GLENDALE/PEORIA ADMPU
NORTHWEST REGION UPDATE
HYDROLOGIC STUDY
VOLUME II – APPENDICIES

CONTRACT FCD 2005C021

Assignment No. 3

May 2007

WP #062665.03

Prepared for: **Flood Control District of Maricopa County**
2801 West Durango Street
Phoenix, AZ 85009
Phone: (602) 506-1501
Fax: (602) 506-8561

And: **City of Peoria**
8401 West Monroe Street
Peoria, AZ 85345
Phone: (623) 773-7212
Fax: (623) 773-7211

Prepared by: **Wood, Patel & Associates, Inc.**
2051 West Northern Avenue
Suite 100
Phoenix, Arizona 85021
Phone: (602) 335-8500
Fax: (602) 335-8580
Website: www.woodpatel.com

Registered Professional Engineer (Civil) CERTIFICATE NO. 32854 SHIMIN ZOU Date Signed 5-17-07 ARIZONA U.S.A.

Registered Professional Engineer (Civil) CERTIFICATE NO. 24999 JEFFREY R. MINCH DATE SIGNED 5-17-07 ARIZONA U.S.A.

GLENDALE/PEORIA ADMPU
NORTHWEST REGION UPDATE
HYDROLOGIC STUDY
VOLUME II – APPENDICIES

CONTRACT FCD 2005C021

Assignment No. 3

May 2007

WP #062665.03

Prepared for: **Flood Control District of Maricopa County**
2801 West Durango Street
Phoenix, AZ 85009
Phone: (602) 506-1501
Fax: (602) 506-8561

And: **City of Peoria**
8401 West Monroe Street
Peoria, AZ 85345
Phone: (623) 773-7212
Fax: (623) 773-7211

Prepared by: **Wood, Patel & Associates, Inc.**
2051 West Northern Avenue
Suite 100
Phoenix, Arizona 85021
Phone: (602) 335-8500
Fax: (602) 335-8580
Website: www.woodpatel.com

Registered Professional Engineer (Civil) CERTIFICATE NO. 32854 SHIMIN ZOU Date Signed 5-17-07 ARIZONA U.S.A.

Registered Professional Engineer (Civil) CERTIFICATE NO. 24999 JEFFREY R. MINCH DATE SIGNED 5-17-07 ARIZONA, U.S.A.

TABLE OF CONTENTS

1.0 INTRODUCTION 1

1.2 Location 1

1.3 Watershed Characteristics 1

1.4 Purpose 3

2.0 PERTINENT STUDIES 4

2.1 Glendale/Peoria ADMP and Glendale/Peoria ADMP Update 4

2.2 Lake Pleasant Parkway Improvements 4

2.3 Camino A Lago Development - South 5

2.4 Camino A Lago Development - North 5

2.5 West Wing Mountain 6

2.6 Cibola Vista 6

2.7 Pleasant Valley 7

2.8 Tierra Del Rio 8

2.9 Rock Springs 8

2.10 Patriot American Development 9

2.11 Home Depot and Target Developments 9

2.12 Melton Ranch 10

2.13 83rd Avenue and Pinnacle Peak Drainage 10

2.14 Happy Valley Roadway Improvements 11

2.15 Pinnacle Peak Road and Channel Improvements 12

2.16 Rose Garden Lane Drainage Improvements 12

2.17 Beardsley Road Channel 12

2.18 Deer Valley Road DCR 13

3.0 HYDROLOGIC MODELING METHODOLOGIES 14

3.1 General Modeling Methods 14

3.2 Hydrologic Data 14

4.0 HYDROLOGIC MODELING RESULTS 16

4.1 Existing Conditions versus Future Conditions 16

4.2 Modeling Results for Existing Conditions 18

4.3 Modeling Results for Future Conditions 18

5.0 SUMMARY 21

6.0 REFERENCES 23

FIGURES

Figure 1 Project Location and Vicinity Map

Figure 2 USGS Comparative Graphs for 100-Year, 6-Hour Storm – Existing Conditions

Figure 3 USGS Comparative Graphs for 100-Year, 6-Hour Storm – Future Conditions

TABLES

Table 1 100-Year, 6-Hour Storm Peak Flow Summary Table for Existing Conditions

Table 2 100-Year, 6-Hour Storm Peak Flow Summary Table for Future Conditions

EXHIBITS

Exhibit A Soil Map

Exhibit B Land Use Maps

Exhibit C Sub-basin Boundary and HEC-1 Schematic Map for Existing Conditions

Exhibit D Sub-basin Boundary and HEC-1 Schematic Map for Future Conditions

Exhibit E CD Containing Electronic Files

APPENDICES
(Volume II)

Appendix A HEC-1 Input Parameters

- Appendix A1 Rainfall Data (NOAA2)
- Appendix A2 Sub-basin Data
- Appendix A3 Soil Data
- Appendix A4 Land Use Data
- Appendix A5 Detention/Retention Basin Volumes

Appendix B Existing Condition HEC-1 Model Output File for the 100-Year, 6-Hour Storm

Appendix C Future Condition HEC-1 Model Output File for the 100-Year, 6-Hour Storm

Registered Professional Engineer (Civil) CERTIFICATE NO. 24999 JEFFREY R. MINCH DATE SIGNED 5-17-07 ARIZONA, U.S.A.

W:\2006Projects\062665.03_Glendale-Peoria ADMP\Project Support\Reports\GP_ADMPU Northwest Region Update Hydrologic Study Report_May31_07.doc

APPENDICES

APPENDIX A

HEC-1 Input Parameters

APPENDIX A1

Rainfall Data (NOAA2)

Rainfall Data

Primary Zone Number:	7	Latitude:	0.0	Elevation:	0
Short Duration Zone Number:	8	Longitude:	0.0		

	Point Values (in)					
Duration	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr
5 MIN	0.33	0.42	0.49	0.58	0.66	0.73
10 MIN	0.49	0.64	0.74	0.89	1.00	1.12
15 MIN	0.59	0.80	0.94	1.13	1.28	1.43
30 MIN	0.79	1.07	1.26	1.53	1.74	1.94
1 HOUR	0.96	1.32	1.57	1.90	2.17	2.43
2 HOUR	1.04	1.45	1.73	2.10	2.40	2.69
3 HOUR	1.10	1.54	1.83	2.24	2.55	2.87
6 HOUR	1.20	1.70	2.03	2.49	2.85	3.20
12 HOUR	1.30	1.88	2.26	2.79	3.20	3.60
24 HOUR	1.40	2.06	2.49	3.09	3.54	4.00

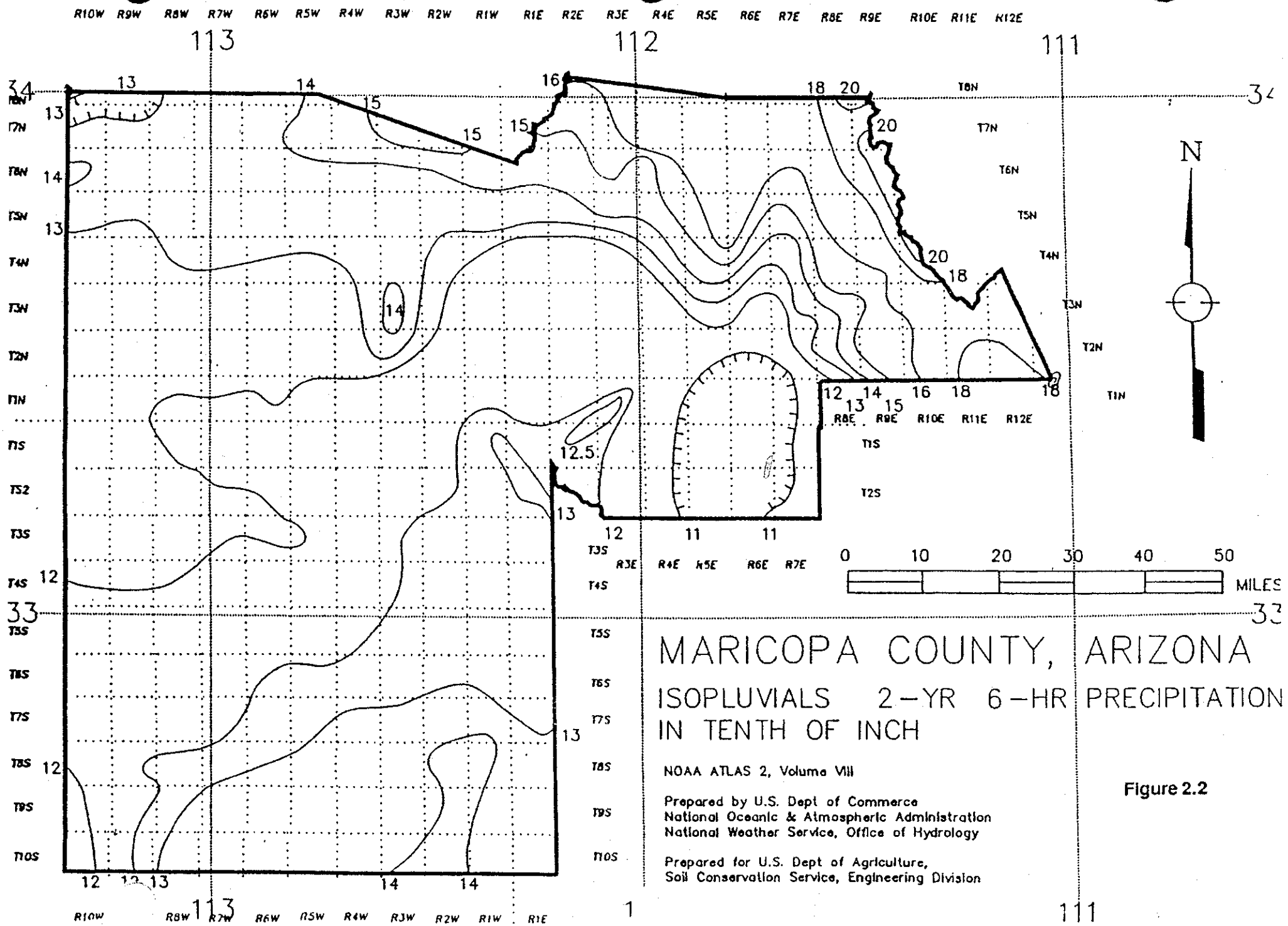
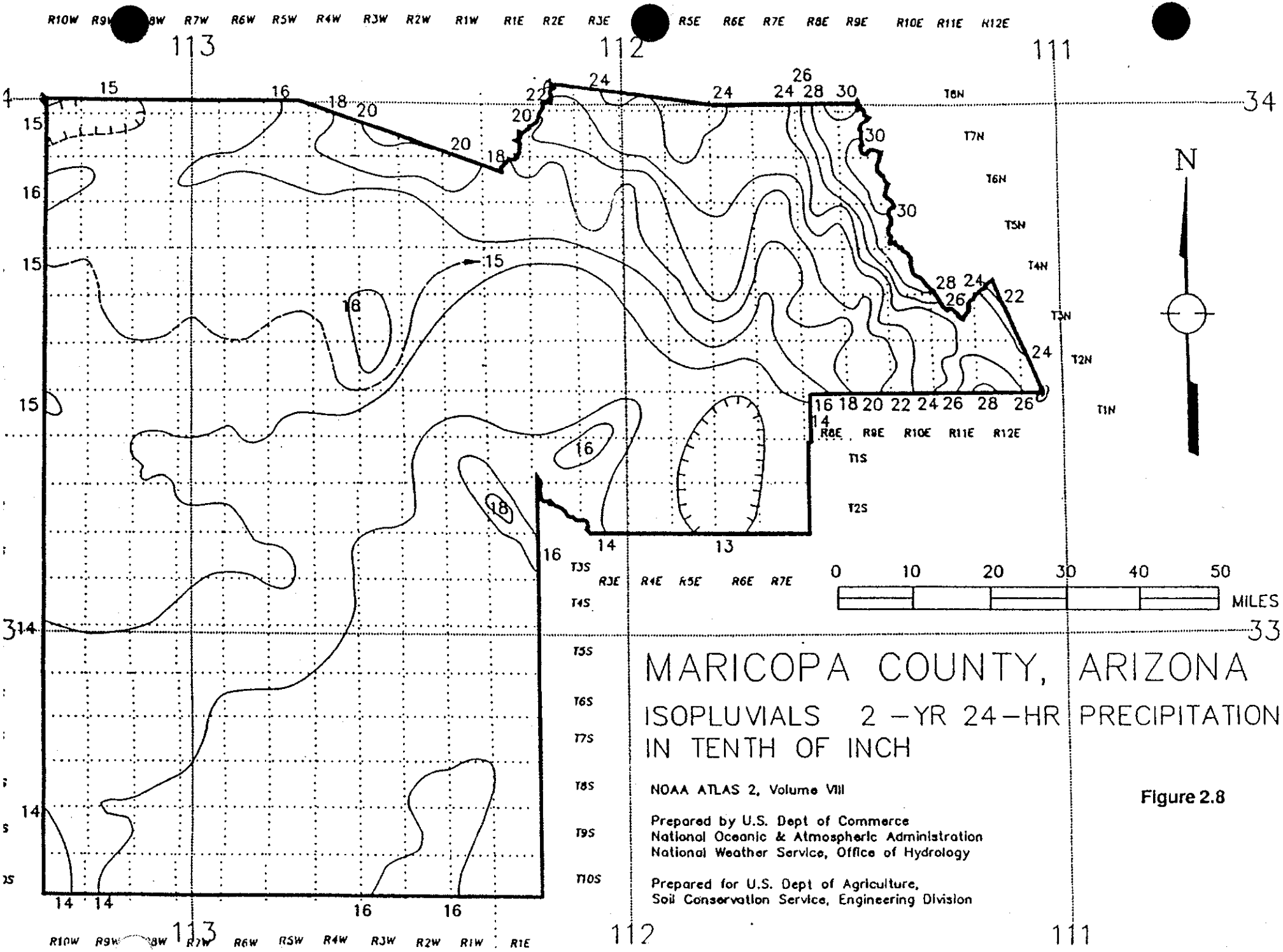

MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 2-YR 6-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
0 10 20 30 40 50
MILES
113
112
111
34
33
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S

Figure 2.2



MARICOPA COUNTY, ARIZONA

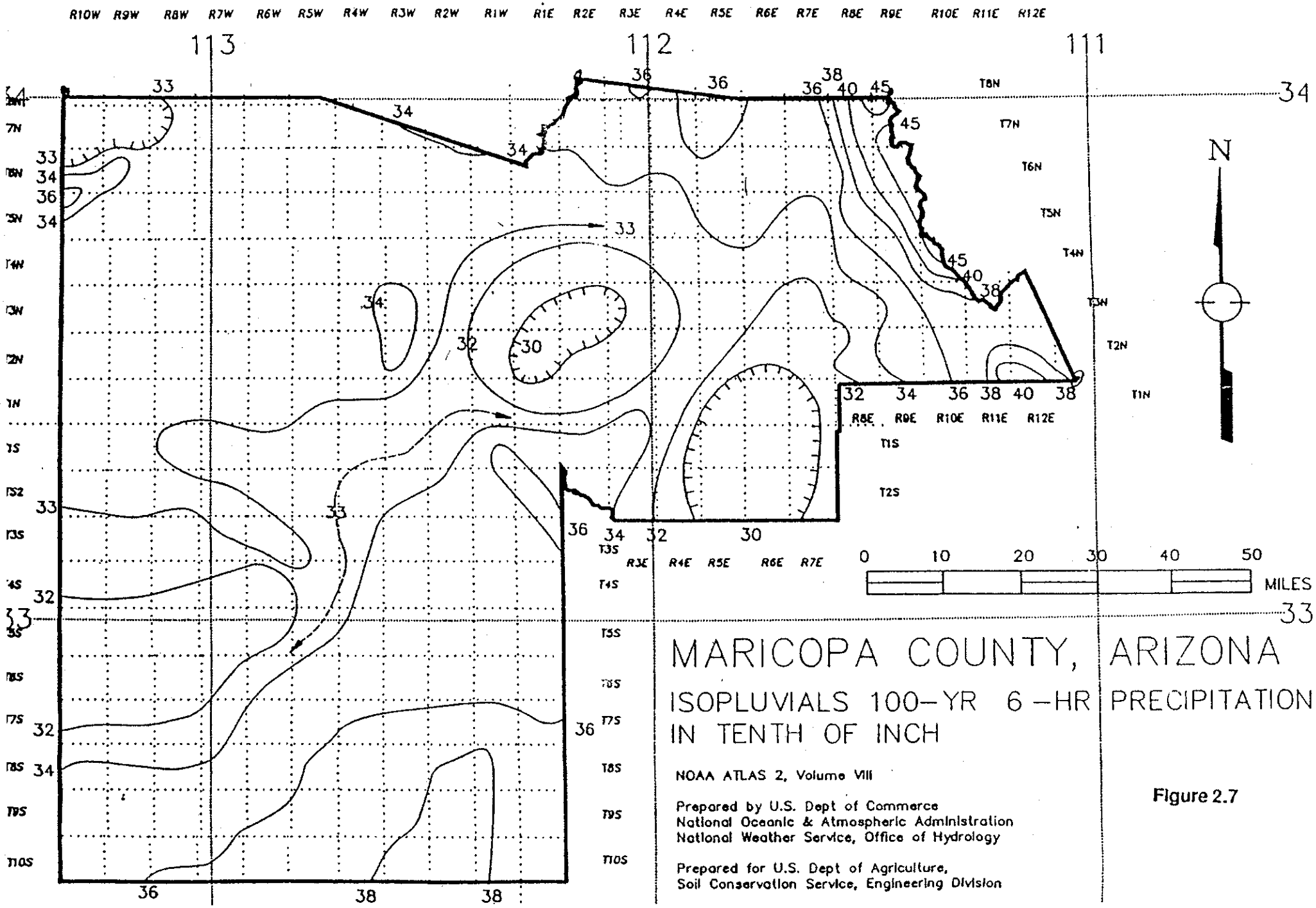
ISOPLUVIALS 2 –YR 24–HR PRECIPITATION IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.8



MARICOPA COUNTY, ARIZONA

ISOPLUVIALS 100-YR 6-HR PRECIPITATION IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.7

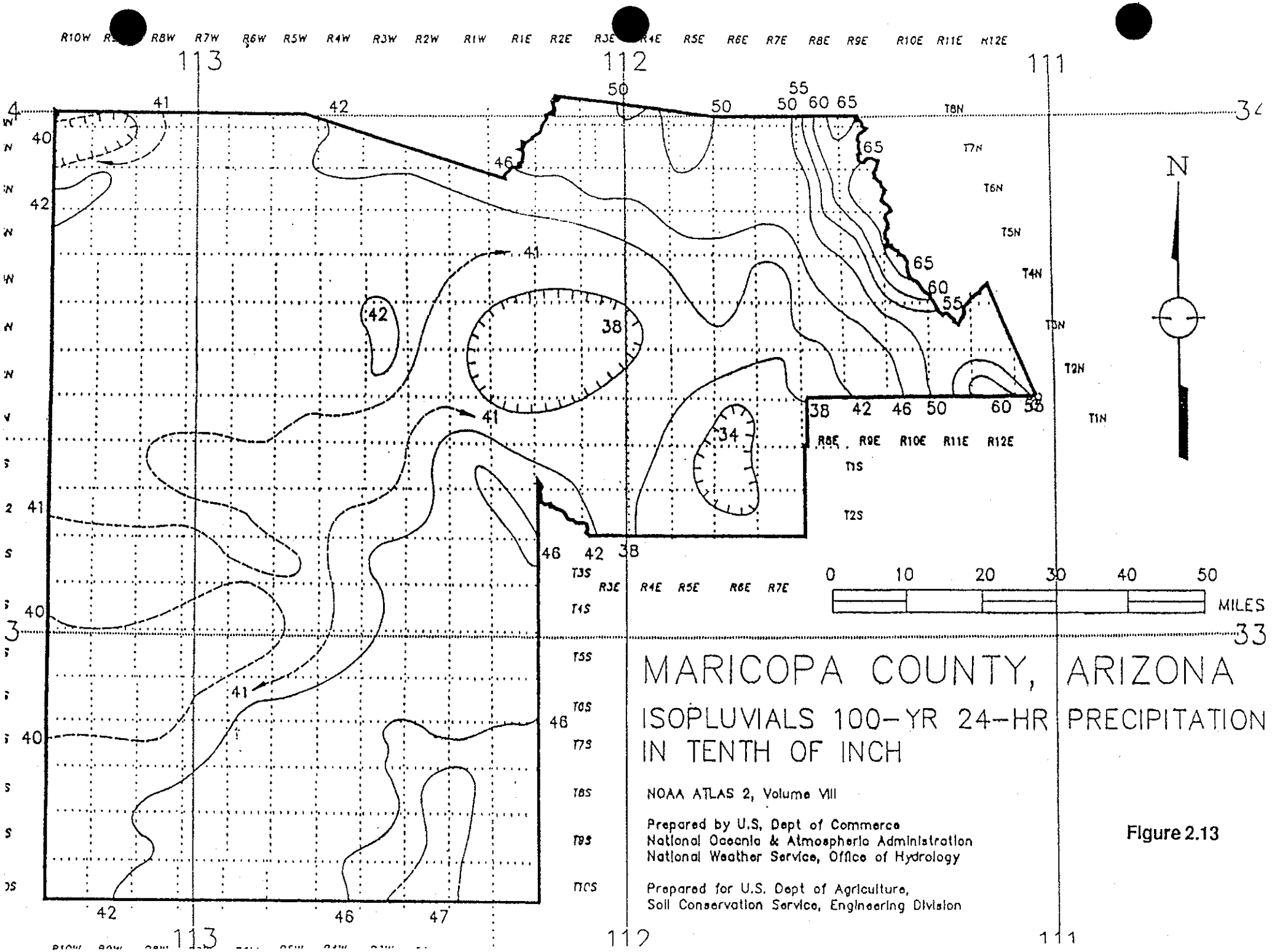

MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 100-YR 24-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
MILES
0 10 20 30 40 50
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N
T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S
113 112 111
34 33

Figure 2.13

APPENDIX A2

Sub-basin Data

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
19	0.05	0.31	116.0	116.0	Urban	0.057	0.23	0.25	6.20	0.19	27	Tc (hrs)	0.51	0.42	0.38	0.34	0.31	0.30
												Vel (f/s)	0.90	1.10	1.21	1.36	1.46	1.54
												R (hrs)	0.40	0.32	0.29	0.25	0.23	0.22
20	0.04	0.42	315.0	268.0	HEC-1 Default	0.053	0.20	0.19	8.80	0.06	23	Tc (hrs)	0.40	0.33	0.30	0.27	0.26	0.24
												Vel (f/s)	1.53	1.87	2.04	2.26	2.41	2.55
												R (hrs)	0.42	0.34	0.31	0.27	0.26	0.24
21	0.03	0.31	97.0	97.0	Urban	0.063	0.25	0.25	6.00	0.21	30	Tc (hrs)	0.56	0.46	0.42	0.37	0.35	0.33
												Vel (f/s)	0.81	0.99	1.09	1.22	1.31	1.39
												R (hrs)	0.58	0.46	0.42	0.37	0.34	0.32
22	0.04	0.31	315.0	268.0	HEC-1 Default	0.049	0.18	0.22	8.40	0.07	18	Tc (hrs)	0.34	0.28	0.25	0.23	0.21	0.20
												Vel (f/s)	1.32	1.63	1.79	1.99	2.12	2.25
												R (hrs)	0.27	0.22	0.20	0.17	0.16	0.15
23	0.03	0.31	129.0	129.0	Urban	0.062	0.25	0.21	6.40	0.18	30	Tc (hrs)	0.50	0.41	0.37	0.33	0.31	0.29
												Vel (f/s)	0.91	1.11	1.22	1.37	1.46	1.55
												R (hrs)	0.49	0.39	0.35	0.31	0.29	0.27
24	0.02	0.36	315.0	268.0	HEC-1 Default	0.052	0.18	0.22	8.00	0.08	19	Tc (hrs)	0.38	0.31	0.28	0.26	0.24	0.23
												Vel (f/s)	1.38	1.70	1.87	2.07	2.22	2.35
												R (hrs)	0.53	0.42	0.37	0.33	0.31	0.29
25	0.02	0.31	106.0	106.0	Urban	0.066	0.25	0.21	6.40	0.18	30	Tc (hrs)	0.55	0.45	0.41	0.37	0.34	0.32
												Vel (f/s)	0.83	1.01	1.11	1.24	1.33	1.41
												R (hrs)	0.81	0.66	0.59	0.52	0.48	0.45
27	0.04	0.33	112.0	112.0	Urban	0.061	0.25	0.23	6.20	0.20	30	Tc (hrs)	0.54	0.44	0.40	0.36	0.34	0.32
												Vel (f/s)	0.89	1.09	1.20	1.34	1.44	1.53
												R (hrs)	0.49	0.39	0.35	0.31	0.29	0.27
29	0.03	0.30	107.0	107.0	Urban	0.062	0.25	0.21	6.40	0.18	30	Tc (hrs)	0.52	0.43	0.39	0.35	0.33	0.31
												Vel (f/s)	0.85	1.03	1.13	1.27	1.35	1.43

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.47	0.38	0.34	0.30	0.28	0.26
33	0.04	0.43	191.0	191.0	Urban	0.060	0.25	0.25	4.25	0.49	38	Tc (hrs)	0.54	0.43	0.40	0.36	0.33	0.31
												Vel (f/s)	1.17	1.45	1.59	1.77	1.89	2.01
												R (hrs)	0.58	0.45	0.41	0.37	0.34	0.32
34	0.03	0.18	280.2	257.0	Urban	0.058	0.22	0.27	4.35	0.43	39	Tc (hrs)	0.31	0.25	0.23	0.21	0.19	0.18
												Vel (f/s)	0.86	1.06	1.16	1.29	1.38	1.47
												R (hrs)	0.19	0.15	0.14	0.12	0.12	0.11
35	0.04	0.52	38.0	38.0	Urban	0.060	0.25	0.25	4.25	0.49	33	Tc (hrs)	1.02	0.81	0.73	0.66	0.61	0.58
												Vel (f/s)	0.75	0.95	1.04	1.16	1.24	1.32
												R (hrs)	1.33	1.03	0.92	0.82	0.76	0.71
36	0.05	0.40	259.5	245.0	HEC-1 Default	0.055	0.21	0.27	4.35	0.43	38	Tc (hrs)	0.45	0.37	0.34	0.30	0.28	0.27
												Vel (f/s)	1.30	1.60	1.75	1.94	2.08	2.21
												R (hrs)	0.43	0.34	0.31	0.28	0.26	0.24
41	0.05	0.32	502.2	303.0	Natural	0.040	0.14	0.33	4.40	0.34	22	Tc (hrs)	0.35	0.28	0.25	0.22	0.21	0.19
												Vel (f/s)	1.34	1.70	1.88	2.10	2.28	2.43
												R (hrs)	0.24	0.19	0.17	0.15	0.14	0.13
42	0.08	0.42	551.5	309.0	Natural	0.052	0.24	0.28	4.25	0.40	47	Tc (hrs)	0.40	0.33	0.30	0.27	0.26	0.24
												Vel (f/s)	1.56	1.88	2.05	2.26	2.42	2.57
												R (hrs)	0.29	0.23	0.21	0.19	0.18	0.17
45	0.06	0.34	315.0	268.0	HEC-1 Default	0.051	0.20	0.28	4.45	0.39	34	Tc (hrs)	0.40	0.32	0.29	0.26	0.25	0.23
												Vel (f/s)	1.26	1.56	1.71	1.90	2.04	2.17
												R (hrs)	0.27	0.22	0.19	0.17	0.16	0.15
46	0.06	0.35	313.4	267.0	HEC-1 Default	0.042	0.15	0.32	4.20	0.41	41	Tc (hrs)	0.35	0.29	0.26	0.24	0.22	0.21
												Vel (f/s)	1.47	1.79	1.96	2.17	2.32	2.46
												R (hrs)	0.25	0.20	0.18	0.16	0.15	0.14

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
47	0.04	0.29	103.0	103.0	Urban	0.061	0.25	0.25	4.50	0.42	36	Tc (hrs)	0.54	0.44	0.40	0.36	0.33	0.31
												Vel (f/s)	0.79	0.98	1.07	1.19	1.28	1.36
												R (hrs)	0.44	0.35	0.31	0.28	0.26	0.24
48	0.03	0.30	50.0	50.0	Urban	0.063	0.25	0.25	3.92	0.57	31	Tc (hrs)	0.75	0.59	0.53	0.48	0.45	0.42
												Vel (f/s)	0.58	0.75	0.83	0.92	0.99	1.05
												R (hrs)	0.85	0.64	0.58	0.51	0.47	0.44
49	0.02	0.23	26.0	26.0	Urban	0.064	0.25	0.25	4.10	0.53	30	Tc (hrs)	0.82	0.64	0.58	0.52	0.48	0.45
												Vel (f/s)	0.41	0.53	0.59	0.65	0.70	0.75
												R (hrs)	0.76	0.58	0.52	0.46	0.43	0.40
50	0.03	0.34	85.0	85.0	Urban	0.063	0.25	0.25	6.00	0.21	30	Tc (hrs)	0.62	0.50	0.46	0.41	0.38	0.36
												Vel (f/s)	0.81	0.99	1.09	1.23	1.32	1.39
												R (hrs)	0.70	0.56	0.50	0.44	0.41	0.38
51	0.01	0.23	57.0	57.0	Urban	0.068	0.25	0.25	5.00	0.32	30	Tc (hrs)	0.62	0.50	0.45	0.41	0.38	0.35
												Vel (f/s)	0.54	0.68	0.75	0.83	0.90	0.95
												R (hrs)	0.84	0.65	0.59	0.52	0.48	0.45
52	0.04	0.41	102.0	102.0	Urban	0.060	0.25	0.25	5.70	0.24	30	Tc (hrs)	0.63	0.51	0.47	0.42	0.39	0.36
												Vel (f/s)	0.95	1.17	1.29	1.45	1.55	1.65
												R (hrs)	0.65	0.52	0.47	0.41	0.38	0.36
55	0.06	0.38	315.0	268.0	Natural	0.035	0.12	0.34	3.95	0.42	65	Tc (hrs)	0.29	0.25	0.23	0.21	0.20	0.19
												Vel (f/s)	1.92	2.25	2.43	2.65	2.81	2.96
												R (hrs)	0.23	0.19	0.17	0.16	0.15	0.14
87	0.03	0.29	62.0	62.0	HEC-1 Default	0.065	0.29	0.25	4.70	0.34	15	Tc (hrs)	0.77	0.58	0.52	0.46	0.42	0.39
												Vel (f/s)	0.56	0.74	0.82	0.93	1.01	1.08
												R (hrs)	0.79	0.57	0.51	0.44	0.40	0.37
100	0.04	0.45	1070.2	315.0	HEC-1 Default	0.046	0.16	0.27	7.00	0.12	18	Tc (hrs)	0.40	0.33	0.29	0.26	0.24	0.23
												Vel (f/s)	1.65	2.03	2.26	2.52	2.70	2.87

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.45	0.36	0.32	0.28	0.26	0.24
26R	0.06	0.42	531.7	307.0	HEC-1 Default	0.046	0.17	0.32	5.70	0.20	19	Tc (hrs)	0.41	0.33	0.30	0.27	0.25	0.23
												Vel (f/s)	1.49	1.86	2.05	2.32	2.50	2.66
												R (hrs)	0.34	0.27	0.24	0.21	0.19	0.18
28R	0.01	0.21	91.4	91.4	Urban	0.067	0.25	0.23	6.20	0.20	30	Tc (hrs)	0.48	0.40	0.36	0.32	0.30	0.28
												Vel (f/s)	0.64	0.78	0.86	0.96	1.03	1.09
												R (hrs)	0.56	0.45	0.41	0.36	0.33	0.31
37E	0.01	0.20	50.5	50.5	Urban	0.062	0.19	0.19	4.25	0.46	46	Tc (hrs)	0.52	0.43	0.40	0.36	0.34	0.32
												Vel (f/s)	0.57	0.68	0.74	0.82	0.87	0.93
												R (hrs)	0.61	0.50	0.45	0.41	0.38	0.36
37W	0.01	0.15	6.9	6.9	Urban	0.070	0.25	0.25	4.10	0.53	33	Tc (hrs)	1.01	0.80	0.73	0.65	0.61	0.57
												Vel (f/s)	0.22	0.27	0.30	0.34	0.36	0.38
												R (hrs)	1.21	0.93	0.83	0.74	0.69	0.64
53R	0.07	0.47	839.1	315.0	HEC-1 Default	0.051	0.20	0.28	4.40	0.41	41	Tc (hrs)	0.43	0.35	0.32	0.29	0.27	0.25
												Vel (f/s)	1.61	1.98	2.16	2.39	2.56	2.71
												R (hrs)	0.36	0.29	0.26	0.24	0.22	0.20
54R	0.02	0.31	115.0	115.0	Urban	0.064	0.25	0.25	6.00	0.21	32	Tc (hrs)	0.53	0.44	0.40	0.36	0.33	0.31
												Vel (f/s)	0.85	1.04	1.14	1.28	1.37	1.45
												R (hrs)	0.65	0.52	0.47	0.42	0.39	0.36
56R	0.01	0.13	159.5	159.5	Urban	0.068	0.25	0.23	6.20	0.20	30	Tc (hrs)	0.32	0.26	0.24	0.21	0.20	0.19
												Vel (f/s)	0.59	0.72	0.79	0.89	0.95	1.01
												R (hrs)	0.26	0.21	0.19	0.16	0.15	0.14
57R	0.01	0.14	156.6	156.6	Urban	0.071	0.25	0.23	6.20	0.20	30	Tc (hrs)	0.34	0.28	0.26	0.23	0.21	0.20
												Vel (f/s)	0.60	0.73	0.80	0.90	0.96	1.02
												R (hrs)	0.37	0.30	0.27	0.23	0.22	0.20

* Non default value

Sub Basin Data

5/2/2007

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A07C	0.18	0.65	36.9	36.9	HEC-1 Default	0.057	0.26	0.24	4.90	0.34	28	Tc (hrs)	1.11	0.88	0.80	0.72	0.67	0.63
												Vel (f/s)	0.86	1.08	1.19	1.33	1.43	1.53
												R (hrs)	0.80	0.62	0.55	0.49	0.45	0.42
A07D	0.23	1.08	20.4	20.4	HEC-1 Default	0.095	0.48	0.02	4.10	0.67	2	Tc (hrs)	1.50	1.50	1.50	1.50	1.41	1.32
												Vel (f/s)	0.79	0.80	0.90	1.03	1.12	1.20
												R (hrs)	1.97	1.94	1.70	1.47	1.34	1.24
A07E	0.23	0.70	37.1	37.1	Urban	0.052	0.23	0.15	7.60	0.11	49	Tc (hrs)	0.90	0.76	0.70	0.63	0.60	0.57
												Vel (f/s)	1.14	1.36	1.48	1.62	1.72	1.81
												R (hrs)	0.58	0.48	0.43	0.39	0.37	0.35
A07F	0.23	1.16	17.2	17.2	HEC-1 Default	0.046	0.21	0.27	4.90	0.32	26	Tc (hrs)	1.50	1.35	1.22	1.09	1.01	0.95
												Vel (f/s)	1.01	1.26	1.39	1.56	1.68	1.79
												R (hrs)	1.71	1.33	1.19	1.05	0.97	0.90
A07G	0.26	0.84	35.5	35.5	Urban	0.049	0.22	0.14	7.60	0.11	38	Tc (hrs)	1.00	0.83	0.76	0.69	0.65	0.62
												Vel (f/s)	1.23	1.48	1.62	1.78	1.90	2.00
												R (hrs)	0.70	0.57	0.51	0.46	0.43	0.41
A07H	0.09	0.30	66.7	66.7	HEC-1 Default	0.056	0.21	0.20	4.70	0.45	52	Tc (hrs)	0.54	0.45	0.42	0.38	0.36	0.34
												Vel (f/s)	0.82	0.98	1.06	1.16	1.24	1.31
												R (hrs)	0.28	0.23	0.21	0.19	0.17	0.16
A08A	0.14	0.92	12.0	12.0	HEC-1 Default	0.046	0.19	0.30	3.31	0.77	18	Tc (hrs)	1.50	1.50	1.37	1.21	1.11	1.04
												Vel (f/s)	0.67	0.87	0.99	1.12	1.21	1.29
												R (hrs)	2.31	1.75	1.51	1.32	1.21	1.12
A08B	0.10	0.44	18.2	18.2	HEC-1 Default	0.049	0.19	0.27	3.74	0.66	34	Tc (hrs)	1.09	0.86	0.77	0.70	0.65	0.61
												Vel (f/s)	0.59	0.75	0.84	0.93	1.00	1.06
												R (hrs)	0.79	0.60	0.54	0.48	0.44	0.41
A09	0.18	0.36	16.7	16.7	HEC-1 Default	0.033	0.13	0.31	3.58	0.64	23	Tc (hrs)	0.92	0.69	0.62	0.55	0.51	0.48
												Vel (f/s)	0.58	0.77	0.86	0.96	1.04	1.11

* Non default value

Sub Basin Data

5/2/2007

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.40	0.29	0.26	0.23	0.21	0.19
A09A	0.08	0.53	17.0	17.0	HEC-1 Default	0.072	0.29	0.14	3.74	0.80	39	Tc (hrs)	1.41	1.13	1.03	0.93	0.87	0.82
												Vel (f/s)	0.55	0.69	0.76	0.84	0.89	0.95
												R (hrs)	1.34	1.05	0.94	0.84	0.78	0.73
A09B	0.04	0.25	80.0	80.0	Urban	0.035	0.11	0.25	4.10	0.68	72	Tc (hrs)	0.34	0.29	0.27	0.25	0.23	0.22
												Vel (f/s)	1.08	1.27	1.37	1.50	1.58	1.66
												R (hrs)	0.23	0.19	0.17	0.16	0.15	0.14
A09C	0.07	0.52	51.9	51.9	Natural	0.062	0.26	0.23	4.50	0.44	31	Tc (hrs)	0.94	0.74	0.68	0.61	0.57	0.53
												Vel (f/s)	0.81	1.03	1.13	1.26	1.35	1.44
												R (hrs)	0.91	0.70	0.63	0.56	0.52	0.48
A09D	0.25	0.44	31.8	31.8	Urban	0.049	0.23	0.18	6.60	0.16	34	Tc (hrs)	0.78	0.65	0.59	0.53	0.50	0.47
												Vel (f/s)	0.83	0.99	1.09	1.21	1.30	1.37
												R (hrs)	0.32	0.26	0.23	0.21	0.19	0.18
A09E	0.15	0.82	22.4	22.4	Urban	0.052	0.23	0.24	4.70	0.36	36	Tc (hrs)	1.31	1.07	0.97	0.88	0.82	0.77
												Vel (f/s)	0.92	1.13	1.24	1.37	1.47	1.56
												R (hrs)	1.27	1.01	0.91	0.81	0.75	0.70
A09F	0.37	0.90	17.8	17.8	HEC-1 Default	0.048	0.22	0.26	5.30	0.28	36	Tc (hrs)	1.39	1.14	1.04	0.94	0.87	0.82
												Vel (f/s)	0.95	1.15	1.27	1.41	1.51	1.60
												R (hrs)	0.87	0.70	0.63	0.56	0.52	0.49
A09GA	0.07	0.32	36.6	36.6	Urban	0.030	0.10	0.25	4.35	0.56	80	Tc (hrs)	0.43	0.37	0.35	0.32	0.30	0.29
												Vel (f/s)	1.09	1.26	1.36	1.47	1.56	1.64
												R (hrs)	0.26	0.22	0.20	0.18	0.17	0.16
A09GB	0.05	0.55	3.8	3.8	Urban	0.058	0.23	0.25	4.30	0.49	35	Tc (hrs)	1.50	1.50	1.50	1.35	1.26	1.18
												Vel (f/s)	0.40	0.49	0.54	0.60	0.64	0.68
												R (hrs)	2.70	2.18	1.96	1.74	1.61	1.51

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A09H	0.24	1.03	17.8	17.8	Urban	0.051	0.25	0.25	4.55	0.41	31	Tc (hrs)	1.50	1.32	1.20	1.07	1.00	0.94
												Vel (f/s)	0.91	1.15	1.26	1.41	1.51	1.61
												R (hrs)	1.51	1.17	1.05	0.93	0.86	0.80
A09I	0.13	0.73	18.0	18.0	Urban	0.054	0.25	0.20	6.60	0.17	29	Tc (hrs)	1.31	1.08	0.98	0.88	0.82	0.77
												Vel (f/s)	0.82	0.99	1.10	1.22	1.31	1.39
												R (hrs)	1.27	1.02	0.91	0.81	0.75	0.70
A09IH	0.09	0.63	42.1	42.1	Urban	0.059	0.26	0.25	4.60	0.39	27	Tc (hrs)	1.10	0.86	0.78	0.70	0.65	0.61
												Vel (f/s)	0.84	1.07	1.18	1.32	1.42	1.52
												R (hrs)	1.11	0.85	0.76	0.68	0.62	0.58
A09J	0.17	0.83	27.7	27.7	Urban	0.052	0.25	0.25	4.35	0.46	30	Tc (hrs)	1.34	1.06	0.96	0.86	0.80	0.75
												Vel (f/s)	0.91	1.15	1.27	1.42	1.53	1.63
												R (hrs)	1.22	0.94	0.84	0.74	0.69	0.64
A09L	0.14	0.68	17.6	17.6	Urban	0.051	0.23	0.26	4.90	0.32	26	Tc (hrs)	1.35	1.08	0.98	0.87	0.81	0.76
												Vel (f/s)	0.74	0.92	1.02	1.14	1.23	1.31
												R (hrs)	1.19	0.92	0.83	0.73	0.67	0.63
A09M	0.25	0.95	43.3	43.3	HEC-1 Default	0.054	0.25	0.25	4.45	0.43	28	Tc (hrs)	1.28	1.01	0.91	0.82	0.76	0.71
												Vel (f/s)	1.09	1.38	1.53	1.71	1.83	1.96
												R (hrs)	1.04	0.79	0.71	0.63	0.58	0.54
A09N	0.11	0.57	25.8	25.8	Urban	0.057	0.26	0.25	5.80	0.22	26	Tc (hrs)	1.13	0.91	0.83	0.74	0.68	0.64
												Vel (f/s)	0.74	0.92	1.01	1.14	1.23	1.30
												R (hrs)	0.95	0.75	0.67	0.59	0.54	0.51
A09O	0.19	1.09	30.8	30.8	HEC-1 Default	0.055	0.30	0.25	4.40	0.43	13	Tc (hrs)	1.50	1.33	1.18	1.04	0.96	0.89
												Vel (f/s)	0.86	1.20	1.35	1.53	1.66	1.79
												R (hrs)	2.00	1.38	1.21	1.06	0.97	0.89
A09P	0.19	0.71	33.6	33.6	HEC-1 Default	0.055	0.30	0.25	4.65	0.36	11	Tc (hrs)	1.42	1.03	0.92	0.81	0.75	0.69
												Vel (f/s)	0.73	1.01	1.13	1.28	1.40	1.50

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	1.08	0.76	0.67	0.58	0.53	0.49
A09QB	0.14	0.60	35.5	35.5	Urban	0.053	0.30	0.25	4.15	0.45	5	Tc (hrs)	1.47	0.98	0.86	0.75	0.69	0.64
												Vel (f/s)	0.60	0.90	1.02	1.17	1.28	1.38
												R (hrs)	1.14	0.73	0.63	0.54	0.49	0.45
A09QA	0.09	0.38	39.1	39.1	HEC-1 Default	0.056	0.30	0.25	4.20	0.50	15	Tc (hrs)	1.04	0.74	0.66	0.58	0.54	0.50
												Vel (f/s)	0.54	0.75	0.85	0.96	1.04	1.12
												R (hrs)	0.69	0.48	0.42	0.36	0.33	0.31
A09R	0.14	0.72	29.2	29.2	HEC-1 Default	0.045	0.22	0.25	4.25	0.53	42	Tc (hrs)	1.05	0.85	0.78	0.71	0.66	0.62
												Vel (f/s)	1.00	1.24	1.35	1.50	1.60	1.70
												R (hrs)	0.91	0.72	0.65	0.58	0.54	0.51
A09S	0.07	0.48	15.1	15.1	Urban	0.035	0.13	0.25	4.90	0.40	72	Tc (hrs)	0.77	0.66	0.62	0.56	0.53	0.51
												Vel (f/s)	0.91	1.06	1.14	1.25	1.32	1.39
												R (hrs)	0.69	0.58	0.54	0.49	0.46	0.43
A09T	0.18	0.72	90.3	90.3	HEC-1 Default	0.048	0.23	0.25	4.30	0.49	35	Tc (hrs)	0.80	0.64	0.58	0.52	0.49	0.46
												Vel (f/s)	1.32	1.65	1.81	2.02	2.16	2.30
												R (hrs)	0.59	0.46	0.41	0.37	0.34	0.32
A09U	0.18	0.68	482.4	300.0	HEC-1 Default	0.048	0.25	0.28	4.20	0.41	23	Tc (hrs)	0.59	0.45	0.41	0.36	0.34	0.31
												Vel (f/s)	1.70	2.21	2.45	2.75	2.97	3.18
												R (hrs)	0.41	0.30	0.27	0.24	0.22	0.20
A10	0.21	0.50	74.0	74.0	HEC-1 Default	0.033	0.07	0.16	4.65	0.28	53	Tc (hrs)	0.48	0.41	0.38	0.35	0.33	0.31
												Vel (f/s)	1.52	1.78	1.93	2.13	2.26	2.37
												R (hrs)	0.23	0.19	0.17	0.16	0.15	0.14
A10A	0.19	0.65	73.8	73.8	HEC-1 Default	0.051	0.30	0.25	5.30	0.24	5	Tc (hrs)	1.00	0.74	0.66	0.57	0.52	0.49
												Vel (f/s)	0.95	1.29	1.45	1.67	1.82	1.95
												R (hrs)	0.68	0.49	0.43	0.36	0.33	0.31

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A11A	0.30	0.90	52.5	52.5	HEC-1 Default	0.043	0.20	0.25	6.00	0.22	44	Tc (hrs)	0.88	0.74	0.68	0.61	0.57	0.54
												Vel (f/s)	1.49	1.78	1.94	2.16	2.30	2.43
												R (hrs)	0.59	0.49	0.44	0.39	0.37	0.34
A11EA	0.14	0.82	80.8	80.8	HEC-1 Default	0.057	0.30	0.25	4.30	0.44	19	Tc (hrs)	1.13	0.84	0.75	0.67	0.62	0.58
												Vel (f/s)	1.07	1.43	1.60	1.80	1.95	2.09
												R (hrs)	1.09	0.78	0.69	0.61	0.56	0.52
A11EB	0.19	1.09	40.3	40.3	HEC-1 Default	0.052	0.26	0.25	4.45	0.45	28	Tc (hrs)	1.40	1.09	0.98	0.88	0.82	0.77
												Vel (f/s)	1.15	1.47	1.62	1.81	1.95	2.08
												R (hrs)	1.48	1.12	1.00	0.89	0.82	0.76
A11F	0.33	1.03	88.8	88.8	HEC-1 Default	0.051	0.29	0.25	4.35	0.43	19	Tc (hrs)	1.15	0.86	0.77	0.69	0.63	0.59
												Vel (f/s)	1.32	1.76	1.96	2.21	2.38	2.56
												R (hrs)	0.83	0.60	0.53	0.47	0.43	0.40
A11G	0.06	0.44	85.1	85.1	HEC-1 Default	0.060	0.30	0.25	4.55	0.35	26	Tc (hrs)	0.75	0.59	0.53	0.47	0.44	0.41
												Vel (f/s)	0.87	1.10	1.22	1.36	1.47	1.57
												R (hrs)	0.69	0.53	0.47	0.42	0.38	0.36
A11I	0.15	0.56	35.2	35.2	Urban	0.054	0.25	0.10	11.20	0.03	29	Tc (hrs)	0.82	0.69	0.63	0.58	0.54	0.52
												Vel (f/s)	1.00	1.19	1.30	1.43	1.52	1.59
												R (hrs)	0.55	0.45	0.41	0.37	0.34	0.33
A11J	0.11	0.57	36.3	36.3	HEC-1 Default	0.056	0.25	0.15	7.30	0.13	29	Tc (hrs)	0.92	0.76	0.69	0.62	0.58	0.55
												Vel (f/s)	0.91	1.11	1.22	1.35	1.44	1.52
												R (hrs)	0.75	0.60	0.54	0.48	0.45	0.42
A11KA	0.08	0.44	451.5	299.0	Urban	0.054	0.22	0.27	4.45	0.41	42	Tc (hrs)	0.43	0.35	0.32	0.29	0.27	0.26
												Vel (f/s)	1.50	1.83	2.00	2.22	2.37	2.51
												R (hrs)	0.32	0.25	0.23	0.20	0.19	0.18
A11KB	0.11	0.36	61.1	61.1	Urban	0.055	0.25	0.25	4.70	0.36	30	Tc (hrs)	0.69	0.55	0.50	0.45	0.42	0.39
												Vel (f/s)	0.77	0.96	1.06	1.18	1.27	1.35

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.39	0.30	0.27	0.24	0.22	0.21
A11KC	0.13	0.38	88.2	88.2	Urban	0.056	0.26	0.25	4.15	0.51	30	Tc (hrs)	0.67	0.52	0.47	0.42	0.40	0.37
												Vel (f/s)	0.83	1.07	1.18	1.31	1.41	1.50
												R (hrs)	0.35	0.26	0.24	0.21	0.19	0.18
A11L	0.26	0.95	29.9	29.9	Urban	0.050	0.25	0.10	11.20	0.03	30	Tc (hrs)	1.08	0.91	0.83	0.76	0.71	0.68
												Vel (f/s)	1.29	1.53	1.67	1.84	1.95	2.05
												R (hrs)	0.83	0.68	0.62	0.56	0.52	0.49
A11MA	0.07	0.24	124.5	124.5	HEC-1 Default	0.057	0.25	0.15	8.80	0.07	30	Tc (hrs)	0.40	0.33	0.30	0.27	0.25	0.24
												Vel (f/s)	0.89	1.08	1.18	1.30	1.39	1.46
												R (hrs)	0.19	0.15	0.14	0.12	0.12	0.11
A11MB	0.19	0.42	54.2	54.2	Urban	0.051	0.25	0.15	8.80	0.07	30	Tc (hrs)	0.64	0.53	0.48	0.44	0.41	0.39
												Vel (f/s)	0.96	1.17	1.28	1.41	1.50	1.58
												R (hrs)	0.29	0.23	0.21	0.19	0.18	0.17
A11NA	0.08	0.33	1079.0	315.0	HEC-1 Default	0.050	0.19	0.30	5.40	0.24	26	Tc (hrs)	0.37	0.30	0.27	0.24	0.23	0.21
												Vel (f/s)	1.31	1.61	1.78	2.00	2.15	2.28
												R (hrs)	0.22	0.17	0.16	0.14	0.13	0.12
A11O	0.06	0.46	934.0	315.0	HEC-1 Default	0.054	0.21	0.27	6.20	0.18	23	Tc (hrs)	0.45	0.37	0.33	0.29	0.27	0.26
												Vel (f/s)	1.50	1.85	2.04	2.30	2.47	2.63
												R (hrs)	0.42	0.34	0.30	0.26	0.24	0.23
A99R	0.04	0.19	36.8	36.8	HEC-1 Default	0.046	0.16	0.31	3.55	0.60	12	Tc (hrs)	0.71	0.50	0.44	0.39	0.36	0.33
												Vel (f/s)	0.39	0.56	0.63	0.72	0.78	0.84
												R (hrs)	0.44	0.30	0.26	0.22	0.20	0.19
A99S	0.08	0.56	17.9	17.9	Natural	0.029	0.10	0.35	3.64	0.49		Tc (hrs)	1.37	0.89	0.78	0.68	0.62	0.57
												Vel (f/s)	0.60	0.92	1.06	1.21	1.33	1.44
												R (hrs)	1.42	0.88	0.76	0.65	0.59	0.54

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A99T	0.03	0.07	28.6	28.6	Urban	0.041	0.17	0.30	2.79	1.37	42	Tc (hrs)	0.33	0.28	0.25	0.22	0.21	0.20
												Vel (f/s)	0.31	0.37	0.41	0.46	0.49	0.52
												R (hrs)	0.10	0.08	0.07	0.06	0.06	0.05
A99U	0.07	0.57	61.4	61.4	HEC-1 Default	0.046	0.20	0.26	3.71	0.71	43	Tc (hrs)	0.77	0.62	0.56	0.51	0.48	0.45
												Vel (f/s)	1.09	1.35	1.48	1.64	1.75	1.85
												R (hrs)	0.80	0.63	0.57	0.51	0.47	0.44
A99V	0.21	0.78	56.4	56.4	Natural	0.029	0.09	0.35	6.00	0.15	12	Tc (hrs)	0.75	0.60	0.54	0.48	0.44	0.42
												Vel (f/s)	1.53	1.90	2.13	2.40	2.58	2.75
												R (hrs)	0.54	0.42	0.37	0.33	0.30	0.28
A99W	0.22	0.63	11.1	11.1	HEC-1 Default	0.043	0.16	0.24	6.40	0.16	33	Tc (hrs)	1.22	1.02	0.92	0.83	0.78	0.73
												Vel (f/s)	0.76	0.91	1.00	1.11	1.19	1.26
												R (hrs)	0.77	0.62	0.56	0.50	0.46	0.44
A99X	0.26	0.61	57.4	57.4	HEC-1 Default	0.029	0.12	0.23	4.20	0.51	54	Tc (hrs)	0.57	0.48	0.44	0.40	0.38	0.36
												Vel (f/s)	1.58	1.88	2.03	2.23	2.38	2.51
												R (hrs)	0.28	0.23	0.21	0.19	0.18	0.17
A99YA	0.10	0.50	116.6	116.6	HEC-1 Default	0.057	0.30	0.25	4.90	0.33	14	Tc (hrs)	0.79	0.59	0.52	0.46	0.43	0.40
												Vel (f/s)	0.93	1.25	1.40	1.58	1.72	1.85
												R (hrs)	0.60	0.43	0.38	0.33	0.30	0.28
A99YB	0.17	0.49	49.6	49.6	HEC-1 Default	0.040	0.13	0.24	3.78	0.51	32	Tc (hrs)	0.71	0.58	0.53	0.47	0.44	0.41
												Vel (f/s)	1.01	1.25	1.37	1.52	1.63	1.74
												R (hrs)	0.39	0.31	0.28	0.25	0.23	0.22
CBA	0.01	0.16	1486.2	315.0	Natural	0.071	0.25	0.17	6.80	0.15	39	Tc (hrs)	0.27	0.23	0.21	0.19	0.18	0.17
												Vel (f/s)	0.86	1.02	1.12	1.24	1.33	1.40
												R (hrs)	0.34	0.28	0.25	0.23	0.21	0.20
CBB	0.02	0.18	1281.9	315.0	HEC-1 Default	0.066	0.25	0.25	4.55	0.41	43	Tc (hrs)	0.30	0.25	0.22	0.20	0.19	0.18
												Vel (f/s)	0.88	1.08	1.18	1.30	1.39	1.47

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.25	0.20	0.18	0.16	0.15	0.14
CBH	0.01	0.11	2020.2	315.0	Natural	0.068	0.25	0.25	4.35	0.46	45	Tc (hrs)	0.24	0.19	0.18	0.16	0.15	0.14
												Vel (f/s)	0.68	0.83	0.91	1.00	1.07	1.14
												R (hrs)	0.16	0.13	0.12	0.10	0.10	0.09
CBJ	0.02	0.23	653.0	315.0	Natural	0.066	0.25	0.25	4.30	0.48	40	Tc (hrs)	0.35	0.28	0.26	0.23	0.22	0.21
												Vel (f/s)	0.96	1.19	1.31	1.45	1.55	1.65
												R (hrs)	0.39	0.31	0.28	0.25	0.23	0.22
CBK	0.05	0.35	306.9	265.0	Natural	0.059	0.25	0.25	4.65	0.38	34	Tc (hrs)	0.44	0.35	0.32	0.29	0.27	0.25
												Vel (f/s)	1.17	1.46	1.60	1.78	1.92	2.04
												R (hrs)	0.34	0.27	0.24	0.22	0.20	0.19
CBL	0.03	0.36	269.0	250.0	Urban	0.063	0.25	0.25	5.70	0.24	33	Tc (hrs)	0.45	0.37	0.34	0.30	0.28	0.26
												Vel (f/s)	1.17	1.43	1.57	1.76	1.89	2.00
												R (hrs)	0.52	0.41	0.37	0.33	0.31	0.29
DV1	0.09	0.56	28.1	28.1	Urban	0.056	0.25	0.25	4.65	0.38	30	Tc (hrs)	1.11	0.88	0.80	0.72	0.67	0.63
												Vel (f/s)	0.74	0.93	1.02	1.14	1.23	1.31
												R (hrs)	1.03	0.80	0.72	0.63	0.58	0.54
DV10	0.21	0.63	22.2	22.2	Urban	0.050	0.29	0.15	7.00	0.12	9	Tc (hrs)	1.16	0.92	0.83	0.74	0.69	0.65
												Vel (f/s)	0.79	1.00	1.12	1.25	1.34	1.43
												R (hrs)	0.74	0.57	0.50	0.44	0.41	0.38
DV11	0.14	0.64	24.4	24.4	Urban	0.050	0.22	0.10	11.20	0.03	42	Tc (hrs)	0.92	0.78	0.72	0.66	0.62	0.59
												Vel (f/s)	1.02	1.20	1.31	1.43	1.52	1.59
												R (hrs)	0.71	0.59	0.54	0.49	0.46	0.44
DV2	0.03	0.47	22.0	22.0	Urban	0.062	0.25	0.25	4.80	0.35	30	Tc (hrs)	1.15	0.92	0.83	0.75	0.69	0.65
												Vel (f/s)	0.60	0.75	0.83	0.92	1.00	1.06
												R (hrs)	1.67	1.30	1.17	1.04	0.96	0.89

* Non default value

Sub Basin Data

5/2/2007

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
DV3	0.05	0.40	23.4	23.4	Urban	0.059	0.25	0.25	4.80	0.35	30	Tc (hrs)	1.01	0.81	0.73	0.66	0.61	0.57
												Vel (f/s)	0.58	0.73	0.80	0.89	0.96	1.02
												R (hrs)	0.99	0.77	0.70	0.62	0.57	0.53
DV4	0.06	0.64	28.6	28.6	Urban	0.058	0.25	0.25	4.80	0.35	30	Tc (hrs)	1.19	0.95	0.86	0.78	0.72	0.68
												Vel (f/s)	0.79	0.99	1.09	1.21	1.31	1.39
												R (hrs)	1.56	1.22	1.10	0.97	0.89	0.83
DV5	0.03	0.27	31.4	31.4	Urban	0.063	0.25	0.25	4.80	0.35	30	Tc (hrs)	0.78	0.63	0.57	0.51	0.47	0.45
												Vel (f/s)	0.51	0.63	0.70	0.77	0.84	0.89
												R (hrs)	0.75	0.58	0.52	0.46	0.43	0.40
DV6	0.09	0.60	31.0	31.0	Urban	0.056	0.25	0.25	4.80	0.35	30	Tc (hrs)	1.10	0.88	0.80	0.72	0.67	0.63
												Vel (f/s)	0.80	1.00	1.10	1.22	1.32	1.40
												R (hrs)	1.08	0.84	0.76	0.67	0.62	0.58
DV7	0.13	0.66	30.7	30.7	HEC-1 Default	0.057	0.26	0.21	6.40	0.18	26	Tc (hrs)	1.11	0.91	0.82	0.73	0.68	0.65
												Vel (f/s)	0.87	1.06	1.18	1.32	1.42	1.50
												R (hrs)	0.95	0.76	0.68	0.60	0.56	0.52
DV8	0.09	0.63	23.8	23.8	Urban	0.059	0.26	0.15	8.40	0.08	24	Tc (hrs)	1.13	0.92	0.84	0.76	0.71	0.67
												Vel (f/s)	0.82	1.01	1.11	1.22	1.31	1.38
												R (hrs)	1.13	0.90	0.81	0.73	0.67	0.63
DV9	0.04	0.23	41.3	41.3	Urban	0.060	0.30	0.15	8.80	0.06	5	Tc (hrs)	0.62	0.49	0.44	0.39	0.37	0.35
												Vel (f/s)	0.55	0.69	0.77	0.86	0.92	0.97
												R (hrs)	0.41	0.31	0.28	0.25	0.23	0.21
E1	0.01	0.13	220.3	218.0	HEC-1 Default	0.071	0.27	0.25	3.95	0.54	22	Tc (hrs)	0.37	0.28	0.25	0.22	0.20	0.19
												Vel (f/s)	0.52	0.69	0.78	0.87	0.94	1.00
												R (hrs)	0.27	0.20	0.17	0.15	0.14	0.13
E2	0.02	0.20	114.7	114.7	Urban	0.066	0.30	0.25	3.95	0.48	5	Tc (hrs)	0.67	0.44	0.39	0.34	0.31	0.29
												Vel (f/s)	0.44	0.66	0.76	0.87	0.94	1.02

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.69	0.44	0.38	0.33	0.30	0.27
E3	0.08	0.63	67.0	67.0	HEC-1 Default	0.060	0.28	0.25	3.95	0.51	13	Tc (hrs)	1.18	0.84	0.75	0.66	0.61	0.57
												Vel (f/s)	0.78	1.10	1.24	1.40	1.52	1.64
												R (hrs)	1.28	0.88	0.77	0.67	0.61	0.57
E4	0.04	0.50	74.4	74.4	HEC-1 Default	0.063	0.26	0.25	4.00	0.53	26	Tc (hrs)	0.90	0.69	0.62	0.55	0.51	0.48
												Vel (f/s)	0.82	1.07	1.18	1.32	1.43	1.52
												R (hrs)	1.18	0.88	0.78	0.69	0.64	0.59
HV1	0.01	0.30	72.6	72.6	HEC-1 Default	0.071	0.25	0.25	3.95	0.56	30	Tc (hrs)	0.72	0.56	0.51	0.45	0.42	0.40
												Vel (f/s)	0.61	0.78	0.87	0.97	1.04	1.11
												R (hrs)	1.66	1.26	1.12	1.00	0.92	0.86
HV2	0.03	0.87	3.1	3.1	Urban	0.063	0.25	0.25	4.45	0.43	29	Tc (hrs)	1.50	1.50	1.50	1.50	1.50	1.50
												Vel (f/s)	0.64	0.64	0.64	0.67	0.72	0.77
												R (hrs)	5.18	5.18	5.18	4.92	4.53	4.22
LACAI	0.04	0.30	62.8	62.8	Urban	0.061	0.30	0.25	4.20	0.43	5	Tc (hrs)	0.92	0.62	0.55	0.48	0.44	0.40
												Vel (f/s)	0.48	0.71	0.81	0.92	1.01	1.09
												R (hrs)	0.87	0.56	0.49	0.42	0.38	0.35
N11A	0.93	2.04	12.0	12.0	Urban	0.042	0.21	0.27	4.80	0.33	29	Tc (hrs)	1.50	1.50	1.50	1.50	1.46	1.37
												Vel (f/s)	1.50	1.51	1.67	1.90	2.05	2.19
												R (hrs)	1.47	1.46	1.30	1.13	1.04	0.97
N11C	0.26	0.82	24.4	24.4	Urban	0.047	0.22	0.27	4.45	0.41	24	Tc (hrs)	1.36	1.06	0.96	0.85	0.79	0.74
												Vel (f/s)	0.88	1.14	1.26	1.41	1.52	1.62
												R (hrs)	0.97	0.73	0.66	0.58	0.53	0.49
N11DA	0.26	0.80	20.6	20.6	Urban	0.050	0.25	0.25	4.60	0.39	30	Tc (hrs)	1.38	1.10	1.00	0.90	0.83	0.78
												Vel (f/s)	0.85	1.07	1.18	1.31	1.41	1.50
												R (hrs)	0.97	0.75	0.67	0.60	0.55	0.51

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N11DB	0.25	0.73	21.5	21.5	Urban	0.050	0.25	0.25	4.60	0.39	30	Tc (hrs)	1.31	1.04	0.94	0.84	0.78	0.74
												Vel (f/s)	0.82	1.03	1.14	1.27	1.37	1.45
												R (hrs)	0.84	0.65	0.59	0.52	0.48	0.45
N11EA	0.26	0.94	13.2	13.2	Urban	0.048	0.23	0.26	5.60	0.25	31	Tc (hrs)	1.50	1.30	1.18	1.06	0.98	0.93
												Vel (f/s)	0.86	1.06	1.16	1.30	1.40	1.49
												R (hrs)	1.28	1.02	0.92	0.81	0.75	0.70
N11EB	0.23	0.69	22.2	22.2	Urban	0.050	0.25	0.23	6.20	0.20	30	Tc (hrs)	1.17	0.96	0.87	0.78	0.72	0.68
												Vel (f/s)	0.87	1.06	1.16	1.30	1.40	1.48
												R (hrs)	0.75	0.60	0.54	0.48	0.44	0.42
N11FA	0.18	0.80	25.8	25.8	Urban	0.050	0.22	0.25	4.40	0.46	34	Tc (hrs)	1.27	1.02	0.92	0.83	0.78	0.73
												Vel (f/s)	0.92	1.16	1.27	1.41	1.51	1.61
												R (hrs)	1.07	0.84	0.75	0.67	0.62	0.58
N11FB	0.12	0.74	24.7	24.7	Urban	0.053	0.24	0.26	4.40	0.45	30	Tc (hrs)	1.32	1.04	0.95	0.85	0.79	0.74
												Vel (f/s)	0.82	1.04	1.15	1.28	1.38	1.47
												R (hrs)	1.32	1.02	0.91	0.81	0.75	0.69
N11J	0.24	0.84	23.6	23.6	Urban	0.053	0.30	0.25	4.10	0.52	13	Tc (hrs)	1.50	1.28	1.13	0.99	0.92	0.85
												Vel (f/s)	0.68	0.97	1.10	1.24	1.35	1.44
												R (hrs)	1.40	0.94	0.82	0.71	0.65	0.60
N11K	0.17	0.73	28.1	28.1	Urban	0.056	0.30	0.25	4.20	0.46	9	Tc (hrs)	1.50	1.17	1.03	0.91	0.83	0.77
												Vel (f/s)	0.63	0.92	1.04	1.18	1.29	1.39
												R (hrs)	1.43	0.95	0.83	0.71	0.65	0.60
N11L2	0.01	0.13	32.8	32.8	Urban	0.069	0.30	0.25	4.80	0.35	15	Tc (hrs)	0.66	0.49	0.44	0.39	0.36	0.33
												Vel (f/s)	0.29	0.39	0.44	0.49	0.54	0.57
												R (hrs)	0.63	0.45	0.40	0.35	0.32	0.29
N11L3	0.04	0.28	46.0	46.0	Urban	0.061	0.30	0.25	4.80	0.35	15	Tc (hrs)	0.81	0.61	0.54	0.48	0.44	0.41
												Vel (f/s)	0.50	0.68	0.76	0.86	0.93	1.00

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.68	0.49	0.43	0.38	0.34	0.32
N11L3A	0.03	0.24	69.6	69.6	Urban	0.063	0.29	0.25	4.65	0.33	9	Tc (hrs)	0.70	0.51	0.46	0.40	0.37	0.34
												Vel (f/s)	0.50	0.69	0.77	0.88	0.96	1.03
												R (hrs)	0.65	0.46	0.41	0.35	0.32	0.30
N11L4	0.01	0.23	49.1	49.1	HEC-1 Default	0.069	0.30	0.25	4.80	0.35	15	Tc (hrs)	0.77	0.57	0.51	0.46	0.42	0.39
												Vel (f/s)	0.44	0.59	0.66	0.74	0.81	0.86
												R (hrs)	1.18	0.85	0.75	0.66	0.60	0.55
N11L5	0.04	0.29	44.9	44.9	Urban	0.064	0.30	0.25	4.80	0.34	13	Tc (hrs)	0.87	0.64	0.57	0.51	0.47	0.43
												Vel (f/s)	0.49	0.66	0.74	0.84	0.91	0.98
												R (hrs)	0.72	0.51	0.45	0.39	0.36	0.33
N11L5A	0.05	0.34	41.2	41.2	Urban	0.060	0.30	0.25	4.55	0.35	7	Tc (hrs)	1.00	0.71	0.63	0.56	0.51	0.47
												Vel (f/s)	0.50	0.70	0.79	0.90	0.98	1.05
												R (hrs)	0.92	0.63	0.55	0.48	0.43	0.40
N11M	0.10	0.35	48.6	48.6	HEC-1 Default	0.055	0.30	0.25	4.15	0.52	15	Tc (hrs)	0.93	0.66	0.59	0.52	0.48	0.45
												Vel (f/s)	0.55	0.78	0.88	0.99	1.07	1.15
												R (hrs)	0.55	0.38	0.33	0.29	0.26	0.24
N11NA	0.02	0.16	2103.1	315.0	Natural	0.038	0.12	0.34	4.00	0.40	29	Tc (hrs)	0.23	0.18	0.17	0.15	0.14	0.13
												Vel (f/s)	1.02	1.28	1.41	1.57	1.69	1.81
												R (hrs)	0.15	0.11	0.10	0.09	0.08	0.08
N11NB	0.14	0.75	73.8	73.8	HEC-1 Default	0.056	0.30	0.25	4.70	0.32	7	Tc (hrs)	1.17	0.85	0.75	0.66	0.60	0.56
												Vel (f/s)	0.94	1.30	1.46	1.67	1.82	1.96
												R (hrs)	1.08	0.75	0.66	0.57	0.51	0.48
N11NC	0.17	0.59	126.5	126.5	HEC-1 Default	0.055	0.29	0.25	4.20	0.46	9	Tc (hrs)	0.94	0.65	0.58	0.51	0.47	0.43
												Vel (f/s)	0.92	1.33	1.50	1.71	1.86	2.01
												R (hrs)	0.62	0.41	0.36	0.31	0.28	0.26

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple * Duration: 5 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N11ND	0.05	0.40	31.1	31.1	Urban	0.062	0.29	0.25	4.60	0.36	12	Tc (hrs)	1.14	0.84	0.75	0.66	0.61	0.56
												Vel (f/s)	0.52	0.70	0.78	0.89	0.97	1.04
												R (hrs)	1.10	0.78	0.69	0.60	0.54	0.50
N11O	0.05	0.33	51.5	51.5	Natural	0.059	0.30	0.25	4.50	0.42	15	Tc (hrs)	0.87	0.64	0.57	0.50	0.46	0.43
												Vel (f/s)	0.56	0.76	0.85	0.96	1.05	1.12
												R (hrs)	0.69	0.49	0.43	0.38	0.34	0.32
N11P1	0.06	0.49	144.5	144.5	Natural	0.058	0.30	0.25	4.10	0.46	5	Tc (hrs)	0.91	0.60	0.53	0.46	0.42	0.39
												Vel (f/s)	0.79	1.19	1.36	1.56	1.70	1.83
												R (hrs)	0.90	0.57	0.49	0.42	0.39	0.35
N11P2	0.06	0.27	111.5	111.5	Natural	0.058	0.30	0.25	4.10	0.46	5	Tc (hrs)	0.73	0.48	0.43	0.37	0.34	0.32
												Vel (f/s)	0.54	0.82	0.93	1.07	1.16	1.26
												R (hrs)	0.44	0.28	0.24	0.21	0.19	0.17
N11P3	0.04	0.46	28.5	28.5	Urban	0.060	0.30	0.25	4.80	0.30	5	Tc (hrs)	1.29	0.93	0.82	0.72	0.66	0.61
												Vel (f/s)	0.52	0.73	0.82	0.94	1.03	1.10
												R (hrs)	1.62	1.13	0.99	0.85	0.77	0.71
N11P4	0.05	0.40	102.8	102.8	HEC-1 Default	0.059	0.30	0.25	4.15	0.44	5	Tc (hrs)	0.90	0.61	0.53	0.47	0.43	0.39
												Vel (f/s)	0.65	0.97	1.10	1.26	1.38	1.49
												R (hrs)	0.87	0.56	0.49	0.42	0.38	0.35
N11P5	0.03	0.22	1231.2	315.0	Natural	0.032	0.10	0.35	4.00	0.39	15	Tc (hrs)	0.27	0.21	0.19	0.17	0.16	0.14
												Vel (f/s)	1.18	1.53	1.71	1.92	2.08	2.24
												R (hrs)	0.21	0.15	0.14	0.12	0.11	0.10
N11P6	0.16	0.50	750.0	315.0	Natural	0.027	0.10	0.35	4.00	0.39	40	Tc (hrs)	0.31	0.26	0.24	0.21	0.20	0.19
												Vel (f/s)	2.34	2.84	3.11	3.43	3.69	3.90
												R (hrs)	0.17	0.14	0.12	0.11	0.10	0.10
N11P7	0.06	0.16	335.4	274.0	Natural	0.058	0.30	0.25	4.25	0.42	5	Tc (hrs)	0.41	0.28	0.25	0.21	0.20	0.18
												Vel (f/s)	0.57	0.84	0.96	1.10	1.20	1.29

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.16	0.10	0.09	0.08	0.07	0.06
N11P8	0.04	0.23	1517.2	315.0	Natural	0.043	0.16	0.32	4.15	0.39	22	Tc (hrs)	0.31	0.24	0.22	0.20	0.18	0.17
												Vel (f/s)	1.08	1.39	1.54	1.72	1.86	2.00
												R (hrs)	0.19	0.14	0.13	0.11	0.10	0.10
N11P9	0.04	0.20	191.9	191.9	Natural	0.060	0.30	0.25	4.10	0.46	5	Tc (hrs)	0.54	0.36	0.31	0.28	0.25	0.23
												Vel (f/s)	0.54	0.82	0.93	1.07	1.16	1.26
												R (hrs)	0.31	0.20	0.17	0.15	0.13	0.12
N20	0.36	0.56	31.2	31.2	Urban	0.039	0.13	0.19	4.70	0.34	62	Tc (hrs)	0.72	0.62	0.57	0.52	0.49	0.47
												Vel (f/s)	1.14	1.33	1.44	1.58	1.68	1.76
												R (hrs)	0.29	0.25	0.23	0.20	0.19	0.18
N21	0.62	1.47	23.4	23.4	HEC-1 Default	0.048	0.18	0.17	4.60	0.43	55	Tc (hrs)	1.50	1.27	1.17	1.06	1.00	0.94
												Vel (f/s)	1.44	1.70	1.85	2.03	2.17	2.28
												R (hrs)	1.03	0.86	0.78	0.71	0.66	0.62
N21C	0.39	1.36	22.1	22.1	Urban	0.047	0.24	0.15	8.00	0.10	32	Tc (hrs)	1.48	1.22	1.11	1.01	0.94	0.89
												Vel (f/s)	1.35	1.64	1.80	1.98	2.11	2.23
												R (hrs)	1.24	1.00	0.91	0.81	0.75	0.71
N21D	0.05	0.41	19.6	19.6	Urban	0.059	0.25	0.15	9.70	0.06	30	Tc (hrs)	0.93	0.77	0.70	0.64	0.60	0.57
												Vel (f/s)	0.65	0.78	0.86	0.94	1.01	1.06
												R (hrs)	0.89	0.72	0.65	0.59	0.55	0.52
N21E	0.06	0.44	23.0	23.0	Urban	0.060	0.26	0.10	11.20	0.03	28	Tc (hrs)	0.88	0.74	0.68	0.62	0.58	0.55
												Vel (f/s)	0.73	0.87	0.95	1.05	1.11	1.17
												R (hrs)	0.81	0.66	0.60	0.54	0.51	0.48
N21F	0.13	0.67	14.9	14.9	Urban	0.055	0.29	0.10	11.20	0.03	17	Tc (hrs)	1.24	1.02	0.93	0.84	0.79	0.75
												Vel (f/s)	0.80	0.97	1.06	1.17	1.25	1.31
												R (hrs)	1.11	0.90	0.81	0.72	0.68	0.64

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N21G	0.06	0.51	27.5	27.5	Urban	0.058	0.30	0.10	11.20	0.03	15	Tc (hrs)	0.92	0.76	0.69	0.63	0.59	0.56
												Vel (f/s)	0.81	0.99	1.08	1.20	1.28	1.35
												R (hrs)	0.96	0.77	0.69	0.62	0.58	0.54
N21H	0.03	0.26	30.8	30.8	Urban	0.063	0.30	0.25	5.10	0.31	15	Tc (hrs)	0.89	0.67	0.60	0.53	0.49	0.45
												Vel (f/s)	0.43	0.57	0.64	0.72	0.79	0.84
												R (hrs)	0.77	0.56	0.50	0.43	0.39	0.37
N21I1	0.08	0.55	49.7	49.7	Urban	0.059	0.30	0.25	4.70	0.32	7	Tc (hrs)	1.17	0.84	0.75	0.66	0.60	0.56
												Vel (f/s)	0.69	0.96	1.08	1.23	1.34	1.45
												R (hrs)	1.12	0.78	0.69	0.59	0.54	0.50
N21I2	0.06	0.60	39.6	39.6	Urban	0.059	0.30	0.25	4.70	0.31	5	Tc (hrs)	1.32	0.95	0.84	0.74	0.67	0.63
												Vel (f/s)	0.66	0.93	1.05	1.19	1.31	1.41
												R (hrs)	1.72	1.19	1.04	0.90	0.81	0.75
N21I3	0.09	0.53	37.7	37.7	HEC-1 Default	0.057	0.28	0.27	5.70	0.23	12	Tc (hrs)	1.10	0.84	0.75	0.66	0.61	0.57
												Vel (f/s)	0.70	0.92	1.03	1.17	1.28	1.36
												R (hrs)	1.00	0.74	0.66	0.57	0.52	0.48
N21I4	0.03	0.32	44.8	44.8	Urban	0.063	0.30	0.25	4.80	0.30	5	Tc (hrs)	0.96	0.69	0.61	0.53	0.49	0.46
												Vel (f/s)	0.49	0.68	0.77	0.88	0.96	1.03
												R (hrs)	1.11	0.77	0.68	0.58	0.53	0.49
N21JA	0.08	0.54	834.4	315.0	Natural	0.047	0.19	0.30	4.15	0.43	35	Tc (hrs)	0.46	0.37	0.34	0.30	0.28	0.27
												Vel (f/s)	1.73	2.15	2.36	2.61	2.81	2.98
												R (hrs)	0.40	0.32	0.28	0.25	0.23	0.22
N21JB	0.17	0.61	88.8	88.8	HEC-1 Default	0.056	0.30	0.25	4.55	0.38	10	Tc (hrs)	1.01	0.72	0.64	0.57	0.52	0.48
												Vel (f/s)	0.88	1.24	1.39	1.58	1.72	1.85
												R (hrs)	0.70	0.49	0.43	0.37	0.34	0.31
N21Z	0.11	0.52	33.0	33.0	HEC-1 Default	0.058	0.30	0.21	6.40	0.18	13	Tc (hrs)	1.07	0.85	0.76	0.67	0.62	0.58
												Vel (f/s)	0.71	0.90	1.01	1.15	1.24	1.32

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.83	0.64	0.57	0.49	0.45	0.42
N22A	0.30	0.95	14.0	14.0	Urban	0.045	0.19	0.14	10.10	0.04	40	Tc (hrs)	1.28	1.08	1.00	0.91	0.86	0.82
												Vel (f/s)	1.09	1.29	1.40	1.53	1.63	1.71
												R (hrs)	0.93	0.77	0.71	0.64	0.60	0.56
N22B	0.18	0.73	25.6	25.6	Urban	0.052	0.25	0.15	9.70	0.06	30	Tc (hrs)	1.07	0.88	0.81	0.73	0.69	0.65
												Vel (f/s)	1.00	1.21	1.32	1.46	1.56	1.64
												R (hrs)	0.84	0.68	0.61	0.55	0.51	0.48
N23	0.39	1.04	18.6	18.6	Urban	0.045	0.20	0.24	4.30	0.45	36	Tc (hrs)	1.47	1.19	1.09	0.98	0.92	0.86
												Vel (f/s)	1.03	1.28	1.40	1.55	1.67	1.77
												R (hrs)	1.01	0.80	0.72	0.64	0.59	0.56
N24	0.11	0.55	40.0	40.0	HEC-1 Default	0.046	0.16	0.17	3.43	0.69	50	Tc (hrs)	0.79	0.66	0.60	0.55	0.52	0.49
												Vel (f/s)	1.03	1.23	1.34	1.47	1.57	1.65
												R (hrs)	0.62	0.51	0.47	0.42	0.39	0.37
N24D	0.09	0.44	27.3	27.3	Urban	0.040	0.10	0.11	4.25	0.42	71	Tc (hrs)	0.65	0.56	0.52	0.48	0.45	0.43
												Vel (f/s)	0.99	1.15	1.24	1.36	1.43	1.51
												R (hrs)	0.47	0.40	0.37	0.34	0.32	0.30
N24E	0.02	0.31	19.4	19.4	Natural	0.065	0.30	0.25	3.95	0.56	15	Tc (hrs)	1.29	0.91	0.80	0.71	0.66	0.61
												Vel (f/s)	0.35	0.50	0.57	0.64	0.69	0.74
												R (hrs)	1.73	1.18	1.03	0.90	0.82	0.76
N24F	0.11	0.49	32.7	32.7	HEC-1 Default	0.055	0.29	0.24	5.00	0.32	18	Tc (hrs)	1.07	0.82	0.74	0.66	0.60	0.56
												Vel (f/s)	0.67	0.88	0.97	1.10	1.19	1.27
												R (hrs)	0.81	0.60	0.54	0.47	0.43	0.40
N24G	0.43	1.06	28.2	28.2	HEC-1 Default	0.049	0.28	0.24	4.20	0.49	18	Tc (hrs)	1.50	1.24	1.11	0.98	0.91	0.85
												Vel (f/s)	0.93	1.25	1.40	1.58	1.71	1.83
												R (hrs)	1.11	0.80	0.70	0.62	0.56	0.52

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N24H	0.23	0.73	60.2	60.2	Natural	0.050	0.22	0.28	4.10	0.49	48	Tc (hrs)	0.86	0.71	0.65	0.59	0.55	0.52
												Vel (f/s)	1.25	1.52	1.65	1.82	1.94	2.06
												R (hrs)	0.56	0.45	0.41	0.37	0.34	0.32
N24I	0.30	1.25	32.0	32.0	Natural	0.049	0.20	0.21	4.15	0.49	48	Tc (hrs)	1.32	1.10	1.01	0.92	0.86	0.81
												Vel (f/s)	1.39	1.67	1.82	2.00	2.13	2.26
												R (hrs)	1.20	0.98	0.89	0.80	0.74	0.70
N24J	0.12	0.89	31.5	31.5	Natural	0.057	0.23	0.25	3.95	0.55	39	Tc (hrs)	1.32	1.06	0.97	0.88	0.82	0.77
												Vel (f/s)	0.99	1.23	1.35	1.49	1.60	1.69
												R (hrs)	1.53	1.20	1.09	0.97	0.90	0.84
N24K	0.21	1.33	30.1	30.1	Natural	0.054	0.23	0.24	4.15	0.51	42	Tc (hrs)	1.50	1.26	1.15	1.04	0.97	0.92
												Vel (f/s)	1.26	1.55	1.70	1.88	2.00	2.12
												R (hrs)	1.82	1.45	1.31	1.18	1.09	1.02
N24M	0.17	0.52	57.6	57.6	HEC-1 Default	0.051	0.23	0.24	4.60	0.38	34	Tc (hrs)	0.78	0.64	0.58	0.52	0.48	0.46
												Vel (f/s)	0.97	1.20	1.32	1.46	1.58	1.67
												R (hrs)	0.46	0.37	0.33	0.29	0.27	0.25
N24N	0.13	0.83	106.0	106.0	HEC-1 Default	0.045	0.19	0.29	3.95	0.49	23	Tc (hrs)	0.88	0.67	0.61	0.54	0.50	0.47
												Vel (f/s)	1.39	1.81	2.01	2.25	2.43	2.60
												R (hrs)	0.88	0.66	0.58	0.52	0.47	0.44
N24V	0.05	0.40	577.5	312.0	Natural	0.032	0.10	0.35	4.15	0.37	12	Tc (hrs)	0.38	0.29	0.26	0.23	0.21	0.20
												Vel (f/s)	1.55	2.03	2.27	2.56	2.79	2.99
												R (hrs)	0.35	0.26	0.23	0.20	0.19	0.17
N25	0.24	1.08	31.5	31.5	Natural	0.042	0.16	0.18	3.53	0.63	44	Tc (hrs)	1.17	0.97	0.89	0.80	0.75	0.71
												Vel (f/s)	1.36	1.64	1.79	1.98	2.11	2.23
												R (hrs)	1.04	0.85	0.77	0.69	0.64	0.60
N26	0.04	0.33	54.5	54.5	Natural	0.037	0.07	0.21	3.88	0.43	41	Tc (hrs)	0.50	0.42	0.38	0.35	0.32	0.31
												Vel (f/s)	0.97	1.16	1.27	1.40	1.50	1.59

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.44	0.36	0.33	0.29	0.27	0.26
N27	0.28	1.80	106.7	106.7	HEC-1 Default	0.035	0.09	0.25	3.33	0.68	36	Tc (hrs)	1.01	0.82	0.74	0.67	0.63	0.59
												Vel (f/s)	2.61	3.24	3.55	3.94	4.22	4.47
												R (hrs)	1.24	0.97	0.88	0.78	0.72	0.68
P1	0.03	0.35	113.3	113.3	HEC-1 Default	0.063	0.30	0.25	6.00	0.18	5	Tc (hrs)	0.68	0.52	0.46	0.40	0.37	0.35
												Vel (f/s)	0.76	0.99	1.12	1.29	1.39	1.49
												R (hrs)	0.78	0.58	0.51	0.43	0.40	0.37
P10	0.06	0.27	44.3	44.3	Urban	0.060	0.25	0.26	3.78	0.63	29	Tc (hrs)	0.75	0.58	0.52	0.47	0.44	0.41
												Vel (f/s)	0.53	0.68	0.76	0.85	0.91	0.97
												R (hrs)	0.50	0.37	0.33	0.29	0.27	0.25
P11	0.04	0.39	15.7	15.7	Urban	0.060	0.25	0.25	3.85	0.60	30	Tc (hrs)	1.22	0.95	0.86	0.77	0.71	0.67
												Vel (f/s)	0.47	0.60	0.67	0.75	0.80	0.85
												R (hrs)	1.33	1.00	0.89	0.79	0.73	0.68
P12	0.04	0.29	44.1	44.1	Urban	0.060	0.25	0.26	3.58	0.71	30	Tc (hrs)	0.79	0.61	0.54	0.49	0.45	0.43
												Vel (f/s)	0.54	0.70	0.78	0.87	0.94	1.00
												R (hrs)	0.62	0.47	0.42	0.37	0.34	0.32
P13	0.06	0.30	126.1	126.1	Urban	0.060	0.25	0.25	3.92	0.57	28	Tc (hrs)	0.57	0.44	0.40	0.35	0.33	0.31
												Vel (f/s)	0.77	1.00	1.11	1.24	1.34	1.42
												R (hrs)	0.38	0.28	0.25	0.22	0.21	0.19
P14	0.01	0.10	102.0	102.0	HEC-1 Default	0.070	0.25	0.25	3.81	0.62	30	Tc (hrs)	0.38	0.29	0.26	0.24	0.22	0.21
												Vel (f/s)	0.39	0.50	0.56	0.62	0.67	0.71
												R (hrs)	0.31	0.24	0.21	0.19	0.17	0.16
P15	0.01	0.14	28.2	28.2	HEC-1 Default	0.072	0.25	0.27	3.23	0.92	30	Tc (hrs)	0.71	0.55	0.49	0.44	0.41	0.38
												Vel (f/s)	0.29	0.37	0.42	0.47	0.51	0.54
												R (hrs)	0.97	0.74	0.64	0.56	0.52	0.49

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
P2	0.05	0.28	98.2	98.2	Urban	0.060	0.25	0.25	4.45	0.43	29	Tc (hrs)	0.57	0.45	0.40	0.36	0.34	0.32
												Vel (f/s)	0.73	0.92	1.02	1.13	1.22	1.30
												R (hrs)	0.39	0.30	0.27	0.24	0.22	0.20
A08	0.08	0.11	36.4	36.4	Urban	0.061	0.30	0.31	3.19	0.88	14	Tc (hrs)	0.72	0.50	0.42	0.36	0.33	0.31
												Vel (f/s)	0.22	0.33	0.39	0.45	0.49	0.52
												R (hrs)	0.19	0.13	0.10	0.09	0.08	0.07
P25S	0.03	0.25	28.0	28.0	Urban	0.066	0.25	0.15	7.60	0.11	35	Tc (hrs)	0.70	0.58	0.53	0.48	0.45	0.42
												Vel (f/s)	0.53	0.64	0.70	0.77	0.82	0.86
												R (hrs)	0.63	0.51	0.46	0.41	0.38	0.36
P27	0.07	0.59	91.8	91.8	Urban	0.058	0.25	0.15	8.00	0.10	30	Tc (hrs)	0.70	0.58	0.53	0.48	0.45	0.42
												Vel (f/s)	1.23	1.50	1.65	1.82	1.94	2.05
												R (hrs)	0.78	0.63	0.57	0.51	0.47	0.44
P27A	0.01	0.18	152.8	152.8	Urban	0.071	0.25	0.25	4.35	0.46	45	Tc (hrs)	0.39	0.32	0.29	0.26	0.25	0.23
												Vel (f/s)	0.68	0.83	0.91	1.00	1.07	1.13
												R (hrs)	0.51	0.41	0.37	0.33	0.31	0.29
P27B	0.01	0.27	191.4	191.4	Urban	0.067	0.25	0.25	5.00	0.32	39	Tc (hrs)	0.43	0.35	0.32	0.29	0.27	0.26
												Vel (f/s)	0.92	1.12	1.22	1.36	1.46	1.55
												R (hrs)	0.61	0.49	0.44	0.39	0.36	0.34
P28	0.03	0.30	69.0	69.0	Urban	0.063	0.25	0.13	10.10	0.04	30	Tc (hrs)	0.54	0.45	0.41	0.38	0.35	0.33
												Vel (f/s)	0.81	0.98	1.07	1.17	1.25	1.32
												R (hrs)	0.56	0.46	0.42	0.37	0.35	0.33
P3	0.05	0.39	59.0	59.0	Urban	0.059	0.25	0.25	4.50	0.42	30	Tc (hrs)	0.77	0.61	0.55	0.49	0.46	0.43
												Vel (f/s)	0.75	0.94	1.04	1.16	1.25	1.33
												R (hrs)	0.68	0.53	0.47	0.42	0.39	0.36
P4a	0.04	0.33	31.5	31.5	Urban	0.061	0.25	0.25	4.00	0.54	31	Tc (hrs)	0.89	0.70	0.63	0.57	0.53	0.50
												Vel (f/s)	0.54	0.69	0.77	0.85	0.92	0.97

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.65	0.65	0.58	0.52	0.48	0.45
P4b	0.02	0.12	87.1	87.1	Urban	0.066	0.25	0.25	4.45	0.43	30	Tc (hrs)	0.40	0.32	0.29	0.26	0.24	0.23
												Vel (f/s)	0.44	0.56	0.61	0.68	0.74	0.78
												R (hrs)	0.25	0.19	0.17	0.15	0.14	0.13
P6	0.07	0.70	13.8	13.8	Urban	0.057	0.25	0.25	4.25	0.49	30	Tc (hrs)	1.50	1.27	1.15	1.03	0.96	0.90
												Vel (f/s)	0.64	0.81	0.90	1.00	1.07	1.14
												R (hrs)	2.16	1.65	1.48	1.31	1.21	1.13
P7	0.01	0.22	25.3	25.3	Urban	0.067	0.25	0.25	3.95	0.56	30	Tc (hrs)	0.83	0.65	0.58	0.52	0.49	0.46
												Vel (f/s)	0.39	0.50	0.55	0.62	0.66	0.70
												R (hrs)	1.02	0.77	0.69	0.61	0.57	0.53
P8	0.01	0.21	16.6	16.6	Urban	0.067	0.25	0.25	4.15	0.52	30	Tc (hrs)	0.92	0.72	0.65	0.58	0.54	0.51
												Vel (f/s)	0.34	0.43	0.48	0.53	0.57	0.61
												R (hrs)	1.15	0.87	0.78	0.69	0.64	0.60
P9	0.05	0.39	179.0	179.0	Urban	0.060	0.25	0.25	3.92	0.57	30	Tc (hrs)	0.57	0.44	0.40	0.36	0.34	0.32
												Vel (f/s)	1.00	1.29	1.43	1.59	1.71	1.82
												R (hrs)	0.55	0.41	0.37	0.33	0.30	0.28
S1	0.12	0.72	69.3	69.3	HEC-1 Default	0.055	0.28	0.25	4.25	0.50	21	Tc (hrs)	1.09	0.81	0.73	0.65	0.60	0.56
												Vel (f/s)	0.97	1.30	1.46	1.64	1.77	1.89
												R (hrs)	1.02	0.74	0.66	0.58	0.53	0.49
S2	0.01	0.09	117.6	117.6	HEC-1 Default	0.070	0.30	0.25	4.70	0.32	7	Tc (hrs)	0.39	0.29	0.25	0.22	0.20	0.19
												Vel (f/s)	0.34	0.46	0.52	0.59	0.65	0.70
												R (hrs)	0.24	0.17	0.15	0.13	0.11	0.11
S3	0.01	0.06	125.0	125.0	Urban	0.072	0.30	0.25	4.65	0.32	5	Tc (hrs)	0.33	0.23	0.21	0.18	0.17	0.15
												Vel (f/s)	0.27	0.38	0.42	0.48	0.53	0.57
												R (hrs)	0.21	0.14	0.13	0.11	0.10	0.09

* Non default value

Sub Basin Data

5/2/2007

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
S30A	0.53	1.34	14.2	14.2	Urban	0.042	0.22	0.21	6.40	0.21	28	Tc (hrs)	1.50	1.41	1.28	1.14	1.06	1.01
												Vel (f/s)	1.14	1.39	1.53	1.72	1.85	1.96
												R (hrs)	1.23	0.99	0.88	0.78	0.72	0.67
S30B	0.40	1.63	20.9	20.9	HEC-1 Default	0.042	0.19	0.29	5.80	0.21	24	Tc (hrs)	1.50	1.41	1.28	1.14	1.06	1.00
												Vel (f/s)	1.37	1.69	1.87	2.10	2.26	2.40
												R (hrs)	1.71	1.36	1.21	1.06	0.98	0.92
S30C	0.45	1.49	24.2	24.2	Urban	0.045	0.23	0.15	7.30	0.13	36	Tc (hrs)	1.46	1.22	1.11	1.00	0.94	0.89
												Vel (f/s)	1.49	1.80	1.97	2.18	2.32	2.45
												R (hrs)	1.22	0.99	0.90	0.80	0.75	0.70
S30D	0.13	0.46	15.2	15.2	Urban	0.054	0.25	0.17	6.80	0.15	30	Tc (hrs)	1.07	0.89	0.80	0.72	0.68	0.64
												Vel (f/s)	0.63	0.76	0.84	0.94	1.00	1.06
												R (hrs)	0.68	0.55	0.50	0.44	0.41	0.39
S4	0.01	0.32	126.1	126.1	HEC-1 Default	0.071	0.30	0.25	4.80	0.32	8	Tc (hrs)	0.73	0.53	0.47	0.41	0.38	0.35
												Vel (f/s)	0.65	0.89	1.00	1.14	1.24	1.34
												R (hrs)	1.19	0.83	0.73	0.63	0.57	0.53
SUMMIT	0.03	0.24	32.1	32.1	Urban	0.063	0.30	0.25	4.35	0.40	5	Tc (hrs)	1.01	0.69	0.61	0.53	0.49	0.45
												Vel (f/s)	0.35	0.51	0.58	0.66	0.73	0.78
												R (hrs)	0.95	0.62	0.54	0.47	0.42	0.39
WB1	0.12	0.60	15.9	15.9	Urban	0.052	0.23	0.18	7.30	0.12	26	Tc (hrs)	1.19	0.97	0.88	0.80	0.74	0.70
												Vel (f/s)	0.74	0.90	1.00	1.11	1.18	1.25
												R (hrs)	1.02	0.82	0.73	0.65	0.61	0.57
WB10	0.10	0.60	23.2	23.2	Urban	0.050	0.20	0.19	8.00	0.09	24	Tc (hrs)	1.02	0.84	0.76	0.69	0.64	0.61
												Vel (f/s)	0.86	1.05	1.16	1.28	1.37	1.45
												R (hrs)	0.97	0.77	0.69	0.62	0.58	0.54
WB2	0.09	0.53	19.6	19.6	Urban	0.048	0.19	0.20	8.80	0.06	18	Tc (hrs)	0.99	0.80	0.73	0.66	0.62	0.58
												Vel (f/s)	0.79	0.97	1.06	1.18	1.26	1.33

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.87	0.69	0.62	0.55	0.51	0.48
WB3	0.01	0.11	51.4	51.4	Urban	0.040	0.12	0.26	8.80	0.05	3	Tc (hrs)	0.31	0.25	0.23	0.20	0.19	0.18
												Vel (f/s)	0.52	0.64	0.71	0.79	0.84	0.89
												R (hrs)	0.24	0.19	0.17	0.15	0.14	0.13
WB4	0.11	0.50	29.4	29.4	Urban	0.052	0.22	0.17	8.80	0.07	25	Tc (hrs)	0.87	0.71	0.65	0.59	0.55	0.52
												Vel (f/s)	0.84	1.03	1.13	1.25	1.33	1.41
												R (hrs)	0.64	0.52	0.47	0.42	0.39	0.36
WB5	0.11	0.38	26.1	26.1	Urban	0.048	0.20	0.19	8.80	0.06	19	Tc (hrs)	0.76	0.62	0.57	0.51	0.48	0.45
												Vel (f/s)	0.73	0.90	0.99	1.09	1.17	1.23
												R (hrs)	0.43	0.35	0.31	0.28	0.26	0.24
WB6	0.12	0.71	17.5	17.5	Urban	0.051	0.22	0.18	8.80	0.07	24	Tc (hrs)	1.21	0.99	0.90	0.82	0.76	0.72
												Vel (f/s)	0.86	1.05	1.15	1.28	1.36	1.44
												R (hrs)	1.20	0.95	0.86	0.77	0.72	0.67
WB7	0.05	0.35	28.2	28.2	Urban	0.044	0.14	0.20	8.80	0.07	34	Tc (hrs)	0.65	0.54	0.50	0.45	0.42	0.40
												Vel (f/s)	0.79	0.95	1.03	1.14	1.21	1.28
												R (hrs)	0.58	0.47	0.43	0.39	0.36	0.34
WB8	0.07	0.78	3.2	3.2	Urban	0.052	0.21	0.15	8.80	0.07	44	Tc (hrs)	1.50	1.50	1.50	1.42	1.34	1.27
												Vel (f/s)	0.57	0.68	0.73	0.81	0.86	0.90
												R (hrs)	3.06	2.54	2.32	2.09	1.95	1.85
WB9	0.22	1.06	13.5	13.5	Urban	0.048	0.22	0.26	5.10	0.31	32	Tc (hrs)	1.50	1.38	1.26	1.13	1.05	0.99
												Vel (f/s)	0.91	1.13	1.24	1.38	1.48	1.58
												R (hrs)	1.67	1.32	1.19	1.06	0.97	0.91
M1	0.11	0.62	28.7	28.7	Urban	0.055	0.30	0.25	4.25	0.49	15	Tc (hrs)	1.44	1.03	0.91	0.81	0.75	0.69
												Vel (f/s)	0.63	0.88	1.00	1.13	1.22	1.31
												R (hrs)	1.36	0.94	0.82	0.71	0.65	0.61

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
M10	0.09	0.60	25.0	25.0	Urban	0.029	0.10	0.25	4.55	0.52	75	Tc (hrs)	0.67	0.57	0.53	0.49	0.46	0.44
												Vel (f/s)	1.32	1.54	1.66	1.80	1.91	2.00
												R (hrs)	0.63	0.53	0.49	0.45	0.42	0.40
M11A	0.07	0.56	19.6	19.6	Urban	0.057	0.25	0.25	4.25	0.49	31	Tc (hrs)	1.29	1.01	0.92	0.82	0.77	0.72
												Vel (f/s)	0.64	0.81	0.90	1.00	1.07	1.14
												R (hrs)	1.41	1.08	0.97	0.86	0.79	0.74
M11B	0.02	0.22	29.1	29.1	Urban	0.066	0.25	0.25	4.30	0.48	30	Tc (hrs)	0.77	0.61	0.55	0.49	0.46	0.43
												Vel (f/s)	0.42	0.53	0.59	0.65	0.70	0.75
												R (hrs)	0.82	0.63	0.56	0.50	0.46	0.43
M12A	0.11	0.40	36.4	36.4	Urban	0.054	0.25	0.25	4.40	0.45	30	Tc (hrs)	0.87	0.69	0.62	0.56	0.52	0.49
												Vel (f/s)	0.67	0.86	0.94	1.05	1.13	1.21
												R (hrs)	0.53	0.41	0.37	0.32	0.30	0.28
M12B	0.04	0.42	33.1	33.1	Urban	0.060	0.25	0.25	4.20	0.50	30	Tc (hrs)	0.98	0.77	0.70	0.63	0.58	0.55
												Vel (f/s)	0.63	0.80	0.89	0.99	1.06	1.13
												R (hrs)	1.08	0.82	0.73	0.65	0.60	0.56
M2	0.16	0.73	25.8	25.8	Urban	0.052	0.30	0.25	4.70	0.36	15	Tc (hrs)	1.45	1.08	0.97	0.86	0.79	0.73
												Vel (f/s)	0.74	0.99	1.11	1.25	1.36	1.46
												R (hrs)	1.24	0.89	0.79	0.69	0.63	0.58
M3	0.12	0.63	19.7	19.7	Urban	0.054	0.30	0.25	4.20	0.50	15	Tc (hrs)	1.50	1.16	1.03	0.91	0.84	0.78
												Vel (f/s)	0.57	0.80	0.90	1.02	1.10	1.18
												R (hrs)	1.45	1.00	0.88	0.76	0.70	0.65
M370	0.13	0.67	30.5	30.5	Urban	0.057	0.29	0.25	4.60	0.39	18	Tc (hrs)	1.36	1.02	0.92	0.81	0.75	0.70
												Vel (f/s)	0.72	0.96	1.07	1.21	1.31	1.41
												R (hrs)	1.20	0.87	0.78	0.68	0.62	0.58
M4	0.13	0.76	30.5	30.5	Urban	0.053	0.29	0.25	4.55	0.41	17	Tc (hrs)	1.43	1.06	0.95	0.84	0.78	0.72
												Vel (f/s)	0.78	1.05	1.18	1.33	1.44	1.54

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	1.40	1.00	0.89	0.78	0.71	0.66
M5	0.02	0.22	8.3	8.3	Urban	0.034	0.10	0.35	4.10	0.38		Tc (hrs)	1.05	0.74	0.65	0.57	0.52	0.48
												Vel (f/s)	0.31	0.44	0.50	0.57	0.63	0.68
												R (hrs)	1.22	0.83	0.72	0.62	0.56	0.51
M6	0.02	0.26	17.1	17.1	Urban	0.033	0.10	0.25	4.15	0.67	75	Tc (hrs)	0.53	0.46	0.42	0.39	0.37	0.35
												Vel (f/s)	0.72	0.84	0.90	0.98	1.04	1.09
												R (hrs)	0.55	0.46	0.43	0.39	0.36	0.35
M7	0.11	0.71	15.9	15.9	Urban	0.054	0.30	0.25	4.20	0.50	15	Tc (hrs)	1.50	1.31	1.16	1.03	0.95	0.89
												Vel (f/s)	0.57	0.79	0.90	1.01	1.10	1.18
												R (hrs)	1.91	1.32	1.15	1.01	0.92	0.85
M8	0.07	0.46	20.3	20.3	Urban	0.058	0.30	0.25	4.35	0.46	15	Tc (hrs)	1.39	1.01	0.89	0.79	0.73	0.68
												Vel (f/s)	0.48	0.67	0.75	0.85	0.92	0.99
												R (hrs)	1.35	0.94	0.83	0.72	0.66	0.61
M9	0.12	0.46	24.0	24.0	Urban	0.053	0.29	0.25	4.35	0.47	17	Tc (hrs)	1.23	0.90	0.80	0.71	0.66	0.61
												Vel (f/s)	0.55	0.75	0.84	0.95	1.03	1.10
												R (hrs)	0.83	0.59	0.52	0.45	0.42	0.39
MA1	0.01	0.22	12.1	12.1	Urban	0.035	0.10	0.25	4.20	0.61	80	Tc (hrs)	0.55	0.47	0.44	0.40	0.38	0.36
												Vel (f/s)	0.59	0.68	0.74	0.80	0.84	0.89
												R (hrs)	0.70	0.60	0.55	0.50	0.47	0.45
MA2	0.03	0.30	27.4	27.4	Urban	0.032	0.10	0.25	4.30	0.58	80	Tc (hrs)	0.47	0.41	0.38	0.35	0.33	0.32
												Vel (f/s)	0.93	1.08	1.16	1.26	1.33	1.40
												R (hrs)	0.49	0.42	0.39	0.35	0.33	0.31

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
19	0.05	0.31	116.0	116.0	Urban	0.063	0.27	0.25	6.20	0.19	27	Tc (hrs)	0.54	0.44	0.40	0.35	0.33	0.31
												Vel (f/s)	0.84	1.03	1.14	1.28	1.38	1.46
												R (hrs)	0.43	0.34	0.31	0.27	0.25	0.23
20	0.04	0.42	315.0	268.0	HEC-1 Default	0.064	0.29	0.19	8.80	0.07	23	Tc (hrs)	0.46	0.38	0.34	0.31	0.29	0.27
												Vel (f/s)	1.33	1.64	1.81	2.01	2.15	2.27
												R (hrs)	0.49	0.39	0.35	0.31	0.29	0.27
21	0.03	0.31	97.0	97.0	Urban	0.063	0.25	0.23	6.20	0.20	30	Tc (hrs)	0.56	0.46	0.42	0.37	0.35	0.33
												Vel (f/s)	0.81	0.99	1.09	1.23	1.31	1.39
												R (hrs)	0.57	0.46	0.41	0.36	0.34	0.32
22	0.04	0.31	315.0	268.0	HEC-1 Default	0.065	0.30	0.22	8.40	0.08	18	Tc (hrs)	0.42	0.34	0.30	0.27	0.25	0.24
												Vel (f/s)	1.09	1.35	1.51	1.68	1.80	1.91
												R (hrs)	0.34	0.27	0.24	0.21	0.19	0.18
23	0.03	0.31	129.0	129.0	Urban	0.062	0.25	0.21	6.40	0.18	30	Tc (hrs)	0.50	0.41	0.37	0.33	0.31	0.29
												Vel (f/s)	0.91	1.11	1.22	1.37	1.46	1.55
												R (hrs)	0.49	0.39	0.35	0.31	0.29	0.27
24	0.02	0.36	315.0	268.0	HEC-1 Default	0.069	0.30	0.22	8.00	0.09	19	Tc (hrs)	0.47	0.37	0.34	0.30	0.28	0.27
												Vel (f/s)	1.14	1.41	1.57	1.75	1.88	1.99
												R (hrs)	0.65	0.51	0.45	0.40	0.37	0.35
25	0.02	0.31	106.0	106.0	Urban	0.066	0.25	0.21	6.40	0.18	30	Tc (hrs)	0.55	0.45	0.41	0.37	0.34	0.32
												Vel (f/s)	0.83	1.01	1.11	1.24	1.33	1.41
												R (hrs)	0.81	0.66	0.59	0.52	0.48	0.45
27	0.04	0.33	112.0	112.0	Urban	0.061	0.25	0.23	6.20	0.20	30	Tc (hrs)	0.54	0.44	0.40	0.36	0.34	0.32
												Vel (f/s)	0.89	1.09	1.20	1.34	1.44	1.53
												R (hrs)	0.49	0.39	0.35	0.31	0.29	0.27
29	0.03	0.30	107.0	107.0	Urban	0.062	0.25	0.21	6.40	0.18	30	Tc (hrs)	0.52	0.43	0.39	0.35	0.33	0.31
												Vel (f/s)	0.85	1.03	1.13	1.27	1.35	1.43

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.47	0.38	0.34	0.30	0.28	0.26
33	0.04	0.43	191.0	191.0	Urban	0.062	0.25	0.25	4.25	0.49	38	Tc (hrs)	0.55	0.44	0.40	0.36	0.34	0.32
												Vel (f/s)	1.15	1.43	1.57	1.74	1.86	1.98
												R (hrs)	0.59	0.46	0.42	0.37	0.35	0.32
34	0.03	0.18	280.2	257.0	Urban	0.066	0.27	0.27	4.35	0.45	39	Tc (hrs)	0.33	0.27	0.24	0.22	0.21	0.19
												Vel (f/s)	0.79	0.99	1.08	1.20	1.28	1.36
												R (hrs)	0.21	0.17	0.15	0.13	0.13	0.12
35	0.04	0.52	38.0	38.0	Urban	0.060	0.25	0.25	4.25	0.49	33	Tc (hrs)	1.02	0.81	0.73	0.66	0.61	0.58
												Vel (f/s)	0.75	0.95	1.04	1.16	1.24	1.32
												R (hrs)	1.33	1.03	0.92	0.82	0.76	0.71
36	0.05	0.40	259.5	245.0	HEC-1 Default	0.063	0.27	0.27	4.35	0.45	38	Tc (hrs)	0.50	0.40	0.36	0.33	0.31	0.29
												Vel (f/s)	1.18	1.47	1.62	1.79	1.92	2.04
												R (hrs)	0.48	0.37	0.34	0.30	0.28	0.26
41	0.05	0.32	502.2	303.0	Natural	0.061	0.34	0.34	4.40	0.39	21	Tc (hrs)	0.50	0.37	0.32	0.29	0.27	0.25
												Vel (f/s)	0.95	1.29	1.45	1.63	1.76	1.88
												R (hrs)	0.36	0.26	0.23	0.20	0.18	0.17
42	0.08	0.42	551.5	309.0	Natural	0.057	0.35	0.35	4.25	0.42	44	Tc (hrs)	0.44	0.36	0.32	0.29	0.27	0.26
												Vel (f/s)	1.40	1.73	1.90	2.10	2.25	2.38
												R (hrs)	0.33	0.26	0.23	0.21	0.19	0.18
45	0.06	0.34	315.0	268.0	HEC-1 Default	0.062	0.28	0.28	4.45	0.41	34	Tc (hrs)	0.45	0.36	0.33	0.29	0.27	0.26
												Vel (f/s)	1.10	1.39	1.53	1.70	1.82	1.94
												R (hrs)	0.32	0.24	0.22	0.20	0.18	0.17
46	0.06	0.35	313.4	267.0	HEC-1 Default	0.062	0.32	0.32	4.20	0.46	41	Tc (hrs)	0.45	0.36	0.33	0.30	0.28	0.26
												Vel (f/s)	1.15	1.43	1.57	1.74	1.86	1.97
												R (hrs)	0.32	0.25	0.23	0.20	0.19	0.18

* Non default value

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
47	0.04	0.29	103.0	103.0	Urban	0.061	0.25	0.25	4.45	0.43	36	Tc (hrs)	0.54	0.44	0.40	0.36	0.33	0.31
												Vel (f/s)	0.78	0.98	1.07	1.19	1.27	1.35
												R (hrs)	0.44	0.35	0.31	0.28	0.26	0.24
48	0.03	0.30	50.0	50.0	Urban	0.063	0.25	0.25	3.92	0.57	31	Tc (hrs)	0.75	0.59	0.53	0.48	0.45	0.42
												Vel (f/s)	0.58	0.75	0.83	0.92	0.99	1.05
												R (hrs)	0.85	0.64	0.58	0.51	0.47	0.44
49	0.02	0.23	26.0	26.0	Urban	0.064	0.25	0.25	4.10	0.53	30	Tc (hrs)	0.82	0.64	0.58	0.52	0.48	0.45
												Vel (f/s)	0.41	0.53	0.59	0.65	0.70	0.75
												R (hrs)	0.76	0.58	0.52	0.46	0.43	0.40
50	0.03	0.34	85.0	85.0	Urban	0.063	0.25	0.25	6.00	0.21	30	Tc (hrs)	0.62	0.50	0.46	0.41	0.38	0.36
												Vel (f/s)	0.81	0.99	1.09	1.23	1.32	1.39
												R (hrs)	0.70	0.56	0.50	0.44	0.41	0.38
51	0.01	0.23	57.0	57.0	Urban	0.068	0.25	0.25	5.00	0.32	30	Tc (hrs)	0.62	0.50	0.45	0.41	0.38	0.35
												Vel (f/s)	0.54	0.68	0.75	0.83	0.90	0.95
												R (hrs)	0.84	0.65	0.59	0.52	0.48	0.45
52	0.04	0.41	102.0	102.0	Urban	0.060	0.25	0.25	5.70	0.24	30	Tc (hrs)	0.63	0.51	0.47	0.42	0.39	0.36
												Vel (f/s)	0.95	1.17	1.29	1.45	1.55	1.65
												R (hrs)	0.65	0.52	0.47	0.41	0.38	0.36
55	0.06	0.38	315.0	268.0	Natural	0.060	0.34	0.34	3.95	0.49	65	Tc (hrs)	0.40	0.33	0.31	0.28	0.27	0.25
												Vel (f/s)	1.41	1.67	1.82	1.98	2.10	2.21
												R (hrs)	0.32	0.26	0.24	0.22	0.20	0.19
87	0.03	0.29	62.0	62.0	HEC-1 Default	0.066	0.31	0.30	4.70	0.32	8	Tc (hrs)	0.88	0.62	0.55	0.48	0.44	0.41
												Vel (f/s)	0.49	0.69	0.78	0.89	0.97	1.05
												R (hrs)	0.91	0.62	0.54	0.47	0.42	0.39
100	0.04	0.45	1070.2	315.0	HEC-1 Default	0.065	0.31	0.27	7.00	0.13	18	Tc (hrs)	0.51	0.41	0.36	0.32	0.30	0.28
												Vel (f/s)	1.30	1.63	1.82	2.06	2.21	2.35

* Non default value

Sub Basin Data

Basin 01 | Storms Multiple | Duration 6 Hour | Loss Method Green-Ampt | Unit Hydrograph Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.59	0.46	0.40	0.35	0.32	0.30
26R	0.06	0.42	531.7	307.0	HEC-1 Default	0.062	0.30	0.32	5.70	0.22	19	Tc (hrs)	0.52	0.40	0.36	0.32	0.29	0.28
												Vel (f/s)	1.18	1.54	1.71	1.93	2.10	2.24
												R (hrs)	0.44	0.33	0.29	0.25	0.23	0.22
28R	0.01	0.21	91.4	91.4	Urban	0.067	0.25	0.23	6.20	0.20	30	Tc (hrs)	0.48	0.40	0.36	0.32	0.30	0.28
												Vel (f/s)	0.64	0.78	0.86	0.96	1.03	1.09
												R (hrs)	0.56	0.45	0.41	0.36	0.33	0.31
37E	0.01	0.20	50.5	50.5	Urban	0.069	0.26	0.26	4.25	0.48	28	Tc (hrs)	0.65	0.51	0.46	0.41	0.38	0.36
												Vel (f/s)	0.45	0.58	0.64	0.72	0.77	0.82
												R (hrs)	0.79	0.60	0.53	0.47	0.44	0.41
37W	0.01	0.15	6.9	6.9	Urban	0.070	0.25	0.25	4.15	0.52	33	Tc (hrs)	1.01	0.80	0.73	0.65	0.61	0.57
												Vel (f/s)	0.22	0.28	0.30	0.34	0.36	0.38
												R (hrs)	1.21	0.93	0.83	0.74	0.68	0.64
53R	0.07	0.47	839.1	315.0	HEC-1 Default	0.061	0.28	0.28	4.40	0.43	41	Tc (hrs)	0.48	0.39	0.35	0.32	0.30	0.28
												Vel (f/s)	1.44	1.78	1.95	2.16	2.31	2.45
												R (hrs)	0.41	0.33	0.30	0.26	0.24	0.23
54R	0.02	0.31	115.0	115.0	Urban	0.064	0.25	0.25	6.00	0.21	32	Tc (hrs)	0.53	0.44	0.40	0.36	0.33	0.31
												Vel (f/s)	0.85	1.04	1.14	1.28	1.37	1.45
												R (hrs)	0.65	0.52	0.47	0.42	0.39	0.36
56R	0.01	0.13	159.5	159.5	Urban	0.068	0.25	0.23	6.20	0.20	30	Tc (hrs)	0.32	0.26	0.24	0.21	0.20	0.19
												Vel (f/s)	0.59	0.72	0.79	0.89	0.95	1.01
												R (hrs)	0.26	0.21	0.19	0.16	0.15	0.14
57R	0.01	0.14	156.6	156.6	Urban	0.071	0.25	0.25	5.80	0.22	37	Tc (hrs)	0.34	0.28	0.25	0.23	0.21	0.20
												Vel (f/s)	0.61	0.74	0.81	0.90	0.97	1.03
												R (hrs)	0.36	0.29	0.26	0.23	0.22	0.20

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A07C	0.18	0.65	36.9	36.9	HEC-1 Default	0.059	0.34	0.31	4.90	0.30	5	Tc (hrs)	1.50	1.05	0.92	0.81	0.74	0.68
												Vel (f/s)	0.61	0.91	1.03	1.18	1.30	1.40
												R (hrs)	1.17	0.75	0.65	0.56	0.50	0.46
A07D	0.23	1.08	20.4	20.4	HEC-1 Default	0.095	0.49	0.02	4.10	0.67	1	Tc (hrs)	1.50	1.50	1.50	1.50	1.42	1.33
												Vel (f/s)	0.79	0.80	0.90	1.02	1.12	1.19
												R (hrs)	1.97	1.96	1.72	1.48	1.35	1.25
A07E	0.23	0.70	37.1	37.1	Urban	0.052	0.23	0.15	7.60	0.11	49	Tc (hrs)	0.90	0.76	0.70	0.63	0.60	0.57
												Vel (f/s)	1.14	1.36	1.48	1.62	1.72	1.81
												R (hrs)	0.58	0.48	0.43	0.39	0.37	0.35
A07F	0.23	1.16	17.2	17.2	HEC-1 Default	0.046	0.21	0.27	4.90	0.32	26	Tc (hrs)	1.50	1.35	1.22	1.09	1.01	0.95
												Vel (f/s)	1.01	1.26	1.39	1.56	1.68	1.79
												R (hrs)	1.71	1.33	1.19	1.05	0.97	0.90
A07G	0.26	0.84	35.5	35.5	Urban	0.052	0.24	0.16	7.60	0.11	32	Tc (hrs)	1.06	0.88	0.80	0.72	0.68	0.64
												Vel (f/s)	1.16	1.40	1.54	1.71	1.82	1.92
												R (hrs)	0.75	0.60	0.54	0.49	0.45	0.43
A07H	0.09	0.30	66.7	66.7	HEC-1 Default	0.056	0.23	0.21	4.70	0.44	47	Tc (hrs)	0.56	0.46	0.42	0.38	0.36	0.34
												Vel (f/s)	0.79	0.95	1.04	1.15	1.23	1.30
												R (hrs)	0.29	0.23	0.21	0.19	0.18	0.17
A08A	0.14	0.92	12.0	12.0	HEC-1 Default	0.047	0.20	0.30	3.31	0.77	18	Tc (hrs)	1.50	1.50	1.38	1.22	1.13	1.05
												Vel (f/s)	0.67	0.86	0.98	1.11	1.20	1.28
												R (hrs)	2.31	1.78	1.53	1.33	1.22	1.14
A08B	0.10	0.44	18.2	18.2	HEC-1 Default	0.049	0.19	0.27	3.74	0.66	35	Tc (hrs)	1.08	0.85	0.77	0.69	0.65	0.61
												Vel (f/s)	0.60	0.76	0.84	0.93	1.00	1.06
												R (hrs)	0.78	0.60	0.54	0.48	0.44	0.41
A09	0.18	0.36	16.7	16.7	HEC-1 Default	0.046	0.24	0.31	3.58	0.68	22	Tc (hrs)	1.16	0.85	0.75	0.67	0.62	0.58
												Vel (f/s)	0.46	0.62	0.70	0.79	0.86	0.92

* Non default value

Sub Basin Data

4/18/2007

Basin: 31 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.52	0.37	0.32	0.28	0.26	0.24
A09A	0.08	0.53	17.0	17.0	HEC-1 Default	0.072	0.29	0.15	3.74	0.80	38	Tc (hrs)	1.43	1.14	1.04	0.94	0.87	0.82
												Vel (f/s)	0.55	0.68	0.75	0.83	0.89	0.94
												R (hrs)	1.36	1.06	0.95	0.85	0.79	0.74
A09B	0.04	0.25	80.0	80.0	Urban	0.035	0.12	0.25	4.10	0.68	71	Tc (hrs)	0.34	0.29	0.27	0.25	0.23	0.22
												Vel (f/s)	1.08	1.26	1.37	1.49	1.58	1.66
												R (hrs)	0.23	0.19	0.18	0.16	0.15	0.14
A09C	0.07	0.52	51.9	51.9	Natural	0.062	0.35	0.32	4.50	0.38	4	Tc (hrs)	1.49	0.91	0.79	0.69	0.63	0.58
												Vel (f/s)	0.51	0.83	0.97	1.11	1.21	1.31
												R (hrs)	1.51	0.88	0.75	0.64	0.58	0.53
A09D	0.25	0.44	31.8	31.8	Urban	0.050	0.23	0.20	6.60	0.16	31	Tc (hrs)	0.81	0.67	0.60	0.54	0.51	0.48
												Vel (f/s)	0.80	0.97	1.07	1.19	1.27	1.34
												R (hrs)	0.33	0.27	0.24	0.21	0.20	0.19
A09E	0.15	0.82	22.4	22.4	Urban	0.051	0.22	0.24	4.70	0.35	34	Tc (hrs)	1.30	1.06	0.97	0.87	0.81	0.76
												Vel (f/s)	0.92	1.13	1.24	1.38	1.49	1.58
												R (hrs)	1.26	1.01	0.91	0.81	0.75	0.70
A09F	0.37	0.90	17.8	17.8	HEC-1 Default	0.047	0.21	0.27	5.30	0.28	35	Tc (hrs)	1.39	1.14	1.04	0.93	0.87	0.82
												Vel (f/s)	0.95	1.16	1.27	1.42	1.52	1.62
												R (hrs)	0.87	0.70	0.63	0.56	0.52	0.48
A09GA	0.07	0.32	36.6	36.6	Urban	0.030	0.10	0.25	4.35	0.56	80	Tc (hrs)	0.43	0.37	0.35	0.32	0.30	0.29
												Vel (f/s)	1.09	1.26	1.36	1.47	1.56	1.64
												R (hrs)	0.26	0.22	0.20	0.18	0.17	0.16
A09GB	0.05	0.55	3.8	3.8	Urban	0.058	0.23	0.25	4.30	0.49	35	Tc (hrs)	1.50	1.50	1.50	1.35	1.26	1.18
												Vel (f/s)	0.40	0.49	0.54	0.60	0.64	0.68
												R (hrs)	2.70	2.18	1.96	1.74	1.61	1.51

* Non default value

Sub Basin Data

4/18/2007

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A09H	0.24	1.03	17.8	17.8	Urban	0.051	0.24	0.25	4.55	0.41	31	Tc (hrs)	1.50	1.32	1.20	1.07	1.00	0.94
												Vel (f/s)	0.91	1.15	1.26	1.41	1.51	1.61
												R (hrs)	1.51	1.17	1.05	0.93	0.86	0.80
A09I	0.13	0.73	18.0	18.0	Urban	0.054	0.25	0.20	6.60	0.17	29	Tc (hrs)	1.31	1.08	0.98	0.88	0.82	0.77
												Vel (f/s)	0.82	0.99	1.10	1.22	1.31	1.39
												R (hrs)	1.27	1.02	0.91	0.81	0.75	0.70
A09IH	0.09	0.63	42.1	42.1	Urban	0.057	0.25	0.26	4.60	0.39	27	Tc (hrs)	1.08	0.85	0.77	0.69	0.64	0.60
												Vel (f/s)	0.85	1.09	1.20	1.34	1.45	1.54
												R (hrs)	1.10	0.84	0.75	0.66	0.61	0.57
A09J	0.17	0.83	27.7	27.7	Urban	0.052	0.25	0.25	4.35	0.46	30	Tc (hrs)	1.34	1.06	0.96	0.86	0.80	0.75
												Vel (f/s)	0.91	1.15	1.27	1.42	1.53	1.63
												R (hrs)	1.22	0.94	0.84	0.74	0.69	0.64
A09K	0.41	1.12	36.6	36.6	Natural	0.048	0.34	0.34	4.40	0.39	2	Tc (hrs)	1.50	1.35	1.16	1.00	0.92	0.85
												Vel (f/s)	0.82	1.21	1.42	1.64	1.80	1.94
												R (hrs)	1.45	0.94	0.79	0.67	0.61	0.56
A09L	0.14	0.68	17.6	17.6	Urban	0.051	0.23	0.26	4.90	0.32	26	Tc (hrs)	1.35	1.08	0.98	0.87	0.81	0.76
												Vel (f/s)	0.74	0.92	1.02	1.14	1.23	1.31
												R (hrs)	1.19	0.92	0.83	0.73	0.67	0.63
A09M	0.25	0.95	43.3	43.3	HEC-1 Default	0.053	0.28	0.28	4.45	0.42	22	Tc (hrs)	1.38	1.04	0.94	0.83	0.77	0.72
												Vel (f/s)	1.01	1.34	1.49	1.67	1.80	1.93
												R (hrs)	1.12	0.82	0.73	0.64	0.59	0.55
A09N	0.11	0.57	25.8	25.8	Urban	0.057	0.27	0.27	5.80	0.22	25	Tc (hrs)	1.15	0.92	0.83	0.74	0.69	0.65
												Vel (f/s)	0.73	0.91	1.00	1.13	1.22	1.29
												R (hrs)	0.97	0.76	0.68	0.60	0.55	0.51
A09O	0.19	1.09	30.8	30.8	HEC-1 Default	0.057	0.32	0.29	4.40	0.41	6	Tc (hrs)	1.50	1.45	1.26	1.10	1.01	0.94
												Vel (f/s)	0.80	1.10	1.27	1.45	1.58	1.71

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	2.18	1.52	1.31	1.13	1.02	0.94
A09P	0.19	0.71	33.6	33.6	HEC-1 Default	0.058	0.32	0.29	4.65	0.34	6	Tc (hrs)	1.50	1.11	0.98	0.86	0.79	0.73
												Vel (f/s)	0.64	0.94	1.06	1.21	1.33	1.43
												R (hrs)	1.26	0.82	0.72	0.62	0.56	0.51
A09QB	0.14	0.60	35.5	35.5	Urban	0.053	0.30	0.25	4.15	0.44	5	Tc (hrs)	1.46	0.98	0.86	0.75	0.69	0.64
												Vel (f/s)	0.60	0.90	1.03	1.17	1.28	1.38
												R (hrs)	1.13	0.72	0.63	0.54	0.49	0.45
A09QA	0.09	0.38	39.1	39.1	HEC-1 Default	0.057	0.34	0.34	4.20	0.44	2	Tc (hrs)	1.50	0.86	0.73	0.63	0.58	0.53
												Vel (f/s)	0.35	0.65	0.76	0.88	0.97	1.04
												R (hrs)	1.10	0.57	0.47	0.40	0.36	0.33
A09R	0.14	0.72	29.2	29.2	HEC-1 Default	0.055	0.35	0.34	4.25	0.43	1	Tc (hrs)	1.50	1.29	1.09	0.94	0.86	0.79
												Vel (f/s)	0.53	0.82	0.97	1.12	1.23	1.33
												R (hrs)	1.85	1.14	0.95	0.80	0.72	0.66
A09S	0.07	0.48	15.1	15.1	Urban	0.036	0.13	0.25	4.90	0.40	71	Tc (hrs)	0.79	0.67	0.63	0.57	0.54	0.52
												Vel (f/s)	0.90	1.04	1.12	1.23	1.30	1.37
												R (hrs)	0.71	0.60	0.55	0.50	0.47	0.44
A09T	0.18	0.72	90.3	90.3	HEC-1 Default	0.056	0.33	0.31	4.30	0.41	2	Tc (hrs)	1.47	0.87	0.75	0.65	0.60	0.55
												Vel (f/s)	0.72	1.21	1.40	1.62	1.77	1.92
												R (hrs)	1.15	0.65	0.55	0.47	0.42	0.39
A09U	0.18	0.68	482.4	300.0	HEC-1 Default	0.056	0.32	0.30	4.20	0.43	22	Tc (hrs)	0.67	0.50	0.45	0.40	0.37	0.35
												Vel (f/s)	1.48	1.98	2.22	2.49	2.69	2.87
												R (hrs)	0.47	0.34	0.30	0.27	0.24	0.23
A10	0.21	0.50	74.0	74.0	HEC-1 Default	0.053	0.34	0.34	4.65	0.33	2	Tc (hrs)	1.21	0.74	0.64	0.56	0.51	0.47
												Vel (f/s)	0.61	0.99	1.15	1.32	1.45	1.57
												R (hrs)	0.63	0.37	0.31	0.27	0.24	0.22

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A10A	0.19	0.65	73.8	73.8	HEC-1 Default	0.055	0.33	0.32	5.30	0.24	2	Tc (hrs)	1.20	0.81	0.71	0.62	0.56	0.52
												Vel (f/s)	0.80	1.18	1.34	1.54	1.69	1.82
												R (hrs)	0.83	0.54	0.47	0.40	0.36	0.33
A11A	0.30	0.90	52.5	52.5	HEC-1 Default	0.045	0.23	0.29	6.00	0.21	34	Tc (hrs)	0.97	0.79	0.72	0.65	0.60	0.57
												Vel (f/s)	1.37	1.67	1.83	2.05	2.20	2.32
												R (hrs)	0.65	0.52	0.47	0.42	0.39	0.36
A11EA	0.14	0.82	80.8	80.8	HEC-1 Default	0.057	0.33	0.31	4.30	0.41	11	Tc (hrs)	1.32	0.90	0.79	0.70	0.64	0.60
												Vel (f/s)	0.91	1.33	1.52	1.73	1.87	2.02
												R (hrs)	1.30	0.85	0.74	0.64	0.58	0.54
A11EB	0.19	1.09	40.3	40.3	HEC-1 Default	0.052	0.34	0.34	4.45	0.38	4	Tc (hrs)	1.50	1.32	1.13	0.99	0.90	0.83
												Vel (f/s)	0.80	1.21	1.41	1.62	1.77	1.92
												R (hrs)	2.21	1.39	1.17	1.00	0.91	0.84
A11F	0.33	1.03	88.8	88.8	HEC-1 Default	0.052	0.33	0.31	4.35	0.40	8	Tc (hrs)	1.45	0.96	0.84	0.73	0.67	0.62
												Vel (f/s)	1.04	1.58	1.80	2.06	2.24	2.42
												R (hrs)	1.07	0.68	0.58	0.50	0.46	0.42
A11G	0.06	0.44	85.1	85.1	HEC-1 Default	0.063	0.31	0.28	4.55	0.35	25	Tc (hrs)	0.79	0.61	0.55	0.49	0.45	0.43
												Vel (f/s)	0.82	1.06	1.17	1.31	1.42	1.52
												R (hrs)	0.73	0.55	0.49	0.43	0.40	0.37
A11I	0.15	0.56	35.2	35.2	Urban	0.054	0.25	0.10	11.20	0.03	28	Tc (hrs)	0.83	0.69	0.63	0.58	0.54	0.52
												Vel (f/s)	1.00	1.19	1.30	1.43	1.52	1.59
												R (hrs)	0.55	0.45	0.41	0.37	0.34	0.33
A11J	0.11	0.57	36.3	36.3	HEC-1 Default	0.059	0.29	0.22	7.30	0.12	18	Tc (hrs)	1.03	0.83	0.74	0.66	0.61	0.58
												Vel (f/s)	0.82	1.01	1.13	1.27	1.36	1.44
												R (hrs)	0.85	0.67	0.59	0.52	0.48	0.45
A11KA	0.08	0.44	451.5	299.0	Urban	0.060	0.27	0.27	4.45	0.42	42	Tc (hrs)	0.46	0.37	0.34	0.31	0.29	0.27
												Vel (f/s)	1.40	1.73	1.89	2.09	2.23	2.37

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.34	0.27	0.24	0.22	0.20	0.19
A11KB	0.11	0.36	61.1	61.1	Urban	0.055	0.25	0.25	4.70	0.36	30	Tc (hrs)	0.69	0.55	0.50	0.45	0.42	0.39
												Vel (f/s)	0.77	0.96	1.06	1.18	1.27	1.35
												R (hrs)	0.39	0.30	0.27	0.24	0.22	0.21
A11KC	0.13	0.38	88.2	88.2	Urban	0.058	0.27	0.26	4.15	0.50	27	Tc (hrs)	0.70	0.54	0.49	0.44	0.41	0.38
												Vel (f/s)	0.79	1.03	1.14	1.28	1.37	1.46
												R (hrs)	0.37	0.27	0.24	0.22	0.20	0.19
A11L	0.26	0.95	29.9	29.9	Urban	0.053	0.27	0.12	11.20	0.03	24	Tc (hrs)	1.15	0.95	0.87	0.79	0.74	0.70
												Vel (f/s)	1.22	1.46	1.60	1.76	1.88	1.98
												R (hrs)	0.88	0.72	0.65	0.58	0.54	0.51
A11MA	0.07	0.24	124.5	124.5	HEC-1 Default	0.061	0.32	0.24	8.80	0.06	8	Tc (hrs)	0.47	0.37	0.33	0.30	0.27	0.26
												Vel (f/s)	0.75	0.95	1.07	1.19	1.28	1.36
												R (hrs)	0.23	0.17	0.15	0.14	0.13	0.12
A11MB	0.19	0.42	54.2	54.2	Urban	0.052	0.25	0.15	8.80	0.07	29	Tc (hrs)	0.65	0.54	0.49	0.44	0.42	0.39
												Vel (f/s)	0.95	1.15	1.26	1.39	1.48	1.57
												R (hrs)	0.29	0.24	0.21	0.19	0.18	0.17
A11NA	0.08	0.33	1079.0	315.0	HEC-1 Default	0.061	0.29	0.30	5.40	0.25	26	Tc (hrs)	0.43	0.34	0.31	0.27	0.25	0.24
												Vel (f/s)	1.13	1.43	1.58	1.77	1.92	2.04
												R (hrs)	0.26	0.20	0.18	0.16	0.14	0.13
A11O	0.06	0.46	934.0	315.0	HEC-1 Default	0.062	0.28	0.27	6.20	0.19	23	Tc (hrs)	0.50	0.40	0.36	0.32	0.30	0.28
												Vel (f/s)	1.35	1.69	1.87	2.11	2.28	2.42
												R (hrs)	0.48	0.37	0.33	0.29	0.27	0.25
A99R	0.04	0.19	36.8	36.8	HEC-1 Default	0.065	0.31	0.31	3.55	0.66	12	Tc (hrs)	0.97	0.64	0.55	0.48	0.44	0.41
												Vel (f/s)	0.29	0.44	0.51	0.59	0.64	0.68
												R (hrs)	0.62	0.39	0.33	0.28	0.26	0.24

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A99S	0.08	0.56	17.9	17.9	Natural	0.057	0.35	0.35	3.64	0.59		Tc (hrs)	1.50	1.50	1.21	1.03	0.93	0.86
												Vel (f/s)	0.41	0.55	0.68	0.80	0.88	0.95
												R (hrs)	2.17	1.58	1.25	1.03	0.93	0.85
A99T	0.03	0.07	28.6	28.6	Urban	0.044	0.20	0.30	2.79	1.39	42	Tc (hrs)	0.34	0.29	0.26	0.23	0.22	0.21
												Vel (f/s)	0.30	0.35	0.39	0.44	0.47	0.50
												R (hrs)	0.10	0.08	0.07	0.07	0.06	0.06
A99U	0.07	0.57	61.4	61.4	HEC-1 Default	0.046	0.25	0.30	3.71	0.66	29	Tc (hrs)	0.88	0.68	0.61	0.54	0.50	0.47
												Vel (f/s)	0.95	1.23	1.38	1.55	1.67	1.77
												R (hrs)	0.94	0.70	0.62	0.54	0.50	0.47
A99V	0.21	0.78	56.4	56.4	Natural	0.051	0.35	0.40	6.00	0.18	1	Tc (hrs)	1.43	0.94	0.82	0.71	0.65	0.60
												Vel (f/s)	0.80	1.22	1.39	1.60	1.77	1.90
												R (hrs)	1.11	0.70	0.60	0.51	0.46	0.42
A99W	0.22	0.63	11.1	11.1	HEC-1 Default	0.053	0.27	0.29	6.40	0.17	20	Tc (hrs)	1.50	1.23	1.10	0.98	0.90	0.85
												Vel (f/s)	0.60	0.75	0.84	0.95	1.02	1.09
												R (hrs)	0.99	0.77	0.69	0.60	0.55	0.51
A99X	0.26	0.61	57.4	57.4	HEC-1 Default	0.036	0.21	0.28	4.20	0.53	39	Tc (hrs)	0.72	0.58	0.53	0.48	0.44	0.42
												Vel (f/s)	1.24	1.55	1.70	1.88	2.02	2.14
												R (hrs)	0.37	0.29	0.26	0.23	0.22	0.20
A99YA	0.10	0.50	116.6	116.6	HEC-1 Default	0.056	0.35	0.34	4.90	0.29	1	Tc (hrs)	1.06	0.65	0.57	0.49	0.45	0.41
												Vel (f/s)	0.70	1.12	1.29	1.49	1.64	1.78
												R (hrs)	0.82	0.48	0.41	0.35	0.32	0.29
A99YB	0.17	0.49	49.6	49.6	HEC-1 Default	0.054	0.34	0.34	3.78	0.55	4	Tc (hrs)	1.50	0.91	0.76	0.66	0.60	0.56
												Vel (f/s)	0.43	0.79	0.94	1.09	1.20	1.29
												R (hrs)	1.02	0.52	0.42	0.36	0.32	0.30
CBA	0.01	0.16	1486.2	315.0	Natural	0.073	0.34	0.35	6.80	0.13	11	Tc (hrs)	0.36	0.27	0.24	0.21	0.20	0.18
												Vel (f/s)	0.66	0.87	0.97	1.11	1.20	1.29

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple * Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.46	0.34	0.30	0.26	0.24	0.22
CBB	0.02	0.18	1281.8	315.0	HEC-1 Default	0.067	0.34	0.34	4.55	0.35	15	Tc (hrs)	0.41	0.29	0.26	0.23	0.21	0.20
												Vel (f/s)	0.65	0.91	1.02	1.16	1.26	1.35
												R (hrs)	0.35	0.24	0.21	0.19	0.17	0.16
CBH	0.01	0.11	2020.2	315.0	Natural	0.068	0.35	0.35	4.40	0.38	15	Tc (hrs)	0.33	0.23	0.21	0.18	0.17	0.16
												Vel (f/s)	0.49	0.69	0.79	0.89	0.97	1.03
												R (hrs)	0.23	0.16	0.14	0.12	0.11	0.10
CBJ	0.02	0.23	653.0	315.0	Natural	0.066	0.35	0.35	4.30	0.41	10	Tc (hrs)	0.53	0.35	0.30	0.27	0.24	0.23
												Vel (f/s)	0.64	0.96	1.11	1.27	1.38	1.49
												R (hrs)	0.62	0.39	0.33	0.29	0.26	0.24
CBK	0.05	0.35	306.9	265.0	Natural	0.060	0.34	0.34	4.65	0.33	6	Tc (hrs)	0.66	0.43	0.37	0.33	0.30	0.28
												Vel (f/s)	0.78	1.20	1.37	1.57	1.71	1.85
												R (hrs)	0.54	0.34	0.29	0.25	0.23	0.21
CBL	0.03	0.36	269.0	250.0	Urban	0.066	0.28	0.29	5.70	0.23	24	Tc (hrs)	0.50	0.40	0.36	0.32	0.29	0.28
												Vel (f/s)	1.06	1.34	1.47	1.66	1.80	1.91
												R (hrs)	0.58	0.45	0.40	0.35	0.32	0.30
DV1	0.09	0.56	28.1	28.1	Urban	0.056	0.25	0.26	4.65	0.37	29	Tc (hrs)	1.12	0.89	0.81	0.72	0.67	0.63
												Vel (f/s)	0.73	0.92	1.02	1.14	1.23	1.31
												R (hrs)	1.03	0.80	0.72	0.64	0.59	0.55
DV10	0.21	0.63	22.2	22.2	Urban	0.052	0.30	0.16	7.00	0.12	5	Tc (hrs)	1.23	0.96	0.86	0.76	0.71	0.67
												Vel (f/s)	0.75	0.96	1.08	1.21	1.31	1.39
												R (hrs)	0.78	0.59	0.52	0.46	0.42	0.40
DV11	0.14	0.64	24.4	24.4	Urban	0.050	0.22	0.10	11.20	0.03	41	Tc (hrs)	0.92	0.78	0.72	0.66	0.62	0.59
												Vel (f/s)	1.02	1.20	1.31	1.43	1.52	1.59
												R (hrs)	0.71	0.59	0.54	0.49	0.46	0.44

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
DV2	0.03	0.47	22.0	22.0	Urban	0.062	0.25	0.25	4.80	0.35	30	Tc (hrs)	1.15	0.92	0.83	0.75	0.69	0.65
												Vel (f/s)	0.60	0.75	0.83	0.92	1.00	1.06
												R (hrs)	1.67	1.30	1.17	1.04	0.96	0.89
DV3	0.05	0.40	23.4	23.4	Urban	0.059	0.25	0.25	4.80	0.35	30	Tc (hrs)	1.01	0.81	0.73	0.66	0.61	0.57
												Vel (f/s)	0.58	0.73	0.80	0.89	0.96	1.02
												R (hrs)	0.99	0.77	0.70	0.62	0.57	0.53
DV4	0.06	0.64	28.6	28.6	Urban	0.058	0.25	0.25	4.80	0.35	30	Tc (hrs)	1.19	0.95	0.86	0.78	0.72	0.68
												Vel (f/s)	0.79	0.99	1.09	1.21	1.31	1.39
												R (hrs)	1.56	1.22	1.10	0.97	0.89	0.83
DV5	0.03	0.27	31.4	31.4	Urban	0.063	0.25	0.25	4.80	0.35	30	Tc (hrs)	0.78	0.63	0.57	0.51	0.47	0.45
												Vel (f/s)	0.51	0.63	0.70	0.77	0.84	0.89
												R (hrs)	0.75	0.58	0.52	0.46	0.43	0.40
DV6	0.09	0.60	31.0	31.0	Urban	0.056	0.25	0.25	4.80	0.35	30	Tc (hrs)	1.10	0.88	0.80	0.72	0.67	0.63
												Vel (f/s)	0.80	1.00	1.10	1.22	1.32	1.40
												R (hrs)	1.08	0.84	0.76	0.67	0.62	0.58
DV7	0.13	0.66	30.7	30.7	HEC-1 Default	0.052	0.22	0.25	6.40	0.17	20	Tc (hrs)	1.10	0.89	0.80	0.71	0.66	0.62
												Vel (f/s)	0.88	1.09	1.21	1.37	1.47	1.56
												R (hrs)	0.94	0.74	0.66	0.58	0.53	0.50
DV8	0.09	0.63	23.8	23.8	Urban	0.059	0.26	0.15	8.40	0.08	24	Tc (hrs)	1.13	0.92	0.84	0.76	0.71	0.67
												Vel (f/s)	0.82	1.01	1.11	1.22	1.31	1.38
												R (hrs)	1.13	0.90	0.81	0.73	0.67	0.63
DV9	0.04	0.23	41.3	41.3	Urban	0.060	0.29	0.15	8.80	0.06	7	Tc (hrs)	0.61	0.48	0.44	0.39	0.37	0.35
												Vel (f/s)	0.55	0.70	0.77	0.86	0.92	0.97
												R (hrs)	0.40	0.31	0.28	0.25	0.23	0.21
E1	0.01	0.13	220.3	218.0	HEC-1 Default	0.071	0.33	0.32	3.95	0.48	2	Tc (hrs)	0.59	0.33	0.28	0.24	0.22	0.21
												Vel (f/s)	0.32	0.58	0.68	0.78	0.86	0.93

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.46	0.24	0.20	0.17	0.16	0.14
E2	0.02	0.20	114.7	114.7	Urban	0.066	0.30	0.25	3.95	0.48	5	Tc (hrs)	0.67	0.44	0.39	0.34	0.31	0.29
												Vel (f/s)	0.44	0.66	0.76	0.87	0.94	1.02
												R (hrs)	0.69	0.44	0.38	0.33	0.30	0.27
E3	0.08	0.63	67.0	67.0	HEC-1 Default	0.061	0.31	0.28	3.95	0.48	4	Tc (hrs)	1.47	0.92	0.80	0.69	0.64	0.59
												Vel (f/s)	0.63	1.01	1.16	1.33	1.45	1.57
												R (hrs)	1.63	0.97	0.83	0.71	0.64	0.59
E4	0.04	0.50	74.4	74.4	HEC-1 Default	0.063	0.34	0.33	4.00	0.47	3	Tc (hrs)	1.50	0.85	0.72	0.62	0.57	0.53
												Vel (f/s)	0.49	0.86	1.02	1.18	1.29	1.39
												R (hrs)	2.09	1.11	0.92	0.79	0.71	0.66
HV1	0.01	0.30	72.6	72.6	HEC-1 Default	0.072	0.27	0.29	3.95	0.55	25	Tc (hrs)	0.78	0.59	0.53	0.47	0.44	0.41
												Vel (f/s)	0.56	0.75	0.83	0.94	1.01	1.07
												R (hrs)	1.82	1.33	1.17	1.03	0.95	0.89
HV2	0.03	0.87	3.1	3.1	Urban	0.063	0.25	0.25	4.45	0.43	29	Tc (hrs)	1.50	1.50	1.50	1.50	1.50	1.50
												Vel (f/s)	0.64	0.64	0.64	0.67	0.72	0.77
												R (hrs)	5.18	5.18	5.18	4.92	4.53	4.22
LACAI	0.04	0.30	62.8	62.8	Urban	0.065	0.31	0.27	4.20	0.43	4	Tc (hrs)	1.01	0.65	0.57	0.50	0.46	0.42
												Vel (f/s)	0.44	0.67	0.77	0.88	0.96	1.04
												R (hrs)	0.96	0.60	0.51	0.44	0.40	0.37
N11A	0.93	2.04	12.0	12.0	Urban	0.042	0.21	0.27	4.80	0.33	29	Tc (hrs)	1.50	1.50	1.50	1.50	1.46	1.37
												Vel (f/s)	1.50	1.51	1.67	1.90	2.05	2.19
												R (hrs)	1.47	1.46	1.30	1.13	1.04	0.97
N11C	0.26	0.82	24.4	24.4	Urban	0.047	0.22	0.27	4.45	0.41	24	Tc (hrs)	1.36	1.06	0.96	0.85	0.79	0.74
												Vel (f/s)	0.88	1.14	1.26	1.41	1.52	1.62
												R (hrs)	0.97	0.73	0.66	0.58	0.53	0.49

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N11DA	0.26	0.80	20.6	20.6	Urban	0.050	0.25	0.25	4.60	0.39	30	Tc (hrs)	1.38	1.10	1.00	0.90	0.83	0.78
												Vel (f/s)	0.85	1.07	1.18	1.31	1.41	1.50
												R (hrs)	0.97	0.75	0.67	0.60	0.55	0.51
N11DB	0.25	0.73	21.5	21.5	Urban	0.050	0.25	0.25	4.60	0.39	30	Tc (hrs)	1.31	1.04	0.94	0.84	0.78	0.74
												Vel (f/s)	0.82	1.03	1.14	1.27	1.37	1.45
												R (hrs)	0.84	0.65	0.59	0.52	0.48	0.45
N11EA	0.26	0.94	13.2	13.2	Urban	0.048	0.23	0.26	5.60	0.25	31	Tc (hrs)	1.50	1.30	1.18	1.06	0.98	0.93
												Vel (f/s)	0.86	1.06	1.16	1.30	1.40	1.49
												R (hrs)	1.28	1.02	0.92	0.81	0.75	0.70
N11EB	0.23	0.69	22.2	22.2	Urban	0.050	0.25	0.23	6.20	0.20	30	Tc (hrs)	1.17	0.96	0.87	0.78	0.72	0.68
												Vel (f/s)	0.87	1.06	1.16	1.30	1.40	1.48
												R (hrs)	0.75	0.60	0.54	0.48	0.44	0.42
N11FA	0.18	0.80	25.8	25.8	Urban	0.050	0.22	0.26	4.40	0.46	34	Tc (hrs)	1.28	1.02	0.93	0.83	0.78	0.73
												Vel (f/s)	0.92	1.15	1.27	1.41	1.51	1.61
												R (hrs)	1.08	0.84	0.76	0.67	0.62	0.58
N11FB	0.12	0.74	24.7	24.7	Urban	0.053	0.24	0.26	4.40	0.45	30	Tc (hrs)	1.32	1.04	0.95	0.85	0.79	0.74
												Vel (f/s)	0.82	1.04	1.15	1.28	1.38	1.47
												R (hrs)	1.32	1.02	0.91	0.81	0.75	0.69
N11G	0.52	1.06	32.1	32.1	Natural	0.045	0.35	0.35	4.35	0.40		Tc (hrs)	1.50	1.39	1.17	1.01	0.92	0.84
												Vel (f/s)	0.78	1.12	1.33	1.55	1.70	1.84
												R (hrs)	1.21	0.81	0.67	0.56	0.51	0.46
N11H	0.42	1.04	31.7	31.7	Natural	0.047	0.35	0.35	4.50	0.36		Tc (hrs)	1.50	1.37	1.16	1.00	0.92	0.84
												Vel (f/s)	0.76	1.12	1.31	1.52	1.67	1.81
												R (hrs)	1.35	0.89	0.74	0.63	0.57	0.52
N11J	0.24	0.84	23.6	23.6	Urban	0.053	0.30	0.25	4.10	0.51	13	Tc (hrs)	1.50	1.27	1.12	0.99	0.91	0.85
												Vel (f/s)	0.68	0.97	1.10	1.25	1.35	1.45

* Non default value

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	1.39	0.94	0.82	0.71	0.65	0.60
N11K	0.17	0.73	28.1	28.1	Urban	0.056	0.30	0.25	4.20	0.46	9	Tc (hrs)	1.50	1.17	1.03	0.91	0.83	0.77
												Vel (f/s)	0.63	0.92	1.04	1.18	1.29	1.39
												R (hrs)	1.43	0.95	0.83	0.71	0.65	0.60
N11L2	0.01	0.13	32.8	32.8	Urban	0.069	0.30	0.25	4.80	0.35	15	Tc (hrs)	0.66	0.49	0.44	0.39	0.36	0.33
												Vel (f/s)	0.29	0.39	0.44	0.49	0.54	0.57
												R (hrs)	0.63	0.45	0.40	0.35	0.32	0.29
N11L3	0.04	0.28	46.0	46.0	Urban	0.061	0.30	0.26	4.80	0.35	14	Tc (hrs)	0.83	0.61	0.55	0.48	0.44	0.41
												Vel (f/s)	0.49	0.67	0.75	0.85	0.92	0.99
												R (hrs)	0.69	0.49	0.43	0.38	0.35	0.32
N11L3A	0.03	0.24	69.6	69.6	Urban	0.064	0.29	0.25	4.65	0.33	9	Tc (hrs)	0.71	0.52	0.46	0.41	0.37	0.35
												Vel (f/s)	0.50	0.68	0.77	0.87	0.95	1.02
												R (hrs)	0.66	0.47	0.41	0.36	0.32	0.30
N11L4	0.01	0.23	49.1	49.1	HEC-1 Default	0.074	0.31	0.28	4.80	0.33	10	Tc (hrs)	0.86	0.62	0.55	0.48	0.44	0.41
												Vel (f/s)	0.39	0.55	0.62	0.70	0.76	0.82
												R (hrs)	1.34	0.92	0.81	0.70	0.64	0.59
N11L5	0.04	0.29	44.9	44.9	Urban	0.064	0.29	0.25	4.80	0.34	13	Tc (hrs)	0.86	0.64	0.57	0.51	0.47	0.43
												Vel (f/s)	0.49	0.66	0.74	0.84	0.91	0.98
												R (hrs)	0.71	0.51	0.45	0.39	0.36	0.33
N11L5A	0.05	0.34	41.2	41.2	Urban	0.061	0.30	0.25	4.55	0.35	7	Tc (hrs)	1.01	0.72	0.64	0.56	0.51	0.48
												Vel (f/s)	0.49	0.69	0.78	0.89	0.97	1.05
												R (hrs)	0.93	0.64	0.56	0.48	0.44	0.40
N11M	0.10	0.35	48.6	48.6	HEC-1 Default	0.055	0.35	0.35	4.15	0.45		Tc (hrs)	1.50	0.79	0.66	0.57	0.52	0.48
												Vel (f/s)	0.31	0.65	0.78	0.91	0.99	1.08
												R (hrs)	1.03	0.46	0.37	0.32	0.29	0.26

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N11NA	0.02	0.16	2103.1	315.0	Natural	0.065	0.35	0.35	4.00	0.47	29	Tc (hrs)	0.33	0.26	0.23	0.20	0.19	0.18
												Vel (f/s)	0.70	0.92	1.02	1.15	1.24	1.32
												R (hrs)	0.22	0.17	0.15	0.13	0.12	0.11
N11NB	0.14	0.75	73.8	73.8	HEC-1 Default	0.056	0.31	0.27	4.70	0.31	4	Tc (hrs)	1.25	0.87	0.77	0.67	0.61	0.57
												Vel (f/s)	0.88	1.27	1.43	1.64	1.80	1.94
												R (hrs)	1.15	0.77	0.67	0.58	0.52	0.48
N11NC	0.17	0.59	126.5	126.5	HEC-1 Default	0.058	0.31	0.29	4.20	0.46	7	Tc (hrs)	1.08	0.70	0.61	0.53	0.49	0.45
												Vel (f/s)	0.80	1.24	1.42	1.63	1.77	1.91
												R (hrs)	0.72	0.45	0.38	0.33	0.30	0.28
N11ND	0.05	0.40	31.1	31.1	Urban	0.062	0.29	0.25	4.60	0.36	12	Tc (hrs)	1.14	0.84	0.75	0.66	0.61	0.56
												Vel (f/s)	0.52	0.70	0.78	0.89	0.97	1.04
												R (hrs)	1.10	0.78	0.69	0.60	0.54	0.50
N11O	0.05	0.33	51.5	51.5	Natural	0.059	0.35	0.35	4.50	0.36		Tc (hrs)	1.34	0.74	0.63	0.55	0.50	0.46
												Vel (f/s)	0.36	0.65	0.77	0.89	0.97	1.06
												R (hrs)	1.11	0.58	0.48	0.41	0.37	0.34
N11P1	0.06	0.49	144.5	144.5	Natural	0.058	0.35	0.35	4.10	0.46		Tc (hrs)	1.46	0.69	0.57	0.49	0.45	0.42
												Vel (f/s)	0.49	1.04	1.25	1.46	1.60	1.73
												R (hrs)	1.52	0.66	0.54	0.46	0.41	0.38
N11P2	0.06	0.27	111.5	111.5	Natural	0.059	0.35	0.35	4.10	0.46		Tc (hrs)	1.18	0.56	0.47	0.40	0.36	0.34
												Vel (f/s)	0.34	0.71	0.85	0.99	1.09	1.18
												R (hrs)	0.76	0.33	0.27	0.23	0.20	0.19
N11P3	0.04	0.46	28.5	28.5	Urban	0.060	0.30	0.25	4.80	0.30	5	Tc (hrs)	1.29	0.93	0.82	0.72	0.66	0.61
												Vel (f/s)	0.52	0.73	0.82	0.94	1.03	1.10
												R (hrs)	1.62	1.13	0.99	0.85	0.77	0.71
N11P4	0.05	0.40	102.8	102.8	HEC-1 Default	0.062	0.31	0.27	4.15	0.44	4	Tc (hrs)	0.98	0.63	0.55	0.48	0.44	0.41
												Vel (f/s)	0.60	0.93	1.06	1.21	1.32	1.43

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.96	0.59	0.51	0.44	0.40	0.36
N11P5	0.03	0.22	1231.2	315.0	Natural	0.063	0.35	0.35	4.00	0.47	15	Tc (hrs)	0.47	0.33	0.29	0.25	0.23	0.22
												Vel (f/s)	0.68	0.99	1.13	1.29	1.40	1.50
												R (hrs)	0.38	0.25	0.21	0.19	0.17	0.16
N11P6	0.16	0.50	750.0	315.0	Natural	0.052	0.35	0.35	4.00	0.47	40	Tc (hrs)	0.47	0.38	0.34	0.31	0.29	0.27
												Vel (f/s)	1.55	1.93	2.14	2.38	2.55	2.70
												R (hrs)	0.26	0.21	0.18	0.16	0.15	0.14
N11P7	0.06	0.16	335.4	274.0	Natural	0.058	0.35	0.35	4.25	0.42		Tc (hrs)	0.62	0.32	0.27	0.23	0.21	0.19
												Vel (f/s)	0.38	0.74	0.89	1.03	1.13	1.22
												R (hrs)	0.25	0.12	0.10	0.08	0.07	0.07
N11P8	0.04	0.23	1517.2	315.0	Natural	0.060	0.35	0.35	4.15	0.44	21	Tc (hrs)	0.42	0.31	0.27	0.24	0.22	0.21
												Vel (f/s)	0.80	1.09	1.24	1.39	1.51	1.61
												R (hrs)	0.26	0.19	0.16	0.14	0.13	0.12
N11P9	0.04	0.20	191.9	191.9	Natural	0.060	0.35	0.35	4.10	0.46		Tc (hrs)	0.87	0.41	0.34	0.29	0.27	0.25
												Vel (f/s)	0.34	0.71	0.86	1.00	1.10	1.19
												R (hrs)	0.52	0.23	0.19	0.16	0.14	0.13
N20	0.36	0.56	31.2	31.2	Urban	0.040	0.14	0.22	4.70	0.33	51	Tc (hrs)	0.77	0.65	0.60	0.54	0.51	0.48
												Vel (f/s)	1.07	1.27	1.38	1.52	1.62	1.70
												R (hrs)	0.31	0.26	0.24	0.21	0.20	0.19
N21	0.62	1.47	23.4	23.4	HEC-1 Default	0.051	0.21	0.20	4.60	0.42	45	Tc (hrs)	1.50	1.37	1.25	1.13	1.06	1.00
												Vel (f/s)	1.31	1.58	1.72	1.91	2.04	2.16
												R (hrs)	1.15	0.93	0.85	0.76	0.70	0.66
N21JA	0.08	0.54	834.4	315.0	Natural	0.057	0.35	0.35	4.15	0.44	26	Tc (hrs)	0.59	0.45	0.40	0.35	0.33	0.31
												Vel (f/s)	1.34	1.78	1.99	2.24	2.41	2.57
												R (hrs)	0.53	0.39	0.34	0.30	0.28	0.26

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N21C	0.39	1.36	22.1	22.1	Urban	0.047	0.24	0.15	8.00	0.10	32	Tc (hrs)	1.48	1.22	1.11	1.01	0.94	0.89
												Vel (f/s)	1.35	1.64	1.80	1.98	2.11	2.23
												R (hrs)	1.24	1.00	0.91	0.81	0.75	0.71
N21D	0.05	0.41	19.6	19.6	Urban	0.059	0.25	0.15	9.70	0.06	30	Tc (hrs)	0.93	0.77	0.70	0.64	0.60	0.57
												Vel (f/s)	0.65	0.78	0.86	0.94	1.01	1.06
												R (hrs)	0.89	0.72	0.65	0.59	0.55	0.52
N21E	0.06	0.44	23.0	23.0	Urban	0.061	0.26	0.10	11.20	0.03	28	Tc (hrs)	0.89	0.75	0.68	0.62	0.59	0.56
												Vel (f/s)	0.72	0.87	0.94	1.04	1.10	1.16
												R (hrs)	0.82	0.67	0.61	0.55	0.51	0.48
N21F	0.13	0.67	14.9	14.9	Urban	0.057	0.30	0.11	11.20	0.03	13	Tc (hrs)	1.28	1.05	0.96	0.86	0.81	0.77
												Vel (f/s)	0.77	0.94	1.03	1.14	1.22	1.28
												R (hrs)	1.16	0.93	0.84	0.75	0.69	0.65
N21G	0.06	0.51	27.5	27.5	Urban	0.058	0.30	0.10	11.20	0.03	15	Tc (hrs)	0.92	0.76	0.69	0.63	0.59	0.56
												Vel (f/s)	0.81	0.99	1.08	1.20	1.28	1.35
												R (hrs)	0.96	0.77	0.69	0.62	0.58	0.54
N21H	0.03	0.26	30.8	30.8	Urban	0.063	0.30	0.25	5.10	0.31	15	Tc (hrs)	0.89	0.67	0.60	0.53	0.49	0.45
												Vel (f/s)	0.43	0.57	0.64	0.72	0.79	0.84
												R (hrs)	0.77	0.56	0.50	0.43	0.39	0.37
N21I1	0.08	0.55	49.7	49.7	Urban	0.059	0.30	0.25	4.70	0.32	7	Tc (hrs)	1.17	0.84	0.75	0.66	0.60	0.56
												Vel (f/s)	0.69	0.96	1.08	1.23	1.34	1.45
												R (hrs)	1.12	0.78	0.69	0.59	0.54	0.50
N21I2	0.06	0.60	39.6	39.6	Urban	0.059	0.30	0.25	4.70	0.31	5	Tc (hrs)	1.32	0.95	0.84	0.74	0.67	0.63
												Vel (f/s)	0.66	0.93	1.05	1.19	1.31	1.41
												R (hrs)	1.72	1.19	1.04	0.90	0.81	0.75
N21I3	0.09	0.53	37.7	37.7	HEC-1 Default	0.036	0.13	0.37	5.70	0.19	4	Tc (hrs)	0.88	0.68	0.60	0.52	0.48	0.45
												Vel (f/s)	0.89	1.15	1.29	1.48	1.61	1.72

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.77	0.58	0.51	0.44	0.40	0.37
N21I4	0.03	0.32	44.8	44.8	Urban	0.063	0.30	0.25	4.80	0.30	5	Tc (hrs)	0.96	0.69	0.61	0.53	0.49	0.46
												Vel (f/s)	0.49	0.68	0.77	0.88	0.96	1.03
												R (hrs)	1.11	0.77	0.68	0.58	0.53	0.49
N21JB	0.17	0.61	88.8	88.8	HEC-1 Default	0.058	0.32	0.28	4.55	0.36	5	Tc (hrs)	1.15	0.77	0.68	0.59	0.54	0.50
												Vel (f/s)	0.78	1.16	1.32	1.51	1.65	1.79
												R (hrs)	0.81	0.52	0.45	0.39	0.35	0.32
N21Z	0.11	0.52	33.0	33.0	HEC-1 Default	0.042	0.17	0.32	6.40	0.15	7	Tc (hrs)	0.92	0.73	0.65	0.57	0.53	0.49
												Vel (f/s)	0.83	1.05	1.18	1.35	1.45	1.55
												R (hrs)	0.70	0.54	0.48	0.41	0.38	0.35
N22A	0.30	0.95	14.0	14.0	Urban	0.045	0.19	0.14	10.10	0.04	39	Tc (hrs)	1.28	1.08	1.00	0.91	0.86	0.82
												Vel (f/s)	1.09	1.29	1.40	1.53	1.63	1.71
												R (hrs)	0.93	0.77	0.71	0.64	0.60	0.56
N22B	0.18	0.73	25.6	25.6	Urban	0.052	0.25	0.15	9.70	0.06	30	Tc (hrs)	1.07	0.88	0.81	0.73	0.69	0.65
												Vel (f/s)	1.00	1.21	1.32	1.46	1.56	1.64
												R (hrs)	0.84	0.68	0.61	0.55	0.51	0.48
N23	0.39	1.04	18.6	18.6	Urban	0.050	0.26	0.27	4.30	0.47	27	Tc (hrs)	1.50	1.34	1.21	1.08	1.01	0.95
												Vel (f/s)	0.88	1.13	1.26	1.41	1.51	1.61
												R (hrs)	1.21	0.91	0.81	0.72	0.66	0.61
N24	0.11	0.55	40.0	40.0	HEC-1 Default	0.056	0.33	0.34	3.45	0.69	6	Tc (hrs)	1.50	1.10	0.90	0.77	0.70	0.65
												Vel (f/s)	0.41	0.74	0.90	1.05	1.15	1.24
												R (hrs)	1.72	0.90	0.73	0.61	0.55	0.51
N24D	0.09	0.44	27.3	27.3	Urban	0.047	0.22	0.26	4.25	0.52	35	Tc (hrs)	0.91	0.72	0.66	0.59	0.55	0.52
												Vel (f/s)	0.71	0.90	0.99	1.10	1.17	1.25
												R (hrs)	0.69	0.53	0.48	0.43	0.40	0.37

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N24E	0.02	0.31	19.4	19.4	Natural	0.065	0.35	0.35	3.95	0.48		Tc (hrs)	1.50	1.09	0.91	0.78	0.71	0.65
												Vel (f/s)	0.23	0.42	0.50	0.59	0.64	0.70
												R (hrs)	2.83	1.44	1.18	0.99	0.89	0.82
N24F	0.11	0.49	32.7	32.7	HEC-1 Default	0.059	0.32	0.30	5.00	0.30	9	Tc (hrs)	1.29	0.91	0.81	0.71	0.65	0.61
												Vel (f/s)	0.56	0.79	0.89	1.01	1.10	1.19
												R (hrs)	1.00	0.68	0.60	0.52	0.47	0.43
N24G	0.43	1.06	28.2	28.2	HEC-1 Default	0.051	0.32	0.31	4.20	0.45	4	Tc (hrs)	1.50	1.45	1.25	1.08	0.99	0.92
												Vel (f/s)	0.78	1.07	1.25	1.44	1.57	1.69
												R (hrs)	1.35	0.95	0.80	0.69	0.62	0.57
N24H	0.23	0.73	60.2	60.2	Natural	0.051	0.35	0.35	4.10	0.46	29	Tc (hrs)	1.05	0.81	0.72	0.64	0.60	0.56
												Vel (f/s)	1.02	1.33	1.49	1.67	1.79	1.91
												R (hrs)	0.71	0.53	0.46	0.41	0.38	0.35
N24I	0.30	1.25	32.0	32.0	Natural	0.049	0.35	0.35	4.15	0.44		Tc (hrs)	1.50	1.50	1.33	1.15	1.04	0.97
												Vel (f/s)	0.92	1.15	1.37	1.60	1.76	1.90
												R (hrs)	1.90	1.46	1.21	1.02	0.92	0.84
N24J	0.12	0.89	31.5	31.5	Natural	0.054	0.35	0.35	3.95	0.48		Tc (hrs)	1.50	1.45	1.20	1.03	0.94	0.87
												Vel (f/s)	0.65	0.90	1.09	1.27	1.39	1.51
												R (hrs)	2.43	1.69	1.38	1.16	1.04	0.96
N24K	0.21	1.33	30.1	30.1	Natural	0.052	0.34	0.34	4.15	0.45	3	Tc (hrs)	1.50	1.50	1.41	1.22	1.11	1.03
												Vel (f/s)	0.98	1.17	1.38	1.60	1.75	1.89
												R (hrs)	2.43	1.98	1.65	1.40	1.27	1.17
N24M	0.17	0.52	57.6	57.6	HEC-1 Default	0.056	0.30	0.30	4.60	0.36	17	Tc (hrs)	1.01	0.74	0.66	0.59	0.54	0.51
												Vel (f/s)	0.76	1.03	1.15	1.30	1.41	1.51
												R (hrs)	0.61	0.43	0.38	0.34	0.31	0.28
N24N	0.13	0.83	106.0	106.0	HEC-1 Default	0.058	0.29	0.29	3.95	0.53	23	Tc (hrs)	1.06	0.79	0.70	0.63	0.58	0.55
												Vel (f/s)	1.15	1.54	1.73	1.94	2.10	2.23

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	1.09	0.79	0.69	0.61	0.56	0.52
N24V	0.05	0.40	577.5	312.0	Natural	0.061	0.35	0.35	4.15	0.45	13	Tc (hrs)	0.65	0.44	0.38	0.34	0.31	0.29
												Vel (f/s)	0.90	1.33	1.54	1.75	1.90	2.04
												R (hrs)	0.65	0.42	0.36	0.31	0.28	0.26
N25	0.24	1.08	31.5	31.5	Natural	0.051	0.35	0.35	3.53	0.64		Tc (hrs)	1.50	1.50	1.36	1.14	1.04	0.96
												Vel (f/s)	0.79	0.92	1.16	1.39	1.52	1.65
												R (hrs)	1.90	1.61	1.24	1.02	0.92	0.84
N26	0.04	0.33	54.5	54.5	Natural	0.061	0.35	0.35	3.88	0.50		Tc (hrs)	1.50	0.80	0.66	0.57	0.51	0.48
												Vel (f/s)	0.27	0.61	0.73	0.86	0.94	1.02
												R (hrs)	1.81	0.75	0.60	0.51	0.46	0.42
N27	0.28	1.80	106.7	106.7	HEC-1 Default	0.052	0.32	0.34	3.33	0.77	11	Tc (hrs)	1.50	1.36	1.13	0.97	0.89	0.83
												Vel (f/s)	1.32	1.94	2.33	2.72	2.97	3.19
												R (hrs)	2.63	1.72	1.40	1.18	1.07	0.99
P1	0.03	0.35	113.3	113.3	HEC-1 Default	0.064	0.34	0.38	6.00	0.18	1	Tc (hrs)	0.84	0.56	0.50	0.43	0.39	0.36
												Vel (f/s)	0.61	0.91	1.03	1.20	1.32	1.42
												R (hrs)	0.99	0.64	0.55	0.47	0.42	0.39
P10	0.06	0.27	44.3	44.3	Urban	0.060	0.25	0.26	3.78	0.63	29	Tc (hrs)	0.75	0.58	0.52	0.47	0.44	0.41
												Vel (f/s)	0.53	0.68	0.76	0.85	0.91	0.97
												R (hrs)	0.50	0.37	0.33	0.29	0.27	0.25
P11	0.04	0.39	15.7	15.7	Urban	0.060	0.25	0.25	3.85	0.60	30	Tc (hrs)	1.22	0.95	0.86	0.77	0.71	0.67
												Vel (f/s)	0.47	0.60	0.67	0.75	0.80	0.85
												R (hrs)	1.33	1.00	0.89	0.79	0.73	0.68
P12	0.04	0.29	44.1	44.1	Urban	0.060	0.25	0.26	3.58	0.71	30	Tc (hrs)	0.79	0.61	0.54	0.49	0.45	0.43
												Vel (f/s)	0.54	0.70	0.78	0.87	0.94	1.00
												R (hrs)	0.62	0.47	0.42	0.37	0.34	0.32

* Non default value

Sub Basin Data

Basin 01 Storms Multiple Duration 6 Hour Loss Method Green-Ampt Unit Hydrograph Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
P13	0.06	0.30	126.1	126.1	Urban	0.061	0.26	0.25	3.92	0.57	27	Tc (hrs)	0.58	0.45	0.40	0.36	0.33	0.31
												Vel (f/s)	0.76	0.99	1.10	1.23	1.32	1.41
												R (hrs)	0.39	0.29	0.26	0.23	0.21	0.20
P14	0.01	0.10	102.0	102.0	HEC-1 Default	0.072	0.34	0.34	3.81	0.53	2	Tc (hrs)	0.76	0.39	0.32	0.28	0.25	0.23
												Vel (f/s)	0.19	0.38	0.45	0.53	0.58	0.63
												R (hrs)	0.68	0.32	0.26	0.22	0.20	0.18
P15	0.01	0.14	28.2	28.2	HEC-1 Default	0.075	0.33	0.34	3.23	0.81	5	Tc (hrs)	1.44	0.77	0.62	0.52	0.47	0.44
												Vel (f/s)	0.14	0.27	0.33	0.40	0.44	0.47
												R (hrs)	2.13	1.06	0.83	0.68	0.61	0.56
P2	0.05	0.28	98.2	98.2	Urban	0.060	0.25	0.25	4.45	0.43	29	Tc (hrs)	0.57	0.45	0.40	0.36	0.34	0.32
												Vel (f/s)	0.73	0.92	1.02	1.13	1.22	1.30
												R (hrs)	0.39	0.30	0.27	0.24	0.22	0.20
P27	0.07	0.59	91.8	91.8	Urban	0.058	0.25	0.15	8.00	0.10	30	Tc (hrs)	0.70	0.58	0.53	0.48	0.45	0.42
												Vel (f/s)	1.23	1.50	1.65	1.82	1.94	2.05
												R (hrs)	0.78	0.63	0.57	0.51	0.47	0.44
P27A	0.01	0.18	152.8	152.8	Urban	0.072	0.25	0.25	4.35	0.46	44	Tc (hrs)	0.39	0.32	0.29	0.27	0.25	0.24
												Vel (f/s)	0.67	0.82	0.90	0.99	1.06	1.12
												R (hrs)	0.52	0.42	0.38	0.34	0.31	0.30
P27B	0.01	0.27	191.4	191.4	Urban	0.068	0.26	0.26	5.00	0.32	37	Tc (hrs)	0.44	0.36	0.33	0.30	0.28	0.26
												Vel (f/s)	0.89	1.10	1.20	1.33	1.43	1.52
												R (hrs)	0.63	0.50	0.45	0.40	0.37	0.35
P28	0.03	0.30	69.0	69.0	Urban	0.064	0.25	0.13	10.10	0.04	29	Tc (hrs)	0.55	0.45	0.42	0.38	0.36	0.34
												Vel (f/s)	0.81	0.97	1.06	1.16	1.24	1.31
												R (hrs)	0.57	0.46	0.42	0.38	0.35	0.33
P3	0.05	0.39	59.0	59.0	Urban	0.059	0.25	0.25	4.45	0.43	30	Tc (hrs)	0.77	0.61	0.55	0.49	0.46	0.43
												Vel (f/s)	0.74	0.94	1.04	1.16	1.24	1.33

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.69	0.53	0.48	0.42	0.39	0.36
P4a	0.04	0.33	31.5	31.5	Urban	0.061	0.25	0.25	4.00	0.55	30	Tc (hrs)	0.90	0.70	0.64	0.57	0.53	0.50
												Vel (f/s)	0.54	0.69	0.76	0.85	0.91	0.97
												R (hrs)	0.86	0.66	0.59	0.52	0.48	0.45
P4b	0.02	0.12	87.1	87.1	Urban	0.066	0.25	0.25	4.45	0.43	30	Tc (hrs)	0.40	0.32	0.29	0.26	0.24	0.23
												Vel (f/s)	0.44	0.56	0.61	0.68	0.74	0.78
												R (hrs)	0.25	0.19	0.17	0.15	0.14	0.13
P6	0.07	0.70	13.8	13.8	Urban	0.057	0.25	0.25	4.25	0.49	30	Tc (hrs)	1.50	1.27	1.15	1.03	0.96	0.90
												Vel (f/s)	0.64	0.81	0.90	1.00	1.07	1.14
												R (hrs)	2.16	1.65	1.48	1.31	1.21	1.13
P7	0.01	0.22	25.3	25.3	Urban	0.067	0.25	0.25	3.95	0.56	30	Tc (hrs)	0.83	0.65	0.58	0.52	0.49	0.46
												Vel (f/s)	0.39	0.50	0.55	0.62	0.66	0.70
												R (hrs)	1.02	0.77	0.69	0.61	0.57	0.53
P8	0.01	0.21	16.6	16.6	Urban	0.067	0.25	0.25	4.15	0.52	30	Tc (hrs)	0.92	0.72	0.65	0.58	0.54	0.51
												Vel (f/s)	0.34	0.43	0.48	0.53	0.57	0.61
												R (hrs)	1.15	0.87	0.78	0.69	0.64	0.60
P9	0.05	0.39	179.0	179.0	Urban	0.060	0.25	0.25	3.92	0.57	30	Tc (hrs)	0.57	0.44	0.40	0.36	0.34	0.32
												Vel (f/s)	1.00	1.28	1.43	1.59	1.71	1.82
												R (hrs)	0.55	0.41	0.37	0.33	0.30	0.28
S1	0.12	0.72	69.3	69.3	HEC-1 Default	0.059	0.31	0.27	4.25	0.47	12	Tc (hrs)	1.29	0.90	0.79	0.70	0.64	0.60
												Vel (f/s)	0.82	1.18	1.34	1.52	1.65	1.77
												R (hrs)	1.25	0.83	0.72	0.63	0.57	0.53
S2	0.01	0.09	117.6	117.6	HEC-1 Default	0.071	0.34	0.33	4.70	0.32	3	Tc (hrs)	0.49	0.31	0.27	0.24	0.21	0.20
												Vel (f/s)	0.27	0.43	0.49	0.56	0.62	0.67
												R (hrs)	0.30	0.18	0.16	0.13	0.12	0.11

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
S3	0.01	0.06	125.0	125.0	Urban	0.072	0.30	0.25	4.65	0.32	5	Tc (hrs)	0.33	0.23	0.21	0.18	0.17	0.15
												Vel (f/s)	0.27	0.38	0.42	0.48	0.53	0.57
												R (hrs)	0.21	0.14	0.13	0.11	0.10	0.09
S30B	0.40	1.63	20.9	20.9	HEC-1 Default	0.042	0.19	0.29	5.80	0.21	24	Tc (hrs)	1.50	1.41	1.28	1.14	1.06	1.00
												Vel (f/s)	1.37	1.69	1.87	2.10	2.26	2.40
												R (hrs)	1.71	1.36	1.21	1.06	0.98	0.92
S30C	0.45	1.49	24.2	24.2	Urban	0.045	0.23	0.15	7.30	0.13	36	Tc (hrs)	1.46	1.22	1.11	1.00	0.94	0.89
												Vel (f/s)	1.49	1.80	1.97	2.18	2.32	2.45
												R (hrs)	1.22	0.99	0.90	0.80	0.75	0.70
S30D	0.13	0.46	15.2	15.2	Urban	0.054	0.25	0.17	6.80	0.15	30	Tc (hrs)	1.07	0.89	0.80	0.72	0.68	0.64
												Vel (f/s)	0.63	0.76	0.84	0.94	1.00	1.06
												R (hrs)	0.68	0.55	0.50	0.44	0.41	0.39
S4	0.01	0.32	126.1	126.1	HEC-1 Default	0.071	0.33	0.31	4.80	0.30	2	Tc (hrs)	0.86	0.56	0.49	0.43	0.39	0.36
												Vel (f/s)	0.55	0.84	0.95	1.09	1.20	1.30
												R (hrs)	1.43	0.89	0.77	0.66	0.60	0.55
SUMMIT	0.03	0.24	32.1	32.1	Urban	0.063	0.30	0.25	4.35	0.40	5	Tc (hrs)	1.01	0.69	0.61	0.53	0.49	0.45
												Vel (f/s)	0.35	0.51	0.58	0.66	0.73	0.78
												R (hrs)	0.95	0.62	0.54	0.47	0.42	0.39
WB1	0.12	0.60	15.9	15.9	Urban	0.052	0.23	0.18	7.30	0.12	26	Tc (hrs)	1.19	0.97	0.88	0.80	0.74	0.70
												Vel (f/s)	0.74	0.90	1.00	1.11	1.18	1.25
												R (hrs)	1.02	0.82	0.73	0.65	0.61	0.57
WB10	0.10	0.60	23.2	23.2	Urban	0.051	0.21	0.19	8.00	0.09	23	Tc (hrs)	1.04	0.85	0.77	0.69	0.65	0.62
												Vel (f/s)	0.85	1.04	1.14	1.27	1.35	1.43
												R (hrs)	0.98	0.78	0.70	0.63	0.58	0.55
WB2	0.09	0.53	19.6	19.6	Urban	0.049	0.20	0.19	8.80	0.06	20	Tc (hrs)	0.99	0.81	0.74	0.66	0.62	0.59
												Vel (f/s)	0.79	0.96	1.06	1.17	1.25	1.32

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.87	0.69	0.63	0.56	0.52	0.49
WB3	0.01	0.11	51.4	51.4	Urban	0.040	0.12	0.26	8.80	0.05	3	Tc (hrs)	0.31	0.25	0.23	0.20	0.19	0.18
												Vel (f/s)	0.52	0.64	0.71	0.79	0.84	0.89
												R (hrs)	0.24	0.19	0.17	0.15	0.14	0.13
WB4	0.11	0.50	29.4	29.4	Urban	0.052	0.23	0.17	8.80	0.07	25	Tc (hrs)	0.87	0.71	0.65	0.59	0.55	0.52
												Vel (f/s)	0.84	1.03	1.13	1.25	1.33	1.41
												R (hrs)	0.65	0.52	0.47	0.42	0.39	0.37
WB5	0.11	0.38	26.1	26.1	Urban	0.048	0.20	0.19	8.80	0.06	19	Tc (hrs)	0.76	0.62	0.57	0.51	0.48	0.45
												Vel (f/s)	0.73	0.90	0.99	1.09	1.17	1.23
												R (hrs)	0.43	0.35	0.31	0.28	0.26	0.24
WB6	0.12	0.71	17.5	17.5	Urban	0.051	0.22	0.18	8.80	0.07	24	Tc (hrs)	1.21	0.99	0.90	0.82	0.76	0.72
												Vel (f/s)	0.86	1.05	1.15	1.28	1.36	1.44
												R (hrs)	1.20	0.95	0.86	0.77	0.72	0.67
WB7	0.05	0.35	28.2	28.2	Urban	0.044	0.14	0.20	8.80	0.07	34	Tc (hrs)	0.65	0.54	0.50	0.45	0.42	0.40
												Vel (f/s)	0.79	0.95	1.03	1.14	1.21	1.28
												R (hrs)	0.58	0.47	0.43	0.39	0.36	0.34
WB8	0.07	0.78	3.2	3.2	Urban	0.052	0.21	0.15	8.80	0.07	44	Tc (hrs)	1.50	1.50	1.50	1.42	1.34	1.27
												Vel (f/s)	0.57	0.68	0.73	0.81	0.86	0.90
												R (hrs)	3.06	2.54	2.32	2.09	1.95	1.85
WB9	0.22	1.06	13.5	13.5	Urban	0.048	0.22	0.26	5.10	0.31	32	Tc (hrs)	1.50	1.38	1.26	1.13	1.05	0.99
												Vel (f/s)	0.91	1.13	1.24	1.38	1.48	1.58
												R (hrs)	1.67	1.32	1.19	1.06	0.97	0.91
A08	0.08	0.11	36.4	36.4	Urban	0.061	0.30	0.31	3.19	0.88	14	Tc (hrs)	0.72	0.50	0.42	0.36	0.33	0.31
												Vel (f/s)	0.22	0.33	0.39	0.45	0.49	0.52
												R (hrs)	0.19	0.13	0.10	0.09	0.08	0.07

* Non default value

Sub Basin Data

4/18/2007

Basin: D1 | Storms: Multiple | Duration: 6 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Sub Basin ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
S30A	0.53	1.34	14.2	14.2	Urban	0.042	0.22	0.21	6.40	0.21	28	Tc (hrs)	1.50	1.41	1.28	1.14	1.06	1.01
												Vel (f/s)	1.14	1.39	1.53	1.72	1.85	1.96
												R (hrs)	1.23	0.99	0.88	0.78	0.72	0.67
P25S	0.03	0.25	28.0	28.0	Urban	0.063	0.35	0.35	4.35	0.40	15	Tc (hrs)	1.03	0.72	0.63	0.56	0.52	0.48
												Vel (f/s)	0.36	0.51	0.58	0.66	0.71	0.76
												R (hrs)	0.97	0.65	0.56	0.49	0.45	0.42

* Non default value

APPENDIX A3

Soil Data

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
Major Basin 01							
100	Aguila/Carefree	13	0.009	22.7	0.01		
	Aguila/Carefree	100	0.012	30.4	0.40	20.0	100
	Aguila/Carefree	110	0.018	46.9	0.13		
19	Aguila/Carefree	13	0.001	2.2	0.01		
	Aguila/Carefree	112	0.001	2.9	0.39		
	Aguila/Carefree	100	0.004	7.8	0.40	20.0	100
	Aguila/Carefree	110	0.039	87.1	0.13		
20	Aguila/Carefree	100	0.006	15.6	0.40	20.0	100
	Aguila/Carefree	110	0.015	37.8	0.13		
	Aguila/Carefree	13	0.019	46.6	0.01		
21	Aguila/Carefree	112	0.003	9.8	0.39		
	Aguila/Carefree	110	0.026	90.2	0.13		
22	Aguila/Carefree	100	0.007	16.0	0.40	20.0	100
	Aguila/Carefree	13	0.016	37.9	0.01		
	Aguila/Carefree	110	0.019	46.1	0.13		
23	Aguila/Carefree	112	0.001	2.3	0.39		
	Aguila/Carefree	110	0.030	97.7	0.13		
24	Aguila/Carefree	100	0.003	16.7	0.40	20.0	100
	Aguila/Carefree	13	0.006	30.8	0.01		
	Aguila/Carefree	110	0.010	52.5	0.13		
25	Aguila/Carefree	110	0.016	100.0	0.13		
26R	Aguila/Carefree	100	0.016	25.7	0.40	20.0	100
	Aguila/Carefree	110	0.046	74.3	0.13		
27	Aguila/Carefree	112	0.001	3.6	0.39		
	Aguila/Carefree	110	0.037	96.4	0.13		
28R	Aguila/Carefree	112	0.001	4.7	0.39		
	Aguila/Carefree	110	0.012	95.3	0.13		
29	Aguila/Carefree	112	0.001	2.4	0.39		
	Aguila/Carefree	110	0.033	97.6	0.13		
33	Aguila/Carefree	112	0.007	16.4	0.39		
	Aguila/Carefree	21	0.011	25.2	0.38		
	Aguila/Carefree	18	0.025	58.4	0.33	15.0	100
34	Central County	CO	0.001	5.0	0.29	20.0	100
	Aguila/Carefree	18	0.027	95.0	0.33	15.0	100
35	Aguila/Carefree	110	0.003	7.5	0.13		
	Aguila/Carefree	18	0.007	16.9	0.33	15.0	100
	Aguila/Carefree	112	0.033	75.6	0.39		
36	Aguila/Carefree	118	0.001	3.1	0.42		
	Central County	CO	0.004	9.5	0.29	20.0	100
	Aguila/Carefree	18	0.040	87.4	0.33	15.0	100

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
37E	Aguila/Carefree	110	0.001	11.1	0.13		
	Aguila/Carefree	118	0.002	16.2	0.42		
	Aguila/Carefree	115	0.003	25.6	0.39		
	Aguila/Carefree	112	0.006	47.0	0.39		
37W	Aguila/Carefree	18	0.002	21.8	0.33	15.0	100
	Aguila/Carefree	112	0.007	78.2	0.39		
41	Central County	RS	0.005	8.7	0.40	65.0	100
	Central County	GWD	0.015	28.2	0.35		
	Central County	CO	0.034	63.1	0.29	20.0	100
42	Central County	GWD	0.001	1.5	0.35		
	Central County	CO	0.034	45.4	0.29	20.0	100
	Central County	RS	0.040	53.1	0.40	65.0	100
45	Aguila/Carefree	18	0.001	1.5	0.33	15.0	100
	Central County	GWD	0.018	28.6	0.35		
	Central County	CO	0.043	69.9	0.29	20.0	100
46	Central County	CO	0.008	12.8	0.29	20.0	100
	Central County	GWD	0.027	43.5	0.35		
	Central County	RS	0.027	43.7	0.40	65.0	100
47	Central County	GWD	0.001	3.3	0.35		
	Central County	CO	0.007	17.1	0.29	20.0	100
	Central County	TSC	0.007	18.9	0.14		
	Aguila/Carefree	18	0.008	20.2	0.33	15.0	100
	Aguila/Carefree	118	0.016	40.6	0.42		
48	Aguila/Carefree	112	0.001	4.8	0.39		
	Aguila/Carefree	18	0.001	5.2	0.33	15.0	100
	Aguila/Carefree	118	0.023	90.0	0.42		
49	Central County	TSC	0.002	7.3	0.14		
	Aguila/Carefree	115	0.004	16.7	0.39		
	Aguila/Carefree	118	0.018	76.0	0.42		
50	Central County	GWD	0.002	8.0	0.35		
	Central County	TSC	0.025	92.0	0.14		
51	Aguila/Carefree	118	0.001	5.0	0.42		
	Central County	AL	0.005	43.0	0.40		
	Central County	TSC	0.006	52.1	0.14		
52	Central County	AL	0.002	3.5	0.40		
	Central County	GWD	0.006	13.4	0.35		
	Central County	TSC	0.036	83.1	0.14		
53R	Central County	TSC	0.011	16.4	0.14		
	Central County	RS	0.022	31.5	0.40	65.0	100
	Central County	GWD	0.036	52.1	0.35		
54R	Central County	RS	0.001	3.3	0.40	65.0	100
	Central County	TSC	0.020	96.7	0.14		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
55	Central County	GWD	0.002	4.2	0.35		
	Central County	RS	0.052	95.8	0.40	65.0	100
56R	Central County	TSC	0.012	100.0	0.14		
57R	Central County	TSC	0.008	100.0	0.14		
87	Central County	PWB	0.002	5.8	0.38		
	Central County	GN	0.026	94.2	0.25		
A07C	Central County	TH	0.001	0.8	0.04		
	Central County	TG	0.007	3.8	0.04		
	Central County	VA	0.010	5.5	0.39		
	Central County	MR	0.011	6.2	0.05		
	Central County	LCB	0.015	8.4	0.25		
	Central County	MP	0.021	11.8	0.25		
	Central County	CA2	0.023	13.4	0.38		
	Central County	TFA	0.028	15.8	0.37		
	Central County	TE	0.060	34.3	0.25		
A07D	Central County	CA2	0.001	0.3	0.38		
	Central County	MO	0.004	1.7	0.39		
	Central County	GE	0.009	3.7	0.26		
	Central County	CB	0.030	13.0	0.40		
	Central County	TFA	0.053	23.1	0.37		
	Central County	VA	0.133	58.2	0.39		
A07E	Central County	TH	0.003	1.4	0.04		
	Central County	GXA	0.006	2.5	0.23		
	Central County	TE	0.006	2.6	0.25		
	Central County	RBA	0.008	3.6	0.26		
	Central County	RPE	0.013	5.9	0.29		
	Central County	TFA	0.032	13.9	0.37		
	Central County	MR	0.159	70.1	0.05		
A07F	Central County	RPE	0.001	0.3	0.29		
	Central County	LB	0.004	1.8	0.40		
	Central County	PEA	0.005	1.9	0.37		
	Central County	MR	0.008	3.5	0.05		
	Central County	MP	0.012	4.9	0.25		
	Central County	RBA	0.031	13.1	0.26		
	Central County	TE	0.071	30.3	0.25		
	Central County	LCA	0.103	44.1	0.25		
A07G	Central County	TFA	0.001	0.2	0.37		
	Central County	TE	0.003	1.3	0.25		
	Central County	RBA	0.030	11.6	0.26		
	Central County	RPE	0.031	12.1	0.29		
	Central County	TG	0.033	12.7	0.04		
	Central County	MR	0.160	62.1	0.05		
A07H	Central County	VA	0.007	7.7	0.39		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A07H	Central County	TG	0.011	11.7	0.04		
	Central County	CA2	0.020	21.4	0.38		
	Central County	TFA	0.027	28.5	0.37		
	Central County	TE	0.029	30.7	0.25		
A08	Central County	CB	0.029	36.9	0.40		
	Central County	TD	0.016	20.7	1.20		
	Central County	VG	0.030	38.3	0.91		
	Central County	VH	0.003	4.0	0.27		
A08A	Central County	CB	0.005	3.8	0.40		
	Central County	TD	0.011	7.8	1.20		
	Central County	GE	0.017	12.4	0.26		
	Central County	BR	0.028	20.0	1.05		
	Central County	VH	0.028	20.6	0.27		
	Central County	VG	0.049	35.5	0.91		
A08B	Central County	GE	0.002	1.9	0.26		
	Central County	TFA	0.002	2.3	0.37		
	Central County	VG	0.003	2.5	0.91		
	Central County	TD	0.004	4.2	1.20		
	Central County	GGA	0.005	4.7	0.25		
	Central County	BR	0.011	10.7	1.05		
	Central County	CB	0.073	73.5	0.40		
A09	Central County	BR	0.014	8.0	1.05		
	Central County	TD	0.025	14.2	1.20		
	Central County	CB	0.137	77.8	0.40		
A09A	Central County	GGA	0.006	7.1	0.25		
	Central County	TFA	0.011	13.4	0.37		
	Central County	CB	0.015	18.4	0.40		
	Central County	VA	0.016	19.3	0.39		
	Central County	ABA	0.017	20.5	0.38		
	Central County	BR	0.018	21.4	1.05		
A09B	Central County	TFA	0.004	10.7	0.37		
	Central County	CA2	0.005	11.2	0.38		
	Central County	ABA	0.032	78.1	0.38		
A09C	Central County	TG	0.001	0.8	0.04		
	Central County	VA	0.001	1.9	0.39		
	Central County	CA2	0.013	18.4	0.38		
	Central County	TFA	0.023	31.7	0.37		
	Central County	TE	0.034	47.2	0.25		
A09D	Central County	TFA	0.002	0.9	0.37		
	Central County	RPE	0.004	1.7	0.29		
	Central County	TE	0.005	1.8	0.25		
	Central County	RBA	0.005	2.1	0.26		
	Central County	TG	0.008	3.0	0.04		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A09D	Central County	PRB	0.015	6.0	0.28		
	Central County	MR	0.025	9.7	0.05		
	Central County	TPB	0.190	74.8	0.12		
A09E	Central County	MP	0.003	2.3	0.25		
	Central County	TPB	0.009	6.1	0.12		
	Central County	TE	0.011	7.4	0.25		
	Central County	LCA	0.015	9.9	0.25		
	Central County	PRB	0.109	74.3	0.28		
A09F	Central County	TRB	0.001	0.2	0.13		
	Central County	PT	0.003	0.8	0.40		
	Central County	LCA	0.008	2.2	0.25		
	Central County	TRA	0.017	4.5	0.11		
	Central County	MTB	0.024	6.4	0.15		
	Central County	MP	0.034	9.3	0.25		
	Central County	TSC	0.036	9.7	0.14		
	Central County	MR	0.038	10.3	0.05		
	Central County	PWB	0.043	11.8	0.38		
	Central County	PRB	0.054	14.6	0.28		
	Central County	BE	0.110	30.0	0.24		
A09GA	Central County	BE	0.021	28.5	0.24		
	Central County	PWB	0.053	71.5	0.38		
A09GB	Central County	VE	0.002	2.9	0.25		
	Central County	PT	0.003	6.1	0.40		
	Central County	BE	0.012	23.6	0.24		
	Central County	PWB	0.034	67.4	0.38		
A09H	Central County	PRB	0.062	26.3	0.28		
	Central County	PWB	0.074	31.2	0.38		
	Central County	BE	0.100	42.5	0.24		
A09I	Central County	MTB	0.003	2.0	0.15		
	Central County	TPB	0.123	98.0	0.12		
A09IH	Central County	BE	0.002	1.7	0.24		
	Central County	MTB	0.008	8.8	0.15		
	Central County	TPB	0.010	11.1	0.12		
	Central County	PRB	0.012	13.0	0.28		
	Central County	GYD	0.017	18.2	0.26		
	Central County	PWB	0.043	47.2	0.38		
A09J	Central County	BE	0.057	34.1	0.24		
	Central County	PWB	0.110	65.9	0.38		
A09L	Central County	BE	0.002	1.2	0.24		
	Central County	TPB	0.005	3.4	0.12		
	Central County	GYD	0.034	25.2	0.26		
	Central County	PWB	0.047	34.3	0.38		
	Central County	MTB	0.049	35.9	0.15		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A09M	Central County	TPB	0.007	2.8	0.12		
	Central County	GYD	0.021	8.6	0.26		
	Central County	BE	0.081	32.5	0.24		
	Central County	PWB	0.140	56.1	0.38		
A09N	Central County	MTB	0.001	0.5	0.15		
	Central County	PWB	0.009	8.4	0.38		
	Central County	GYD	0.025	22.7	0.26		
	Central County	TPB	0.075	68.3	0.12		
A09O	Central County	CV	0.007	3.8	0.39		
	Central County	BE	0.076	39.3	0.24		
	Central County	PWB	0.110	56.9	0.38		
A09P	Central County	PWB	0.052	27.5	0.38		
	Central County	BE	0.136	72.5	0.24		
A09QA	Central County	BE	0.003	3.2	0.24		
	Central County	GWD	0.037	40.1	0.35		
	Central County	PWB	0.052	56.7	0.38		
A09QB	Central County	BE	0.003	2.0	0.24		
	Central County	GWD	0.012	8.5	0.35		
	Central County	PWB	0.129	89.5	0.38		
A09R	Central County	GYD	0.001	0.4	0.26		
	Central County	GN	0.005	3.3	0.25		
	Central County	BE	0.021	14.8	0.24		
	Central County	PWB	0.054	37.5	0.38		
	Central County	CV	0.063	43.9	0.39		
A09S	Central County	PWB	0.001	1.0	0.38		
	Central County	BE	0.072	99.0	0.24		
A09T	Central County	GN	0.001	0.3	0.25		
	Central County	BE	0.010	5.5	0.24		
	Central County	PWB	0.045	24.6	0.38		
	Central County	GYD	0.053	29.3	0.26		
	Central County	CV	0.073	40.3	0.39		
A09U	Central County	CO	0.001	0.6	0.29	20.0	100
	Central County	GYD	0.012	6.7	0.26		
	Central County	GN	0.014	7.9	0.25		
	Central County	RS	0.051	29.1	0.40	65.0	100
	Central County	PWB	0.097	55.7	0.38		
A10	Central County	MTB	0.001	0.4	0.15		
	Central County	TPB	0.090	42.2	0.12		
	Central County	CF	0.123	57.4	0.50		
A10A	Central County	GWD	0.001	0.5	0.35		
	Central County	GYD	0.043	22.9	0.26		
	Central County	PWB	0.054	28.5	0.38		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A10A	Central County	TPB	0.091	48.0	0.12		
A11A	Central County	BE	0.011	3.5	0.24		
	Central County	PT	0.026	8.6	0.40		
	Central County	VF	0.077	25.7	0.01		
	Central County	PWB	0.186	62.2	0.38		
A11EA	Central County	GWD	0.012	8.3	0.35		
	Central County	PWB	0.017	12.0	0.38		
	Central County	PT	0.050	34.7	0.40		
	Central County	CO	0.065	45.1	0.29	20.0	100
A11EB	Aguila/Carefree	21	0.003	1.6	0.38		
	Aguila/Carefree	13	0.004	2.1	0.01		
	Central County	PT	0.021	11.1	0.40		
	Aguila/Carefree	110	0.025	13.2	0.13		
	Central County	PWB	0.136	72.0	0.38		
A11F	Central County	GYD	0.027	8.1	0.26		
	Central County	CV	0.034	10.1	0.39		
	Central County	PWB	0.053	15.7	0.38		
	Central County	CO	0.092	27.6	0.29	20.0	100
	Central County	GWD	0.129	38.5	0.35		
A11G	Central County	PT	0.002	3.1	0.40		
	Central County	CO	0.059	96.9	0.29	20.0	100
A11I	Central County	PWB	0.004	2.7	0.38		
	Aguila/Carefree	110	0.041	26.8	0.13		
	Aguila/Carefree	13	0.108	70.5	0.01		
A11J	Aguila/Carefree	112	0.009	8.0	0.39		
	Aguila/Carefree	21	0.015	13.4	0.38		
	Aguila/Carefree	13	0.025	22.1	0.01		
	Aguila/Carefree	110	0.063	56.6	0.13		
A11KA	Aguila/Carefree	21	0.009	10.8	0.38		
	Aguila/Carefree	18	0.015	18.9	0.33	15.0	100
	Central County	CO	0.057	70.3	0.29	20.0	100
A11KB	Aguila/Carefree	21	0.013	12.3	0.38		
	Aguila/Carefree	110	0.041	38.6	0.13		
	Aguila/Carefree	112	0.053	49.1	0.39		
A11KC	Central County	CO	0.002	1.3	0.29	20.0	100
	Central County	PT	0.005	3.4	0.40		
	Aguila/Carefree	112	0.011	8.0	0.39		
	Aguila/Carefree	18	0.021	15.8	0.33	15.0	100
	Aguila/Carefree	21	0.094	71.4	0.38		
A11L	Aguila/Carefree	110	0.088	33.5	0.13		
	Aguila/Carefree	13	0.175	66.5	0.01		
A11MA	Aguila/Carefree	13	0.029	38.9	0.01		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A11MA	Aguila/Carefree	110	0.045	61.1	0.13		
A11MB	Aguila/Carefree	13	0.077	39.6	0.01		
	Aguila/Carefree	110	0.117	60.4	0.13		
A11NA	Aguila/Carefree	100	0.026	34.1	0.40	20.0	100
	Aguila/Carefree	110	0.050	65.9	0.13		
A11O	Aguila/Carefree	100	0.005	8.0	0.40	20.0	100
	Aguila/Carefree	110	0.052	92.0	0.13		
A99R	Central County	TD	0.004	11.1	1.20		
	Central County	VH	0.006	14.9	0.27		
	Central County	VG	0.008	22.8	0.91		
	Central County	CB	0.019	51.2	0.40		
A99S	Central County	BR	0.004	4.8	1.05		
	Central County	TD	0.010	13.5	1.20		
	Central County	CB	0.063	81.7	0.40		
A99T	Central County	CB	0.006	20.5	0.40		
	Central County	TD	0.011	36.6	1.20		
	Central County	BR	0.013	43.0	1.05		
A99U	Central County	TD	0.003	3.7	1.20		
	Central County	CA2	0.004	5.4	0.38		
	Central County	MA	0.006	8.3	0.40		
	Central County	BR	0.011	16.3	1.05		
	Central County	TFA	0.014	20.3	0.37		
	Central County	CB	0.014	20.6	0.40		
	Central County	ABA	0.018	25.3	0.38		
A99V	Central County	TD	0.002	0.8	1.20		
	Central County	CB	0.006	2.9	0.40		
	Central County	ABA	0.010	5.0	0.38		
	Central County	TFA	0.011	5.4	0.37		
	Central County	CA2	0.012	5.6	0.38		
	Central County	TPB	0.166	80.4	0.12		
A99W	Central County	CF	0.006	2.7	0.50		
	Central County	MTB	0.008	3.8	0.15		
	Central County	TPB	0.201	93.5	0.12		
A99X	Central County	TPB	0.060	22.7	0.12		
	Central County	CF	0.204	77.3	0.50		
A99YA	Central County	CF	0.006	5.6	0.50		
	Central County	GWD	0.013	12.5	0.35		
	Central County	GYD	0.014	13.6	0.26		
	Central County	PWB	0.032	31.3	0.38		
	Central County	TPB	0.038	36.9	0.12		
A99YB	Central County	GM	0.034	19.9	0.29		
	Central County	CF	0.137	80.1	0.50		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
CBA	Aguila/Carefree	110	0.001	13.4	0.13		
	Aguila/Carefree	13	0.002	28.4	0.01		
	Aguila/Carefree	18	0.004	58.2	0.33	15.0	100
CBB	Aguila/Carefree	110	0.003	15.1	0.13		
	Aguila/Carefree	18	0.015	84.9	0.33	15.0	100
CBH	Aguila/Carefree	18	0.012	100.0	0.33	15.0	100
CBJ	Central County	PT	0.001	6.0	0.40		
	Aguila/Carefree	110	0.002	14.6	0.13		
	Aguila/Carefree	10	0.002	15.2	0.94		
	Aguila/Carefree	18	0.010	64.2	0.33	15.0	100
CBK	Aguila/Carefree	18	0.016	29.7	0.33	15.0	100
	Aguila/Carefree	110	0.017	31.6	0.13		
	Central County	PT	0.020	38.7	0.40		
CBL	Central County	PT	0.002	7.6	0.40		
	Aguila/Carefree	18	0.005	17.1	0.33	15.0	100
	Aguila/Carefree	110	0.021	75.3	0.13		
DV1	Central County	GN	0.009	10.0	0.25		
	Central County	CV	0.016	17.2	0.39		
	Central County	LCA	0.067	72.8	0.25		
DV10	Central County	VF	0.009	4.5	0.01		
	Central County	MR	0.101	47.7	0.05		
	Central County	GN	0.101	47.8	0.25		
DV11	Central County	TH	0.001	0.3	0.04		
	Central County	MR	0.071	49.4	0.05		
	Central County	VF	0.072	50.2	0.01		
DV2	Central County	LCA	0.032	100.0	0.25		
DV3	Central County	PT	0.001	2.6	0.40		
	Central County	LCA	0.048	97.4	0.25		
DV4	Central County	MP	0.001	1.0	0.25		
	Central County	LCA	0.059	99.0	0.25		
DV5	Central County	MP	0.004	13.4	0.25		
	Central County	LCA	0.025	86.6	0.25		
DV6	Central County	TU	0.001	0.8	0.25		
	Central County	MP	0.019	21.4	0.25		
	Central County	LCA	0.070	77.8	0.25		
DV7	Central County	MP	0.010	7.8	0.25		
	Central County	LCA	0.024	18.4	0.25		
	Central County	GN	0.044	33.8	0.25		
	Central County	MR	0.053	40.0	0.05		
DV8	Central County	LCA	0.002	1.6	0.25		
	Central County	TU	0.002	1.9	0.25		
	Central County	VF	0.009	10.0	0.01		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
DV8	Central County	MP	0.015	15.7	0.25		
	Central County	MR	0.066	70.8	0.05		
DV9	Central County	VF	0.001	2.6	0.01		
	Central County	MR	0.041	97.4	0.05		
E1	Central County	PT	0.015	100.0	0.40		
E2	Central County	PT	0.016	100.0	0.40		
E3	Central County	PWB	0.005	6.3	0.38		
	Central County	PT	0.077	93.7	0.40		
E4	Central County	PT	0.015	38.7	0.40		
	Central County	PWB	0.024	61.3	0.38		
HV1	Central County	PWB	0.002	24.6	0.38		
	Central County	PT	0.005	75.4	0.40		
HV2	Central County	TPB	0.005	15.8	0.12		
	Central County	CF	0.012	39.4	0.50		
	Central County	GM	0.014	44.8	0.29		
LACAI	Central County	PWB	0.008	23.8	0.38		
	Central County	GWD	0.027	76.2	0.35		
M1	Central County	CV	0.018	17.3	0.39		
	Central County	LCA	0.020	19.3	0.25		
	Central County	PWB	0.067	63.4	0.38		
M10	Central County	PSA	0.008	8.9	0.25		
	Central County	VE	0.008	9.2	0.25		
	Central County	LCA	0.014	15.8	0.25		
	Central County	PT	0.024	27.7	0.40		
	Central County	TE	0.033	38.4	0.25		
M11A	Central County	PWB	0.009	13.7	0.38		
	Central County	VE	0.018	26.3	0.25		
	Central County	PT	0.041	60.0	0.40		
M11B	Central County	BE	0.005	26.7	0.24		
	Central County	PWB	0.013	73.3	0.38		
M12A	Central County	BE	0.043	38.5	0.24		
	Central County	PWB	0.069	61.5	0.38		
M12B	Central County	BE	0.004	9.4	0.24		
	Central County	PWB	0.040	90.6	0.38		
M2	Central County	PEA	0.006	3.4	0.37		
	Central County	PT	0.008	4.9	0.40		
	Central County	MP	0.013	8.2	0.25		
	Central County	LCA	0.133	83.4	0.25		
M3	Central County	TE	0.001	0.8	0.25		
	Central County	CV	0.003	2.3	0.39		
	Central County	LCA	0.013	10.6	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
M3	Central County	PWB	0.104	86.2	0.38		
M370	Central County	PWB	0.042	32.2	0.38		
	Central County	BE	0.089	67.8	0.24		
M4	Central County	MP	0.006	4.6	0.25		
	Central County	TE	0.026	19.6	0.25		
	Central County	PT	0.037	28.0	0.40		
	Central County	LCA	0.063	47.7	0.25		
M5	Central County	PWB	0.016	100.0	0.38		
M6	Central County	TE	0.001	6.4	0.25		
	Central County	PT	0.005	21.0	0.40		
	Central County	PWB	0.016	72.6	0.38		
M7	Central County	VE	0.019	16.4	0.25		
	Central County	PWB	0.094	83.6	0.38		
M8	Central County	TE	0.002	3.6	0.25		
	Central County	PT	0.016	24.8	0.40		
	Central County	VE	0.023	34.5	0.25		
	Central County	PWB	0.025	37.1	0.38		
M9	Central County	PWB	0.005	4.3	0.38		
	Central County	TE	0.021	17.5	0.25		
	Central County	VE	0.031	25.3	0.25		
	Central County	PT	0.064	52.9	0.40		
MA1	Central County	BE	0.002	14.8	0.24		
	Central County	PWB	0.010	85.2	0.38		
MA2	Central County	BE	0.006	22.7	0.24		
	Central County	PWB	0.020	77.3	0.38		
N11A	Central County	PT	0.005	0.6	0.40		
	Central County	MR	0.006	0.7	0.05		
	Central County	TFA	0.013	1.4	0.37		
	Central County	PSA	0.017	1.8	0.25		
	Central County	GXA	0.018	2.0	0.23		
	Central County	RBA	0.022	2.4	0.26		
	Central County	MP	0.181	19.5	0.25		
	Central County	LCA	0.667	71.8	0.25		
N11C	Central County	VE	0.011	4.3	0.25		
	Central County	PSA	0.019	7.6	0.25		
	Central County	MP	0.023	9.2	0.25		
	Central County	LCA	0.083	32.4	0.25		
	Central County	PT	0.119	46.5	0.40		
N11DA	Central County	GXA	0.008	3.3	0.23		
	Central County	MP	0.010	3.7	0.25		
	Central County	TE	0.024	9.3	0.25		
	Central County	PT	0.061	24.0	0.40		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N11DA	Central County	LCA	0.153	59.6	0.25		
N11DB	Central County	MP	0.006	2.5	0.25		
	Central County	TE	0.007	2.6	0.25		
	Central County	PT	0.060	23.6	0.40		
	Central County	LCA	0.181	71.2	0.25		
N11EA	Central County	GXA	0.003	1.0	0.23		
	Central County	TE	0.009	3.3	0.25		
	Central County	TU	0.012	4.6	0.25		
	Central County	MP	0.013	5.1	0.25		
	Central County	TW	0.026	10.1	0.05		
	Central County	MR	0.028	10.7	0.05		
	Central County	LCA	0.169	65.2	0.25		
N11EB	Central County	TW	0.002	0.7	0.05		
	Central County	PT	0.003	1.5	0.40		
	Central County	MP	0.006	2.7	0.25		
	Central County	TE	0.010	4.2	0.25		
	Central County	TG	0.023	10.0	0.04		
	Central County	MR	0.059	25.7	0.05		
	Central County	LCA	0.128	55.3	0.25		
N11FA	Central County	TE	0.001	0.4	0.25		
	Central County	PSA	0.001	0.6	0.25		
	Central County	LCA	0.003	1.7	0.25		
	Central County	BE	0.006	3.5	0.24		
	Central County	PWB	0.045	25.1	0.38		
	Central County	PT	0.056	31.1	0.40		
	Central County	VE	0.068	37.6	0.25		
N11FB	Central County	TE	0.002	1.8	0.25		
	Central County	MP	0.007	5.4	0.25		
	Central County	LCA	0.051	42.3	0.25		
	Central County	PT	0.061	50.5	0.40		
N11J	Central County	CV	0.003	1.1	0.39		
	Central County	PWB	0.241	98.9	0.38		
N11K	Central County	PWB	0.031	18.7	0.38		
	Central County	GN	0.033	19.9	0.25		
	Central County	CV	0.103	61.4	0.39		
N11L2	Central County	GN	0.010	100.0	0.25		
N11L3	Central County	GN	0.039	100.0	0.25		
N11L3A	Central County	PWB	0.004	14.2	0.38		
	Central County	GN	0.021	85.8	0.25		
N11L4	Central County	GN	0.010	100.0	0.25		
N11L5	Central County	GN	0.042	100.0	0.25		
N11L5A	Central County	PWB	0.016	36.8	0.38		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N11L5A	Central County	GN	0.028	63.2	0.25		
N11M	Central County	GN	0.010	9.9	0.25		
	Central County	CV	0.037	37.0	0.39		
	Central County	PWB	0.053	53.0	0.38		
N11NA	Central County	RS	0.010	44.0	0.40	65.0	100
	Central County	PWB	0.013	56.0	0.38		
N11NB	Central County	CV	0.002	1.7	0.39		
	Central County	GYD	0.003	2.0	0.26		
	Central County	PWB	0.014	10.1	0.38		
	Central County	GN	0.120	86.2	0.25		
N11NC	Central County	GN	0.028	16.2	0.25		
	Central County	PWB	0.144	83.8	0.38		
N11ND	Central County	CV	0.015	27.6	0.39		
	Central County	GN	0.039	72.4	0.25		
N11O	Central County	GYD	0.001	2.6	0.26		
	Central County	CV	0.021	39.8	0.39		
	Central County	GN	0.031	57.6	0.25		
N11P1	Central County	PWB	0.064	100.0	0.38		
N11P2	Central County	GWD	0.001	1.7	0.35		
	Central County	PWB	0.062	98.3	0.38		
N11P3	Central County	GN	0.041	100.0	0.25		
N11P4	Central County	GN	0.001	1.2	0.25		
	Central County	GWD	0.009	17.5	0.35		
	Central County	PWB	0.041	81.3	0.38		
N11P5	Central County	RS	0.006	23.4	0.40	65.0	100
	Central County	PWB	0.021	76.6	0.38		
N11P6	Central County	GWD	0.001	0.4	0.35		
	Central County	PWB	0.061	38.1	0.38		
	Central County	RS	0.098	61.5	0.40	65.0	100
N11P7	Central County	GWD	0.060	100.0	0.35		
N11P8	Central County	RS	0.014	32.1	0.40	65.0	100
	Central County	GWD	0.029	67.9	0.35		
N11P9	Central County	GWD	0.005	11.7	0.35		
	Central County	PWB	0.038	88.3	0.38		
N20	Central County	TG	0.005	1.4	0.04		
	Central County	GGA	0.008	2.3	0.25		
	Central County	LE	0.009	2.6	0.04		
	Central County	VH	0.028	7.9	0.27		
	Central County	TD	0.067	18.9	1.20		
	Central County	CB	0.069	19.3	0.40		
	Central County	MR	0.083	23.5	0.05		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N20	Central County	AFA	0.086	24.1	0.38		
N21	Central County	ES	0.001	0.2	0.25		
	Central County	VE	0.002	0.4	0.25		
	Central County	TE	0.003	0.4	0.25		
	Central County	MO	0.005	0.8	0.39		
	Central County	MA	0.009	1.4	0.40		
	Central County	ABA	0.011	1.8	0.38		
	Central County	AA	0.015	2.5	0.26		
	Central County	GGA	0.018	2.9	0.25		
	Central County	MP	0.019	3.1	0.25		
	Central County	VH	0.028	4.5	0.27		
	Central County	GE	0.062	9.9	0.26		
	Central County	CB	0.086	13.8	0.40		
	Central County	TD	0.086	13.8	1.20		
	Central County	MR	0.118	19.0	0.05		
	Central County	AFA	0.158	25.5	0.38		
N21C	Central County	TD	0.004	1.1	1.20		
	Central County	BS	0.011	2.9	0.39		
	Central County	TW	0.014	3.6	0.05		
	Central County	TH	0.016	4.0	0.04		
	Central County	TG	0.017	4.2	0.04		
	Central County	LCA	0.019	4.7	0.25		
	Central County	VF	0.031	8.0	0.01		
	Central County	CB	0.033	8.3	0.40		
	Central County	GE	0.036	9.2	0.26		
	Central County	MR	0.212	54.0	0.05		
N21D	Central County	TW	0.004	7.9	0.05		
	Central County	LCA	0.004	8.3	0.25		
	Central County	VF	0.012	21.7	0.01		
	Central County	MR	0.033	62.1	0.05		
N21E	Central County	MR	0.026	41.8	0.05		
	Central County	VF	0.037	58.2	0.01		
N21F	Central County	GN	0.028	22.7	0.25		
	Central County	VF	0.096	77.3	0.01		
N21G	Central County	GE	0.001	1.0	0.26		
	Central County	GN	0.012	19.0	0.25		
	Central County	VF	0.051	80.0	0.01		
N21H	Central County	VF	0.002	4.5	0.01		
	Central County	AA	0.002	6.0	0.26		
	Central County	GE	0.005	13.9	0.26		
	Central County	GN	0.025	75.5	0.25		
N21I1	Central County	PWB	0.007	8.6	0.38		
	Central County	GN	0.076	91.4	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N21I2	Central County	PWB	0.004	6.4	0.38		
	Central County	GN	0.053	93.6	0.25		
N21I3	Central County	VF	0.011	12.2	0.01		
	Central County	GN	0.076	87.8	0.25		
N21I4	Central County	GN	0.027	100.0	0.25		
N21JA	Central County	GN	0.001	0.8	0.25		
	Central County	PWB	0.001	0.9	0.38		
	Central County	RS	0.032	39.5	0.40	65.0	100
	Central County	GWD	0.047	58.8	0.35		
N21JB	Central County	AGB	0.005	2.9	0.40		
	Central County	GWD	0.064	38.7	0.35		
	Central County	GN	0.097	58.4	0.25		
N21Z	Central County	VF	0.023	21.3	0.01		
	Central County	GN	0.086	78.7	0.25		
N22A	Central County	TH	0.007	2.4	0.04		
	Central County	TW	0.009	3.1	0.05		
	Central County	VF	0.091	30.5	0.01		
	Central County	MR	0.192	64.0	0.05		
N22B	Central County	TG	0.006	3.4	0.04		
	Central County	TH	0.006	3.6	0.04		
	Central County	VF	0.029	16.7	0.01		
	Central County	MR	0.133	76.3	0.05		
N23	Central County	AGB	0.001	0.3	0.40		
	Central County	VF	0.002	0.5	0.01		
	Central County	BS	0.009	2.2	0.39		
	Central County	MR	0.009	2.4	0.05		
	Central County	BT	0.011	2.9	0.25		
	Central County	GGA	0.012	3.1	0.25		
	Central County	TD	0.021	5.3	1.20		
	Central County	AA	0.026	6.6	0.26		
	Central County	ABA	0.039	10.1	0.38		
	Central County	CB	0.042	10.7	0.40		
	Central County	GE	0.078	19.9	0.26		
	Central County	AFA	0.139	35.8	0.38		
N24	Central County	BS	0.002	2.0	0.39		
	Central County	CB	0.003	3.0	0.40		
	Central County	TD	0.034	31.4	1.20		
	Central County	AGB	0.069	63.6	0.40		
N24D	Central County	GN	0.005	5.1	0.25		
	Central County	BS	0.013	14.6	0.39		
	Central County	AA	0.018	20.5	0.26		
	Central County	AFA	0.022	24.7	0.38		
	Central County	AGB	0.031	35.0	0.40		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N24E	Central County	AGB	0.020	100.0	0.40		
N24F	Central County	VF	0.009	8.5	0.01		
	Central County	AGB	0.041	39.0	0.40		
	Central County	GN	0.055	52.5	0.25		
N24G	Central County	GN	0.038	8.7	0.25		
	Central County	GM	0.106	24.7	0.29		
	Central County	AGB	0.286	66.6	0.40		
N24H	Central County	TSC	0.004	1.9	0.14		
	Central County	GWD	0.006	2.7	0.35		
	Central County	AGB	0.008	3.4	0.40		
	Central County	GN	0.009	3.9	0.25		
	Central County	AL	0.036	15.9	0.40		
	Central County	PWB	0.066	28.9	0.38		
	Central County	RS	0.099	43.4	0.40	65.0	100
N24I	Aguila/Carefree	3	0.001	0.3	0.58		
	Aguila/Carefree	115	0.006	1.9	0.39		
	Central County	TSC	0.021	6.9	0.14		
	Central County	AGB	0.125	41.5	0.40		
	Central County	AL	0.149	49.5	0.40		
N24J	Aguila/Carefree	3	0.002	1.7	0.58		
	Central County	AGB	0.119	98.3	0.40		
N24K	Aguila/Carefree	3	0.020	9.4	0.58		
	Central County	GM	0.081	38.2	0.29		
	Central County	AGB	0.111	52.4	0.40		
N24M	Aguila/Carefree	21	0.003	1.6	0.38		
	Aguila/Carefree	3	0.006	3.5	0.58		
	Aguila/Carefree	118	0.010	5.7	0.42		
	Aguila/Carefree	18	0.020	11.6	0.33	15.0	100
	Aguila/Carefree	110	0.052	30.8	0.13		
	Aguila/Carefree	115	0.079	46.9	0.39		
N24N	Aguila/Carefree	115	0.003	2.3	0.39		
	Aguila/Carefree	55	0.007	5.7	0.27		
	Aguila/Carefree	100	0.008	6.1	0.40	20.0	100
	Aguila/Carefree	21	0.010	7.8	0.38		
	Aguila/Carefree	75	0.010	8.0	0.23		
	Aguila/Carefree	18	0.042	32.3	0.33	15.0	100
	Aguila/Carefree	3	0.049	37.7	0.58		
N24V	Aguila/Carefree	110	0.003	6.4	0.13		
	Aguila/Carefree	21	0.016	35.2	0.38		
	Aguila/Carefree	100	0.026	58.4	0.40	20.0	100
N25	Central County	GM	0.008	3.2	0.29		
	Central County	TD	0.064	26.2	1.20		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N25	Central County	AGB	0.172	70.6	0.40		
N26	Central County	AL	0.001	1.7	0.40		
	Central County	TD	0.006	14.7	1.20		
	Central County	GM	0.015	36.3	0.29		
	Central County	AGB	0.019	47.3	0.40		
N27	Aguila/Carefree	55	0.002	0.8	0.27		
	Aguila/Carefree	18	0.003	1.2	0.33	15.0	100
	Aguila/Carefree	100	0.006	2.1	0.40	20.0	100
	Aguila/Carefree	115	0.009	3.2	0.39		
	Aguila/Carefree	112	0.015	5.3	0.39		
	Central County	GM	0.026	9.0	0.29		
	Aguila/Carefree	10	0.048	17.1	0.94		
	Central County	AGB	0.055	19.6	0.40		
	Aguila/Carefree	3	0.056	19.9	0.58		
	Central County	TD	0.062	21.8	1.20		
P1	Central County	GYD	0.002	5.8	0.26		
	Central County	CF	0.002	7.8	0.50		
	Central County	GM	0.003	9.6	0.29		
	Central County	TPB	0.023	76.8	0.12		
P10	Central County	CF	0.027	48.8	0.50		
	Central County	PT	0.028	51.2	0.40		
P11	Central County	GM	0.012	28.0	0.29		
	Central County	CF	0.030	72.0	0.50		
P12	Aguila/Carefree	10	0.001	1.6	0.94		
	Central County	CF	0.043	98.4	0.50		
P13	Central County	CF	0.008	13.6	0.50		
	Central County	PT	0.051	86.4	0.40		
P14	Central County	CF	0.003	40.2	0.50		
	Central County	PT	0.005	59.8	0.40		
P15	Aguila/Carefree	10	0.003	44.3	0.94		
	Central County	CF	0.003	55.7	0.50		
P2	Central County	PWB	0.002	3.3	0.38		
	Central County	TPB	0.011	21.0	0.12		
	Central County	PT	0.039	75.6	0.40		
P25S	Aguila/Carefree	18	0.009	32.1	0.33	15.0	100
	Aguila/Carefree	13	0.009	32.1	0.01		
	Aguila/Carefree	110	0.010	35.7	0.13		
P27	Aguila/Carefree	18	0.001	1.8	0.33	15.0	100
	Central County	PT	0.002	2.6	0.40		
	Central County	VF	0.002	3.4	0.01		
	Aguila/Carefree	13	0.008	12.2	0.01		
	Aguila/Carefree	53	0.011	16.6	0.02		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
P27	Aguila/Carefree	110	0.041	63.3	0.13		
P27A	Aguila/Carefree	18	0.008	100.0	0.33	15.0	100
P27B	Aguila/Carefree	110	0.005	41.2	0.13		
	Aguila/Carefree	18	0.008	58.8	0.33	15.0	100
P28	Central County	PWB	0.002	8.2	0.38		
	Aguila/Carefree	110	0.008	30.3	0.13		
	Aguila/Carefree	13	0.016	61.4	0.01		
P3	Central County	TPB	0.006	11.8	0.12		
	Central County	CF	0.015	27.4	0.50		
	Central County	GM	0.033	60.8	0.29		
P4a	Central County	GM	0.018	44.7	0.29		
	Central County	CF	0.022	55.3	0.50		
P4b	Central County	CF	0.002	12.7	0.50		
	Central County	GM	0.015	87.3	0.29		
P6	Central County	CF	0.023	32.0	0.50		
	Central County	GM	0.048	68.0	0.29		
P7	Central County	GM	0.006	42.6	0.29		
	Central County	CF	0.008	57.4	0.50		
P8	Central County	CF	0.006	42.7	0.50		
	Central County	GM	0.008	57.3	0.29		
P9	Central County	TPB	0.001	2.9	0.12		
	Central County	CF	0.013	29.1	0.50		
	Central County	PT	0.031	68.0	0.40		
S1	Central County	GYD	0.001	0.9	0.26		
	Central County	BE	0.007	5.6	0.24		
	Central County	PT	0.012	9.5	0.40		
	Central County	GWD	0.013	10.7	0.35		
	Central County	GM	0.018	14.2	0.29		
	Central County	PWB	0.074	59.2	0.38		
S2	Central County	TPB	0.002	14.4	0.12		
	Central County	GM	0.010	85.6	0.29		
S3	Central County	PWB	0.001	13.8	0.38		
	Central County	GYD	0.005	86.2	0.26		
S30A	Central County	LB	0.001	0.1	0.40		
	Central County	LCA	0.338	63.6	0.25		
	Central County	LE	0.088	16.6	0.04		
	Central County	MR	0.102	19.2	0.05		
	Central County	VF	0.002	0.4	0.01		
S30B	Central County	PEA	0.003	0.8	0.37		
	Central County	PSA	0.003	0.8	0.25		
	Central County	TRA	0.007	1.7	0.11		
	Central County	VF	0.022	5.6	0.01		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
S30B	Central County	GXA	0.027	6.9	0.23		
	Central County	MR	0.071	17.7	0.05		
	Central County	RBA	0.071	17.9	0.26		
	Central County	LCA	0.193	48.6	0.25		
S30C	Central County	GXA	0.002	0.4	0.23		
	Central County	PEA	0.003	0.7	0.37		
	Central County	MP	0.006	1.2	0.25		
	Central County	LB	0.013	2.8	0.40		
	Central County	VF	0.069	15.2	0.01		
	Central County	MR	0.163	35.8	0.05		
	Central County	LCA	0.199	43.8	0.25		
S30D	Central County	TRB	0.006	4.9	0.13		
	Central County	LCA	0.007	5.1	0.25		
	Central County	TRA	0.019	14.2	0.11		
	Central County	MP	0.045	34.2	0.25		
	Central County	MR	0.054	41.6	0.05		
S4	Central County	GYD	0.002	16.9	0.26		
	Central County	TPB	0.004	30.3	0.12		
	Central County	PWB	0.008	52.8	0.38		
SUMMI	Central County	PWB	0.004	16.5	0.38		
	Central County	GN	0.006	24.5	0.25		
	Central County	GWD	0.015	59.0	0.35		
WB1	Central County	VF	0.003	2.6	0.01		
	Central County	MP	0.005	4.1	0.25		
	Central County	LCA	0.038	33.0	0.25		
	Central County	MR	0.069	60.3	0.05		
WB10	Central County	TH	0.009	9.4	0.04		
	Central County	GXA	0.010	10.1	0.23		
	Central County	LCA	0.010	11.0	0.25		
	Central County	MR	0.066	69.5	0.05		
WB2	Central County	VF	0.001	0.7	0.01		
	Central County	MR	0.099	99.3	0.05		
WB3	Central County	MR	0.010	100.0	0.05		
WB4	Central County	TH	0.003	2.5	0.04		
	Central County	VF	0.005	4.9	0.01		
	Central County	MR	0.101	92.7	0.05		
WB5	Central County	VF	0.002	1.6	0.01		
	Central County	MR	0.112	98.4	0.05		
WB6	Central County	MR	0.116	100.0	0.05		
WB7	Central County	TH	0.002	4.7	0.04		
	Central County	MR	0.043	95.3	0.05		
WB8	Central County	GXA	0.001	1.0	0.23		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
WB8	Central County	TG	0.001	1.6	0.04		
	Central County	TH	0.003	4.9	0.04		
	Central County	MR	0.062	92.4	0.05		
WB9	Central County	MR	0.014	6.5	0.05		
	Central County	MP	0.026	11.9	0.25		
	Central County	GXA	0.038	17.3	0.23		
	Central County	LCA	0.140	64.3	0.25		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
Major Basin 01							
100	Aguila/Carefree	100	0.012	30.3	0.40	20.0	100
	Aguila/Carefree	110	0.018	47.0	0.13		
	Aguila/Carefree	13	0.009	22.6	0.01		
19	Aguila/Carefree	100	0.004	7.8	0.40	20.0	100
	Aguila/Carefree	110	0.039	87.1	0.13		
	Aguila/Carefree	112	0.001	2.9	0.39		
	Aguila/Carefree	13	0.001	2.2	0.01		
20	Aguila/Carefree	100	0.006	15.7	0.40	20.0	100
	Aguila/Carefree	110	0.015	37.6	0.13		
	Aguila/Carefree	13	0.019	46.7	0.01		
21	Aguila/Carefree	110	0.026	89.3	0.13		
	Aguila/Carefree	112	0.003	9.6	0.39		
	Aguila/Carefree	13	0.000	1.0	0.01		
22	Aguila/Carefree	100	0.007	16.0	0.40	20.0	100
	Aguila/Carefree	110	0.019	46.2	0.13		
	Aguila/Carefree	13	0.016	37.8	0.01		
23	Aguila/Carefree	110	0.030	97.7	0.13		
	Aguila/Carefree	112	0.001	2.3	0.39		
24	Aguila/Carefree	100	0.003	16.7	0.40	20.0	100
	Aguila/Carefree	110	0.010	52.5	0.13		
	Aguila/Carefree	13	0.006	30.8	0.01		
25	Aguila/Carefree	110	0.015	100.0	0.13		
26R	Aguila/Carefree	100	0.016	25.7	0.40	20.0	100
	Aguila/Carefree	110	0.046	74.3	0.13		
27	Aguila/Carefree	110	0.037	96.4	0.13		
	Aguila/Carefree	112	0.001	3.6	0.39		
28R	Aguila/Carefree	110	0.012	96.1	0.13		
	Aguila/Carefree	112	0.001	3.9	0.39		
29	Aguila/Carefree	110	0.033	97.6	0.13		
	Aguila/Carefree	112	0.001	2.4	0.39		
33	Aguila/Carefree	112	0.007	16.4	0.39		
	Aguila/Carefree	18	0.025	58.5	0.33	15.0	100
	Aguila/Carefree	21	0.011	25.1	0.38		
34	Aguila/Carefree	18	0.027	95.3	0.33	15.0	100
	Central County	CO	0.001	4.7	0.29	20.0	100
35	Aguila/Carefree	110	0.003	7.5	0.13		
	Aguila/Carefree	112	0.033	75.6	0.39		
	Aguila/Carefree	18	0.007	16.9	0.33	15.0	100
36	Aguila/Carefree	112	0.000		0.39		
	Aguila/Carefree	118	0.001	3.1	0.42		
	Aguila/Carefree	18	0.040	87.4	0.33	15.0	100

(soildata)

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
36	Central County	CO	0.004	9.5	0.29	20.0	100
37E	Aguila/Carefree	110	0.001	11.1	0.13		
	Aguila/Carefree	112	0.006	47.0	0.39		
	Aguila/Carefree	115	0.003	25.6	0.39		
	Aguila/Carefree	118	0.002	16.2	0.42		
	Aguila/Carefree	18	0.000		0.33	15.0	100
37W	Aguila/Carefree	110	0.000	2.3	0.13		
	Aguila/Carefree	112	0.007	76.1	0.39		
	Aguila/Carefree	18	0.002	21.6	0.33	15.0	100
41	Central County	CO	0.034	63.2	0.29	20.0	100
	Central County	GWD	0.015	28.1	0.35		
	Central County	RS	0.005	8.7	0.40	65.0	100
42	Central County	CO	0.034	45.4	0.29	20.0	100
	Central County	GWD	0.001	1.5	0.35		
	Central County	RS	0.040	53.1	0.40	65.0	100
45	Aguila/Carefree	18	0.001	1.5	0.33	15.0	100
	Central County	CO	0.043	69.8	0.29	20.0	100
	Central County	GWD	0.018	28.8	0.35		
46	Central County	CO	0.008	12.8	0.29	20.0	100
	Central County	GWD	0.027	43.4	0.35		
	Central County	RS	0.027	43.7	0.40	65.0	100
47	Aguila/Carefree	118	0.016	40.7	0.42		
	Aguila/Carefree	18	0.008	20.1	0.33	15.0	100
	Central County	CO	0.007	17.0	0.29	20.0	100
	Central County	GWD	0.001	3.3	0.35		
	Central County	TSC	0.007	18.8	0.14		
48	Aguila/Carefree	112	0.001	4.8	0.39		
	Aguila/Carefree	118	0.023	90.0	0.42		
	Aguila/Carefree	18	0.001	5.2	0.33	15.0	100
49	Aguila/Carefree	115	0.004	16.5	0.39		
	Aguila/Carefree	118	0.018	74.6	0.42		
	Central County	AL	0.000	1.7	0.40		
	Central County	TSC	0.002	7.2	0.14		
50	Aguila/Carefree	118	0.000	0.7	0.42		
	Central County	GWD	0.002	7.9	0.35		
	Central County	TSC	0.025	91.3	0.14		
51	Aguila/Carefree	115	0.000		0.39		
	Aguila/Carefree	118	0.001	5.0	0.42		
	Central County	AL	0.005	43.0	0.40		
	Central County	TSC	0.006	52.1	0.14		
52	Central County	AL	0.002	3.5	0.40		
	Central County	GWD	0.006	13.4	0.35		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
52	Central County	TSC	0.036	83.1	0.14		
53R	Central County	GWD	0.036	52.1	0.35		
	Central County	RS	0.022	31.5	0.40	65.0	100
	Central County	TSC	0.011	16.4	0.14		
54R	Central County	GWD	0.000	0.5	0.35		
	Central County	RS	0.001	3.3	0.40	65.0	100
	Central County	TSC	0.020	96.2	0.14		
55	Central County	GWD	0.002	4.2	0.35		
	Central County	RS	0.052	95.8	0.40	65.0	100
56R	Central County	TSC	0.012	100.0	0.14		
57R	Central County	RS	0.001	10.0	0.40	65.0	100
	Central County	TSC	0.007	90.0	0.14		
87	Central County	GN	0.026	94.2	0.25		
	Central County	PWB	0.002	5.8	0.38		
A07C	Central County	CA2	0.023	13.4	0.38		
	Central County	LCB	0.015	8.4	0.25		
	Central County	MP	0.021	11.8	0.25		
	Central County	MR	0.011	6.2	0.05		
	Central County	TE	0.060	34.3	0.25		
	Central County	TFA	0.028	15.8	0.37		
	Central County	TG	0.007	3.8	0.04		
	Central County	TH	0.001	0.8	0.04		
	Central County	TRB	0.000		0.13		
	Central County	VA	0.010	5.5	0.39		
A07D	Central County	CA2	0.001	0.3	0.38		
	Central County	CB	0.030	13.0	0.40		
	Central County	GE	0.009	3.7	0.26		
	Central County	MO	0.004	1.7	0.39		
	Central County	TFA	0.053	23.1	0.37		
	Central County	VA	0.133	58.2	0.39		
A07E	Central County	GXA	0.006	2.5	0.23		
	Central County	LCA	0.000		0.25		
	Central County	MR	0.159	70.1	0.05		
	Central County	RBA	0.008	3.6	0.26		
	Central County	RPE	0.013	5.9	0.29		
	Central County	TE	0.006	2.6	0.25		
	Central County	TFA	0.032	13.9	0.37		
	Central County	TH	0.003	1.4	0.04		
A07F	Central County	LB	0.004	1.8	0.40		
	Central County	LCA	0.103	44.1	0.25		
	Central County	MP	0.012	4.9	0.25		
	Central County	MR	0.008	3.5	0.05		
	Central County	PEA	0.005	1.9	0.37		

(soildata)

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A07F	Central County	RBA	0.031	13.1	0.26		
	Central County	RPE	0.001	0.3	0.29		
	Central County	TE	0.071	30.3	0.25		
A07G	Central County	MR	0.160	62.0	0.05		
	Central County	RBA	0.030	11.6	0.26		
	Central County	RPE	0.031	12.1	0.29		
	Central County	TE	0.003	1.3	0.25		
	Central County	TFA	0.001	0.2	0.37		
	Central County	TG	0.033	12.7	0.04		
	Central County	TPB	0.000	0.1	0.12		
A07H	Central County	CA2	0.020	21.4	0.38		
	Central County	TE	0.029	30.7	0.25		
	Central County	TFA	0.027	28.5	0.37		
	Central County	TG	0.011	11.7	0.04		
	Central County	VA	0.007	7.7	0.39		
A08A	Central County	BR	0.028	19.9	1.05		
	Central County	CB	0.005	3.8	0.40		
	Central County	GE	0.017	12.4	0.26		
	Central County	TD	0.011	7.8	1.20		
	Central County	VA	0.000	0.1	0.39		
	Central County	VG	0.049	35.5	0.91		
	Central County	VH	0.028	20.6	0.27		
A08B	Central County	BR	0.011	10.7	1.05		
	Central County	CB	0.073	73.5	0.40		
	Central County	GE	0.002	1.9	0.26		
	Central County	GGA	0.005	4.7	0.25		
	Central County	TD	0.004	4.2	1.20		
	Central County	TFA	0.002	2.3	0.37		
	Central County	VG	0.003	2.5	0.91		
A09	Central County	BR	0.014	8.0	1.05		
	Central County	CB	0.137	77.8	0.40		
	Central County	TD	0.025	14.2	1.20		
A09A	Central County	ABA	0.017	20.5	0.38		
	Central County	BR	0.018	21.4	1.05		
	Central County	CA2	0.000		0.38		
	Central County	CB	0.015	18.4	0.40		
	Central County	GGA	0.006	7.1	0.25		
	Central County	TFA	0.011	13.4	0.37		
	Central County	VA	0.016	19.3	0.39		
A09B	Central County	ABA	0.032	77.5	0.38		
	Central County	CA2	0.005	11.1	0.38		
	Central County	TE	0.000	0.5	0.25		
	Central County	TFA	0.004	10.6	0.37		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A09B	Central County	VA	0.000	0.2	0.39		
A09C	Central County	CA2	0.013	18.4	0.38		
	Central County	TE	0.034	47.2	0.25		
	Central County	TFA	0.023	31.7	0.37		
	Central County	TG	0.001	0.8	0.04		
	Central County	VA	0.001	1.9	0.39		
A09D	Central County	MR	0.025	9.7	0.05		
	Central County	PRB	0.015	6.0	0.28		
	Central County	RBA	0.005	2.1	0.26		
	Central County	RPE	0.004	1.7	0.29		
	Central County	TE	0.005	1.8	0.25		
	Central County	TFA	0.002	0.9	0.37		
	Central County	TG	0.008	3.0	0.04		
	Central County	TPB	0.190	74.8	0.12		
A09E	Central County	LCA	0.015	9.9	0.25		
	Central County	MP	0.003	2.3	0.25		
	Central County	PRB	0.109	74.2	0.28		
	Central County	RBA	0.000	0.1	0.26		
	Central County	TE	0.011	7.4	0.25		
	Central County	TPB	0.009	6.1	0.12		
A09F	Central County	BE	0.110	30.0	0.24		
	Central County	LCA	0.008	2.2	0.25		
	Central County	MP	0.034	9.3	0.25		
	Central County	MR	0.038	10.3	0.05		
	Central County	MTB	0.024	6.4	0.15		
	Central County	PRB	0.054	14.6	0.28		
	Central County	PT	0.003	0.8	0.40		
	Central County	PWB	0.043	11.8	0.38		
	Central County	TRA	0.017	4.5	0.11		
	Central County	TRB	0.001	0.2	0.13		
	Central County	TSC	0.036	9.7	0.14		
A09GA	Central County	BE	0.021	28.5	0.24		
	Central County	PWB	0.053	71.5	0.38		
A09GB	Central County	BE	0.012	23.6	0.24		
	Central County	LCA	0.000		0.25		
	Central County	PT	0.003	6.1	0.40		
	Central County	PWB	0.034	67.4	0.38		
	Central County	VE	0.002	2.9	0.25		
A09H	Central County	BE	0.100	42.4	0.24		
	Central County	GYD	0.000	0.1	0.26		
	Central County	PRB	0.062	26.3	0.28		
	Central County	PWB	0.074	31.2	0.38		
A09I	Central County	MTB	0.003	2.0	0.15		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A09I	Central County	TPB	0.123	98.0	0.12		
A09IH	Central County	BE	0.002	1.7	0.24		
	Central County	GYD	0.017	18.2	0.26		
	Central County	MTB	0.008	8.8	0.15		
	Central County	PRB	0.012	13.0	0.28		
	Central County	PWB	0.043	47.2	0.38		
	Central County	TPB	0.010	11.1	0.12		
A09J	Central County	BE	0.058	34.3	0.24		
	Central County	PWB	0.110	65.7	0.38		
A09K	Central County	BE	0.148	36.2	0.24		
	Central County	PT	0.009	2.1	0.40		
	Central County	PWB	0.235	57.2	0.38		
	Central County	VE	0.018	4.5	0.25		
A09L	Central County	BE	0.002	1.2	0.24		
	Central County	GYD	0.034	25.2	0.26		
	Central County	MTB	0.049	35.9	0.15		
	Central County	PWB	0.047	34.3	0.38		
	Central County	TPB	0.005	3.4	0.12		
A09M	Central County	BE	0.081	32.5	0.24		
	Central County	GYD	0.021	8.6	0.26		
	Central County	PWB	0.140	56.1	0.38		
	Central County	TPB	0.007	2.8	0.12		
A09N	Central County	GYD	0.025	22.7	0.26		
	Central County	MTB	0.001	0.5	0.15		
	Central County	PWB	0.009	8.6	0.38		
	Central County	TPB	0.075	68.2	0.12		
A09O	Central County	BE	0.076	39.2	0.24		
	Central County	CV	0.007	3.8	0.39		
	Central County	PWB	0.110	56.9	0.38		
A09P	Central County	BE	0.136	72.5	0.24		
	Central County	PWB	0.052	27.5	0.38		
A09QA	Central County	BE	0.003	3.2	0.24		
	Central County	GWD	0.037	40.0	0.35		
	Central County	PWB	0.052	56.8	0.38		
A09QB	Central County	BE	0.003	2.1	0.24		
	Central County	GWD	0.012	8.5	0.35		
	Central County	PWB	0.129	89.4	0.38		
A09R	Central County	BE	0.021	14.8	0.24		
	Central County	CV	0.063	43.9	0.39		
	Central County	GN	0.005	3.3	0.25		
	Central County	GYD	0.001	0.4	0.26		
	Central County	PWB	0.054	37.5	0.38		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A09S	Central County	BE	0.071	99.0	0.24		
	Central County	PWB	0.001	1.0	0.38		
A09T	Central County	BE	0.010	5.5	0.24		
	Central County	CV	0.073	40.3	0.39		
	Central County	GN	0.001	0.3	0.25		
	Central County	GYD	0.053	29.2	0.26		
	Central County	PWB	0.045	24.7	0.38		
A09U	Central County	CO	0.001	0.6	0.29	20.0	100
	Central County	GN	0.014	7.9	0.25		
	Central County	GWD	0.000	0.1	0.35		
	Central County	GYD	0.012	6.6	0.26		
	Central County	PWB	0.097	55.6	0.38		
	Central County	RS	0.051	29.1	0.40	65.0	100
A10	Central County	CF	0.123	57.4	0.50		
	Central County	MTB	0.001	0.4	0.15		
	Central County	TPB	0.090	42.2	0.12		
A10A	Central County	GWD	0.001	0.5	0.35		
	Central County	GYD	0.043	22.9	0.26		
	Central County	PWB	0.054	28.6	0.38		
	Central County	TPB	0.091	48.0	0.12		
A11A	Central County	BE	0.010	3.5	0.24		
	Central County	PT	0.026	8.6	0.40		
	Central County	PWB	0.186	62.2	0.38		
	Central County	VF	0.077	25.7	0.01		
A11EA	Central County	CO	0.065	45.1	0.29	20.0	100
	Central County	GWD	0.012	8.3	0.35		
	Central County	PT	0.050	34.7	0.40		
	Central County	PWB	0.017	11.9	0.38		
A11EB	Aguila/Carefree	110	0.025	13.3	0.13		
	Aguila/Carefree	13	0.004	2.1	0.01		
	Aguila/Carefree	21	0.003	1.6	0.38		
	Central County	PT	0.021	11.1	0.40		
	Central County	PWB	0.136	71.9	0.38		
A11F	Central County	CO	0.092	27.7	0.29	20.0	100
	Central County	CV	0.034	10.1	0.39		
	Central County	GWD	0.129	38.6	0.35		
	Central County	GYD	0.027	8.1	0.26		
	Central County	PWB	0.052	15.6	0.38		
A11G	Central County	CO	0.059	96.9	0.29	20.0	100
	Central County	PT	0.002	3.1	0.40		
A11I	Aguila/Carefree	110	0.041	26.7	0.13		
	Aguila/Carefree	13	0.108	70.4	0.01		
	Aguila/Carefree	18	0.000	0.1	0.33	15.0	100

(soildata)

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A11I	Central County	PWB	0.004	2.7	0.38		
A11J	Aguila/Carefree	110	0.063	56.5	0.13		
	Aguila/Carefree	112	0.009	7.9	0.39		
	Aguila/Carefree	13	0.025	22.1	0.01		
	Aguila/Carefree	21	0.015	13.4	0.38		
	Central County	PT	0.000	0.1	0.40		
A11KA	Aguila/Carefree	18	0.015	18.9	0.33	15.0	100
	Aguila/Carefree	21	0.009	10.8	0.38		
	Central County	CO	0.057	70.3	0.29	20.0	100
A11KB	Aguila/Carefree	110	0.041	38.6	0.13		
	Aguila/Carefree	112	0.053	49.0	0.39		
	Aguila/Carefree	21	0.013	12.4	0.38		
A11KC	Aguila/Carefree	110	0.000	0.2	0.13		
	Aguila/Carefree	112	0.011	8.0	0.39		
	Aguila/Carefree	18	0.021	15.8	0.33	15.0	100
	Aguila/Carefree	21	0.094	71.2	0.38		
	Central County	CO	0.002	1.3	0.29	20.0	100
	Central County	PT	0.005	3.4	0.40		
A11L	Aguila/Carefree	110	0.082	31.2	0.13		
	Aguila/Carefree	13	0.180	68.2	0.01		
	Aguila/Carefree	18	0.002	0.6	0.33	15.0	100
A11MA	Aguila/Carefree	110	0.045	61.1	0.13		
	Aguila/Carefree	13	0.029	38.9	0.01		
A11MB	Aguila/Carefree	110	0.117	60.4	0.13		
	Aguila/Carefree	13	0.077	39.6	0.01		
A11NA	Aguila/Carefree	100	0.026	34.1	0.40	20.0	100
	Aguila/Carefree	110	0.050	65.9	0.13		
A11O	Aguila/Carefree	100	0.005	8.0	0.40	20.0	100
	Aguila/Carefree	110	0.052	92.0	0.13		
A99R	Central County	CB	0.019	51.2	0.40		
	Central County	TD	0.004	11.1	1.20		
	Central County	VG	0.008	22.8	0.91		
	Central County	VH	0.006	14.9	0.27		
A99S	Central County	BR	0.004	4.8	1.05		
	Central County	CB	0.063	81.6	0.40		
	Central County	TD	0.010	13.5	1.20		
	Central County	VG	0.000	0.1	0.91		
A99T	Central County	BR	0.013	43.0	1.05		
	Central County	CB	0.006	20.5	0.40		
	Central County	TD	0.011	36.6	1.20		
A99U	Central County	ABA	0.018	25.3	0.38		
	Central County	BR	0.011	16.3	1.05		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A99U	Central County	CA2	0.004	5.4	0.38		
	Central County	CB	0.014	20.6	0.40		
	Central County	MA	0.006	8.3	0.40		
	Central County	TD	0.003	3.7	1.20		
	Central County	TFA	0.014	20.3	0.37		
A99V	Central County	ABA	0.010	5.0	0.38		
	Central County	CA2	0.012	5.6	0.38		
	Central County	CB	0.006	2.9	0.40		
	Central County	CF	0.000	0.1	0.50		
	Central County	TD	0.002	0.8	1.20		
	Central County	TFA	0.011	5.4	0.37		
	Central County	TPB	0.166	80.3	0.12		
A99W	Central County	CF	0.006	2.7	0.50		
	Central County	MTB	0.008	3.8	0.15		
	Central County	TPB	0.201	93.5	0.12		
A99X	Central County	CF	0.204	77.3	0.50		
	Central County	TPB	0.060	22.7	0.12		
A99YA	Central County	CF	0.006	5.6	0.50		
	Central County	GWD	0.013	12.6	0.35		
	Central County	GYD	0.014	13.6	0.26		
	Central County	PWB	0.032	31.3	0.38		
	Central County	TPB	0.038	36.9	0.12		
A99YB	Central County	CF	0.137	80.0	0.50		
	Central County	GM	0.034	20.0	0.29		
	Central County	TPB	0.000	0.1	0.12		
CBA	Aguila/Carefree	110	0.001	13.4	0.13		
	Aguila/Carefree	13	0.002	28.4	0.01		
	Aguila/Carefree	18	0.004	58.2	0.33	15.0	100
CBB	Aguila/Carefree	110	0.003	15.1	0.13		
	Aguila/Carefree	13	0.000		0.01		
	Aguila/Carefree	18	0.015	84.9	0.33	15.0	100
CBH	Aguila/Carefree	110	0.000	2.5	0.13		
	Aguila/Carefree	13	0.000		0.01		
	Aguila/Carefree	18	0.012	97.5	0.33	15.0	100
CBJ	Aguila/Carefree	10	0.002	15.2	0.94		
	Aguila/Carefree	110	0.002	14.6	0.13		
	Aguila/Carefree	18	0.010	64.2	0.33	15.0	100
	Central County	CF	0.000		0.50		
	Central County	PT	0.001	6.0	0.40		
CBK	Aguila/Carefree	110	0.017	31.6	0.13		
	Aguila/Carefree	18	0.016	29.7	0.33	15.0	100
	Central County	PT	0.020	38.7	0.40		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
CBL	Aguila/Carefree	110	0.021	75.3	0.13		
	Aguila/Carefree	18	0.005	17.1	0.33	15.0	100
	Central County	PT	0.002	7.6	0.40		
DV1	Central County	CV	0.016	17.2	0.39		
	Central County	GN	0.009	10.0	0.25		
	Central County	LCA	0.067	72.9	0.25		
DV10	Central County	GN	0.101	47.8	0.25		
	Central County	MR	0.101	47.7	0.05		
	Central County	VF	0.009	4.5	0.01		
DV11	Central County	MR	0.071	49.4	0.05		
	Central County	TH	0.001	0.3	0.04		
	Central County	VF	0.072	50.2	0.01		
DV2	Central County	LCA	0.032	100.0	0.25		
DV3	Central County	LCA	0.048	97.4	0.25		
	Central County	PT	0.001	2.6	0.40		
DV4	Central County	LCA	0.059	98.7	0.25		
	Central County	MP	0.001	1.0	0.25		
	Central County	PT	0.000	0.3	0.40		
DV5	Central County	LCA	0.025	86.6	0.25		
	Central County	MP	0.004	13.4	0.25		
DV6	Central County	LCA	0.070	77.7	0.25		
	Central County	MP	0.019	21.3	0.25		
	Central County	MR	0.000	0.2	0.05		
	Central County	TU	0.001	0.8	0.25		
DV7	Central County	GN	0.044	33.8	0.25		
	Central County	LCA	0.024	18.3	0.25		
	Central County	MP	0.010	7.8	0.25		
	Central County	MR	0.053	40.0	0.05		
DV8	Central County	LCA	0.002	1.6	0.25		
	Central County	MP	0.015	15.7	0.25		
	Central County	MR	0.066	70.8	0.05		
	Central County	TU	0.002	1.9	0.25		
	Central County	VF	0.009	10.0	0.01		
DV9	Central County	MR	0.041	97.4	0.05		
	Central County	TH	0.000		0.04		
	Central County	VF	0.001	2.6	0.01		
E1	Central County	PT	0.015	100.0	0.40		
E2	Central County	PT	0.016	100.0	0.40		
E3	Central County	PT	0.077	93.7	0.40		
	Central County	PWB	0.005	6.3	0.38		
E4	Central County	PT	0.015	38.7	0.40		
	Central County	PWB	0.024	61.3	0.38		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
HV1	Central County	PT	0.005	75.4	0.40		
	Central County	PWB	0.002	24.6	0.38		
HV2	Central County	CF	0.012	39.2	0.50		
	Central County	GM	0.014	44.7	0.29		
	Central County	PT	0.000	0.3	0.40		
	Central County	TPB	0.005	15.8	0.12		
LACAI	Central County	GWD	0.027	76.2	0.35		
	Central County	PWB	0.008	23.8	0.38		
N11A	Central County	GXA	0.018	2.0	0.23		
	Central County	LCA	0.667	71.8	0.25		
	Central County	MP	0.181	19.5	0.25		
	Central County	MR	0.006	0.7	0.05		
	Central County	PSA	0.017	1.8	0.25		
	Central County	PT	0.005	0.6	0.40		
	Central County	RBA	0.022	2.4	0.26		
	Central County	TFA	0.013	1.4	0.37		
N11C	Central County	GXA	0.000		0.23		
	Central County	LCA	0.083	32.4	0.25		
	Central County	MP	0.023	9.2	0.25		
	Central County	MTB	0.000		0.15		
	Central County	PSA	0.019	7.6	0.25		
	Central County	PT	0.119	46.5	0.40		
	Central County	VE	0.011	4.3	0.25		
N11DA	Central County	GXA	0.008	3.3	0.23		
	Central County	LCA	0.153	59.6	0.25		
	Central County	MP	0.010	3.7	0.25		
	Central County	PT	0.062	24.1	0.40		
	Central County	TE	0.024	9.4	0.25		
N11DB	Central County	GXA	0.000		0.23		
	Central County	LCA	0.181	71.2	0.25		
	Central County	MP	0.006	2.5	0.25		
	Central County	PT	0.060	23.6	0.40		
	Central County	TE	0.007	2.6	0.25		
N11EA	Central County	GXA	0.003	1.0	0.23		
	Central County	LCA	0.169	65.2	0.25		
	Central County	MP	0.013	5.1	0.25		
	Central County	MR	0.028	10.7	0.05		
	Central County	TE	0.009	3.3	0.25		
	Central County	TU	0.012	4.6	0.25		
	Central County	TW	0.026	10.1	0.05		
N11EB	Central County	LCA	0.128	55.3	0.25		
	Central County	MP	0.006	2.7	0.25		
	Central County	MR	0.059	25.7	0.05		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N11EB	Central County	PT	0.003	1.5	0.40		
	Central County	TE	0.010	4.2	0.25		
	Central County	TG	0.023	10.0	0.04		
	Central County	TW	0.002	0.7	0.05		
N11FA	Central County	BE	0.006	3.5	0.24		
	Central County	LCA	0.003	1.7	0.25		
	Central County	PSA	0.001	0.6	0.25		
	Central County	PT	0.056	31.1	0.40		
	Central County	PWB	0.045	25.0	0.38		
	Central County	TE	0.001	0.4	0.25		
	Central County	VE	0.068	37.6	0.25		
N11FB	Central County	LCA	0.051	42.2	0.25		
	Central County	MP	0.007	5.4	0.25		
	Central County	PSA	0.000		0.25		
	Central County	PT	0.061	50.2	0.40		
	Central County	TE	0.002	1.8	0.25		
	Central County	VE	0.000	0.3	0.25		
N11G	Central County	LCA	0.034	6.4	0.25		
	Central County	PSA	0.008	1.5	0.25		
	Central County	PT	0.162	30.9	0.40		
	Central County	PWB	0.168	32.1	0.38		
	Central County	TE	0.073	13.8	0.25		
	Central County	VE	0.080	15.2	0.25		
N11H	Central County	CV	0.021	5.1	0.39		
	Central County	LCA	0.209	49.9	0.25		
	Central County	MP	0.019	4.6	0.25		
	Central County	PEA	0.006	1.3	0.37		
	Central County	PT	0.024	5.7	0.40		
	Central County	PWB	0.127	30.3	0.38		
	Central County	TE	0.013	3.0	0.25		
N11J	Central County	CV	0.003	1.1	0.39		
	Central County	PWB	0.241	98.9	0.38		
N11K	Central County	CV	0.103	61.4	0.39		
	Central County	GN	0.033	19.9	0.25		
	Central County	PWB	0.031	18.7	0.38		
N11L2	Central County	GN	0.010	100.0	0.25		
N11L3	Central County	GN	0.039	100.0	0.25		
N11L3A	Central County	GN	0.021	85.8	0.25		
	Central County	PWB	0.004	14.2	0.38		
N11L4	Central County	GN	0.010	100.0	0.25		
N11L5	Central County	CV	0.000	0.5	0.39		
	Central County	GN	0.042	99.5	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N11L5A	Central County	GN	0.028	63.2	0.25		
	Central County	PWB	0.016	36.8	0.38		
N11M	Central County	CV	0.037	37.0	0.39		
	Central County	GN	0.010	9.9	0.25		
	Central County	PWB	0.053	53.0	0.38		
N11NA	Central County	PWB	0.013	56.0	0.38		
	Central County	RS	0.010	44.0	0.40	65.0	100
N11NB	Central County	CV	0.002	1.7	0.39		
	Central County	GN	0.120	86.2	0.25		
	Central County	GYD	0.003	2.0	0.26		
	Central County	PWB	0.014	10.1	0.38		
N11NC	Central County	GN	0.028	16.2	0.25		
	Central County	PWB	0.144	83.8	0.38		
N11ND	Central County	CV	0.015	27.6	0.39		
	Central County	GN	0.039	72.4	0.25		
N11O	Central County	CV	0.021	39.6	0.39		
	Central County	GN	0.031	57.3	0.25		
	Central County	GYD	0.001	2.6	0.26		
	Central County	PWB	0.000	0.6	0.38		
N11P1	Central County	PWB	0.064	100.0	0.38		
N11P2	Central County	GWD	0.001	1.6	0.35		
	Central County	PWB	0.062	98.4	0.38		
N11P3	Central County	GN	0.041	100.0	0.25		
	Central County	PWB	0.000		0.38		
N11P4	Central County	GN	0.001	1.2	0.25		
	Central County	GWD	0.009	17.5	0.35		
	Central County	PWB	0.041	81.3	0.38		
N11P5	Central County	PWB	0.021	76.6	0.38		
	Central County	RS	0.006	23.4	0.40	65.0	100
N11P6	Central County	GWD	0.001	0.4	0.35		
	Central County	PWB	0.061	38.1	0.38		
	Central County	RS	0.098	61.5	0.40	65.0	100
N11P7	Central County	GWD	0.060	100.0	0.35		
N11P8	Central County	GWD	0.030	68.0	0.35		
	Central County	PWB	0.000		0.38		
	Central County	RS	0.014	32.0	0.40	65.0	100
N11P9	Central County	GWD	0.005	11.7	0.35		
	Central County	PWB	0.038	88.3	0.38		
N20	Central County	AFA	0.086	24.1	0.38		
	Central County	CB	0.069	19.3	0.40		
	Central County	GGA	0.008	2.3	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N20	Central County	LE	0.009	2.6	0.04		
	Central County	MR	0.083	23.5	0.05		
	Central County	TD	0.067	18.9	1.20		
	Central County	TG	0.005	1.4	0.04		
	Central County	VH	0.028	7.9	0.27		
N21	Central County	AA	0.015	2.5	0.26		
	Central County	ABA	0.011	1.8	0.38		
	Central County	AFA	0.158	25.4	0.38		
	Central County	BS	0.000		0.39		
	Central County	BT	0.000		0.25		
	Central County	CB	0.086	13.8	0.40		
	Central County	ES	0.001	0.2	0.25		
	Central County	GE	0.062	9.9	0.26		
	Central County	GGA	0.018	2.9	0.25		
	Central County	MA	0.009	1.4	0.40		
	Central County	MO	0.005	0.8	0.39		
	Central County	MP	0.019	3.1	0.25		
	Central County	MR	0.118	18.9	0.05		
	Central County	TD	0.086	13.8	1.20		
	Central County	TE	0.003	0.4	0.25		
	Central County	VE	0.002	0.4	0.25		
	Central County	VF	0.000	0.1	0.01		
	Central County	VH	0.028	4.5	0.27		
N21C	Central County	BS	0.011	2.9	0.39		
	Central County	CB	0.033	8.3	0.40		
	Central County	GE	0.036	9.2	0.26		
	Central County	GGA	0.000		0.25		
	Central County	LCA	0.019	4.7	0.25		
	Central County	LE	0.000	0.1	0.04		
	Central County	MR	0.213	54.0	0.05		
	Central County	TD	0.004	1.1	1.20		
	Central County	TG	0.017	4.2	0.04		
	Central County	TH	0.016	4.0	0.04		
	Central County	TW	0.014	3.6	0.05		
	Central County	VF	0.031	8.0	0.01		
N21D	Central County	GE	0.000	0.2	0.26		
	Central County	LCA	0.004	8.3	0.25		
	Central County	MR	0.033	62.0	0.05		
	Central County	TW	0.004	7.9	0.05		
	Central County	VF	0.012	21.6	0.01		
N21E	Central County	MR	0.026	41.8	0.05		
	Central County	VF	0.037	58.2	0.01		
N21F	Central County	GN	0.028	22.7	0.25		
	Central County	MR	0.000	0.1	0.05		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N21F	Central County	VF	0.097	77.2	0.01		
N21G	Central County	GE	0.001	1.0	0.26		
	Central County	GN	0.012	19.0	0.25		
	Central County	VF	0.051	80.0	0.01		
N21H	Central County	AA	0.002	6.0	0.26		
	Central County	GE	0.005	13.9	0.26		
	Central County	GN	0.025	75.5	0.25		
	Central County	VF	0.002	4.5	0.01		
N21I1	Central County	GN	0.076	91.3	0.25		
	Central County	PWB	0.007	8.7	0.38		
N21I2	Central County	GN	0.053	93.6	0.25		
	Central County	PWB	0.004	6.4	0.38		
N21I3	Central County	GN	0.076	87.8	0.25		
	Central County	VF	0.011	12.2	0.01		
N21I4	Central County	GN	0.027	100.0	0.25		
N21JA	Central County	GN	0.001	0.8	0.25		
	Central County	GWD	0.047	58.8	0.35		
	Central County	PWB	0.001	0.9	0.38		
	Central County	RS	0.032	39.6	0.40	65.0	100
N21JB	Central County	AGB	0.005	2.9	0.40		
	Central County	GN	0.097	58.4	0.25		
	Central County	GWD	0.064	38.7	0.35		
N21Z	Central County	AGB	0.000		0.40		
	Central County	GN	0.086	78.7	0.25		
	Central County	VF	0.023	21.3	0.01		
N22A	Central County	MR	0.191	63.9	0.05		
	Central County	TH	0.007	2.4	0.04		
	Central County	TW	0.009	3.1	0.05		
	Central County	VF	0.091	30.5	0.01		
N22B	Central County	MR	0.133	76.4	0.05		
	Central County	TG	0.006	3.3	0.04		
	Central County	TH	0.006	3.6	0.04		
	Central County	VF	0.029	16.7	0.01		
N23	Central County	AA	0.026	6.6	0.26		
	Central County	ABA	0.039	10.1	0.38		
	Central County	AFA	0.139	35.7	0.38		
	Central County	AGB	0.001	0.3	0.40		
	Central County	BS	0.009	2.2	0.39		
	Central County	BT	0.011	2.9	0.25		
	Central County	CB	0.042	10.7	0.40		
	Central County	GE	0.078	19.9	0.26		
	Central County	GGA	0.012	3.1	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N23	Central County	LCA	0.000	0.1	0.25		
	Central County	MR	0.009	2.4	0.05		
	Central County	TD	0.021	5.3	1.20		
	Central County	VF	0.002	0.5	0.01		
N24	Central County	AGB	0.069	63.5	0.40		
	Central County	BS	0.002	2.0	0.39		
	Central County	CB	0.003	3.0	0.40		
	Central County	GGA	0.000	0.2	0.25		
	Central County	TD	0.034	31.3	1.20		
N24D	Central County	AA	0.018	20.5	0.26		
	Central County	AFA	0.022	24.7	0.38		
	Central County	AGB	0.031	34.9	0.40		
	Central County	BS	0.013	14.6	0.39		
	Central County	CB	0.000	0.2	0.40		
	Central County	GN	0.005	5.1	0.25		
	Central County	TD	0.000		1.20		
N24E	Central County	AGB	0.020	98.1	0.40		
	Central County	BS	0.000	1.9	0.39		
N24F	Central County	AGB	0.041	39.0	0.40		
	Central County	GN	0.055	52.4	0.25		
	Central County	VF	0.009	8.6	0.01		
N24G	Central County	AGB	0.286	66.5	0.40		
	Central County	GM	0.106	24.7	0.29		
	Central County	GN	0.038	8.7	0.25		
N24H	Central County	AGB	0.008	3.4	0.40		
	Central County	AL	0.036	15.9	0.40		
	Central County	GN	0.009	3.9	0.25		
	Central County	GWD	0.006	2.7	0.35		
	Central County	PWB	0.066	28.9	0.38		
	Central County	RS	0.099	43.4	0.40	65.0	100
	Central County	TSC	0.004	1.9	0.14		
N24I	Aguila/Carefree	115	0.006	1.9	0.39		
	Aguila/Carefree	3	0.001	0.3	0.58		
	Central County	AGB	0.125	41.5	0.40		
	Central County	AL	0.149	49.5	0.40		
	Central County	TSC	0.021	6.9	0.14		
N24J	Aguila/Carefree	3	0.002	1.7	0.58		
	Central County	AGB	0.119	98.3	0.40		
N24K	Aguila/Carefree	10	0.000	0.2	0.94		
	Aguila/Carefree	3	0.020	9.4	0.58		
	Central County	AGB	0.111	52.4	0.40		
	Central County	GM	0.081	38.1	0.29		
N24M	Aguila/Carefree	110	0.052	30.7	0.13		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N24M	Aguila/Carefree	115	0.079	46.9	0.39		
	Aguila/Carefree	118	0.010	5.7	0.42		
	Aguila/Carefree	18	0.020	11.6	0.33	15.0	100
	Aguila/Carefree	21	0.003	1.6	0.38		
	Aguila/Carefree	3	0.006	3.5	0.58		
N24N	Aguila/Carefree	100	0.008	6.1	0.40	20.0	100
	Aguila/Carefree	110	0.000	0.2	0.13		
	Aguila/Carefree	115	0.003	2.3	0.39		
	Aguila/Carefree	18	0.042	32.2	0.33	15.0	100
	Aguila/Carefree	21	0.010	7.8	0.38		
	Aguila/Carefree	3	0.049	37.7	0.58		
	Aguila/Carefree	55	0.007	5.7	0.27		
	Aguila/Carefree	75	0.010	8.0	0.23		
N24V	Aguila/Carefree	100	0.026	58.4	0.40	20.0	100
	Aguila/Carefree	110	0.003	6.4	0.13		
	Aguila/Carefree	21	0.016	35.2	0.38		
N25	Central County	AGB	0.172	70.6	0.40		
	Central County	GM	0.008	3.2	0.29		
	Central County	TD	0.064	26.1	1.20		
N26	Central County	AGB	0.019	47.4	0.40		
	Central County	AL	0.001	1.7	0.40		
	Central County	GM	0.015	36.2	0.29		
	Central County	TD	0.006	14.7	1.20		
N27	Aguila/Carefree	10	0.048	17.1	0.94		
	Aguila/Carefree	100	0.006	2.1	0.40	20.0	100
	Aguila/Carefree	112	0.015	5.3	0.39		
	Aguila/Carefree	115	0.009	3.2	0.39		
	Aguila/Carefree	18	0.003	1.2	0.33	15.0	100
	Aguila/Carefree	3	0.056	19.9	0.58		
	Aguila/Carefree	55	0.002	0.8	0.27		
	Central County	AGB	0.055	19.6	0.40		
	Central County	AL	0.000		0.40		
	Central County	GM	0.026	9.1	0.29		
	Central County	TD	0.062	21.8	1.20		
P1	Central County	CF	0.002	7.8	0.50		
	Central County	GM	0.003	9.6	0.29		
	Central County	GYD	0.002	5.8	0.26		
	Central County	TPB	0.023	76.8	0.12		
P10	Central County	CF	0.027	48.9	0.50		
	Central County	PT	0.028	51.1	0.40		
P11	Central County	CF	0.030	72.0	0.50		
	Central County	GM	0.012	28.0	0.29		
P12	Aguila/Carefree	10	0.001	1.6	0.94		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
P12	Central County	CF	0.043	97.5	0.50		
	Central County	PT	0.000	0.9	0.40		
P13	Central County	CF	0.008	13.5	0.50		
	Central County	PT	0.051	86.5	0.40		
P14	Central County	CF	0.003	40.2	0.50		
	Central County	PT	0.005	59.8	0.40		
P15	Aguila/Carefree	10	0.003	44.3	0.94		
	Central County	CF	0.003	55.7	0.50		
	Central County	PT	0.000		0.40		
P2	Central County	GM	0.000		0.29		
	Central County	PT	0.039	75.8	0.40		
	Central County	PWB	0.002	3.3	0.38		
	Central County	TPB	0.011	20.9	0.12		
P25s	Aguila/Carefree	18	0.028	100.0	0.33	15.0	100
P27	Aguila/Carefree	110	0.041	62.9	0.13		
	Aguila/Carefree	13	0.008	12.1	0.01		
	Aguila/Carefree	18	0.001	1.8	0.33	15.0	100
	Aguila/Carefree	53	0.011	16.5	0.02		
	Central County	PT	0.002	2.6	0.40		
	Central County	PWB	0.000	0.6	0.38		
	Central County	VF	0.002	3.4	0.01		
P27A	Aguila/Carefree	110	0.000		0.13		
	Aguila/Carefree	18	0.008	100.0	0.33	15.0	100
P27B	Aguila/Carefree	110	0.005	41.2	0.13		
	Aguila/Carefree	18	0.008	58.8	0.33	15.0	100
P28	Aguila/Carefree	110	0.008	30.3	0.13		
	Aguila/Carefree	13	0.016	61.4	0.01		
	Central County	PWB	0.002	8.2	0.38		
P3	Central County	CF	0.015	27.5	0.50		
	Central County	GM	0.033	60.9	0.29		
	Central County	TPB	0.006	11.6	0.12		
P4a	Central County	CF	0.022	55.5	0.50		
	Central County	GM	0.017	44.5	0.29		
P4b	Central County	CF	0.002	12.6	0.50		
	Central County	GM	0.015	87.4	0.29		
P6	Central County	CF	0.023	32.0	0.50		
	Central County	GM	0.048	68.0	0.29		
P7	Central County	CF	0.008	57.4	0.50		
	Central County	GM	0.006	42.6	0.29		
P8	Central County	CF	0.006	42.7	0.50		
	Central County	GM	0.008	57.3	0.29		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
P9	Central County	CF	0.013	29.1	0.50		
	Central County	PT	0.031	68.0	0.40		
	Central County	TPB	0.001	2.9	0.12		
S1	Central County	BE	0.007	5.5	0.24		
	Central County	GM	0.018	14.1	0.29		
	Central County	GWD	0.013	10.7	0.35		
	Central County	GYD	0.001	0.9	0.26		
	Central County	PT	0.012	9.5	0.40		
	Central County	PWB	0.074	59.2	0.38		
	Central County	TPB	0.000	0.1	0.12		
S2	Central County	GM	0.010	85.6	0.29		
	Central County	TPB	0.002	14.4	0.12		
S3	Central County	GM	0.000		0.29		
	Central County	GYD	0.005	86.2	0.26		
	Central County	PWB	0.001	13.8	0.38		
	Central County	TPB	0.000		0.12		
S30B	Central County	GXA	0.027	6.9	0.23		
	Central County	LCA	0.193	48.5	0.25		
	Central County	MP	0.000	0.1	0.25		
	Central County	MR	0.071	17.7	0.05		
	Central County	PEA	0.003	0.8	0.37		
	Central County	PSA	0.003	0.8	0.25		
	Central County	RBA	0.071	17.9	0.26		
	Central County	TFA	0.000	0.1	0.37		
	Central County	TRA	0.007	1.7	0.11		
	Central County	TRB	0.000	0.1	0.13		
	Central County	VF	0.022	5.5	0.01		
S30C	Central County	GXA	0.002	0.4	0.23		
	Central County	LB	0.013	2.8	0.40		
	Central County	LCA	0.199	43.8	0.25		
	Central County	LE	0.000		0.04		
	Central County	MP	0.006	1.2	0.25		
	Central County	MR	0.163	35.8	0.05		
	Central County	PEA	0.003	0.7	0.37		
	Central County	VF	0.069	15.2	0.01		
S30D	Central County	LCA	0.007	5.1	0.25		
	Central County	MP	0.045	34.2	0.25		
	Central County	MR	0.054	41.6	0.05		
	Central County	TRA	0.019	14.2	0.11		
	Central County	TRB	0.006	4.9	0.13		
S4	Central County	CF	0.000	1.4	0.50		
	Central County	GYD	0.002	16.7	0.26		
	Central County	PWB	0.008	52.1	0.38		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
S4	Central County	TPB	0.004	29.9	0.12		
SUMMI	Central County	GN	0.006	24.5	0.25		
	Central County	GWD	0.015	59.0	0.35		
	Central County	PWB	0.004	16.5	0.38		
WB1	Central County	LCA	0.038	32.8	0.25		
	Central County	MP	0.005	4.1	0.25		
	Central County	MR	0.069	60.1	0.05		
	Central County	TG	0.001	0.4	0.04		
	Central County	VF	0.003	2.6	0.01		
WB10	Central County	GXA	0.010	10.1	0.23		
	Central County	LCA	0.011	11.1	0.25		
	Central County	MR	0.066	69.5	0.05		
	Central County	TH	0.009	9.4	0.04		
WB2	Central County	LCA	0.000	0.1	0.25		
	Central County	MR	0.089	99.1	0.05		
	Central County	VF	0.001	0.8	0.01		
WB3	Central County	MR	0.010	100.0	0.05		
WB4	Central County	MR	0.101	92.7	0.05		
	Central County	TH	0.003	2.5	0.04		
	Central County	VF	0.005	4.9	0.01		
WB5	Central County	MR	0.112	98.4	0.05		
	Central County	VF	0.002	1.6	0.01		
WB6	Central County	MR	0.116	100.0	0.05		
WB7	Central County	MR	0.043	95.3	0.05		
	Central County	TH	0.002	4.7	0.04		
WB8	Central County	GXA	0.001	1.0	0.23		
	Central County	MR	0.062	92.4	0.05		
	Central County	TG	0.001	1.6	0.04		
	Central County	TH	0.003	4.9	0.04		
WB9	Central County	GXA	0.038	17.3	0.23		
	Central County	LCA	0.140	64.3	0.25		
	Central County	MP	0.026	11.9	0.25		
	Central County	MR	0.014	6.5	0.05		
A08	Central County	CB	0.029	36.9	0.40		
	Central County	TD	0.016	20.7	1.20		
	Central County	VG	0.030	38.3	0.91		
	Central County	VH	0.003	4.0	0.27		
S30A	Central County	LB	0.001	0.1	0.40		
	Central County	LCA	0.338	63.6	0.25		
	Central County	LE	0.088	16.6	0.04		
	Central County	MR	0.102	19.2	0.05		
	Central County	VF	0.002	0.4	0.01		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)

* Custom Value (not default value)

APPENDIX A4

Land Use Data

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
100	MDR	0.016	39.9	Normal	50.0	30	0.25	0.050	Low	0.066
	OPEN	0.023	60.1	Dry	10.0		0.10	0.020	Min	0.033
19	OPEN	0.007	15.0	Dry	10.0		0.10	0.020	Min	0.036
	MDR	0.038	85.0	Normal	50.0	30	0.25	0.050	Low	0.061
20	OPEN	0.014	35.4	Dry	10.0		0.10	0.020	Min	0.034
	MDR	0.026	64.6	Normal	50.0	30	0.25	0.050	Low	0.063
21	MDR	0.029	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
22	OPEN	0.020	49.5	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.021	50.5	Normal	50.0	30	0.25	0.050	Low	0.065
23	MDR	0.031	100.0	Normal	50.0	30	0.25	0.050	Low	0.062
24	OPEN	0.010	49.0	Dry	10.0		0.10	0.020	Min	0.035
	MDR	0.010	51.0	Normal	50.0	30	0.25	0.050	Low	0.069
25	MDR	0.016	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
26R	MDR	0.029	47.3	Normal	50.0	30	0.25	0.050	Low	0.062
	OPEN	0.033	52.7	Dry	10.0		0.10	0.020	Min	0.032
27	MDR	0.039	100.0	Normal	50.0	30	0.25	0.050	Low	0.061
28R	MDR	0.013	100.0	Normal	50.0	30	0.25	0.050	Low	0.067
29	MDR	0.034	100.0	Normal	50.0	30	0.25	0.050	Low	0.062
33	OPEN	0.001	3.3	Dry	10.0		0.10	0.020	Min	0.040
	MDR	0.041	96.7	Normal	50.0	30	0.25	0.050	Low	0.061
34	OPEN	0.006	21.1	Dry	10.0		0.10	0.020	Min	0.036
	MDR	0.022	78.9	Normal	50.0	30	0.25	0.050	Low	0.064
35	MDR	0.044	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
36	OPEN	0.011	24.3	Dry	10.0		0.10	0.020	Min	0.035

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
36	MDR	0.034	75.7	Normal	50.0	30	0.25	0.050	Low	0.062
37E	WATER	0.003	22.9	Wet		100		0.001	Min	0.039
	MDR	0.009	77.1	Normal	50.0	30	0.25	0.050	Low	0.069
37W	MDR	0.009	100.0	Normal	50.0	30	0.25	0.050	Low	0.070
41	MDR	0.005	8.7	Normal	50.0	30	0.25	0.050	Low	0.073
	VLDR	0.008	14.5	Normal	30.0	5	0.30	0.050	Low	0.070
	OPEN	0.041	76.8	Dry	10.0		0.10	0.020	Min	0.031
42	OPEN	0.021	27.7	Dry	10.0		0.10	0.020	Min	0.033
	VLDR	0.054	72.3	Normal	30.0	5	0.30	0.050	Low	0.059
45	OPEN	0.021	33.7	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.041	66.3	Normal	50.0	30	0.25	0.050	Low	0.060
46	MDR	0.021	34.6	Normal	50.0	30	0.25	0.050	Low	0.064
	OPEN	0.040	65.4	Dry	10.0		0.10	0.020	Min	0.031
47	MDR	0.039	100.0	Normal	50.0	30	0.25	0.050	Low	0.061
48	MDR	0.025	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
49	MDR	0.024	100.0	Normal	50.0	30	0.25	0.050	Low	0.064
50	MDR	0.028	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
51	MDR	0.012	100.0	Normal	50.0	30	0.25	0.050	Low	0.068
52	MDR	0.043	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
53R	OPEN	0.022	31.8	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.047	68.2	Normal	50.0	30	0.25	0.050	Low	0.060
54R	MDR	0.021	100.0	Normal	50.0	30	0.25	0.050	Low	0.064
55	MDR	0.006	10.6	Normal	50.0	30	0.25	0.050	Low	0.072
	OPEN	0.049	89.4	Dry	10.0		0.10	0.020	Min	0.031

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
56R	MDR	0.012	100.0	Normal	50.0	30	0.25	0.050	Low	0.068
57R	MDR	0.008	100.0	Normal	50.0	30	0.25	0.050	Low	0.071
87	COMM	0.002	7.2	Normal	75.0	80	0.10	0.020	Min	0.039
	LDR	0.013	45.1	Normal	50.0	15	0.30	0.050	Low	0.068
	VLDR	0.013	47.7	Normal	30.0	5	0.30	0.050	Low	0.067
A07C	OPEN	0.001	0.3	Dry	10.0		0.10	0.020	Min	0.043
	MHR	0.001	0.5	Normal	50.0	60	0.25	0.050	Low	0.084
	AGR	0.010	5.7	Wet	85.0		0.50	0.100	Hi	0.130
	MDR	0.164	93.6	Normal	50.0	30	0.25	0.050	Low	0.052
A07D	MDR	0.014	6.1	Normal	50.0	30	0.25	0.050	Low	0.067
	AGR	0.215	93.9	Wet	85.0		0.50	0.100	Hi	0.097
A07E	OPEN	0.006	2.4	Dry	10.0		0.10	0.020	Min	0.037
	COMM	0.026	11.3	Normal	75.0	80	0.10	0.020	Min	0.032
	MDR	0.086	38.0	Normal	50.0	30	0.25	0.050	Low	0.056
	MHR	0.110	48.3	Normal	50.0	60	0.25	0.050	Low	0.055
A07F	COMM	0.012	5.3	Normal	75.0	80	0.10	0.020	Min	0.034
	OPEN	0.054	23.3	Dry	10.0		0.10	0.020	Min	0.030
	MDR	0.166	71.4	Normal	50.0	30	0.25	0.050	Low	0.052
A07G	INS	0.001	0.3	Normal	80.0	75	0.10	0.020	Min	0.042
	IND	0.003	1.0	Normal	60.0	55	0.15	0.030	Min	0.039
	MFR	0.004	1.4	Normal	50.0	45	0.25	0.050	Low	0.075
	WATER	0.015	5.9	Wet		100		0.001	Min	0.034
	COMM	0.018	7.0	Normal	75.0	80	0.10	0.020	Min	0.033
	MDR	0.218	84.4	Normal	50.0	30	0.25	0.050	Low	0.051
A07H	MDR	0.014	15.3	Normal	50.0	30	0.25	0.050	Low	0.067
	AGR	0.020	21.7	Wet	85.0		0.50	0.100	Hi	0.122
	INS	0.059	63.0	Normal	80.0	75	0.10	0.020	Min	0.030

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A08	DESERT	0.040	52.3	Dry	25.0		0.35	0.030	Low	0.061
	MDR	0.037	47.7	Normal	50.0	30	0.25	0.050	Low	0.061
A08A	OPEN	0.055	40.0	Dry	10.0		0.10	0.020	Min	0.030
	MDR	0.083	60.0	Normal	50.0	30	0.25	0.050	Low	0.056
A08B	AGR	0.002	1.7	Wet	85.0		0.50	0.100	Hi	0.149
	OPEN	0.019	19.5	Dry	10.0		0.10	0.020	Min	0.033
	INS	0.024	23.8	Normal	80.0	75	0.10	0.020	Min	0.033
	MDR	0.054	55.0	Normal	50.0	30	0.25	0.050	Low	0.059
A09	LDR	0.001	0.6	Normal	50.0	15	0.30	0.050	Low	0.082
	MDR	0.019	10.6	Normal	50.0	30	0.25	0.050	Low	0.065
	IND	0.062	35.1	Normal	60.0	55	0.15	0.030	Min	0.030
	OPEN	0.094	53.7	Dry	10.0		0.10	0.020	Min	0.029
A09A	OPEN	0.001	1.1	Dry	10.0		0.10	0.020	Min	0.041
	LDR	0.003	3.4	Normal	50.0	15	0.30	0.050	Low	0.077
	IND	0.004	5.3	Normal	60.0	55	0.15	0.030	Min	0.037
	INS	0.011	13.3	Normal	80.0	75	0.10	0.020	Min	0.035
	COMM	0.026	31.4	Normal	75.0	80	0.10	0.020	Min	0.032
	AGR	0.038	45.6	Wet	85.0		0.50	0.100	Hi	0.115
A09B	AGR	0.001	2.0	Wet	85.0		0.50	0.100	Hi	0.157
	MDR	0.001	2.9	Normal	50.0	30	0.25	0.050	Low	0.082
	INS	0.039	95.1	Normal	80.0	75	0.10	0.020	Min	0.031
A09C	INS	0.004	5.8	Normal	80.0	75	0.10	0.020	Min	0.037
	AGR	0.005	6.6	Wet	85.0		0.50	0.100	Hi	0.138
	MDR	0.064	87.7	Normal	50.0	30	0.25	0.050	Low	0.058
A09D	MFR	0.003	1.0	Normal	50.0	45	0.25	0.050	Low	0.077
	COMM	0.004	1.6	Normal	75.0	80	0.10	0.020	Min	0.037
	OPEN	0.005	1.9	Dry	10.0		0.10	0.020	Min	0.037

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A09D	WATER	0.014	5.6	Wet		100		0.001	Min	0.034
	MDR	0.228	89.9	Normal	50.0	30	0.25	0.050	Low	0.050
A09E	OPEN	0.003	2.1	Dry	10.0		0.10	0.020	Min	0.038
	COMM	0.007	4.6	Normal	75.0	80	0.10	0.020	Min	0.036
	WATER	0.009	6.0	Wet		100		0.001	Min	0.035
	MDR	0.129	87.4	Normal	50.0	30	0.25	0.050	Low	0.054
A09F	INS	0.014	3.9	Normal	80.0	75	0.10	0.020	Min	0.034
	OPEN	0.029	8.0	Dry	10.0		0.10	0.020	Min	0.032
	COMM	0.033	9.0	Normal	75.0	80	0.10	0.020	Min	0.032
	MFR	0.061	16.8	Normal	50.0	45	0.25	0.050	Low	0.058
	MDR	0.228	62.4	Normal	50.0	30	0.25	0.050	Low	0.050
A09GA	COMM	0.074	100.0	Normal	75.0	80	0.10	0.020	Min	0.030
A09GB	COMM	0.005	10.1	Normal	75.0	80	0.10	0.020	Min	0.037
	MDR	0.046	89.9	Normal	50.0	30	0.25	0.050	Low	0.060
A09H	MFR	0.001	0.4	Normal	50.0	45	0.25	0.050	Low	0.083
	COMM	0.008	3.2	Normal	75.0	80	0.10	0.020	Min	0.036
	LDR	0.010	4.1	Normal	50.0	15	0.30	0.050	Low	0.069
	MDR	0.218	92.3	Normal	50.0	30	0.25	0.050	Low	0.051
A09I	OPEN	0.004	2.9	Dry	10.0		0.10	0.020	Min	0.038
	MDR	0.122	97.1	Normal	50.0	30	0.25	0.050	Low	0.054
A09IH	LDR	0.018	19.7	Normal	50.0	15	0.30	0.050	Low	0.065
	MDR	0.073	80.3	Normal	50.0	30	0.25	0.050	Low	0.057
A09J	MDR	0.167	100.0	Normal	50.0	30	0.25	0.050	Low	0.052
A09L	OPEN	0.017	12.7	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.119	87.3	Normal	50.0	30	0.25	0.050	Low	0.054
A09M	COMM	0.021	8.5	Normal	75.0	80	0.10	0.020	Min	0.033

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A09M	VLDR	0.032	12.8	Normal	30.0	5	0.30	0.050	Low	0.062
	LDR	0.055	21.9	Normal	50.0	15	0.30	0.050	Low	0.059
	MDR	0.142	56.9	Normal	50.0	30	0.25	0.050	Low	0.053
A09N	VLDR	0.018	16.3	Normal	30.0	5	0.30	0.050	Low	0.065
	MDR	0.092	83.7	Normal	50.0	30	0.25	0.050	Low	0.056
A09O	VLDR	0.040	20.5	Normal	30.0	5	0.30	0.050	Low	0.061
	LDR	0.154	79.5	Normal	50.0	15	0.30	0.050	Low	0.053
A09P	VLDR	0.066	35.2	Normal	30.0	5	0.30	0.050	Low	0.058
	LDR	0.121	64.8	Normal	50.0	15	0.30	0.050	Low	0.054
A09QA	LDR	0.092	100.0	Normal	50.0	15	0.30	0.050	Low	0.056
A09QB	LDR	0.003	1.7	Normal	50.0	15	0.30	0.050	Low	0.077
	VLDR	0.142	98.3	Normal	30.0	5	0.30	0.050	Low	0.053
A09R	COMM	0.061	42.3	Normal	75.0	80	0.10	0.020	Min	0.030
	LDR	0.083	57.7	Normal	50.0	15	0.30	0.050	Low	0.056
A09S	LDR	0.009	12.5	Normal	50.0	15	0.30	0.050	Low	0.070
	COMM	0.063	87.5	Normal	75.0	80	0.10	0.020	Min	0.030
A09T	LDR	0.042	23.0	Normal	50.0	15	0.30	0.050	Low	0.060
	COMM	0.067	36.7	Normal	75.0	80	0.10	0.020	Min	0.030
	VLDR	0.073	40.3	Normal	30.0	5	0.30	0.050	Low	0.057
A09U	OPEN	0.047	26.9	Dry	10.0		0.10	0.020	Min	0.031
	VLDR	0.128	73.1	Normal	30.0	5	0.30	0.050	Low	0.054
A10	IND	0.002	0.7	Normal	60.0	55	0.15	0.030	Min	0.040
	VLDR	0.002	0.9	Normal	30.0	5	0.30	0.050	Low	0.079
	MDR	0.006	2.9	Normal	50.0	30	0.25	0.050	Low	0.072
	LDR	0.015	6.8	Normal	50.0	15	0.30	0.050	Low	0.067
	OPEN	0.082	38.1	Dry	10.0		0.10	0.020	Min	0.029

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A10	WATER	0.108	50.6	Wet		100		0.001	Min	0.028
A10A	LDR	0.003	1.6	Normal	50.0	15	0.30	0.050	Low	0.076
	VLDR	0.186	98.4	Normal	30.0	5	0.30	0.050	Low	0.051
A11A	MDR	0.003	1.0	Normal	50.0	30	0.25	0.050	Low	0.076
	LDR	0.060	20.2	Normal	50.0	15	0.30	0.050	Low	0.058
	VLDR	0.088	29.5	Normal	30.0	5	0.30	0.050	Low	0.056
	COMM	0.147	49.3	Normal	75.0	80	0.10	0.020	Min	0.028
A11EA	VLDR	0.066	45.7	Normal	30.0	5	0.30	0.050	Low	0.058
	LDR	0.078	54.3	Normal	50.0	15	0.30	0.050	Low	0.057
A11EB	VLDR	0.005	2.9	Normal	30.0	5	0.30	0.050	Low	0.073
	COMM	0.031	16.5	Normal	75.0	80	0.10	0.020	Min	0.032
	MDR	0.034	18.2	Normal	50.0	30	0.25	0.050	Low	0.062
	LDR	0.118	62.5	Normal	50.0	15	0.30	0.050	Low	0.054
A11F	MDR	0.001	0.2	Normal	50.0	30	0.25	0.050	Low	0.086
	COMM	0.021	6.2	Normal	75.0	80	0.10	0.020	Min	0.033
	LDR	0.125	37.3	Normal	50.0	15	0.30	0.050	Low	0.054
	VLDR	0.188	56.3	Normal	30.0	5	0.30	0.050	Low	0.051
A11G	MDR	0.004	6.3	Normal	50.0	30	0.25	0.050	Low	0.075
	VLDR	0.057	93.7	Normal	30.0	5	0.30	0.050	Low	0.059
A11I	VLDR	0.005	2.9	Normal	30.0	5	0.30	0.050	Low	0.074
	MDR	0.149	97.1	Normal	50.0	30	0.25	0.050	Low	0.053
A11J	VLDR	0.003	3.0	Normal	30.0	5	0.30	0.050	Low	0.075
	MDR	0.109	97.0	Normal	50.0	30	0.25	0.050	Low	0.055
A11KA	OPEN	0.014	17.7	Dry	10.0		0.10	0.020	Min	0.034
	MDR	0.067	82.3	Normal	50.0	30	0.25	0.050	Low	0.058
A11KB	MDR	0.107	100.0	Normal	50.0	30	0.25	0.050	Low	0.055

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A11KC	LDR	0.001	0.8	Normal	50.0	15	0.30	0.050	Low	0.083
	VLDR	0.014	10.7	Normal	30.0	5	0.30	0.050	Low	0.067
	MDR	0.117	88.5	Normal	50.0	30	0.25	0.050	Low	0.054
A11L	VLDR	0.005	2.0	Normal	30.0	5	0.30	0.050	Low	0.073
	MDR	0.243	98.0	Normal	50.0	30	0.25	0.050	Low	0.050
A11MA	MDR	0.073	100.0	Normal	50.0	30	0.25	0.050	Low	0.057
A11MB	VLDR	0.003	1.7	Normal	30.0	5	0.30	0.050	Low	0.076
	MDR	0.191	98.3	Normal	50.0	30	0.25	0.050	Low	0.051
A11NA	OPEN	0.028	37.3	Dry	10.0		0.10	0.020	Min	0.032
	MDR	0.048	62.7	Normal	50.0	30	0.25	0.050	Low	0.060
A11O	OPEN	0.015	27.1	Dry	10.0		0.10	0.020	Min	0.034
	MDR	0.041	72.9	Normal	50.0	30	0.25	0.050	Low	0.061
A99R	MDR	0.015	39.4	Normal	50.0	30	0.25	0.050	Low	0.067
	OPEN	0.022	60.6	Dry	10.0		0.10	0.020	Min	0.033
A99S	OPEN	0.077	100.0	Dry	10.0		0.10	0.020	Min	0.029
A99T	OPEN	0.003	9.1	Dry	10.0		0.10	0.020	Min	0.039
	LDR	0.006	18.9	Normal	50.0	15	0.30	0.050	Low	0.072
	IND	0.021	72.1	Normal	60.0	55	0.15	0.030	Min	0.033
A99U	WATER	0.001	0.7	Wet		100		0.001	Min	0.043
	MDR	0.033	47.3	Normal	50.0	30	0.25	0.050	Low	0.062
	IND	0.036	52.0	Normal	60.0	55	0.15	0.030	Min	0.031
A99V	MDR	0.006	2.8	Normal	50.0	30	0.25	0.050	Low	0.072
	WATER	0.024	11.4	Wet		100		0.001	Min	0.033
	OPEN	0.177	85.9	Dry	10.0		0.10	0.020	Min	0.027
A99W	IND	0.004	1.8	Normal	60.0	55	0.15	0.030	Min	0.038
	INS	0.014	6.7	Normal	80.0	75	0.10	0.020	Min	0.034

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A99W	WATER	0.027	12.7	Wet		100		0.001	Min	0.032
	OPEN	0.066	30.7	Dry	10.0		0.10	0.020	Min	0.030
	MDR	0.104	48.1	Normal	50.0	30	0.25	0.050	Low	0.055
A99X	VLDR	0.006	2.2	Normal	30.0	5	0.30	0.050	Low	0.072
	OPEN	0.033	12.7	Dry	10.0		0.10	0.020	Min	0.032
	WATER	0.039	14.7	Wet		100		0.001	Min	0.031
	IND	0.186	70.4	Normal	60.0	55	0.15	0.030	Min	0.027
A99YA	VLDR	0.009	9.0	Normal	30.0	5	0.30	0.050	Low	0.069
	LDR	0.094	91.0	Normal	50.0	15	0.30	0.050	Low	0.056
A99YB	LDR	0.002	1.2	Normal	50.0	15	0.30	0.050	Low	0.078
	WATER	0.037	21.9	Wet		100		0.001	Min	0.031
	MDR	0.059	34.3	Normal	50.0	30	0.25	0.050	Low	0.058
	OPEN	0.073	42.5	Dry	10.0		0.10	0.020	Min	0.030
CBA	MDR	0.007	100.0	Normal	50.0	30	0.25	0.050	Low	0.071
CBB	MDR	0.017	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
CBH	MDR	0.012	100.0	Normal	50.0	30	0.25	0.050	Low	0.068
CBJ	MDR	0.015	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
CBK	MDR	0.053	100.0	Normal	50.0	30	0.25	0.050	Low	0.059
CBL	MDR	0.028	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
DV1	MDR	0.091	100.0	Normal	50.0	30	0.25	0.050	Low	0.056
DV10	COMM	0.010	4.9	Normal	75.0	80	0.10	0.020	Min	0.035
	VLDR	0.200	95.1	Normal	30.0	5	0.30	0.050	Low	0.051
DV11	COMM	0.033	23.2	Normal	75.0	80	0.10	0.020	Min	0.032
	MDR	0.111	76.8	Normal	50.0	30	0.25	0.050	Low	0.055
DV2	MDR	0.032	100.0	Normal	50.0	30	0.25	0.050	Low	0.062

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
DV3	MDR	0.050	100.0	Normal	50.0	30	0.25	0.050	Low	0.059
DV4	MDR	0.060	100.0	Normal	50.0	30	0.25	0.050	Low	0.058
DV5	MDR	0.029	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
DV6	MDR	0.090	100.0	Normal	50.0	30	0.25	0.050	Low	0.056
DV7	VLDR	0.020	15.4	Normal	30.0	5	0.30	0.050	Low	0.065
	MDR	0.111	84.6	Normal	50.0	30	0.25	0.050	Low	0.055
DV8	VLDR	0.021	22.3	Normal	30.0	5	0.30	0.050	Low	0.065
	MDR	0.073	77.7	Normal	50.0	30	0.25	0.050	Low	0.057
DV9	VLDR	0.042	100.0	Normal	30.0	5	0.30	0.050	Low	0.060
E1	VLDR	0.005	30.8	Normal	30.0	5	0.30	0.050	Low	0.074
	MDR	0.010	69.2	Normal	50.0	30	0.25	0.050	Low	0.069
E2	VLDR	0.016	100.0	Normal	30.0	5	0.30	0.050	Low	0.066
E3	MDR	0.027	32.5	Normal	50.0	30	0.25	0.050	Low	0.063
	VLDR	0.055	67.5	Normal	30.0	5	0.30	0.050	Low	0.059
E4	VLDR	0.006	14.4	Normal	30.0	5	0.30	0.050	Low	0.072
	MDR	0.034	85.6	Normal	50.0	30	0.25	0.050	Low	0.062
HV1	MDR	0.007	100.0	Normal	50.0	30	0.25	0.050	Low	0.071
HV2	VLDR	0.001	3.9	Normal	30.0	5	0.30	0.050	Low	0.082
	MDR	0.030	96.1	Normal	50.0	30	0.25	0.050	Low	0.062
LACAI	VLDR	0.035	100.0	Normal	30.0	5	0.30	0.050	Low	0.061
M1	LDR	0.105	100.0	Normal	50.0	15	0.30	0.050	Low	0.055
M10	INS	0.087	100.0	Normal	80.0	75	0.10	0.020	Min	0.029
M11A	INS	0.002	3.1	Normal	80.0	75	0.10	0.020	Min	0.039
	MDR	0.067	96.9	Normal	50.0	30	0.25	0.050	Low	0.058

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
M11B	MDR	0.018	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
M12A	MDR	0.112	100.0	Normal	50.0	30	0.25	0.050	Low	0.054
M12B	MDR	0.044	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
M2	LDR	0.159	100.0	Normal	50.0	15	0.30	0.050	Low	0.052
M3	LDR	0.121	100.0	Normal	50.0	15	0.30	0.050	Low	0.054
M370	MDR	0.025	19.1	Normal	50.0	30	0.25	0.050	Low	0.063
	LDR	0.106	80.9	Normal	50.0	15	0.30	0.050	Low	0.055
M4	INS	0.004	3.3	Normal	80.0	75	0.10	0.020	Min	0.037
	LDR	0.128	96.7	Normal	50.0	15	0.30	0.050	Low	0.054
M5	OPEN	0.016	100.0	Dry	10.0		0.10	0.020	Min	0.034
M6	INS	0.022	100.0	Normal	80.0	75	0.10	0.020	Min	0.033
M7	LDR	0.113	100.0	Normal	50.0	15	0.30	0.050	Low	0.054
M8	LDR	0.066	100.0	Normal	50.0	15	0.30	0.050	Low	0.058
M9	INS	0.004	3.2	Normal	80.0	75	0.10	0.020	Min	0.038
	LDR	0.117	96.8	Normal	50.0	15	0.30	0.050	Low	0.054
MA1	COMM	0.012	100.0	Normal	75.0	80	0.10	0.020	Min	0.035
MA2	COMM	0.026	100.0	Normal	75.0	80	0.10	0.020	Min	0.032
N11A	INS	0.009	1.0	Normal	80.0	75	0.10	0.020	Min	0.035
	COMM	0.048	5.1	Normal	75.0	80	0.10	0.020	Min	0.031
	MFR	0.186	20.0	Normal	50.0	45	0.25	0.050	Low	0.051
	OPEN	0.205	22.0	Dry	10.0		0.10	0.020	Min	0.027
	MDR	0.482	51.9	Normal	50.0	30	0.25	0.050	Low	0.046
N11C	OPEN	0.050	19.7	Dry	10.0		0.10	0.020	Min	0.031
	MDR	0.205	80.3	Normal	50.0	30	0.25	0.050	Low	0.051

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N11DA	MDR	0.255	100.0	Normal	50.0	30	0.25	0.050	Low	0.050
N11DB	MDR	0.254	100.0	Normal	50.0	30	0.25	0.050	Low	0.050
N11EA	OPEN	0.021	8.2	Dry	10.0		0.10	0.020	Min	0.033
	INS	0.022	8.3	Normal	80.0	75	0.10	0.020	Min	0.033
	MDR	0.216	83.5	Normal	50.0	30	0.25	0.050	Low	0.051
N11EB	OPEN	0.001	0.6	Dry	10.0		0.10	0.020	Min	0.040
	MDR	0.229	99.4	Normal	50.0	30	0.25	0.050	Low	0.050
N11FA	COMM	0.006	3.1	Normal	75.0	80	0.10	0.020	Min	0.037
	OPEN	0.009	4.7	Dry	10.0		0.10	0.020	Min	0.035
	INS	0.017	9.5	Normal	80.0	75	0.10	0.020	Min	0.034
	MDR	0.149	82.7	Normal	50.0	30	0.25	0.050	Low	0.053
N11FB	INS	0.005	4.3	Normal	80.0	75	0.10	0.020	Min	0.037
	OPEN	0.007	5.5	Dry	10.0		0.10	0.020	Min	0.036
	MDR	0.109	90.2	Normal	50.0	30	0.25	0.050	Low	0.055
N11J	VLDR	0.050	20.7	Normal	30.0	5	0.30	0.050	Low	0.059
	LDR	0.193	79.3	Normal	50.0	15	0.30	0.050	Low	0.051
N11K	COMM	0.001	0.4	Normal	75.0	80	0.10	0.020	Min	0.042
	LDR	0.067	39.9	Normal	50.0	15	0.30	0.050	Low	0.058
	VLDR	0.100	59.6	Normal	30.0	5	0.30	0.050	Low	0.055
N11L2	LDR	0.010	100.0	Normal	50.0	15	0.30	0.050	Low	0.069
N11L3	LDR	0.039	100.0	Normal	50.0	15	0.30	0.050	Low	0.061
N11L3A	COMM	0.001	5.7	Normal	75.0	80	0.10	0.020	Min	0.040
	VLDR	0.023	94.3	Normal	30.0	5	0.30	0.050	Low	0.064
N11L4	LDR	0.010	100.0	Normal	50.0	15	0.30	0.050	Low	0.069
N11L5	VLDR	0.008	19.9	Normal	30.0	5	0.30	0.050	Low	0.070
	LDR	0.034	80.1	Normal	50.0	15	0.30	0.050	Low	0.062

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N11L5A	IND	0.001	2.7	Normal	60.0	55	0.15	0.030	Min	0.041
	LDR	0.002	3.4	Normal	50.0	15	0.30	0.050	Low	0.080
	VLDR	0.042	93.9	Normal	30.0	5	0.30	0.050	Low	0.060
N11M	LDR	0.100	100.0	Normal	50.0	15	0.30	0.050	Low	0.055
N11NA	VLDR	0.003	11.6	Normal	30.0	5	0.30	0.050	Low	0.077
	OPEN	0.020	88.4	Dry	10.0		0.10	0.020	Min	0.033
N11NB	LDR	0.022	15.8	Normal	50.0	15	0.30	0.050	Low	0.064
	VLDR	0.117	84.2	Normal	30.0	5	0.30	0.050	Low	0.054
N11NC	OPEN	0.001	0.7	Dry	10.0		0.10	0.020	Min	0.041
	IND	0.006	3.7	Normal	60.0	55	0.15	0.030	Min	0.036
	LDR	0.045	26.1	Normal	50.0	15	0.30	0.050	Low	0.060
	VLDR	0.119	69.5	Normal	30.0	5	0.30	0.050	Low	0.054
N11ND	COMM	0.003	5.1	Normal	75.0	80	0.10	0.020	Min	0.039
	LDR	0.019	35.1	Normal	50.0	15	0.30	0.050	Low	0.065
	VLDR	0.032	59.8	Normal	30.0	5	0.30	0.050	Low	0.062
N11O	LDR	0.054	100.0	Normal	50.0	15	0.30	0.050	Low	0.059
N11P1	VLDR	0.063	100.0	Normal	30.0	5	0.30	0.050	Low	0.058
N11P2	VLDR	0.063	100.0	Normal	30.0	5	0.30	0.050	Low	0.058
N11P3	VLDR	0.041	100.0	Normal	30.0	5	0.30	0.050	Low	0.060
N11P4	VLDR	0.050	100.0	Normal	30.0	5	0.30	0.050	Low	0.059
N11P5	OPEN	0.027	100.0	Dry	10.0		0.10	0.020	Min	0.032
N11P6	VLDR	0.001	0.8	Normal	30.0	5	0.30	0.050	Low	0.082
	OPEN	0.158	99.2	Dry	10.0		0.10	0.020	Min	0.027
N11P7	VLDR	0.060	100.0	Normal	30.0	5	0.30	0.050	Low	0.058

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N11P8	VLDR	0.013	30.7	Normal	30.0	5	0.30	0.050	Low	0.067
	OPEN	0.030	69.3	Dry	10.0		0.10	0.020	Min	0.032
N11P9	VLDR	0.043	100.0	Normal	30.0	5	0.30	0.050	Low	0.060
N20	MDR	0.005	1.3	Normal	50.0	30	0.25	0.050	Low	0.074
	FWY	0.006	1.6	Normal	80.0	95	0.05	0.020	Low	0.072
	COMM	0.019	5.5	Normal	75.0	80	0.10	0.020	Min	0.033
	IND	0.031	8.8	Normal	60.0	55	0.15	0.030	Min	0.032
	INS	0.035	9.9	Normal	80.0	75	0.10	0.020	Min	0.032
	OPEN	0.042	11.9	Dry	10.0		0.10	0.020	Min	0.031
	WATER	0.100	28.3	Wet		100		0.001	Min	0.029
	MFR	0.116	32.7	Normal	50.0	45	0.25	0.050	Low	0.054
N21	IND	0.003	0.5	Normal	60.0	55	0.15	0.030	Min	0.038
	FWY	0.006	0.9	Normal	80.0	95	0.05	0.020	Low	0.072
	LDR	0.016	2.5	Normal	50.0	15	0.30	0.050	Low	0.066
	OPEN	0.024	3.9	Dry	10.0		0.10	0.020	Min	0.033
	INS	0.090	14.5	Normal	80.0	75	0.10	0.020	Min	0.029
	WATER	0.105	16.8	Wet		100		0.001	Min	0.029
	AGR	0.108	17.3	Wet	85.0		0.50	0.100	Hi	0.104
	MDR	0.110	17.7	Normal	50.0	30	0.25	0.050	Low	0.055
	COMM	0.161	25.9	Normal	75.0	80	0.10	0.020	Min	0.027
N21C	LDR	0.001	0.2	Normal	50.0	15	0.30	0.050	Low	0.086
	WATER	0.002	0.5	Wet		100		0.001	Min	0.040
	MFR	0.004	1.0	Normal	50.0	45	0.25	0.050	Low	0.074
	OPEN	0.007	1.7	Dry	10.0		0.10	0.020	Min	0.036
	INS	0.017	4.2	Normal	80.0	75	0.10	0.020	Min	0.034
	MDR	0.364	92.5	Normal	50.0	30	0.25	0.050	Low	0.047
N21D	MDR	0.053	100.0	Normal	50.0	30	0.25	0.050	Low	0.059
N21E	LDR	0.008	13.0	Normal	50.0	15	0.30	0.050	Low	0.070

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N21E	MDR	0.055	87.0	Normal	50.0	30	0.25	0.050	Low	0.059
N21F	COMM	0.007	5.4	Normal	75.0	80	0.10	0.020	Min	0.036
	VLDR	0.015	12.0	Normal	30.0	5	0.30	0.050	Low	0.066
	LDR	0.103	82.6	Normal	50.0	15	0.30	0.050	Low	0.055
N21G	MDR	0.001	1.7	Normal	50.0	30	0.25	0.050	Low	0.082
	LDR	0.062	98.3	Normal	50.0	15	0.30	0.050	Low	0.058
N21H	MDR	0.001	2.7	Normal	50.0	30	0.25	0.050	Low	0.083
	LDR	0.032	97.3	Normal	50.0	15	0.30	0.050	Low	0.062
N21I1	LDR	0.014	17.2	Normal	50.0	15	0.30	0.050	Low	0.067
	VLDR	0.069	82.8	Normal	30.0	5	0.30	0.050	Low	0.057
N21I2	VLDR	0.056	100.0	Normal	30.0	5	0.30	0.050	Low	0.059
N21I3	OPEN	0.010	11.3	Dry	10.0		0.10	0.020	Min	0.035
	VLDR	0.012	13.8	Normal	30.0	5	0.30	0.050	Low	0.068
	LDR	0.065	74.9	Normal	50.0	15	0.30	0.050	Low	0.058
N21I4	VLDR	0.027	100.0	Normal	30.0	5	0.30	0.050	Low	0.063
N21JA	VLDR	0.006	7.6	Normal	30.0	5	0.30	0.050	Low	0.072
	MFR	0.009	11.5	Normal	50.0	45	0.25	0.050	Low	0.069
	LDR	0.021	26.4	Normal	50.0	15	0.30	0.050	Low	0.064
	OPEN	0.044	54.4	Dry	10.0		0.10	0.020	Min	0.031
N21JB	VLDR	0.080	48.4	Normal	30.0	5	0.30	0.050	Low	0.056
	LDR	0.086	51.6	Normal	50.0	15	0.30	0.050	Low	0.056
N21Z	VLDR	0.020	18.2	Normal	30.0	5	0.30	0.050	Low	0.065
	LDR	0.090	81.8	Normal	50.0	15	0.30	0.050	Low	0.056
N22A	VLDR	0.001	0.5	Normal	30.0	5	0.30	0.050	Low	0.081
	INS	0.013	4.2	Normal	80.0	75	0.10	0.020	Min	0.034
	MFR	0.021	6.8	Normal	50.0	45	0.25	0.050	Low	0.065

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N22A	OPEN	0.033	11.0	Dry	10.0		0.10	0.020	Min	0.032
	COMM	0.065	21.7	Normal	75.0	80	0.10	0.020	Min	0.030
	MDR	0.167	55.8	Normal	50.0	30	0.25	0.050	Low	0.052
N22B	MDR	0.175	100.0	Normal	50.0	30	0.25	0.050	Low	0.052
N23	COMM	0.018	4.6	Normal	75.0	80	0.10	0.020	Min	0.033
	WATER	0.037	9.4	Wet		100		0.001	Min	0.031
	OPEN	0.041	10.4	Dry	10.0		0.10	0.020	Min	0.031
	MDR	0.293	75.5	Normal	50.0	30	0.25	0.050	Low	0.049
N24	MDR	0.004	3.6	Normal	50.0	30	0.25	0.050	Low	0.075
	IND	0.005	4.3	Normal	60.0	55	0.15	0.030	Min	0.037
	OPEN	0.008	7.6	Dry	10.0		0.10	0.020	Min	0.036
	WATER	0.043	40.3	Wet		100		0.001	Min	0.031
	LDR	0.048	44.2	Normal	50.0	15	0.30	0.050	Low	0.060
N24D	MDR	0.001	1.5	Normal	50.0	30	0.25	0.050	Low	0.081
	IND	0.016	17.8	Normal	60.0	55	0.15	0.030	Min	0.034
	LDR	0.020	23.3	Normal	50.0	15	0.30	0.050	Low	0.065
	WATER	0.050	57.4	Wet		100		0.001	Min	0.031
N24E	LDR	0.021	100.0	Normal	50.0	15	0.30	0.050	Low	0.065
N24F	VLDR	0.001	0.5	Normal	30.0	5	0.30	0.050	Low	0.087
	WATER	0.004	3.6	Wet		100		0.001	Min	0.038
	LDR	0.101	95.9	Normal	50.0	15	0.30	0.050	Low	0.055
N24G	OPEN	0.002	0.4	Dry	10.0		0.10	0.020	Min	0.040
	WATER	0.022	5.2	Wet		100		0.001	Min	0.033
	VLDR	0.061	14.2	Normal	30.0	5	0.30	0.050	Low	0.058
	LDR	0.345	80.2	Normal	50.0	15	0.30	0.050	Low	0.048
N24H	MFR	0.030	13.1	Normal	50.0	45	0.25	0.050	Low	0.062
	LDR	0.060	26.3	Normal	50.0	15	0.30	0.050	Low	0.058

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N24H	OPEN	0.066	28.8	Dry	10.0		0.10	0.020	Min	0.030
	MDR	0.073	31.7	Normal	50.0	30	0.25	0.050	Low	0.057
N24I	OPEN	0.012	3.8	Dry	10.0		0.10	0.020	Min	0.035
	COMM	0.019	6.2	Normal	75.0	80	0.10	0.020	Min	0.033
	LDR	0.033	10.8	Normal	50.0	15	0.30	0.050	Low	0.062
	WATER	0.053	17.6	Wet		100		0.001	Min	0.030
	MDR	0.069	22.9	Normal	50.0	30	0.25	0.050	Low	0.057
	MFR	0.116	38.6	Normal	50.0	45	0.25	0.050	Low	0.054
N24J	WATER	0.004	3.6	Wet		100		0.001	Min	0.037
	OPEN	0.005	4.3	Dry	10.0		0.10	0.020	Min	0.037
	MDR	0.050	41.6	Normal	50.0	30	0.25	0.050	Low	0.059
	MFR	0.061	50.4	Normal	50.0	45	0.25	0.050	Low	0.058
N24K	OPEN	0.005	2.5	Dry	10.0		0.10	0.020	Min	0.037
	LDR	0.009	4.0	Normal	50.0	15	0.30	0.050	Low	0.070
	WATER	0.013	6.3	Wet		100		0.001	Min	0.034
	MDR	0.056	26.3	Normal	50.0	30	0.25	0.050	Low	0.059
	MFR	0.130	61.0	Normal	50.0	45	0.25	0.050	Low	0.054
N24M	OPEN	0.009	5.2	Dry	10.0		0.10	0.020	Min	0.035
	WATER	0.010	6.0	Wet		100		0.001	Min	0.035
	MDR	0.150	88.9	Normal	50.0	30	0.25	0.050	Low	0.053
N24N	OPEN	0.056	42.8	Dry	10.0		0.10	0.020	Min	0.030
	MDR	0.075	57.2	Normal	50.0	30	0.25	0.050	Low	0.057
N24V	MDR	0.001	2.7	Normal	50.0	30	0.25	0.050	Low	0.082
	OPEN	0.044	97.3	Dry	10.0		0.10	0.020	Min	0.031
N25	VLDR	0.007	2.7	Normal	30.0	5	0.30	0.050	Low	0.071
	OPEN	0.034	14.1	Dry	10.0		0.10	0.020	Min	0.032
	WATER	0.091	37.4	Wet		100		0.001	Min	0.029
	LDR	0.112	45.8	Normal	50.0	15	0.30	0.050	Low	0.055

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N26	MFR	0.003	7.7	Normal	50.0	45	0.25	0.050	Low	0.076
	WATER	0.015	37.9	Wet		100		0.001	Min	0.034
	OPEN	0.022	54.4	Dry	10.0		0.10	0.020	Min	0.033
N27	MFR	0.013	4.8	Normal	50.0	45	0.25	0.050	Low	0.067
	FWY	0.019	6.7	Normal	80.0	95	0.05	0.020	Low	0.065
	MDR	0.025	8.8	Normal	50.0	30	0.25	0.050	Low	0.063
	WATER	0.068	24.2	Wet		100		0.001	Min	0.030
	OPEN	0.157	55.5	Dry	10.0		0.10	0.020	Min	0.027
P1	LDR	0.001	2.1	Normal	50.0	15	0.30	0.050	Low	0.086
	VLDR	0.029	97.9	Normal	30.0	5	0.30	0.050	Low	0.063
P10	VLDR	0.003	5.0	Normal	30.0	5	0.30	0.050	Low	0.077
	MDR	0.052	95.0	Normal	50.0	30	0.25	0.050	Low	0.059
P11	MDR	0.042	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
P12	MDR	0.044	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
P13	VLDR	0.004	6.1	Normal	30.0	5	0.30	0.050	Low	0.075
	MDR	0.055	93.9	Normal	50.0	30	0.25	0.050	Low	0.059
P14	MDR	0.008	100.0	Normal	50.0	30	0.25	0.050	Low	0.070
P15	MDR	0.006	100.0	Normal	50.0	30	0.25	0.050	Low	0.072
P2	LDR	0.002	3.5	Normal	50.0	15	0.30	0.050	Low	0.079
	MDR	0.049	96.5	Normal	50.0	30	0.25	0.050	Low	0.059
P25S	MDR	0.016	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
P27	MDR	0.065	100.0	Normal	50.0	30	0.25	0.050	Low	0.058
P27A	MDR	0.008	100.0	Normal	50.0	30	0.25	0.050	Low	0.071
P27B	MDR	0.013	100.0	Normal	50.0	30	0.25	0.050	Low	0.067

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
P28	MDR	0.027	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
P3	MDR	0.054	100.0	Normal	50.0	30	0.25	0.050	Low	0.059
P4a	WATER	0.001	1.5	Wet		100		0.001	Min	0.043
	MDR	0.039	98.5	Normal	50.0	30	0.25	0.050	Low	0.061
P4b	MDR	0.017	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
P6	MDR	0.070	100.0	Normal	50.0	30	0.25	0.050	Low	0.057
P7	MDR	0.014	100.0	Normal	50.0	30	0.25	0.050	Low	0.067
P8	MDR	0.013	100.0	Normal	50.0	30	0.25	0.050	Low	0.067
P9	MDR	0.045	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
S1	MDR	0.003	2.7	Normal	50.0	30	0.25	0.050	Low	0.075
	VLDR	0.008	6.0	Normal	30.0	5	0.30	0.050	Low	0.071
	COMM	0.011	9.1	Normal	75.0	80	0.10	0.020	Min	0.035
	LDR	0.102	82.2	Normal	50.0	15	0.30	0.050	Low	0.055
S2	MDR	0.001	9.3	Normal	50.0	30	0.25	0.050	Low	0.082
	VLDR	0.011	90.7	Normal	30.0	5	0.30	0.050	Low	0.069
S3	VLDR	0.006	100.0	Normal	30.0	5	0.30	0.050	Low	0.072
S30A	OPEN-2	0.196	36.9	Normal	95.0	2	0.20	0.020	Min	0.027
	MHDR	0.244	46.0	Normal	50.0	40	0.25	0.050	Low	0.050
	MFR	0.067	12.5	Normal	50.0	45	0.25	0.050	Low	0.058
	COM-2	0.024	4.6	Normal	75.0	80	0.10	0.020	Min	0.033
S30B	IND	0.007	1.7	Normal	60.0	55	0.15	0.030	Min	0.036
	MFR	0.009	2.2	Normal	50.0	45	0.25	0.050	Low	0.070
	COMM	0.024	6.0	Normal	75.0	80	0.10	0.020	Min	0.033
	OPEN	0.124	31.0	Dry	10.0		0.10	0.020	Min	0.028
	MDR	0.235	59.1	Normal	50.0	30	0.25	0.050	Low	0.050

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
S30C	IND	0.002	0.4	Normal	60.0	55	0.15	0.030	Min	0.040
	OPEN	0.002	0.5	Dry	10.0		0.10	0.020	Min	0.039
	COMM	0.054	11.8	Normal	75.0	80	0.10	0.020	Min	0.030
	MDR	0.397	87.4	Normal	50.0	30	0.25	0.050	Low	0.047
S30D	OPEN	0.001	0.8	Dry	10.0		0.10	0.020	Min	0.041
	MDR	0.130	99.2	Normal	50.0	30	0.25	0.050	Low	0.054
S4	LDR	0.005	32.2	Normal	50.0	15	0.30	0.050	Low	0.074
	VLDR	0.010	67.8	Normal	30.0	5	0.30	0.050	Low	0.069
SUMMIT	VLDR	0.026	100.0	Normal	30.0	5	0.30	0.050	Low	0.063
WB1	OPEN	0.017	14.9	Dry	10.0		0.10	0.020	Min	0.034
	MDR	0.098	85.1	Normal	50.0	30	0.25	0.050	Low	0.055
WB10	INS	0.003	3.4	Normal	80.0	75	0.10	0.020	Min	0.038
	OPEN	0.025	26.8	Dry	10.0		0.10	0.020	Min	0.032
	MDR	0.066	69.9	Normal	50.0	30	0.25	0.050	Low	0.058
WB2	MDR	0.001	1.1	Normal	50.0	30	0.25	0.050	Low	0.082
	OPEN	0.009	8.8	Dry	10.0		0.10	0.020	Min	0.035
	OPEN	0.031	31.4	Dry	10.0		0.10	0.020	Min	0.032
	MDR	0.058	58.7	Normal	50.0	30	0.25	0.050	Low	0.058
WB3	MDR	0.001	11.2	Normal	50.0	30	0.25	0.050	Low	0.082
	OPEN	0.009	88.8	Dry	10.0		0.10	0.020	Min	0.035
WB4	OPEN	0.019	17.0	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.091	83.0	Normal	50.0	30	0.25	0.050	Low	0.056
WB5	OPEN	0.040	35.2	Dry	10.0		0.10	0.020	Min	0.031
	MDR	0.074	64.8	Normal	50.0	30	0.25	0.050	Low	0.057
WB6	OPEN	0.024	20.9	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.091	79.1	Normal	50.0	30	0.25	0.050	Low	0.056

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
WB7	MDR	0.013	28.8	Normal	50.0	30	0.25	0.050	Low	0.067
	INS	0.015	33.3	Normal	80.0	75	0.10	0.020	Min	0.034
	OPEN	0.017	37.9	Dry	10.0		0.10	0.020	Min	0.034
WB8	COMM	0.018	27.0	Normal	75.0	80	0.10	0.020	Min	0.033
	MDR	0.049	73.0	Normal	50.0	30	0.25	0.050	Low	0.059
WB9	COMM	0.021	9.5	Normal	75.0	80	0.10	0.020	Min	0.033
	OPEN	0.022	10.0	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.175	80.5	Normal	50.0	30	0.25	0.050	Low	0.052

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
100	DESERT	0.023	59.9	Dry	25.0		0.35	0.030	Low	0.064
	MDR	0.016	40.1	Normal	50.0	30	0.25	0.050	Low	0.066
19	DESERT	0.007	15.0	Dry	25.0		0.35	0.030	Low	0.071
	MDR	0.038	85.0	Normal	50.0	30	0.25	0.050	Low	0.061
20	DESERT	0.014	35.4	Dry	25.0		0.35	0.030	Low	0.067
	MDR	0.026	64.6	Normal	50.0	30	0.25	0.050	Low	0.063
21	MDR	0.029	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
22	DESERT	0.020	49.5	Dry	25.0		0.35	0.030	Low	0.065
	MDR	0.021	50.5	Normal	50.0	30	0.25	0.050	Low	0.065
23	MDR	0.031	100.0	Normal	50.0	30	0.25	0.050	Low	0.062
24	DESERT	0.010	49.0	Dry	25.0		0.35	0.030	Low	0.069
	MDR	0.010	51.0	Normal	50.0	30	0.25	0.050	Low	0.069
25	MDR	0.015	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
26R	DESERT	0.033	52.7	Dry	25.0		0.35	0.030	Low	0.062
	MDR	0.029	47.3	Normal	50.0	30	0.25	0.050	Low	0.062
27	MDR	0.039	100.0	Normal	50.0	30	0.25	0.050	Low	0.061
28R	MDR	0.013	100.0	Normal	50.0	30	0.25	0.050	Low	0.067
29	MDR	0.034	100.0	Normal	50.0	30	0.25	0.050	Low	0.062
33	DESERT	0.001	3.3	Dry	25.0		0.35	0.030	Low	0.081
	MDR	0.041	96.7	Normal	50.0	30	0.25	0.050	Low	0.061
34	DESERT	0.006	21.2	Dry	25.0		0.35	0.030	Low	0.072
	MDR	0.022	78.8	Normal	50.0	30	0.25	0.050	Low	0.064
35	MDR	0.044	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
36	DESERT	0.011	24.3	Dry	25.0		0.35	0.030	Low	0.068

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
36	MDR	0.034	75.7	Normal	50.0	30	0.25	0.050	Low	0.062
37E	DESERT	0.001	7.8	Dry	25.0		0.35	0.030	Low	0.083
	MDR	0.012	92.2	Normal	50.0	30	0.25	0.050	Low	0.068
37W	MDR	0.009	100.0	Normal	50.0	30	0.25	0.050	Low	0.070
41	DESERT	0.048	90.1	Dry	25.0		0.35	0.030	Low	0.059
	MDR	0.005	8.8	Normal	50.0	30	0.25	0.050	Low	0.073
	VLDR	0.001	1.1	Normal	30.0	5	0.30	0.050	Low	0.086
42	DESERT	0.075	99.9	Dry	25.0		0.35	0.030	Low	0.057
	VLDR	0.000	0.1	Normal	30.0	5	0.30	0.050	Low	0.096
45	DESERT	0.021	33.4	Dry	25.0		0.35	0.030	Low	0.065
	MDR	0.041	66.6	Normal	50.0	30	0.25	0.050	Low	0.060
46	DESERT	0.040	65.5	Dry	25.0		0.35	0.030	Low	0.061
	MDR	0.021	34.5	Normal	50.0	30	0.25	0.050	Low	0.064
47	MDR	0.039	100.0	Normal	50.0	30	0.25	0.050	Low	0.061
48	MDR	0.025	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
49	MDR	0.024	100.0	Normal	50.0	30	0.25	0.050	Low	0.064
50	MDR	0.028	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
51	MDR	0.012	100.0	Normal	50.0	30	0.25	0.050	Low	0.068
52	MDR	0.043	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
53R	DESERT	0.022	31.8	Dry	25.0		0.35	0.030	Low	0.064
	MDR	0.047	68.2	Normal	50.0	30	0.25	0.050	Low	0.060
54R	MDR	0.021	100.0	Normal	50.0	30	0.25	0.050	Low	0.064
55	DESERT	0.049	89.4	Dry	25.0		0.35	0.030	Low	0.059
	MDR	0.006	10.6	Normal	50.0	30	0.25	0.050	Low	0.072

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
56R	MDR	0.012	100.0	Normal	50.0	30	0.25	0.050	Low	0.068
57R	MDR	0.008	100.0	Normal	50.0	30	0.25	0.050	Low	0.071
87	COMM	0.002	7.2	Normal	75.0	80	0.10	0.020	Min	0.039
	DESERT	0.013	45.5	Dry	25.0		0.35	0.030	Low	0.068
	LDR	0.000	0.4	Normal	50.0	15	0.30	0.050	Low	0.096
	VLDR	0.013	46.9	Normal	30.0	5	0.30	0.050	Low	0.067
A07C	AGR	0.010	5.7	Wet	85.0		0.50	0.100	Hi	0.130
	DESERT	0.134	76.8	Dry	25.0		0.35	0.030	Low	0.053
	MDR	0.029	16.5	Normal	50.0	30	0.25	0.050	Low	0.063
	MHR	0.001	0.7	Normal	50.0	60	0.25	0.050	Low	0.082
	OPEN	0.001	0.3	Dry	10.0		0.10	0.020	Min	0.043
A07D	AGR	0.215	93.8	Wet	85.0		0.50	0.100	Hi	0.097
	DESERT	0.008	3.4	Dry	25.0		0.35	0.030	Low	0.070
	INS	0.000		Normal	80.0	75	0.10	0.020	Min	0.047
	MDR	0.006	2.8	Normal	50.0	30	0.25	0.050	Low	0.072
A07E	COMM	0.026	11.3	Normal	75.0	80	0.10	0.020	Min	0.032
	MDR	0.086	38.0	Normal	50.0	30	0.25	0.050	Low	0.056
	MHR	0.110	48.3	Normal	50.0	60	0.25	0.050	Low	0.055
	OPEN	0.006	2.4	Dry	10.0		0.10	0.020	Min	0.037
A07F	COMM	0.012	5.3	Normal	75.0	80	0.10	0.020	Min	0.034
	DESERT	0.000		Dry	25.0		0.35	0.030	Low	0.096
	MDR	0.166	71.4	Normal	50.0	30	0.25	0.050	Low	0.052
	OPEN	0.054	23.3	Dry	10.0		0.10	0.020	Min	0.030
A07G	AGR	0.000		Wet	85.0		0.50	0.100	Hi	0.180
	DESERT	0.025	9.5	Dry	25.0		0.35	0.030	Low	0.064
	IND	0.003	1.0	Normal	60.0	55	0.15	0.030	Min	0.039
	INS	0.001	0.3	Normal	80.0	75	0.10	0.020	Min	0.041
	MDR	0.211	81.6	Normal	50.0	30	0.25	0.050	Low	0.051

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
	MFR	0.004	1.4	Normal	50.0	45	0.25	0.050	Low	0.075
	MHR	0.001	0.3	Normal	50.0	60	0.25	0.050	Low	0.085
	WATER	0.015	5.9	Wet		100		0.001	Min	0.034
A07H	AGR	0.020	21.7	Wet	85.0		0.50	0.100	Hi	0.122
	DESERT	0.014	15.4	Dry	25.0		0.35	0.030	Low	0.067
	INS	0.059	62.8	Normal	80.0	75	0.10	0.020	Min	0.030
	MDR	0.000	0.1	Normal	50.0	30	0.25	0.050	Low	0.096
A08A	DESERT	0.004	2.8	Dry	25.0		0.35	0.030	Low	0.075
	MDR	0.083	60.0	Normal	50.0	30	0.25	0.050	Low	0.056
	OPEN	0.051	37.2	Dry	10.0		0.10	0.020	Min	0.031
A08B	AGR	0.002	1.7	Wet	85.0		0.50	0.100	Hi	0.149
	INS	0.024	24.1	Normal	80.0	75	0.10	0.020	Min	0.033
	MDR	0.054	54.8	Normal	50.0	30	0.25	0.050	Low	0.059
	OPEN	0.019	19.4	Dry	10.0		0.10	0.020	Min	0.033
A09	DESERT	0.073	41.6	Dry	25.0		0.35	0.030	Low	0.057
	IND	0.062	35.0	Normal	60.0	55	0.15	0.030	Min	0.030
	LDR	0.001	0.6	Normal	50.0	15	0.30	0.050	Low	0.082
	MDR	0.019	10.5	Normal	50.0	30	0.25	0.050	Low	0.065
	OPEN	0.021	12.2	Dry	10.0		0.10	0.020	Min	0.033
A09A	AGR	0.038	45.0	Wet	85.0		0.50	0.100	Hi	0.115
	COMM	0.026	31.1	Normal	75.0	80	0.10	0.020	Min	0.032
	DESERT	0.001	1.2	Dry	25.0		0.35	0.030	Low	0.083
	IND	0.004	5.2	Normal	60.0	55	0.15	0.030	Min	0.037
	INS	0.011	13.1	Normal	80.0	75	0.10	0.020	Min	0.035
	LDR	0.003	3.3	Normal	50.0	15	0.30	0.050	Low	0.077
	MDR	0.000	0.1	Normal	50.0	30	0.25	0.050	Low	0.096
	OPEN	0.001	1.1	Dry	10.0		0.10	0.020	Min	0.041
A09B	AGR	0.001	1.9	Wet	85.0		0.50	0.100	Hi	0.157

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
	DESERT	0.001	3.1	Dry	25.0		0.35	0.030	Low	0.081
	IND	0.001	1.4	Normal	60.0	55	0.15	0.030	Min	0.043
	INS	0.039	93.5	Normal	80.0	75	0.10	0.020	Min	0.031
A09C	AGR	0.005	6.6	Wet	85.0		0.50	0.100	Hi	0.138
	DESERT	0.064	87.7	Dry	25.0		0.35	0.030	Low	0.058
	INS	0.004	5.8	Normal	80.0	75	0.10	0.020	Min	0.037
A09D	DESERT	0.009	3.7	Dry	25.0		0.35	0.030	Low	0.069
	INS	0.000	0.2	Normal	80.0	75	0.10	0.020	Min	0.044
	MDR	0.211	83.0	Normal	50.0	30	0.25	0.050	Low	0.051
	MFR	0.003	1.0	Normal	50.0	45	0.25	0.050	Low	0.077
	OPEN	0.005	1.9	Dry	10.0		0.10	0.020	Min	0.037
	VACANT	0.012	4.7	Dry	15.0	5	0.10	0.030	Min	0.035
	WATER	0.014	5.6	Wet		100		0.001	Min	0.034
A09E	COMM	0.007	4.5	Normal	75.0	80	0.10	0.020	Min	0.036
	DESERT	0.001	0.7	Dry	25.0		0.35	0.030	Low	0.083
	MDR	0.120	80.6	Normal	50.0	30	0.25	0.050	Low	0.054
	OPEN	0.003	2.1	Dry	10.0		0.10	0.020	Min	0.038
	VACANT	0.009	6.0	Dry	15.0	5	0.10	0.030	Min	0.035
	WATER	0.009	6.1	Wet		100		0.001	Min	0.035
A09F	COMM	0.033	8.9	Normal	75.0	80	0.10	0.020	Min	0.032
	INS	0.014	3.9	Normal	80.0	75	0.10	0.020	Min	0.034
	MDR	0.201	55.1	Normal	50.0	30	0.25	0.050	Low	0.051
	MFR	0.061	16.8	Normal	50.0	45	0.25	0.050	Low	0.058
	OPEN	0.029	8.0	Dry	10.0		0.10	0.020	Min	0.032
	VACANT	0.027	7.4	Dry	15.0	5	0.10	0.030	Min	0.032
A09GA	COMM	0.073	99.7	Normal	75.0	80	0.10	0.020	Min	0.030
	MDR	0.000	0.3	Normal	50.0	30	0.25	0.050	Low	0.092
A09GB	COMM	0.005	10.0	Normal	75.0	80	0.10	0.020	Min	0.037

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A09GB	MDR	0.046	89.6	Normal	50.0	30	0.25	0.050	Low	0.060
	OPEN	0.000	0.4	Dry	10.0		0.10	0.020	Min	0.046
A09H	COMM	0.008	3.2	Normal	75.0	80	0.10	0.020	Min	0.036
	DESERT	0.001	0.4	Dry	25.0		0.35	0.030	Low	0.083
	LDR	0.003	1.4	Normal	50.0	15	0.30	0.050	Low	0.076
	MDR	0.218	91.8	Normal	50.0	30	0.25	0.050	Low	0.051
	MFR	0.001	0.4	Normal	50.0	45	0.25	0.050	Low	0.083
	OPEN	0.000	0.1	Dry	10.0		0.10	0.020	Min	0.046
	VACANT	0.007	2.7	Dry	15.0	5	0.10	0.030	Min	0.036
A09I	LDR	0.001	0.8	Normal	50.0	15	0.30	0.050	Low	0.083
	MDR	0.122	96.3	Normal	50.0	30	0.25	0.050	Low	0.054
	OPEN	0.004	2.9	Dry	10.0		0.10	0.020	Min	0.038
A09IH	LDR	0.013	14.6	Normal	50.0	15	0.30	0.050	Low	0.067
	MDR	0.073	80.4	Normal	50.0	30	0.25	0.050	Low	0.057
	VACANT	0.005	5.0	Dry	15.0	5	0.10	0.030	Min	0.037
A09J	DESERT	0.001	0.6	Dry	25.0		0.35	0.030	Low	0.083
	MDR	0.167	99.4	Normal	50.0	30	0.25	0.050	Low	0.052
A09K	COMM	0.000	0.1	Normal	75.0	80	0.10	0.020	Min	0.044
	DESERT	0.384	93.6	Dry	25.0		0.35	0.030	Low	0.047
	MDR	0.025	6.2	Normal	50.0	30	0.25	0.050	Low	0.063
	VLDR	0.000	0.1	Normal	30.0	5	0.30	0.050	Low	0.088
A09L	IND	0.000	0.1	Normal	60.0	55	0.15	0.030	Min	0.046
	MDR	0.119	87.2	Normal	50.0	30	0.25	0.050	Low	0.054
	OPEN	0.017	12.7	Dry	10.0		0.10	0.020	Min	0.033
A09M	COMM	0.015	6.0	Normal	75.0	80	0.10	0.020	Min	0.034
	DESERT	0.083	33.2	Dry	25.0		0.35	0.030	Low	0.056
	MDR	0.142	56.8	Normal	50.0	30	0.25	0.050	Low	0.053

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A09M	VLDR	0.010	3.9	Normal	30.0	5	0.30	0.050	Low	0.069
A09N	DESERT	0.018	16.3	Dry	25.0		0.35	0.030	Low	0.065
	MDR	0.092	83.7	Normal	50.0	30	0.25	0.050	Low	0.056
A09O	DESERT	0.086	44.5	Dry	25.0		0.35	0.030	Low	0.056
	LDR	0.068	35.0	Normal	50.0	15	0.30	0.050	Low	0.057
	VLDR	0.040	20.5	Normal	30.0	5	0.30	0.050	Low	0.061
A09P	DESERT	0.083	44.1	Dry	25.0		0.35	0.030	Low	0.056
	LDR	0.053	28.5	Normal	50.0	15	0.30	0.050	Low	0.059
	VLDR	0.051	27.4	Normal	30.0	5	0.30	0.050	Low	0.059
A09QA	COMM	0.001	1.1	Normal	75.0	80	0.10	0.020	Min	0.041
	DESERT	0.083	90.0	Dry	25.0		0.35	0.030	Low	0.056
	LDR	0.008	9.0	Normal	50.0	15	0.30	0.050	Low	0.070
A09QB	DESERT	0.003	1.7	Dry	25.0		0.35	0.030	Low	0.077
	VLDR	0.142	98.3	Normal	30.0	5	0.30	0.050	Low	0.053
A09R	COMM	0.000	0.1	Normal	75.0	80	0.10	0.020	Min	0.046
	DESERT	0.131	91.4	Dry	25.0		0.35	0.030	Low	0.054
	LDR	0.012	8.5	Normal	50.0	15	0.30	0.050	Low	0.068
A09S	COMM	0.063	86.3	Normal	75.0	80	0.10	0.020	Min	0.030
	DESERT	0.001	1.4	Dry	25.0		0.35	0.030	Low	0.083
	LDR	0.009	12.3	Normal	50.0	15	0.30	0.050	Low	0.070
A09T	COMM	0.001	0.5	Normal	75.0	80	0.10	0.020	Min	0.041
	DESERT	0.109	59.5	Dry	25.0		0.35	0.030	Low	0.055
	VLDR	0.073	40.0	Normal	30.0	5	0.30	0.050	Low	0.057
A09U	DESERT	0.080	45.6	Dry	25.0		0.35	0.030	Low	0.057
	VLDR	0.095	54.4	Normal	30.0	5	0.30	0.050	Low	0.055
A10	DESERT	0.192	89.5	Dry	25.0		0.35	0.030	Low	0.051

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A10	IND	0.002	0.7	Normal	60.0	55	0.15	0.030	Min	0.040
	LDR	0.015	6.8	Normal	50.0	15	0.30	0.050	Low	0.067
	MDR	0.006	2.9	Normal	50.0	30	0.25	0.050	Low	0.072
A10A	DESERT	0.116	61.4	Dry	25.0		0.35	0.030	Low	0.054
	VLDR	0.073	38.6	Normal	30.0	5	0.30	0.050	Low	0.057
A11A	COMM	0.123	41.1	Normal	75.0	80	0.10	0.020	Min	0.028
	DESERT	0.087	29.1	Dry	25.0		0.35	0.030	Low	0.056
	LDR	0.000	0.1	Normal	50.0	15	0.30	0.050	Low	0.092
	MDR	0.001	0.3	Normal	50.0	30	0.25	0.050	Low	0.083
	VLDR	0.088	29.5	Normal	30.0	5	0.30	0.050	Low	0.056
A11EA	DESERT	0.085	58.8	Dry	25.0		0.35	0.030	Low	0.056
	VLDR	0.059	41.3	Normal	30.0	5	0.30	0.050	Low	0.058
A11EB	COMM	0.008	4.4	Normal	75.0	80	0.10	0.020	Min	0.035
	DESERT	0.174	91.8	Dry	25.0		0.35	0.030	Low	0.052
	MDR	0.002	0.9	Normal	50.0	30	0.25	0.050	Low	0.079
	VLDR	0.005	2.8	Normal	30.0	5	0.30	0.050	Low	0.073
A11F	DESERT	0.189	56.6	Dry	25.0		0.35	0.030	Low	0.051
	MDR	0.001	0.2	Normal	50.0	30	0.25	0.050	Low	0.086
	VLDR	0.144	43.2	Normal	30.0	5	0.30	0.050	Low	0.053
A11G	DESERT	0.017	28.6	Dry	25.0		0.35	0.030	Low	0.066
	MDR	0.004	6.3	Normal	50.0	30	0.25	0.050	Low	0.075
	VLDR	0.039	65.1	Normal	30.0	5	0.30	0.050	Low	0.061
A11I	DESERT	0.005	3.1	Dry	25.0		0.35	0.030	Low	0.073
	MDR	0.144	94.0	Normal	50.0	30	0.25	0.050	Low	0.053
	VLDR	0.005	2.9	Normal	30.0	5	0.30	0.050	Low	0.074
A11J	DESERT	0.042	37.2	Dry	25.0		0.35	0.030	Low	0.060
	MDR	0.067	59.9	Normal	50.0	30	0.25	0.050	Low	0.058

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A11J	VLDR	0.003	2.9	Normal	30.0	5	0.30	0.050	Low	0.076
A11KA	DESERT	0.014	17.7	Dry	25.0		0.35	0.030	Low	0.067
	MDR	0.067	82.3	Normal	50.0	30	0.25	0.050	Low	0.058
A11KB	MDR	0.107	100.0	Normal	50.0	30	0.25	0.050	Low	0.055
A11KC	DESERT	0.015	11.1	Dry	25.0		0.35	0.030	Low	0.067
	MDR	0.103	78.3	Normal	50.0	30	0.25	0.050	Low	0.055
	VLDR	0.014	10.7	Normal	30.0	5	0.30	0.050	Low	0.067
A11L	DESERT	0.051	19.2	Dry	25.0		0.35	0.030	Low	0.059
	MDR	0.209	78.9	Normal	50.0	30	0.25	0.050	Low	0.051
	VLDR	0.005	1.9	Normal	30.0	5	0.30	0.050	Low	0.073
A11MA	DESERT	0.053	72.2	Dry	25.0		0.35	0.030	Low	0.059
	MDR	0.020	27.8	Normal	50.0	30	0.25	0.050	Low	0.065
A11MB	DESERT	0.001	0.5	Dry	25.0		0.35	0.030	Low	0.083
	MDR	0.190	97.8	Normal	50.0	30	0.25	0.050	Low	0.051
	VLDR	0.003	1.7	Normal	30.0	5	0.30	0.050	Low	0.076
A11NA	DESERT	0.028	37.3	Dry	25.0		0.35	0.030	Low	0.063
	MDR	0.048	62.7	Normal	50.0	30	0.25	0.050	Low	0.060
A11O	DESERT	0.015	27.1	Dry	25.0		0.35	0.030	Low	0.066
	MDR	0.041	72.9	Normal	50.0	30	0.25	0.050	Low	0.061
A99R	DESERT	0.022	58.5	Dry	25.0		0.35	0.030	Low	0.064
	MDR	0.015	39.3	Normal	50.0	30	0.25	0.050	Low	0.067
	OPEN	0.001	2.2	Dry	10.0		0.10	0.020	Min	0.042
A99S	DESERT	0.077	98.7	Dry	25.0		0.35	0.030	Low	0.057
	OPEN	0.001	1.3	Dry	10.0		0.10	0.020	Min	0.041
A99T	DESERT	0.003	9.4	Dry	25.0		0.35	0.030	Low	0.077
	IND	0.021	72.1	Normal	60.0	55	0.15	0.030	Min	0.033

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
A99T	LDR	0.006	18.5	Normal	50.0	15	0.30	0.050	Low	0.072
A99U	COMM	0.001	1.4	Normal	75.0	80	0.10	0.020	Min	0.041
	DESERT	0.034	46.8	Dry	25.0		0.35	0.030	Low	0.062
	IND	0.036	50.4	Normal	60.0	55	0.15	0.030	Min	0.031
	LDR	0.001	1.4	Normal	50.0	15	0.30	0.050	Low	0.083
A99V	DESERT	0.202	97.7	Dry	25.0		0.35	0.030	Low	0.051
	MDR	0.004	2.1	Normal	50.0	30	0.25	0.050	Low	0.074
	OPEN	0.000	0.2	Dry	10.0		0.10	0.020	Min	0.044
A99W	DESERT	0.088	40.7	Dry	25.0		0.35	0.030	Low	0.056
	IND	0.004	1.8	Normal	60.0	55	0.15	0.030	Min	0.038
	INS	0.014	6.7	Normal	80.0	75	0.10	0.020	Min	0.034
	MDR	0.098	45.5	Normal	50.0	30	0.25	0.050	Low	0.055
	OPEN	0.012	5.4	Dry	10.0		0.10	0.020	Min	0.035
A99X	DESERT	0.078	29.6	Dry	25.0		0.35	0.030	Low	0.057
	IND	0.186	70.4	Normal	60.0	55	0.15	0.030	Min	0.027
A99YA	DESERT	0.097	93.7	Dry	25.0		0.35	0.030	Low	0.055
	MDR	0.001	1.0	Normal	50.0	30	0.25	0.050	Low	0.083
	VLDR	0.006	5.3	Normal	30.0	5	0.30	0.050	Low	0.072
A99YB	DESERT	0.148	86.8	Dry	25.0		0.35	0.030	Low	0.053
	MDR	0.023	13.2	Normal	50.0	30	0.25	0.050	Low	0.064
CBA	DESERT	0.006	94.1	Dry	25.0		0.35	0.030	Low	0.072
	MDR	0.000	5.9	Normal	50.0	30	0.25	0.050	Low	0.088
CBB	DESERT	0.016	91.9	Dry	25.0		0.35	0.030	Low	0.066
	MDR	0.001	8.1	Normal	50.0	30	0.25	0.050	Low	0.081
CBH	DESERT	0.012	100.0	Dry	25.0		0.35	0.030	Low	0.068
CBJ	DESERT	0.015	100.0	Dry	25.0		0.35	0.030	Low	0.066

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
CBK	DESERT	0.050	94.7	Dry	25.0		0.35	0.030	Low	0.059
	MDR	0.003	5.3	Normal	50.0	30	0.25	0.050	Low	0.077
CBL	DESERT	0.008	29.7	Dry	25.0		0.35	0.030	Low	0.070
	MDR	0.019	70.3	Normal	50.0	30	0.25	0.050	Low	0.065
DV1	DESERT	0.001	1.1	Dry	25.0		0.35	0.030	Low	0.083
	LDR	0.001	1.1	Normal	50.0	15	0.30	0.050	Low	0.083
	MDR	0.088	93.9	Normal	50.0	30	0.25	0.050	Low	0.056
	VACANT	0.004	4.0	Dry	15.0	5	0.10	0.030	Min	0.038
DV10	DESERT	0.011	4.9	Dry	25.0		0.35	0.030	Low	0.069
	LDR	0.000	0.1	Normal	50.0	15	0.30	0.050	Low	0.090
	MDR	0.001	0.5	Normal	50.0	30	0.25	0.050	Low	0.083
	VACANT	0.001	0.5	Dry	15.0	5	0.10	0.030	Min	0.041
	VLDR	0.200	94.0	Normal	30.0	5	0.30	0.050	Low	0.051
DV11	COMM	0.033	23.0	Normal	75.0	80	0.10	0.020	Min	0.032
	MDR	0.111	76.8	Normal	50.0	30	0.25	0.050	Low	0.055
	VLDR	0.000	0.1	Normal	30.0	5	0.30	0.050	Low	0.092
DV2	MDR	0.032	100.0	Normal	50.0	30	0.25	0.050	Low	0.062
DV3	MDR	0.050	100.0	Normal	50.0	30	0.25	0.050	Low	0.059
DV4	DESERT	0.000	0.7	Dry	25.0		0.35	0.030	Low	0.088
	MDR	0.059	99.3	Normal	50.0	30	0.25	0.050	Low	0.058
DV5	MDR	0.029	100.0	Normal	50.0	30	0.25	0.050	Low	0.063
DV6	MDR	0.090	100.0	Normal	50.0	30	0.25	0.050	Low	0.056
DV7	LDR	0.000	0.1	Normal	50.0	15	0.30	0.050	Low	0.096
	MDR	0.079	59.8	Normal	50.0	30	0.25	0.050	Low	0.057
	VACANT	0.032	24.6	Dry	15.0	5	0.10	0.030	Min	0.032
	VLDR	0.021	15.6	Normal	30.0	5	0.30	0.050	Low	0.065

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
DV8	MDR	0.072	77.4	Normal	50.0	30	0.25	0.050	Low	0.057
	VLDR	0.021	22.6	Normal	30.0	5	0.30	0.050	Low	0.064
DV9	COMM	0.001	2.3	Normal	75.0	80	0.10	0.020	Min	0.041
	MDR	0.001	1.4	Normal	50.0	30	0.25	0.050	Low	0.086
	VLDR	0.041	96.3	Normal	30.0	5	0.30	0.050	Low	0.060
E1	DESERT	0.010	67.6	Dry	25.0		0.35	0.030	Low	0.069
	MDR	0.000	2.1	Normal	50.0	30	0.25	0.050	Low	0.090
	VLDR	0.004	30.3	Normal	30.0	5	0.30	0.050	Low	0.074
E2	VLDR	0.016	100.0	Normal	30.0	5	0.30	0.050	Low	0.066
E3	DESERT	0.024	29.3	Dry	25.0		0.35	0.030	Low	0.064
	MDR	0.003	3.2	Normal	50.0	30	0.25	0.050	Low	0.077
	VLDR	0.055	67.5	Normal	30.0	5	0.30	0.050	Low	0.059
E4	COMM	0.001	2.5	Normal	75.0	80	0.10	0.020	Min	0.041
	DESERT	0.034	83.5	Dry	25.0		0.35	0.030	Low	0.062
	MDR	0.000	0.2	Normal	50.0	30	0.25	0.050	Low	0.096
	VLDR	0.006	13.8	Normal	30.0	5	0.30	0.050	Low	0.072
HV1	COMM	0.001	12.5	Normal	75.0	80	0.10	0.020	Min	0.041
	DESERT	0.003	35.0	Dry	25.0		0.35	0.030	Low	0.077
	LDR	0.000	5.0	Normal	50.0	15	0.30	0.050	Low	0.088
	MDR	0.004	47.5	Normal	50.0	30	0.25	0.050	Low	0.075
HV2	DESERT	0.001	3.9	Dry	25.0		0.35	0.030	Low	0.082
	MDR	0.030	96.1	Normal	50.0	30	0.25	0.050	Low	0.062
LACAI	DESERT	0.008	21.8	Dry	25.0		0.35	0.030	Low	0.071
	VLDR	0.027	78.2	Normal	30.0	5	0.30	0.050	Low	0.063
N11A	COMM	0.047	5.1	Normal	75.0	80	0.10	0.020	Min	0.031
	INS	0.009	1.0	Normal	80.0	75	0.10	0.020	Min	0.035
	MDR	0.482	51.9	Normal	50.0	30	0.25	0.050	Low	0.046

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N11A	MFR	0.186	20.0	Normal	50.0	45	0.25	0.050	Low	0.051
	OPEN	0.205	22.0	Dry	10.0		0.10	0.020	Min	0.027
N11C	INS	0.000	0.2	Normal	80.0	75	0.10	0.020	Min	0.044
	MDR	0.205	80.3	Normal	50.0	30	0.25	0.050	Low	0.051
	OPEN	0.050	19.5	Dry	10.0		0.10	0.020	Min	0.031
N11DA	DESERT	0.001	0.3	Dry	25.0		0.35	0.030	Low	0.084
	MDR	0.256	99.3	Normal	50.0	30	0.25	0.050	Low	0.050
	OPEN	0.001	0.4	Dry	10.0		0.10	0.020	Min	0.041
N11DB	MDR	0.254	99.6	Normal	50.0	30	0.25	0.050	Low	0.050
	OPEN	0.001	0.4	Dry	10.0		0.10	0.020	Min	0.041
N11EA	INS	0.022	8.3	Normal	80.0	75	0.10	0.020	Min	0.033
	MDR	0.216	83.2	Normal	50.0	30	0.25	0.050	Low	0.051
	OPEN	0.021	8.1	Dry	10.0		0.10	0.020	Min	0.033
	VLDR	0.001	0.4	Normal	30.0	5	0.30	0.050	Low	0.083
N11EB	MDR	0.229	99.4	Normal	50.0	30	0.25	0.050	Low	0.050
	OPEN	0.001	0.6	Dry	10.0		0.10	0.020	Min	0.040
N11FA	COMM	0.006	3.2	Normal	75.0	80	0.10	0.020	Min	0.036
	DESERT	0.001	0.7	Dry	25.0		0.35	0.030	Low	0.082
	INS	0.017	9.4	Normal	80.0	75	0.10	0.020	Min	0.034
	MDR	0.148	82.0	Normal	50.0	30	0.25	0.050	Low	0.053
	OPEN	0.009	4.7	Dry	10.0		0.10	0.020	Min	0.035
N11FB	DESERT	0.001	0.5	Dry	25.0		0.35	0.030	Low	0.086
	INS	0.005	4.1	Normal	80.0	75	0.10	0.020	Min	0.037
	MDR	0.109	90.0	Normal	50.0	30	0.25	0.050	Low	0.055
	OPEN	0.007	5.5	Dry	10.0		0.10	0.020	Min	0.036
N11G	DESERT	0.523	99.9	Dry	25.0		0.35	0.030	Low	0.045
	LDR	0.000	0.1	Normal	50.0	15	0.30	0.050	Low	0.088

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N11G	VLDR	0.000		Normal	30.0	5	0.30	0.050	Low	0.092
N11H	DESERT	0.418	99.8	Dry	25.0		0.35	0.030	Low	0.047
	MDR	0.001	0.2	Normal	50.0	30	0.25	0.050	Low	0.084
	VLDR	0.000		Normal	30.0	5	0.30	0.050	Low	0.096
N11J	DESERT	0.004	1.8	Dry	25.0		0.35	0.030	Low	0.074
	LDR	0.189	77.5	Normal	50.0	15	0.30	0.050	Low	0.051
	VLDR	0.050	20.7	Normal	30.0	5	0.30	0.050	Low	0.059
N11K	COMM	0.001	0.4	Normal	75.0	80	0.10	0.020	Min	0.043
	DESERT	0.001	0.3	Dry	25.0		0.35	0.030	Low	0.087
	LDR	0.066	39.5	Normal	50.0	15	0.30	0.050	Low	0.058
	MDR	0.001	0.6	Normal	50.0	30	0.25	0.050	Low	0.083
	VLDR	0.100	59.3	Normal	30.0	5	0.30	0.050	Low	0.055
N11L2	LDR	0.010	98.1	Normal	50.0	15	0.30	0.050	Low	0.069
	MDR	0.000	1.0	Normal	50.0	30	0.25	0.050	Low	0.096
	VACANT	0.000	1.0	Dry	15.0	5	0.10	0.030	Min	0.047
N11L3	DESERT	0.001	2.8	Dry	25.0		0.35	0.030	Low	0.082
	LDR	0.038	94.5	Normal	50.0	15	0.30	0.050	Low	0.061
	VACANT	0.001	2.5	Dry	15.0	5	0.10	0.030	Min	0.041
	VLDR	0.000	0.3	Normal	30.0	5	0.30	0.050	Low	0.096
N11L3A	COMM	0.001	5.4	Normal	75.0	80	0.10	0.020	Min	0.040
	DESERT	0.000	0.8	Dry	25.0		0.35	0.030	Low	0.092
	LDR	0.001	3.9	Normal	50.0	15	0.30	0.050	Low	0.083
	VLDR	0.023	89.9	Normal	30.0	5	0.30	0.050	Low	0.064
N11L4	DESERT	0.003	25.5	Dry	25.0		0.35	0.030	Low	0.077
	LDR	0.007	65.1	Normal	50.0	15	0.30	0.050	Low	0.071
	VLDR	0.001	9.4	Normal	30.0	5	0.30	0.050	Low	0.083
N11L5	LDR	0.033	76.4	Normal	50.0	15	0.30	0.050	Low	0.062

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N11L5	MDR	0.001	2.3	Normal	50.0	30	0.25	0.050	Low	0.083
	VACANT	0.001	2.3	Dry	15.0	5	0.10	0.030	Min	0.041
	VLDR	0.008	19.0	Normal	30.0	5	0.30	0.050	Low	0.070
N11L5A	DESERT	0.001	1.6	Dry	25.0		0.35	0.030	Low	0.085
	IND	0.001	2.7	Normal	60.0	55	0.15	0.030	Min	0.041
	LDR	0.002	3.4	Normal	50.0	15	0.30	0.050	Low	0.080
	VLDR	0.041	92.4	Normal	30.0	5	0.30	0.050	Low	0.060
N11M	DESERT	0.098	98.3	Dry	25.0		0.35	0.030	Low	0.055
	LDR	0.002	1.7	Normal	50.0	15	0.30	0.050	Low	0.079
N11NA	DESERT	0.023	95.7	Dry	25.0		0.35	0.030	Low	0.064
	VLDR	0.001	4.3	Normal	30.0	5	0.30	0.050	Low	0.083
N11NB	DESERT	0.023	16.3	Dry	25.0		0.35	0.030	Low	0.064
	LDR	0.001	0.4	Normal	50.0	15	0.30	0.050	Low	0.086
	VLDR	0.116	83.3	Normal	30.0	5	0.30	0.050	Low	0.054
N11NC	DESERT	0.067	39.3	Dry	25.0		0.35	0.030	Low	0.058
	IND	0.006	3.7	Normal	60.0	55	0.15	0.030	Min	0.036
	LDR	0.045	26.1	Normal	50.0	15	0.30	0.050	Low	0.060
	VLDR	0.053	30.9	Normal	30.0	5	0.30	0.050	Low	0.059
N11ND	COMM	0.003	4.9	Normal	75.0	80	0.10	0.020	Min	0.039
	LDR	0.019	35.1	Normal	50.0	15	0.30	0.050	Low	0.065
	MDR	0.000	0.2	Normal	50.0	30	0.25	0.050	Low	0.096
	VLDR	0.032	59.8	Normal	30.0	5	0.30	0.050	Low	0.062
N11O	DESERT	0.054	100.0	Dry	25.0		0.35	0.030	Low	0.059
N11P1	DESERT	0.064	99.2	Dry	25.0		0.35	0.030	Low	0.058
	LDR	0.000	0.6	Normal	50.0	15	0.30	0.050	Low	0.088
	VLDR	0.000	0.2	Normal	30.0	5	0.30	0.050	Low	0.096
N11P2	DESERT	0.061	96.2	Dry	25.0		0.35	0.030	Low	0.058

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N11P2	VLDR	0.002	3.8	Normal	30.0	5	0.30	0.050	Low	0.077
N11P3	VLDR	0.041	100.0	Normal	30.0	5	0.30	0.050	Low	0.060
N11P4	DESERT	0.009	18.6	Dry	25.0		0.35	0.030	Low	0.069
	VLDR	0.041	81.4	Normal	30.0	5	0.30	0.050	Low	0.060
N11P5	DESERT	0.027	100.0	Dry	25.0		0.35	0.030	Low	0.063
N11P6	DESERT	0.159	100.0	Dry	25.0		0.35	0.030	Low	0.052
N11P7	DESERT	0.060	100.0	Dry	25.0		0.35	0.030	Low	0.058
N11P8	DESERT	0.043	100.0	Dry	25.0		0.35	0.030	Low	0.060
N11P9	DESERT	0.043	100.0	Dry	25.0		0.35	0.030	Low	0.060
N20	COMM	0.000	0.1	Normal	75.0	80	0.10	0.020	Min	0.044
	DESERT	0.016	4.6	Dry	25.0		0.35	0.030	Low	0.066
	FWY	0.006	1.7	Normal	80.0	95	0.05	0.020	Low	0.072
	IND	0.032	8.9	Normal	60.0	55	0.15	0.030	Min	0.032
	INS	0.036	10.0	Normal	80.0	75	0.10	0.020	Min	0.032
	MDR	0.005	1.3	Normal	50.0	30	0.25	0.050	Low	0.074
	MFR	0.100	28.2	Normal	50.0	45	0.25	0.050	Low	0.055
	OPEN	0.058	16.2	Dry	10.0		0.10	0.020	Min	0.030
	VACANT	0.019	5.3	Dry	15.0	5	0.10	0.030	Min	0.033
	WATER	0.084	23.7	Wet		100		0.001	Min	0.029
N21	AGR	0.109	17.5	Wet	85.0		0.50	0.100	Hi	0.104
	COMM	0.130	20.8	Normal	75.0	80	0.10	0.020	Min	0.028
	DESERT	0.055	8.9	Dry	25.0		0.35	0.030	Low	0.059
	FWY	0.006	0.9	Normal	80.0	95	0.05	0.020	Low	0.072
	IND	0.003	0.5	Normal	60.0	55	0.15	0.030	Min	0.038
	INS	0.090	14.5	Normal	80.0	75	0.10	0.020	Min	0.029
	LDR	0.016	2.5	Normal	50.0	15	0.30	0.050	Low	0.066
	MDR	0.110	17.7	Normal	50.0	30	0.25	0.050	Low	0.055

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N21	OPEN	0.040	6.4	Dry	10.0		0.10	0.020	Min	0.031
	WATER	0.064	10.2	Wet		100		0.001	Min	0.030
N21C	COMM	0.001	0.3	Normal	75.0	80	0.10	0.020	Min	0.041
	DESERT	0.004	1.0	Dry	25.0		0.35	0.030	Low	0.074
	INS	0.017	4.2	Normal	80.0	75	0.10	0.020	Min	0.034
	LDR	0.001	0.2	Normal	50.0	15	0.30	0.050	Low	0.086
	MDR	0.364	92.2	Normal	50.0	30	0.25	0.050	Low	0.047
	MFR	0.000	0.1	Normal	50.0	45	0.25	0.050	Low	0.090
	OPEN	0.007	1.7	Dry	10.0		0.10	0.020	Min	0.036
	WATER	0.002	0.5	Wet		100		0.001	Min	0.040
N21D	MDR	0.053	100.0	Normal	50.0	30	0.25	0.050	Low	0.059
N21E	LDR	0.008	12.6	Normal	50.0	15	0.30	0.050	Low	0.070
	MDR	0.055	85.8	Normal	50.0	30	0.25	0.050	Low	0.059
	VLDR	0.001	1.6	Normal	30.0	5	0.30	0.050	Low	0.083
N21F	DESERT	0.007	5.3	Dry	25.0		0.35	0.030	Low	0.071
	LDR	0.101	80.6	Normal	50.0	15	0.30	0.050	Low	0.055
	MDR	0.001	0.8	Normal	50.0	30	0.25	0.050	Low	0.083
	VACANT	0.002	1.2	Dry	15.0	5	0.10	0.030	Min	0.040
	VLDR	0.015	12.1	Normal	30.0	5	0.30	0.050	Low	0.066
N21G	LDR	0.062	98.1	Normal	50.0	15	0.30	0.050	Low	0.058
	MDR	0.001	1.9	Normal	50.0	30	0.25	0.050	Low	0.082
N21H	LDR	0.032	97.3	Normal	50.0	15	0.30	0.050	Low	0.062
	MDR	0.001	2.7	Normal	50.0	30	0.25	0.050	Low	0.083
N21I1	COMM	0.001	1.2	Normal	75.0	80	0.10	0.020	Min	0.041
	DESERT	0.003	4.1	Dry	25.0		0.35	0.030	Low	0.075
	LDR	0.011	13.3	Normal	50.0	15	0.30	0.050	Low	0.068
	VLDR	0.068	81.4	Normal	30.0	5	0.30	0.050	Low	0.057

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N21I2	LDR	0.001	0.9	Normal	50.0	15	0.30	0.050	Low	0.087
	VLDR	0.056	99.1	Normal	30.0	5	0.30	0.050	Low	0.059
N21I3	OPEN	0.010	11.3	Dry	10.0		0.10	0.020	Min	0.035
	VACANT	0.065	74.7	Dry	15.0	5	0.10	0.030	Min	0.030
	VLDR	0.012	14.0	Normal	30.0	5	0.30	0.050	Low	0.068
N21I4	VACANT	0.000	0.4	Dry	15.0	5	0.10	0.030	Min	0.047
	VLDR	0.027	99.6	Normal	30.0	5	0.30	0.050	Low	0.063
N21JA	DESERT	0.080	100.0	Dry	25.0		0.35	0.030	Low	0.057
N21JB	DESERT	0.058	34.9	Dry	25.0		0.35	0.030	Low	0.058
	LDR	0.035	20.8	Normal	50.0	15	0.30	0.050	Low	0.062
	VACANT	0.000	0.1	Dry	15.0	5	0.10	0.030	Min	0.046
	VLDR	0.073	44.1	Normal	30.0	5	0.30	0.050	Low	0.057
N21Z	LDR	0.017	15.9	Normal	50.0	15	0.30	0.050	Low	0.066
	OPEN	0.000	0.1	Dry	10.0		0.10	0.020	Min	0.047
	VACANT	0.072	65.9	Dry	15.0	5	0.10	0.030	Min	0.030
	VLDR	0.020	18.1	Normal	30.0	5	0.30	0.050	Low	0.065
N22A	COMM	0.065	21.6	Normal	75.0	80	0.10	0.020	Min	0.030
	INS	0.013	4.2	Normal	80.0	75	0.10	0.020	Min	0.034
	MDR	0.151	50.6	Normal	50.0	30	0.25	0.050	Low	0.053
	MFR	0.021	6.9	Normal	50.0	45	0.25	0.050	Low	0.065
	OPEN	0.033	11.0	Dry	10.0		0.10	0.020	Min	0.032
	VACANT	0.016	5.2	Dry	15.0	5	0.10	0.030	Min	0.034
	VLDR	0.001	0.5	Normal	30.0	5	0.30	0.050	Low	0.081
N22B	MDR	0.175	100.0	Normal	50.0	30	0.25	0.050	Low	0.052
N23	COMM	0.018	4.6	Normal	75.0	80	0.10	0.020	Min	0.033
	DESERT	0.073	18.7	Dry	25.0		0.35	0.030	Low	0.057
	IND	0.001	0.3	Normal	60.0	55	0.15	0.030	Min	0.041

* Custom Value (not default value)

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N23	INS	0.000	0.1	Normal	80.0	75	0.10	0.020	Min	0.044
	MDR	0.297	75.8	Normal	50.0	30	0.25	0.050	Low	0.049
	OPEN	0.001	0.3	Dry	10.0		0.10	0.020	Min	0.041
	WATER	0.001	0.3	Wet		100		0.001	Min	0.041
N24	DESERT	0.093	86.3	Dry	25.0		0.35	0.030	Low	0.056
	IND	0.007	6.3	Normal	60.0	55	0.15	0.030	Min	0.036
	MDR	0.008	7.4	Normal	50.0	30	0.25	0.050	Low	0.070
N24D	DESERT	0.009	10.3	Dry	25.0		0.35	0.030	Low	0.070
	IND	0.047	53.2	Normal	60.0	55	0.15	0.030	Min	0.031
	LDR	0.031	35.0	Normal	50.0	15	0.30	0.050	Low	0.062
	MDR	0.001	1.5	Normal	50.0	30	0.25	0.050	Low	0.081
N24E	DESERT	0.021	99.5	Dry	25.0		0.35	0.030	Low	0.065
	IND	0.000	0.5	Normal	60.0	55	0.15	0.030	Min	0.047
N24F	DESERT	0.044	41.8	Dry	25.0		0.35	0.030	Low	0.060
	LDR	0.061	57.5	Normal	50.0	15	0.30	0.050	Low	0.058
	VACANT	0.000	0.1	Dry	15.0	5	0.10	0.030	Min	0.047
	VLDR	0.001	0.6	Normal	30.0	5	0.30	0.050	Low	0.086
N24G	DESERT	0.260	60.4	Dry	25.0		0.35	0.030	Low	0.049
	LDR	0.092	21.3	Normal	50.0	15	0.30	0.050	Low	0.056
	VACANT	0.012	2.8	Dry	15.0	5	0.10	0.030	Min	0.034
	VLDR	0.067	15.5	Normal	30.0	5	0.30	0.050	Low	0.058
N24H	DESERT	0.220	96.1	Dry	25.0		0.35	0.030	Low	0.050
	MDR	0.009	3.9	Normal	50.0	30	0.25	0.050	Low	0.070
N24I	DESERT	0.297	98.7	Dry	25.0		0.35	0.030	Low	0.049
	MDR	0.004	1.3	Normal	50.0	30	0.25	0.050	Low	0.075
N24J	DESERT	0.119	98.6	Dry	25.0		0.35	0.030	Low	0.054
	MDR	0.002	1.4	Normal	50.0	30	0.25	0.050	Low	0.079

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
N24K	DESERT	0.193	90.7	Dry	25.0		0.35	0.030	Low	0.051
	MDR	0.020	9.3	Normal	50.0	30	0.25	0.050	Low	0.065
N24M	DESERT	0.082	48.7	Dry	25.0		0.35	0.030	Low	0.056
	MDR	0.087	51.3	Normal	50.0	30	0.25	0.050	Low	0.056
N24N	DESERT	0.056	42.8	Dry	25.0		0.35	0.030	Low	0.059
	MDR	0.075	57.2	Normal	50.0	30	0.25	0.050	Low	0.057
N24V	DESERT	0.044	97.1	Dry	25.0		0.35	0.030	Low	0.060
	MDR	0.001	2.9	Normal	50.0	30	0.25	0.050	Low	0.081
N25	DESERT	0.237	96.9	Dry	25.0		0.35	0.030	Low	0.050
	MDR	0.001	0.4	Normal	50.0	30	0.25	0.050	Low	0.083
	VLDR	0.007	2.7	Normal	30.0	5	0.30	0.050	Low	0.071
N26	DESERT	0.040	100.0	Dry	25.0		0.35	0.030	Low	0.061
N27	DESERT	0.235	83.3	Dry	25.0		0.35	0.030	Low	0.050
	FWY	0.022	7.8	Normal	80.0	95	0.05	0.020	Low	0.064
	MDR	0.025	8.9	Normal	50.0	30	0.25	0.050	Low	0.063
P1	DESERT	0.026	89.8	Dry	25.0		0.35	0.030	Low	0.063
	MDR	0.000	0.3	Normal	50.0	30	0.25	0.050	Low	0.096
	VLDR	0.003	9.9	Normal	30.0	5	0.30	0.050	Low	0.076
P10	DESERT	0.000	0.2	Dry	25.0		0.35	0.030	Low	0.096
	MDR	0.052	94.9	Normal	50.0	30	0.25	0.050	Low	0.059
	VLDR	0.003	4.9	Normal	30.0	5	0.30	0.050	Low	0.077
P11	MDR	0.042	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
P12	MDR	0.044	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
P13	DESERT	0.002	3.4	Dry	25.0		0.35	0.030	Low	0.079
	MDR	0.053	90.3	Normal	50.0	30	0.25	0.050	Low	0.059
	VLDR	0.004	6.3	Normal	30.0	5	0.30	0.050	Low	0.075

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
P14	DESERT	0.008	92.6	Dry	25.0		0.35	0.030	Low	0.071
	MDR	0.001	7.4	Normal	50.0	30	0.25	0.050	Low	0.086
P15	DESERT	0.005	83.6	Dry	25.0		0.35	0.030	Low	0.073
	MDR	0.001	16.4	Normal	50.0	30	0.25	0.050	Low	0.083
P2	LDR	0.002	3.5	Normal	50.0	15	0.30	0.050	Low	0.079
	MDR	0.049	96.5	Normal	50.0	30	0.25	0.050	Low	0.059
P25S	DESERT	0.028	100.0	Dry	25.0		0.35	0.030	Low	0.063
P27	DESERT	0.000	0.2	Dry	25.0		0.35	0.030	Low	0.096
	MDR	0.065	99.8	Normal	50.0	30	0.25	0.050	Low	0.058
P27A	DESERT	0.000	2.6	Dry	25.0		0.35	0.030	Low	0.092
	MDR	0.008	97.4	Normal	50.0	30	0.25	0.050	Low	0.071
P27B	DESERT	0.001	7.0	Dry	25.0		0.35	0.030	Low	0.083
	MDR	0.013	93.0	Normal	50.0	30	0.25	0.050	Low	0.067
P28	DESERT	0.001	3.6	Dry	25.0		0.35	0.030	Low	0.083
	MDR	0.027	95.3	Normal	50.0	30	0.25	0.050	Low	0.063
	VLDR	0.000	1.1	Normal	30.0	5	0.30	0.050	Low	0.090
P3	MDR	0.054	100.0	Normal	50.0	30	0.25	0.050	Low	0.059
P4a	MDR	0.039	100.0	Normal	50.0	30	0.25	0.050	Low	0.061
P4b	MDR	0.017	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
P6	MDR	0.070	100.0	Normal	50.0	30	0.25	0.050	Low	0.057
P7	MDR	0.014	100.0	Normal	50.0	30	0.25	0.050	Low	0.067
P8	MDR	0.013	100.0	Normal	50.0	30	0.25	0.050	Low	0.067
P9	MDR	0.045	100.0	Normal	50.0	30	0.25	0.050	Low	0.060
S1	COMM	0.000	0.1	Normal	75.0	80	0.10	0.020	Min	0.047

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
S1	DESERT	0.025	19.7	Dry	25.0		0.35	0.030	Low	0.064
	LDR	0.092	74.2	Normal	50.0	15	0.30	0.050	Low	0.056
	MDR	0.003	2.7	Normal	50.0	30	0.25	0.050	Low	0.075
	VLDR	0.004	3.3	Normal	30.0	5	0.30	0.050	Low	0.074
S2	DESERT	0.010	82.2	Dry	25.0		0.35	0.030	Low	0.069
	MDR	0.001	10.2	Normal	50.0	30	0.25	0.050	Low	0.082
	VLDR	0.001	7.6	Normal	30.0	5	0.30	0.050	Low	0.083
S3	VLDR	0.006	100.0	Normal	30.0	5	0.30	0.050	Low	0.072
S30B	COMM	0.024	6.0	Normal	75.0	80	0.10	0.020	Min	0.033
	IND	0.007	1.6	Normal	60.0	55	0.15	0.030	Min	0.036
	MDR	0.236	59.1	Normal	50.0	30	0.25	0.050	Low	0.050
	MFR	0.009	2.2	Normal	50.0	45	0.25	0.050	Low	0.070
	OPEN	0.124	31.0	Dry	10.0		0.10	0.020	Min	0.028
S30C	COMM	0.053	11.7	Normal	75.0	80	0.10	0.020	Min	0.030
	IND	0.002	0.4	Normal	60.0	55	0.15	0.030	Min	0.040
	MDR	0.397	87.4	Normal	50.0	30	0.25	0.050	Low	0.047
	OPEN	0.002	0.5	Dry	10.0		0.10	0.020	Min	0.039
S30D	COMM	0.001	0.8	Normal	75.0	80	0.10	0.020	Min	0.041
	MDR	0.130	97.7	Normal	50.0	30	0.25	0.050	Low	0.054
	MFR	0.001	0.8	Normal	50.0	45	0.25	0.050	Low	0.083
	OPEN	0.001	0.8	Dry	10.0		0.10	0.020	Min	0.041
S4	DESERT	0.008	55.9	Dry	25.0		0.35	0.030	Low	0.070
	VLDR	0.006	44.1	Normal	30.0	5	0.30	0.050	Low	0.072
SUMMIT	VLDR	0.026	100.0	Normal	30.0	5	0.30	0.050	Low	0.063
WB1	MDR	0.098	85.1	Normal	50.0	30	0.25	0.050	Low	0.055
	OPEN	0.017	14.9	Dry	10.0		0.10	0.020	Min	0.033
WB10	DESERT	0.001	1.0	Dry	25.0		0.35	0.030	Low	0.083

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
WB10	INS	0.003	3.4	Normal	80.0	75	0.10	0.020	Min	0.038
	MDR	0.066	69.1	Normal	50.0	30	0.25	0.050	Low	0.058
	OPEN	0.025	26.5	Dry	10.0		0.10	0.020	Min	0.032
WB2	INS	0.000	0.4	Normal	80.0	75	0.10	0.020	Min	0.044
	MDR	0.058	64.8	Normal	50.0	30	0.25	0.050	Low	0.058
	OPEN	0.031	34.7	Dry	10.0		0.10	0.020	Min	0.032
WB3	MDR	0.001	11.2	Normal	50.0	30	0.25	0.050	Low	0.082
	OPEN	0.009	88.8	Dry	10.0		0.10	0.020	Min	0.035
WB4	DESERT	0.001	0.9	Dry	25.0		0.35	0.030	Low	0.083
	MDR	0.090	82.2	Normal	50.0	30	0.25	0.050	Low	0.056
	OPEN	0.019	16.9	Dry	10.0		0.10	0.020	Min	0.033
WB5	DESERT	0.000	0.1	Dry	25.0		0.35	0.030	Low	0.096
	MDR	0.074	64.9	Normal	50.0	30	0.25	0.050	Low	0.057
	OPEN	0.040	35.0	Dry	10.0		0.10	0.020	Min	0.031
WB6	MDR	0.091	79.0	Normal	50.0	30	0.25	0.050	Low	0.056
	OPEN	0.024	21.0	Dry	10.0		0.10	0.020	Min	0.033
WB7	INS	0.015	33.3	Normal	80.0	75	0.10	0.020	Min	0.034
	MDR	0.013	28.8	Normal	50.0	30	0.25	0.050	Low	0.067
	OPEN	0.017	37.9	Dry	10.0		0.10	0.020	Min	0.034
WB8	COMM	0.018	26.6	Normal	75.0	80	0.10	0.020	Min	0.033
	IND	0.001	1.5	Normal	60.0	55	0.15	0.030	Min	0.041
	MDR	0.049	71.9	Normal	50.0	30	0.25	0.050	Low	0.059
WB9	COMM	0.021	9.5	Normal	75.0	80	0.10	0.020	Min	0.033
	MDR	0.175	80.5	Normal	50.0	30	0.25	0.050	Low	0.052
	OPEN	0.022	10.0	Dry	10.0		0.10	0.020	Min	0.033
A08	DESERT	0.040	52.3	Dry	25.0		0.35	0.030	Low	0.061
	MDR	0.037	47.7	Normal	50.0	30	0.25	0.050	Low	0.061

* Custom Value (not default value)

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin: 01										
S30A	OPEN-2	0.196	36.9	Normal	95.0	2	0.20	0.020	Min	0.027
	MHDR	0.244	46.0	Normal	50.0	40	0.25	0.050	Low	0.050
	MFR	0.067	12.5	Normal	50.0	45	0.25	0.050	Low	0.058
	COM-2	0.024	4.6	Normal	75.0	80	0.10	0.020	Min	0.033

APPENDIX A5

Detention/Retention Basin Volumes

Glendale/Peoria ADMPU Northwest Region Update

Study #	Base Model (Rose Garden) Basin ID	New Model Basin ID	Retention ID	100yr-2-hr Retention Vol (ac-ft)	80% Retention		Detention ID	Detention Volume (ac-ft)
1	N24Q	19					B19	4.5
		19	D19Q	0.40	0.32	ADMPU		
1	N24R	20						
		20	D20Q	0.90	0.72	ADMPU		
1	N24O	21						
1	N24S	22						
		22	D22Q	1.30	1.04	ADMPU		
1	N24P	23					B23	4.25
1	N24T	24						
		24	D24Q	0.60	0.48	ADMPU		
		25						
		27						
		29					B29	6.06
		33					B33	6.06
		33	D33Q	0.10	0.08	ADMPU		
		34					B34	5.42
		34	D34Q	0.40	0.32	ADMPU		
		35						
		36						
		36	D36Q	0.70	0.56	ADMPU		
		41					B41	1.72
		41	D41Q	3.10	2.48	ADMPU		
		42					B42	1
		42	D42Q	4.90	3.92	ADMPU		
		45						
		45	D45Q	1.30	1.04	ADMPU		
		46						
		46	D46Q	2.50	2.00	ADMPU		
		47						
		48						
		49					B49	2.9
		51					B51	8
		52					B52	13.63
		55						
		55	D55Q	3.10	2.48	ADMPU		
		87						
		87	D87Q	0.80	0.64	ADMPU		
1	N24U	100						
		100	D100Q	1.50	1.20	ADMPU		
		26R						
		26R	D26RQ	2.10	1.68	ADMPU		
		28R						
		37E						
		37W					B37W	1
		53R						
		53R	D53RQ	1.40	1.12	ADMPU		
		54R						
1	N24L	56R					B56	2.4
		57R					B57R	3.06
	A07C	A07C						
		A07C	DA07CQ	12.10	9.68	ADMPU		
	A07D	A07D						
		A07D	DA07DQ	0.70	0.56	ADMPU		
	A07E	A07E						

Note:Additional Volume for New L.U. (Red)

Study #	Base Model (Rose Garden) Basin ID	New Model Basin ID	Retention ID	100yr-2-hr Retention Vol (ac-ft)	80% Retention		Detention ID	Detention Volume (ac-ft)
	A07F	A07F						
	A07G	A07G	LA07GD	16.10	12.88			
		A07G		3.00	2.40	ADMPU		
	A07H	A07H						
		A07H	DA07HQ	1.30	1.04	ADMPU		
	A08A	A08A						
		A08A	DA08AQ	0.20	0.16	ADMPU		
	A08B	A08B						
	A09	A09						
		A09	DA09Q	4.60	3.68	ADMPU		
	A09B	A09B						
		A09B	DA09BQ	0.10	0.08	ADMPU		
	A09C	A09C						
		A09C	DA09CQ	5.80	4.64	ADMPU		
	A09D	A09D	LA09DD	19.10	15.28			
		A09D		2.20	1.76	ADMPU		
	A09E	A09E	LA09ED	10.30	8.24			
		A09E		0.80	0.64	ADMPU		
	A09F	A09F	LA09FD	17.00	13.60			
		A09F		2.40	1.92	ADMPU		
	A09G	A09GA	L09GAD	7.40	5.92			
		A09GB	L09GBD	3.50	2.80			
	A09H	A09H	LA09HD	15.80	12.64			
		A09H		0.40	0.32	ADMPU		
	A09H	A09I	LA09ID	6.70	5.36			
	A09IH	A09IH					LA09IH	8
		A09IH	A09IHQ	0.30	0.24	ADMPU		
	A09J	A09J	LA09JD	9.60	7.68			
	A09L	A09L					LA09L	4
	A09M	A09M	LA09MD	8.60	6.88			
		A09M		6.00	4.80	ADMPU		
	A09N	A09N					LA09N	10
		A09N	DA09NQ	1.20	0.96	ADMPU		
8/U	A09O	A09O				New	SA09O	28.541
		A09O	DA09OQ	5.80	4.64	ADMPU		
8/U	A09P	A09P				New	SA09P	25.236
		A09P	DA09PQ	5.60	4.48	ADMPU		
U	A09Q	A09QB						
	A09Q	A09QB						
		A09QB	A09QBQ	0.20	0.16	ADMPU		
		A09QA						
		A09QA						
		A09QA	A09QAQ	5.60	4.48	ADMPU		
U	A09R	A09R						
		A09R	DA09RQ	13.10	10.48	ADMPU		
7	A09S	A09S	DA09S	8.78	7.03	New		
10	A09T	A09T						
		A09T	DA09TQ	11.90	9.52	ADMPU		
10	A09U	A09U						
		A09U	DA09UQ	5.20	4.16	ADMPU		
	A09I	A0PI						
	A10	A10						
		A10	DA10Q	20.70	16.56	ADMPU		
	A10A	A10A						
		A10A	DA10AQ	7.80	6.24	ADMPU		
4/7	A11A	A11A	DA11A	9.57	7.66	New		
		A11A		7.60	6.08	ADMPU		
U	A11E	A11EA						

Note:Additional Volume for New L.U. (Red)

Study #	Base Model (Rose Garden) Basin ID	New Model Basin ID	Retention ID	100yr-2-hr Retention Vol (ac-ft)	80% Retention		Detention ID	Detention Volume (ac-ft)
		A11EA	D11EAQ	5.70	4.56	ADMPU		
		A11EB						
		A11EB	D11EBQ	14.00	11.20	ADMPU		
U	A11F	A11F						
		A11F	DA11FQ	14.20	11.36	ADMPU		
2	A11G	A11G						
		A11G	DA11GQ	1.20	0.96	ADMPU		
3	A11I	A11I	DA11I	14.56	11.65	New		
		A11I		0.40	0.32	ADMPU		
2	A11J	A11J				New	SA11J	4.39
		A11J	DA11JQ	3.80	3.04	ADMPU		
2	A11K	A11KA				New	SA11KA	9.6
		A11KA	A11KAQ	0.90	0.72	ADMPU		
		A11KB				New	SA11KB	10.705
		A11KC				New	SA11KC	6.377
		A11KC	A11KCQ	2.20	1.76	ADMPU		
3	A11L	A11L	DA11L	9.48	7.58	New		
		A11L	DA11LQ	3.50	2.80	ADMPU		
		P25S	DP25SQ	1.10	0.88	ADMPU		
2/4	A11M	A11MA	DA11MA	4.20	3.36	New	SA11MA	6.19
		A11MA		4.80	3.84	ADMPU		
		A11MB	DA11MB	4.50	3.60	New	SA11MB	11.242
		A11MB		0.10	0.08	ADMPU		
2	A11N	A11NA				New	SA11NA	7.31
		A11NA	A11NAQ	1.80	1.44	ADMPU		
2	A11O	A11O				New	SA11O	3.13
		A11O	DA11OQ	1.00	0.80	ADMPU		
	A99R	A99R						
		A99R	DA99RQ	1.40	1.12	ADMPU		
	A99S	A99S						
		A99S	DA99SQ	4.90	3.92	ADMPU		
	A99T	A99T	LA99TD	0.80	0.64			
		A99T		0.20	0.16	ADMPU		
	A99U	A99U						
		A99U	DA99UQ	3.10	2.48	ADMPU		
	A99V	A99V						
		A99V	DA99VQ	14.70	11.76	ADMPU		
	A99W	A99W	LA99WD	8.40	6.72			
		A99W		7.80	6.24	ADMPU		
	A99X	A99X						
		A99X	DA99XQ	8.10	6.48	ADMPU		
		A99YA						
		A99YA	A99YAQ	6.60	5.28	ADMPU		
U	A99Y	A99YB						
		A99YB	A99YBQ	13.30	10.64	ADMPU		
		CBA						
		CBA	DCBAQ	0.60	0.48	ADMPU		
4	A11H	CBB						
		CBB	DCBBQ	1.40	1.12	ADMPU		
		CBH						
		CBH	DCBHQ	1.10	0.88	ADMPU		
		CBJ						
		CBJ	DCBJQ	1.40	1.12	ADMPU		
		CBK	DCBKQ	4.50	3.60	ADMPU		
		CBL						
		CBL	DCBLQ	0.70	0.56	ADMPU		
17	N11I	DV1						

Note:Additional Volume for New L.U. (Red)

Study #	Base Model (Rose Garden) Basin ID	New Model Basin ID	Retention ID	100yr-2-hr Retention Vol (ac-ft)	80% Retention		Detention ID	Detention Volume (ac-ft)
		DV1	DDV1Q	0.30	0.24	ADMPU		
	N22B	DV10						
		DV10	DDV10Q	1.40	1.12	ADMPU		
17	N22A	DV11						
		DV2						
		DV3						
		DV4						
		DV5						
		DV6	DVRB	5.60	4.48			
		DV7						
		DV7	DDV7Q	3.00	2.40	ADMPU		
		DV8						
		DV9						
		E1						
		E1	DE1Q	0.90	0.72	ADMPU		
		E2						
4	A11B	E3						
		E3	DE3Q	2.10	1.68	ADMPU		
		E4						
		E4	DE4Q	3.10	2.48	ADMPU		
		HV1						
		HV1	DHV1Q	0.20	0.16	ADMPU		
		HV2	DBHV2	0.85	0.68			
		HV2		0.10	0.08	ADMPU		
		LACAI						
		LACAI	LACAIQ	0.50	0.40	ADMPU		
14	N11H	M1	1R	9.05	7.24	ADMPU	*B1	9.1
		M10	10R	7.54	6.03			
		M11A	11AR	7.08	5.66			
		M11B	11BR	1.37	1.10			
		M12A	12AR	9.56	7.65	ADMPU	*B4	28.13
		M12B	12BR	3.90	3.12	ADMPU	*B4	9.4
		M2	2R	12.82	10.26			
		M3	3R	10.36	8.29	ADMPU	*B1	9.1
14	A09K	M370						
		M370	DM370Q	7.10	5.68	ADMPU		
		M4	4R	11.30	9.04			
	M11G	M5	5R	0.45	0.36			
		M6	6R	1.98	1.58			
		M7	7R	9.68	7.74			
		M8	8R	6.43	5.14			
		M9	9R	10.19	8.15			
		MA1	A1R	1.49	1.19			
		MA2	A2R	3.35	2.68			
	N11A	N11A					RBWB	350
		N11C					LN11CE	5
	N11C	N11C	LN11CD	15.60	12.48		LN11CW	3.5
	N11DA	N11DA	LDAOUT	10.00	8.00		SN11DA	8
	N11DB	N11DB	LNBOUT	18.00	14.40			
	N11E	N11EA						
		N11EB	LN11ED	39.20	31.36		LX50	50
	N11F	N11FA	LN1FAD	9.60	7.68			
		N11FB	LN1FBD	13.20	10.56			
	N11J	N11J	LN11JD	2.30	1.84			
		N11J		0.30	0.24	ADMPU		
	N11L2	N11L2						
	N11L3	N11L3						
		N11L3	N11L3Q	0.10	0.08	ADMPU		

Note:Additional Volume for New L.U. (Red)

Study #	Base Model (Rose Garden) Basin ID	New Model Basin ID	Retention ID	100yr-2-hr Retention Vol (ac-ft)	80% Retention		Detention ID	Detention Volume (ac-ft)
		N11L3A						
	N11L4	N11L4						
		N11L4	N11L4Q	0.20	0.16	ADMPU		
	N11L5	N11L5						
		N11L5A						
	N11M	N11M						
		N11M	DN11MQ	6.60	5.28	ADMPU		
10	N11NA	N11NA						
		N11NA	N11NAQ	1.50	1.20	ADMPU		
U	N11N	N11NA						
		N11NB						
		N11NB	N11NBQ	1.60	1.28	ADMPU		
		N11NC						
		N11NC	N11NCQ	4.60	3.68	ADMPU		
	N11L1	N11ND						
U	N11O	N11O						
		N11O	DN11OQ	3.60	2.88	ADMPU		
9	N11P1	N11P1						
		N11P1	N11P1Q	4.20	3.36	ADMPU		
9	N11P2	N11P2	VPRET	8.34	6.67			
		N11P2		4.10	3.28	ADMPU		
	N11P3	N11P3						
9	N11P4	N11P4						
		N11P4	N11P4Q	0.60	0.48	ADMPU		
10	N11P5	N11P5						
		N11P5	N11P5Q	1.70	1.36	ADMPU		
9		N11P6						
		N11P6	N11P6Q	10.10	8.08	ADMPU		
9		N11P7						
		N11P7	N11P7Q	4.00	3.20	ADMPU		
10	N11P7	N11P8						
		N11P8	N11P8Q	2.80	2.24	ADMPU		
10	N11P6	N11P9						
		N11P9	N11P9Q	2.90	2.32	ADMPU		
	N20	N20						
		N20	DN20Q	4.40	3.52	ADMPU		
	N21	N21						
		N21	DN21Q	7.50	6.00	ADMPU		
	N21C	N21C	LN21CD	3.00	2.40			
		N21C		0.50	0.40	ADMPU		
	N21D	N21D	LN21DD	4.80	3.84			
	N21E	N21E						
	N21F	N21F						
		N21F	DN21FQ	1.00	0.80	ADMPU		
	N21G	N21G						
	N21H	N21H						
	N21I1	N21I1					87BA	20
		N21I1	N21I1Q	0.20	0.16	ADMPU		
	N21I2	N21I2						
	N21I3	N21I3	N21I3O	17.20	13.76			
		N21I3		4.40	3.52	ADMPU		
		N21I4					R83BSN	50
10	N21J	N21JA						
	N21J	N21JA						
		N21JA	N21JAQ	4.50	3.60	ADMPU		
9		N21JB						
		N21JB						

Note:Additional Volume for New L.U. (Red)

Study #	Base Model (Rose Garden) Basin ID	New Model Basin ID	Retention ID	100yr-2-hr Retention Vol (ac-ft)	80% Retention		Detention ID	Detention Volume (ac-ft)
		N21JB	N21JBQ	3.90	3.12	ADMPU		
	N21Z	N21Z	N21ZI	3.41	2.73			
		N21Z		4.90	3.92	ADMPU		
	N22	N22A	LN22DA	22.00	17.60			
		N22A		1.40	1.12	ADMPU		
		N22B	LN22DB	15.00	12.00			
	N23	N23						
		N23	DN23Q	6.90	5.52	ADMPU		
	N24	N24						
		N24	DN24Q	8.40	6.72	ADMPU		
	N24D	N24D					LN24D	260
		N24D	DN24DQ	0.60	0.48	ADMPU		
	N24E	N24E						
		N24E	DN24EQ	1.40	1.12	ADMPU		
	N24F	N24F						
		N24F	DN24FQ	3.00	2.40	ADMPU		
	N24G	N24G	LN24GD	0.60	0.48			
		N24G		18.30	14.64	ADMPU		
6	N24H	N24H						
		N24H	DN24HQ	4.90	3.92	ADMPU		
6	N24I	N24I						
		N24I	DN24IQ	7.90	6.32	ADMPU		
6	N24J	N24J						
		N24J	DN24JQ	0.60	0.48	ADMPU		
6	N24K	N24K						
		N24K	DN24KQ	2.80	2.24	ADMPU		
5	N24M	N24M	DN24M	9.88	7.90	ADMPU		
		N24M		7.10	5.68	ADMPU		
5	N24N	N24N	DN24N	3.33	2.66	ADMPU		
		N24N		3.50	2.80	ADMPU		
U	N24V	N24V						
		N24V	DN24VQ	2.80	2.24	ADMPU		
	N25	N25						
		N25	DN25Q	22.70	18.16	ADMPU		
6	N26	N26						
		N26	DN26Q	3.60	2.88	ADMPU		
6	N27	N27						
		N27	DN27Q	18.60	14.88	ADMPU		
		P1	DB1	0.62	0.50			
		P1		1.70	1.36	ADMPU		
		P10	DB10	1.35	1.08			
4	A11C	P11	DB11	1.50	1.20			
		P12	DB12	1.42	1.14			
4	A11D	P13	DB13	1.32	1.06			
		P13		0.20	0.16	ADMPU		
		P14	RB14	1.41	1.13			
		P14		0.70	0.56	ADMPU		
		P15	DB15	0.33	0.26			
		P15		0.50	0.40	ADMPU		
		P2	RB2	5.92	4.74			
		P27	DB27	1.70	1.36			
		P27A	DB27a	0.26	0.21			
4	A99Z	P27B	DB27b	0.31	0.25			
		P28	DB28	1.54	1.23			
		P3	RB3	6.54	5.23			
		P4a	DB4a	0.93	0.74			
		P4b	RB4b	0.40	0.32			

Note:Additional Volume for New L.U. (Red)

Study #	Base Model (Rose Garden) Basin ID	New Model Basin ID	Retention ID	100yr-2-hr Retention Vol (ac-ft)	80% Retention		Detention ID	Detention Volume (ac-ft)
4	A11	P6	DB6	2.20	1.76			
		P7	DB7	0.38	0.30			
		P8	DB8	0.37	0.30			
		P9	DB9	1.15	0.92			
		S1						
		S1	DS1Q	2.40	1.92	ADMPU		
		S2						
		S2	DS2Q	0.70	0.56	ADMPU		
		S3						
	S30B	S30B						
	S30C	S30C						
	S30D	S30D						
		S4						
		S4	DS4Q	0.50	0.40	ADMPU		
		SUMMIT						
18	N11B	WB1					R-R2	10
		WB10					R-R9	5
		WB2					R-4-5	45
18	N20A	WB3						
		WB3					R-6	4
		WB4					R-R1	7
		WB5					R-r2	30
		WB6					R-R8	11
		WB7					R-R7	6
		WB8						
		WB9					R-R10	13

Note:Additional Volume for New L.U. (Red)

APPENDIX B

HEC-1 Model Input and Output Files for Existing Conditions

```
1*****************************************
 *                                       *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
 *              JUN   1998               *
 *            VERSION 4.1                *
 *                                       *
 *   RUN DATE   02MAY07  TIME  16:05:49  *
 *                                       *
*****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX          XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

```
1                                        HEC-1 INPUT                                                    PAGE  1

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

   1          ID   Project ID: GP_NW ADMP_EX1 - Major Basin: 01 - Return Period: 100 Years
   2          ID                                                                          **
   3          ID   Glendale/Peoria ADMP Northwest Region Update                            **
   4          ID   Original HEC-1 Model: L3R5DVR.DAT, Wood/Patel, APRIL 14, 2006            **
   5          ID                        REVISED FOR DOVE VALLEY RANCH IMPROVEMENTS          **
   6          ID   Modified HEC-1 Model: EC06BASE.DAT, Wood/Patel, SZ, May 2007             **
   7          ID                        100-Year 6-Hour HEC-1 Model for Existing Conditions **
   8          ID   1) NOAA 2 Rainfall Data                                                  **
   9          ID   2) DDMSW MCUHP1 V3.3.2 Used                                             **
  10          ID                                                                          **
  11          ID   ****************************************************************************
              *
  12          ID   ****************************************************************************
  13          ID   **                                                                        **
  14          ID   ** CONCEPT REFINEMENT STUDY FOR ROSE GARDEN LANE DRAINAGE IMPROVEMENTS    **
  15          ID   ** ORIGINAL HEC-1 FILE FROM GLENDAL/PEORIA ADMP UPDATE STUDY              **
  16          ID   ** MODIFIED HEC-1 MODEL: LEVEL3R5.DAT, Wood/Patel & CVL, May 2005         **
  17          ID   ** THIS IS THE PREFERRED ALTERNATIVE MODEL                                **
  18          ID   ** WPA REVISED APRIL 14, 2006 FOR DOVE VALLEY RANCH IMPROVEMENTS          **
  19          ID   ** USING LATEST SURVEY DATA.                                              **
  20          ID   ****************************************************************************
              *
  21          ID   ****************************************************************************
  22          ID   **                                                                        **
  23          ID   **                    Glendale/Peoria ADMP Update                         **
  24          ID   **                                                                        **
  25          ID   ****************************************************************************
  26          ID   ****************************************************************************
  27          ID   PROJECT:                Glendale Peoria ADMP Update
  28          ID   CLIENT:                 Flood Control District of Maricopa County
  29          ID   PREPARED BY:            Entellus, Inc.
  30          ID   PROJECT No:             FCD 99-44              Entellus 310.017
  31          ID   FILE NAME: LEVEL3.DAT             CREATED DATE: JUNE 6, 2001
  32          ID   STORM:                  100-year 6-hour Storm
  33          ID   DEVELOPMENT CONDITIONS: LEVEL 3 HYDROLOGY
  34          ID
              *
              * ***************************************************************************
  35          IT       2                    1000
  36          IO       5
  37          IN      15
              *
              *DIAGRAM
              *
  38          JD    3.20    0.01
```

```
 39          PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
 40          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
 41          PC   0.962   0.972   0.983   0.991   1.000
 42          JD   3.179    0.50
 43          PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
 44          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
 45          PC   0.962   0.972   0.983   0.991   1.000
 46          JD   3.120    2.80
 47          PC   0.000   0.009   0.016   0.025   0.034   0.042   0.051   0.059   0.067   0.076
 48          PC   0.087   0.100   0.120   0.163   0.252   0.451   0.694   0.837   0.900   0.938
1                                          HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 49          PC   0.950   0.963   0.975   0.988   1.000
 50          JD   2.950    16.0
 51          PC   0.000   0.015   0.020   0.030   0.048   0.063   0.076   0.090   0.105   0.119
 52          PC   0.135   0.152   0.175   0.222   0.304   0.472   0.670   0.796   0.868   0.912
 53          PC   0.946   0.960   0.973   0.987   1.000
 54          JD   2.598    90.0
 55          PC   0.000   0.021   0.035   0.051   0.071   0.087   0.105   0.125   0.143   0.160
 56          PC   0.179   0.201   0.232   0.281   0.364   0.500   0.658   0.773   0.841   0.888
 57          PC   0.927   0.945   0.964   0.982   1.000
             *
             * ******************************************************************************
             *
             * The Following Portion Came from the HEC-1 Model for the Tierra Del Rio
             * Development.  Model CREATED BY A. MERCIER, CMX, ON 01/16/04
             * FILE NAME: TDR6DC.DAT
             *
             * ******************************************************************************
             *

 58          KK     CBA   BASIN
 59          BA   0.007
 60          KM   SUB-BASIN CBA
 61          LG    0.34    0.35    6.80    0.13      11
 62          UC   0.182   0.219
 63          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 64          UA     100
             *

 65          KK    RCBA
 66          KM   CHANNEL ROUTING
 67          RD    1479   .0095    .030            TRAP       0       4
             *

 68          KK     P28   BASIN
 69          KM   SUB-BASIN P28
 70          BA   0.027
 71          LG    0.25    0.13   10.10    0.04      29
 72          UC   0.337   0.331
 73          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 74          UA     100
             *

 75          KK    CP28
 76          KM
 77          HC       2
             *

 78          KK    DT28
 79          KM
 80          DT    DB28   1.230
 81          DI       0     100     500    1000    5000
 82          DQ       0     100     500    1000    5000
             *
1                                          HEC-1 INPUT                                          PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 83          KK     CBB   BASIN
 84          KM  SUB-BASIN CBB
 85          BA   0.017
 86          LG    0.34    0.34    4.55    0.35      15
 87          UC   0.195   0.156
 88          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 89          UA     100
             *

 90          KK    RCBB
 91          KM  CHANNEL ROUTING
```

```
 92          RD    1231   .0244    .030            TRAP       0       4
             *

 93          KK   CP28a
 94          KM
 95          HC       2
             *

 96          KK    R28a
 97          KM  CHANNEL ROUTING
 98          RD    1642   .0018    .030            TRAP      10       4
             *

 99          KK     P27   BASIN
100          KM  SUB-BASIN P27
101          BA   0.065
102          LG    0.25    0.15    8.00    0.10      30
103          UC   0.423   0.443
104          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
105          UA     100
             *

106          KK    DT27
107          KM
108          DT    DB27   1.360
109          DI       0     100     500    1000    5000
110          DQ       0     100     500    1000    5000
             *

111          KK    CP27
112          KM
113          HC       2
             *

114          KK    P27A   BASIN
115          KM  SUB-BASIN P27A
116          BA   0.008
117          LG    0.25    0.25    4.35    0.46      44
118          UC   0.235   0.295
119          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
120          UA     100
             *
                                          HEC-1 INPUT                                          PAGE  4

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

121          KK   DT27a
122          KM
123          DT   DB27a   0.210
124          DI       0     100     500    1000    5000
125          DQ       0     100     500    1000    5000
             *

126          KK    P27B   BASIN
127          KM  SUB-BASIN P27B
128          BA   0.013
129          LG    0.26    0.26    5.00    0.32      37
130          UC   0.260   0.346
131          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
132          UA     100
             *

133          KK   DT27b
134          KM
135          DT   DB27b   0.250
136          DI       0     100     500    1000    5000
137          DQ       0     100     500    1000    5000
             *

138          KK     CBL   BASIN
139          KM  SUB-BASIN CBL
140          BA   0.028
141          LG    0.28    0.29    5.70    0.23      24
142          UC   0.276   0.301
143          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
144          UA     100
             *

145          KK    CCBL
146          KM
147          HC       4
             *
```

```
 148          KK    RCBL
 149          KM  NATURAL WASH ROUTING
 150          RC   0.035   0.035   0.035     840   .0227
 151          RX       0     7.5      15      50      60      95   102.5     110
 152          RY       5     2.5       0       0       0       0     2.5       5
              *

 153          KK     CBK   BASIN
 154          KM  SUB-BASIN CBK
 155          BA   0.052
 156          LG    0.34    0.34    4.65    0.33       6
 157          UC   0.277   0.207
 158          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 159          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE  5

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 160          KK    CCBK
 161          KM
 162          HC       2
              *

 163          KK    RCBK
 164          KM  CHANNEL ROUTING
 165          RD     755   .0238    .030            TRAP      10       4
              *

 166          KK     P14   BASIN
 167          KM  SUB-BASIN P14
 168          BA   0.008
 169          LG    0.34    0.34    3.81    0.53       2
 170          UC   0.234   0.183
 171          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 172          UA     100
              *

 173          KK    RT14
 174          KM
 175          DT    RB14   1.130
 176          DI       0     100     500    1000    5000
 177          DQ       0     100     500    1000    5000
              *

 178          KK    CP14
 179          KM
 180          HC       2
              *

 181          KK     P15   BASIN
 182          KM  SUB-BASIN P15
 183          BA   0.006
 184          LG    0.33    0.34    3.23    0.81       5
 185          UC   0.436   0.564
 186          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 187          UA     100
              *

 188          KK    DT15
 189          KM
 190          DT    DB15   0.260
 191          DI       0     100     500    1000    5000
 192          DQ       0     100     500    1000    5000
              *

 193          KK     CBJ   BASIN
 194          KM  SUB-BASIN CBJ
 195          BA   0.015
 196          LG    0.35    0.35    4.30    0.41      10
 197          UC   0.227   0.241
 198          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 199          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE  6

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 200          KK    CP15
 201          KM
```

```
 202          HC       3
              *

 203          KK     R15
 204          KM  CHANNEL ROUTING
 205          RD     800   .0125    .030            TRAP      10       4
              *

 206          KK     CBH   BASIN
 207          KM  SUB-BASIN CBH
 208          BA   0.012
 209          LG    0.35    0.35    4.40    0.38      15
 210          UC   0.156   0.100
 211          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 212          UA     100
              *
              * Route CBH to P25S
              *

 213          KK    RCBH
 214          RS       2    FLOW       0
 215          RC    0.02     .02     .02    1500   .0055
 216          RX     280     320     340     350     360     370     390     430
 217          RY       6       4       2       0       0       2       4       6
              *

 218          KK    P25S   BASIN
 219          KM  SUB-BASIN P25S
 220          BA   0.028
 221          LG    0.35    0.35    4.35    0.40      15
 222          UC   0.480   0.415
 223          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 224          UA     100
              *

 225          KK   CP25S
 226          KM
 227          HC       2
              *

 228          KK    AFR0
 229          KM  Dummy Combination at Jomax Road and AFR
 230          HC       2
              *
              * ***************************************************************************

 231          KK      E1   BASIN
 232          KM  SUB-BASIN E1
 233          BA   0.014
 234          LG    0.33    0.32    3.95    0.48       2
 235          UC   0.205   0.142
 236          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1                                           HEC-1 INPUT                                          PAGE  7

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 237          UA     100
              *

 238          KK     RE1
 239          KM  CHANNEL ROUTING
 240          RD    1993   .0376    .030            TRAP      10       4
              *

 241          KK      E2   BASIN
 242          KM  SUB-BASIN E2
 243          BA   0.016
 244          LG    0.30    0.25    3.95    0.48       5
 245          UC   0.288   0.271
 246          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 247          UA     100
              *

 248          KK     RE2
 249          KM  CHANNEL ROUTING
 250          RD    1108   .0542    .030            TRAP      10       4
              *

 251          KK     P13   BASIN
 252          KM  SUB-BASIN P13
 253          BA   0.059
 254          LG    0.26    0.25    3.92    0.57      27
 255          UC   0.313   0.195
```

```
256          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
257          UA     100
             *

258          KK    DT13
259          KM
260          DT    DB13   1.060
261          DI       0     100     500    1000    5000
262          DQ       0     100     500    1000    5000
             *

263          KK    CP13
264          KM
265          HC       3
             *

266          KK     R13
267          KM  CHANNEL ROUTING
268          RD    1412   .0035    .025            TRAP      10       4
             *

269          KK     P12   BASIN
270          KM  SUB-BASIN P12
271          BA   0.044
272          LG    0.25    0.26    3.58    0.71      30
273          UC   0.426   0.316
274          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
275          UA     100
             *
1                                          HEC-1 INPUT                                        PAGE  8

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

276          KK    DT12
277          KM
278          DT    DB12   1.140
279          DI       0     100     500    1000    5000
280          DQ       0     100     500    1000    5000
             *

281          KK    CP12
282          KM
283          HC       2
             *

284          KK      E3   BASIN
285          KM  SUB-BASIN E3
286          BA   0.082
287          LG    0.31    0.28    3.95    0.48       4
288          UC   0.589   0.591
289          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
290          UA     100
             *

291          KK     RE3
292          KM  CHANNEL ROUTING
293          RD    1473   .0339    .030            TRAP      10       4
             *

294          KK     P10   BASIN
295          KM  SUB-BASIN P10
296          BA   0.055
297          LG    0.25    0.26    3.78    0.63      29
298          UC   0.409   0.251
299          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
300          UA     100
             *

301          KK    DT10
302          KM
303          DT    DB10   1.080
304          DI       0     100     500    1000    5000
305          DQ       0     100     500    1000    5000
             *

306          KK    CP10
307          KM
308          HC       2
             *

309          KK     R10
310          KM  CHANNEL ROUTING
```

```
 311          RD    1947   .0035    .025            TRAP      10       4
              *
1                                          HEC-1 INPUT                                                    PAGE  9

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 312          KK     P11   BASIN
 313          KM  SUB-BASIN P11
 314          BA   0.042
 315          LG    0.25    0.25    3.85    0.60      30
 316          UC   0.671   0.682
 317          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 318          UA     100
              *

 319          KK    DT11
 320          KM
 321          DT    DB11   1.200
 322          DI       0     100     500    1000    5000
 323          DQ       0     100     500    1000    5000
              *

 324          KK    CP11
 325          KM
 326          HC       2
              *

 327          KK      E4   BASIN
 328          KM  SUB-BASIN E4
 329          BA   0.040
 330          LG    0.34    0.33    4.00    0.47       3
 331          UC   0.528   0.655
 332          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 333          UA     100
              *

 334          KK     RE4
 335          KM  CHANNEL ROUTING
 336          KM  SHAPE REFLECTS CURRENT SET OF PLANS FOR HAPPY VALLEY ROAD DITCH
 337          RD
 338          RC    .015    .015    .015    1287   .0250
 339          RX       0       2       4    9.84   12.84   15.84   21.84   27.56
 340          RY    2.46    1.96    1.46       0     0.5       1       2    2.95
              *

 341          KK      P9   BASIN
 342          KM  SUB-BASIN P9
 343          BA   0.045
 344          LG    0.25    0.25    3.92    0.57      30
 345          UC   0.315   0.283
 346          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 347          UA     100
              *

 348          KK     DT9
 349          KM
 350          DT     DB9   0.920
 351          DI       0     100     500    1000    5000
 352          DQ       0     100     500    1000    5000
              *
1                                          HEC-1 INPUT                                                    PAGE 10

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 353          KK     HV1   BASIN
 354          KM  SUB-BASIN HV1
 355          BA   0.007
 356          LG    0.27    0.29    3.95    0.55      25
 357          UC   0.410   0.888
 358          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 359          UA     100
              *

 360          KK     CP9
 361          KM
 362          HC       3
              *

 363          KK      R9
 364          KM  CHANNEL ROUTING
 365          KM  SHAPE REFLECTS CURRENT SET OF PLANS FOR HAPPY VALLEY ROAD DITCH
```

```
366          RD
367          RC    .015    .015    .015     940   .0250
368          RX       0       2       4    9.84   12.84   15.84   21.84   27.56
369          RY    2.46    1.96    1.46       0     0.5       1       2    2.95
             *

370          KK      P8   BASIN
371          KM  SUB-BASIN P8
372          BA   0.013
373          LG    0.25    0.25    4.15    0.52      30
374          UC   0.508   0.595
375          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
376          UA     100
             *

377          KK     DT8
378          KM
379          DT     DB8   0.300
380          DI       0     100     500    1000    5000
381          DQ       0     100     500    1000    5000
             *

382          KK      P7   BASIN
383          KM  SUB-BASIN P7
384          BA   0.014
385          LG    0.25    0.25    3.95    0.56      30
386          UC   0.458   0.528
387          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
388          UA     100
             *

389          KK     DT7
390          KM
391          DT     DB7   0.300
392          DI       0     100     500    1000    5000
393          DQ       0     100     500    1000    5000
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

394          KK     CP7
395          KM
396          HC       3
             *

397          KK      R7
398          KM  CHANNEL ROUTING
399          RD
400          RC    .015    .015    .015    1488   .0250
401          RX       0       2       4    9.84   12.84   15.84   21.84   27.56
402          RY    2.46    1.96    1.46       0     0.5       1       2    2.95
             *

403          KK      P6   BASIN
404          KM  SUB-BASIN P6
405          BA   0.070
406          LG    0.25    0.25    4.25    0.49      30
407          UC   0.899   1.126
408          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
409          UA     100
             *

410          KK     DT6
411          KM
412          DT     DB6   1.760
413          DI       0     100     500    1000    5000
414          DQ       0     100     500    1000    5000
             *

415          KK     CP6
416          KM
417          HC       2
             *

418          KK   HPVLY
419          KM
420          HC       3
             *
             *
             * ***********************************************************************
             *
```

```
*
KK   A11MA   BASIN
KM  SUB-BASIN A11M North Portion
BA   0.073
LG    0.32    0.24    8.80    0.06       8
UC   0.258   0.117
UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
UA     100
*
* On-site Retention Basin
*
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  A11MAQ
DT  DA11MA     3.4
DI       0     100    1000    1000
DQ       0     100    1000    1000
*
*
*

KK  SA11MA STORAGE
KM  Online Detention Basin,  6.2 ac-ft.
RS       1    STOR       0
SV       0     1.5     2.5     4.0     6.2    10.0
SE       0       2       3       4       5       6
SL       0    3.14    0.62     0.5
SS       5      50     2.7     1.5
*
* ROUTE RA11MA IS 2000 FT WITH A SLOPE OF .0092
* CROSS SECTION IS A SMALL NATURAL CHANNEL
*

KK  RA11MA
RS       9    FLOW       0
RC    0.05    0.06    0.05    2000   .0092
RX       0     350     450     480     482     510     610     910
RY       7       6       5       1       0       5       6       7
*

KK   A11MB   BASIN
KM  SUB-BASIN A11M South Portion
BA   0.194
LG    0.25    0.15    8.80    0.07      29
UC   0.393   0.167
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
* On-site Retention Basin
*     GP

KK  A11MBQ
DT  DA11MB     3.6
DI       0     100    1000    1000
DQ       0     100    1000    1000
*

KK  SA11MB STORAGE
KM  Online Detention Basin, 11.2 ac-ft.
RS       1    STOR       0
SV       0     3.0     5.5     8.0    11.2    15.0
SE       0       2       3       4       5       6
SL       0    3.14    0.62     0.5
SS       5     200     2.7     1.5
*
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   A11NA   BASIN
KM  SUB-BASIN A11N - Revised
BA   0.076
LG    0.29    0.30    5.40    0.25      26
UC   0.237   0.134
UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
UA     100
*
```

```
469          KK  SA11NA STORAGE
470          KM  Online Detention Basin,  7.3 ac-ft.
471          RS       1    STOR       0
472          SV       0     1.0     3.0     5.0     7.3    11.0
473          SE       0       2       3       4       5       6
474          SL       0    3.14    0.62     0.5
475          SS       5     100     2.7     1.5
             *

476          KK  RA11NA
477          RS      11    FLOW       0
478          RC    0.05    0.06    0.05    2400  0.0090
479          RX       0     350     450     480     482     510     610     910
480          RY       7       6       5       1       0       5       6       7
             *
             * COMBINE Flows of A11NA, A11MA AND A11MB
             *

481          KK  CA11MB
482          HC       3
             *
             * Route Flow to A11J
             *

483          KK  RA11MB
484          RS       8    FLOW       0
485          RC    0.05    0.06    0.05    3000   .0085
486          RX       0     350     450     480     482     510     610     910
487          RY       7       6       5       1       0       5       6       7
             *

488          KK    A11O   BASIN
489          KM  SUBASIN A11O
490          BA   0.056
491          LG    0.28    0.27    6.20    0.19      23
492          UC   0.279   0.249
493          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
494          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

495          KK   SA11O STORAGE
496          KM  Online Detention Basin,  3.1 ac-ft.
497          RS       1    STOR       0
498          SV       0     0.5     1.0     2.0     3.1     5.0
499          SE       0       2       3       4       5       6
500          SL       0    3.14    0.62     0.5
501          SS       5      50     2.7     1.5
             *
             * ROUTE A11O to A11KB
             *

502          KK   RA11O
503          RS       9    FLOW       0
504          RC    0.05     .06     .05    2500   .0085
505          RX       0     350     450     480     482     510     610     910
506          RY       7       6       5       1       0       5       6       7
             *

507          KK   A11KB   BASIN
508          KM  SUB-BASIN A11K North Portion
509          BA   0.107
510          LG    0.25    0.25    4.70    0.36      30
511          UC   0.390   0.206
512          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
513          UA     100
             *

514          KK  SA11KB STORAGE
515          KM  Online Detention Basin, 10.7 ac-ft.
516          RS       1    STOR       0
517          SV       0     3.0     5.0     7.0    10.7    15.0
518          SE       0       2       3       4       5       6
519          SL       0    3.14    0.62     0.5
520          SS       5     100     2.7     1.5
             *

521          KK   A11KA   BASIN
522          KM  SUB-BASIN A11K East Portion
523          BA   0.081
```

```
524          LG    0.27    0.27    4.45    0.42      42
525          UC   0.272   0.190
526          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
527          UA     100
             *

528          KK  SA11KA STORAGE
529          KM  Online Detention Basin,  9.6 ac-ft.
530          RS       1    STOR       0
531          SV       0     2.0     4.0     6.0     9.6    14.0
532          SE       0       2       3       4       5       6
533          SL       0    3.14    0.62     0.5
534          SS       5      50     2.7     1.5
             *
             * ROUTE A11KA to A11KB
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

535          KK  RA11KA
536          RS       8    FLOW       0
537          RC    0.05     .06     .05    2000   .0075
538          RX       0     350     450     480     482     510     610     910
539          RY       7       6       5       1       0       5       6       7
             *
             * COMBINE A11KB,A11KA AND A11O
             *

540          KK  CA11KB
541          HC       3
             *
             * ROUTE Flow of CA11KB to A11KC
             *

542          KK  RA11KB
543          RS       8    FLOW       0
544          RC    0.05    0.06    0.05    1600  0.0055
545          RX       0      50     250     350     360     420     620     720
546          RY      10       8       6       2       0       6       8      10
             *

547          KK    A11G   BASIN
548          KM  SUB-BASIN A11G
549          BA   0.060
550          LG    0.31    0.28    4.55    0.35      25
551          UC   0.425   0.369
552          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
553          UA     100
             *
             * ROUTE A11G to A11KC
             *

554          KK  RA11GN
555          RS       7    FLOW       0
556          RC    0.05     .06     .05    2300   0.010
557          RX       0     350     450     480     482     510     610     910
558          RY       7       6       5       1       0       5       6       7
             *

559          KK   A11KC   BASIN
560          KM  SUB-BASIN A11K West Portion
561          BA   0.132
562          LG    0.27    0.26    4.15    0.50      27
563          UC   0.381   0.185
564          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
565          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

566          KK  SA11KC STORAGE
567          KM  Online Detention Basin,  6.4 ac-ft.
568          RS       1    STOR       0
569          SV       0     1.5     2.5     4.0     6.4    10.0
570          SE       0       2       3       4       5       6
571          SL       0    3.14    0.62     0.5
572          SS       5      50     2.7     1.5
             *
             * COMBINE RA11KB, RA11G, AND A11KC
```

```
                *

573             KK  CA11KC
574             HC       3
                *
                * ROUTE CA11KC to A11J
                * CROSS SECTION IS A MEDIUM NATURAL CHANNEL
                *

575             KK  RA11KC
576             RS       4    FLOW       0
577             RC    0.05     .06     .05    1000   .0055
578             RX       0      50     250     350     360     420     620     720
579             RY      10       8       6       2       0       6       8      10
                *

580             KK    A11J   BASIN
581             KM  SUB-BASIN A11J
582             BA   0.112
583             LG    0.29    0.22    7.30    0.12      18
584             UC   0.579   0.448
585             UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
586             UA     100
                *

587             KK   SA11J STORAGE
588             KM  Online Detention Basin,  4.4 ac-ft.
589             RS       1    STOR       0
590             SV       0     1.0     2.0     3.0     4.4     7.0
591             SE       0       2       3       4       5       6
592             SL       0    3.14    0.62     0.5
593             SS       5      50     2.7     1.5
                *
                * COMBINE Flows of RA11MB, A11J, AND RA11KC
                *

594             KK   CA11J
595             HC       3
                *
1                                        HEC-1 INPUT                                                PAGE 17

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

596             KK    A11L   BASIN
597             KM  SUB-BASIN A11L
598             BA   0.264
599             LG    0.27    0.12   11.20    0.03      24
600             UC   0.704   0.514
601             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
602             UA     100
                *
                * On-site Retention Basin
                *     GP

603             KK  DA11LQ
604             DT   DA11L     7.6
605             DI       0     100    1000    1000
606             DQ       0     100    1000    1000
                *
                * ROUTE FLOW TO A11I FROM A11L                                                      G
                *

607             KK   RA11L
608             RS       9    FLOW       0
609             RC    0.05    0.06    0.05    2600   .0069
610             RX       0     350     450     480     482     510     610     910
611             RY       7       6       5       1       0       5       6       7
                *

612             KK    A11I   BASIN
613             KM  SUB-BASIN A11I
614             BA   0.153
615             LG    0.25    0.10   11.20    0.03      28
616             UC   0.516   0.325
617             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
618             UA     100
                *
                * On-site Retention Basin
                *

619             KK  DA11IQ
620             DT   DA11I    11.7
```

```
 621          DI        0      100     1000     1000
 622          DQ        0      100     1000     1000
              *
              * COMBINE Flows of CA11J, A11I, and RA11L
              *

 623          KK    CA11I
 624          HC        3
              *
              * ROUTE FLOW TO A11EB FROM CA11I
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 625          KK    RA11I
 626          RS        9     FLOW        0
 627          RC     0.05      .06      .05     4000    .0075
 628          RX        0       50      100      150      180      230      280      330
 629          RY       10        8        6        0        0        6        8       10
              *

 630          KK    A11EA    BASIN
 631          KM   SUB-BASIN A11E East Portion
 632          BA    0.144
 633          LG     0.33     0.31     4.30     0.41       11
 634          UC    0.596    0.537
 635          UA        0      4.5     12.6     23.2     35.8     50.0     64.2     76.8     87.4     95.5
 636          UA      100
              *
              * ROUTE FLOW TO A11EB FROM A11EA
              *

 637          KK   RA11EA
 638          RS        6     FLOW        0
 639          RC     0.05      .06      .05     1500    .0065
 640          RX        0       50      250      320      360      420      620      720
 641          RY       10        8        6        0        0        6        8       10
              *

 642          KK    A11EB    BASIN
 643          KM   SUB-BASIN A11E West Portion
 644          BA    0.190
 645          LG     0.34     0.34     4.45     0.38        4
 646          UC    0.834    0.835
 647          UA        0      4.5     12.6     23.2     35.8     50.0     64.2     76.8     87.4     95.5
 648          UA      100
              *
              * COMBINE Flows of A11EA, A11EB, and RA11I
              *

 649          KK   CA11EB
 650          HC        3
              *

 651          KK       41    BASIN
 652          KM   SUB-BASIN 41
 653          BA    0.054
 654          LG     0.34     0.34     4.40     0.39       21
 655          UC    0.249    0.168
 656          UA        0      3.0      5.0      8.0     12.0     20.0     43.0     75.0     90.0     96.0
 657          UA      100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 658          KK      B41
 659          KM   Storage Route Runoff through Detention Basin @41
 660          KM   Outlet Structure:  1-48" PIPE
 661          RS        1     STOR        0
 662          SA      .09      .18      .27       .4
 663          SE     1433     1435     1437     1440
 664          SQ        0       23       71      132
              *

 665          KK       42    BASIN
 666          KM   SUB-BASIN 42
 667          BA    0.075
 668          LG     0.35     0.35     4.25     0.42       44
 669          UC    0.259    0.180
```

```
670          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
671          UA     100
             *

672          KK     B42
673          KM  Storage Route Runoff through Detention Basin @42
674          KM  Outlet Structure:  48" PIPE
675          RS       1    STOR       0
676          SA     .07     .13     .21     .31      .4
677          SE    1427    1429    1431    1433    1435
678          SQ       0      23      71     112     147
             *
             * COMBINE Flows of 41 and 42                                                G
             *

679          KK     C41
680          HC       2
             *
             * ROUTE FLOW TO A11F FROM C41
             *

681          KK    RC41
682          RS      14    FLOW       0
683          RC    0.05     .06     .05    5200   .0075
684          RX       0      50      70      90     110     130     150     200
685          RY       6       5       3       0       0       3       5       6
             *

686          KK    A11F   BASIN
687          KM  SUB-BASIN A11F
688          BA   0.334
689          LG    0.33    0.31    4.35    0.40       8
690          UC   0.624   0.419
691          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
692          UA     100
             *
             * COMBINE Flows of A11F and RC41                                            G
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

693          KK   CA11F
694          HC       2
             *
             * COMBINE Flows of CA11F and CA11EB
             *

695          KK   CA11E
696          HC       2
             *
             * ROUTE FLOW TO A11A FROM CA11E
             *

697          KK   RA11E
698          RS       3    FLOW       0
699          RC    0.05     .06     .05    1700   .0070
700          RX       0      50      70      90     110     130     150     200
701          RY       6       5       3       0       0       3       5       6
             *

702          KK    A09U   BASIN
703          KM  SUB-BASIN A09U
704          BA   0.175
705          LG    0.32    0.30    4.20    0.43      22
706          UC   0.347   0.227
707          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
708          UA     100
             *
             * Diversion MAIN (SOUTH), SPLIT (WEST) ALONG Happy Valley RD.
             * 80% FLOW GOES DOWN 92ND AVE, 20% WEST ON HAPPY VALLEY
             *

709          KK   DA09U
710          DT   A09UI
711          DI       0       1      10     100     200     400     800    1000    2000
712          DQ       0      .8       8      80     160     320     640     800    1600
             *
             * ROUTE FLOW TO CA09T FROM A09U                                             G
             *

713          KK  RA09UW
```

```
714          RS        9    FLOW       0
715          RC     0.05    0.03     .05    4000   .0075
716          RX        0     200     210     220     240     270     295     595
717          RY      4.5       2       0       2       3       3     3.5     4.5
             *

718          KK    A09T   BASIN
719          KM  SUB-BASIN A09T
720          BA    0.182
721          LG     0.33    0.31    4.30    0.41       2
722          UC    0.551   0.388
723          UA        0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
724          UA      100
             *
             * COMBINE  CA09U AND A09T
             *
1                                    HEC-1 INPUT                                          PAGE 21

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

725          KK   CA09T
726          HC        2
             *
             * DIVERTED  MAIN (TO WASH) DIVERTED (SOUTH)
             * HAPPY VALLEY ROAD CAN CARRY 210 CFS TO THE WEST, Excess FLOW Splits TO SOUTH
             *

727          KK   DA09T
728          DT   A09TI
729          DI        0      45      91     136     182     227     273     500
730          DQ        0      .2      .3      .4      .5      17      63     290
             *
             * ROUTE FLOW TO CX22 FROM CA09T
             *

731          KK  RA09TW
732          RS        2    FLOW       0
733          RC     0.05    0.03    0.05    1500   .0025
734          RX        0     200     210     220     230     270     295     595
735          RY        6       4       0       0       4       4     5.5       7
             *

736          KK    A11A   BASIN
737          KM  SUB-BASIN A11A
738          BA    0.298
739          LG     0.23    0.29    6.00    0.21      34
740          UC    0.568   0.362
741          UA        0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
742          UA      100
             *
             * On-site Retention Basin
             *     GP

743          KK  DA11AQ
744          DT   DA11A     7.7
745          DI        0     100    1000    1000
746          DQ        0     100    1000    1000
             *
             * Combine  Flows of RA09TW, CA11E,and A11A
             *

747          KK    CX23
748          HC        3
             *
             * ROUTE FLOW TO CS1 FROM CX23                                                GP
             *

749          KK    RX23
750          RS        7    FLOW       0
751          RC     0.05     .06     .05    4000   .0074
752          RX        0      50     150     175     275     300     400     500
753          RY       12       8       6       0       0       6       8      12
             *
1                                    HEC-1 INPUT                                          PAGE 22

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

754          KK      S1   BASIN
755          KM  SUB-BASIN S1
756          BA    0.124
757          LG     0.31    0.27    4.25    0.47      12
```

```
758          UC   0.597   0.527
759          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
760          UA     100
             *

761          KK      P2   BASIN
762          KM  SUB-BASIN P2
763          BA   0.051
764          LG    0.25    0.25    4.45    0.43      29
765          UC   0.316   0.203
766          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
767          UA     100
             *

768          KK     RT2
769          KM
770          DT     RB2   4.740
771          DI       0     100     500    1000    5000
772          DQ       0     100     500    1000    5000
             *

773          KK     CS1
774          KM
775          HC       3
             *

776          KK     RS1
777          KM  CHANNEL ROUTING
778          RD     924   .0108    .035            TRAP     200       6
             *

779          KK      S2   BASIN
780          KM  SUB-BASIN S2
781          BA   0.012
782          LG    0.34    0.33    4.70    0.32       3
783          UC   0.198   0.111
784          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
785          UA     100
             *

786          KK      S3   BASIN
787          KM  SUB-BASIN S3
788          BA   0.006
789          LG    0.30    0.25    4.65    0.32       5
790          UC   0.154   0.090
791          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
792          UA     100
             *
1                                          HEC-1 INPUT                                          PAGE 23

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

793          KK     CS2
794          KM
795          HC       3
             *

796          KK     RS2
797          KM  CHANNEL ROUTING
798          RD     665   .0075    .020            TRAP      20       4
             *

799          KK      P3   BASIN
800          KM  SUB-BASIN P3
801          BA   0.054
802          LG    0.25    0.25    4.45    0.43      30
803          UC   0.431   0.361
804          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
805          UA     100
             *

806          KK     RT3
807          KM
808          DT     RB3   5.230
809          DI       0     100     500    1000    5000
810          DQ       0     100     500    1000    5000
             *

811          KK     CP3
812          KM
813          HC       2
             *
```

```
814          KK     P4b   BASIN
815          KM  SUB-BASIN P4b
816          BA   0.017
817          LG    0.25    0.25    4.45    0.43      30
818          UC   0.225   0.132
819          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
820          UA     100
             *

821          KK    RT4b
822          KM
823          DT    RB4b   0.320
824          DI       0     100     500    1000    5000
825          DQ       0     100     500    1000    5000
             *

826          KK      S4   BASIN
827          KM  SUB-BASIN S4
828          BA   0.014
829          LG    0.33    0.31    4.80    0.30       2
830          UC   0.361   0.546
831          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
832          UA     100
             *
1                                          HEC-1 INPUT                                          PAGE 24

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

833          KK      P1   BASIN
834          KM  SUB-BASIN P1
835          BA   0.029
836          LG    0.34    0.38    6.00    0.18       1
837          UC   0.362   0.389
838          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
839          UA     100
             *

840          KK     DT1
841          KM
842          DT     DB1   0.500
843          DI       0     100     500    1000    5000
844          DQ       0     100     500    1000    5000
             *

845          KK     CP1
846          KM
847          HC       2
             *

848          KK     HV2   BASIN
849          KM  SUB-BASIN HV2
850          BA   0.031
851          LG    0.25    0.25    4.45    0.43      29
852          UC   1.500   4.221
853          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
854          UA     100
             *

855          KK    RHV2
856          KM  CHANNEL ROUTING
857          RD     910   .0033    .015            TRAP      10       4
             *

858          KK   DTHV2
859          KM
860          DT   DBHV2   0.680
861          DI       0     100     500    1000    5000
862          DQ       0     100     500    1000    5000
             *

863          KK     P4a   BASIN
864          KM  SUB-BASIN P4a
865          BA   0.039
866          LG    0.25    0.25    4.00    0.55      30
867          UC   0.499   0.448
868          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
869          UA     100
             *
                                           HEC-1 INPUT                                          PAGE 25

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
870          KK    DT4a
871          KM
872          DT    DB4a   0.740
873          DI       0     100     500    1000    5000
874          DQ       0     100     500    1000    5000
             *

875          KK   SOUTH
876          KM  Combined at South HVR
877          HC       5
             *

878          KK    N110   BASIN
879          KM  SUB-BASIN N110
880          BA   0.054
881          LG    0.35    0.35    4.50    0.36       0
882          UC   0.458   0.338
883          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
884          UA     100
             *
             * A WASH TO THE WEST THAT CARRIES A MAX. FLOW OF 47 CFS.
             *

885          KK   DN110
886          DT   N110I
887          DI       0      30      60     100     300     600    1200    2200
888          DQ       0      27      54      90     270     553    1153    2153
             *
             * ROUTE RN110W IS 2752 FT WITH A SLOPE OF .0025
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             *

889          KK  RN110W
890          RS      15    FLOW       0
891          RC    0.05     .06     .05    2752   .0025
892          RX       0      50     250     350     360     420     620     720
893          RY      10       8       6       2       0       6       8      10
             *
             * RECOVER DIVERTED FLOW FROM CA09T
             *

894          KK  DRA09T
895          DR   A09TI
             *
             * ROUTE RA09TS IS 2824 FT WITH A SLOPE OF .0057
             * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
             * ROUTE FLOW TO CA09R FROM CA09T
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

896          KK  RA09TS
897          RS      15    FLOW       0
898          RC    0.05     .06     .05    2824   .0057
899          RX       0     400     800    1200    1600    2000    2400    2800
900          RY       3       1      .5       0       0      .5       1       3
             *

901          KK    A09R   BASIN
902          KM  SUB-BASIN A09R
903          BA   0.144
904          LG    0.35    0.34    4.25    0.43       1
905          UC   0.792   0.663
906          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
907          UA     100
             *
             * COMBINE  CN110,  CA09T, AND A09R
             *

908          KK   CA09R
909          HC       3
             *
             * EXISTING CONDITIONS FLOW DOWN LAKE PLEASANT RD
             *

910          KK   DA09R
911          DT   A09RI
912          DI       0      10      50     100     300     500     800    1000    2000
913          DQ       0     9.9    49.3    99.4   299.5     499     799     999    1999
```

```
*
* ROUTE RA09RW IS 1609 FT WITH A SLOPE OF .0012
* *** ROUTE FLOW TO CA09S FROM CA09R  *************************
*

KK  RA09RW
RS      15    FLOW       0
RC    0.05    0.04     .05    1609  0.0012
RX       0     200     300     325     340     360     380     880
RY       5       4       3       2       3       3       2     3.5
*

KK    A09S   BASIN
KM  SUB-BASIN A09S
BA   0.072
LG    0.13    0.25    4.90    0.40      71
UC   0.515   0.441
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
* On-site Retention Basin
*     GP
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  DA09SQ
DT   DA09S     7.0
DI       0     100    1000    1000
DQ       0     100    1000    1000
*
* *** COMBINE  RA09RW AND A09S ***************************************************
*

KK   CA09S
HC       2
*

KK  RA09SW
RS       6    FLOW       0
RC    0.03    0.03    0.03    1600  0.0085
RX       0      50     100     120     140     160     210     260
RY       6       4       3       0       0       3       4       6
*

KK   A09QA   BASIN
KM  SUB-BASIN A09Q North Portion
BA   0.092
LG    0.34    0.34    4.20    0.44       2
UC   0.534   0.331
UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
UA     100
*
* *** COMBINE  Flows of RA09SW and A09QA *************************************
*

KK  CA09QA
HC       2
*
* *** DIVERTED  MAIN (SOUTH), DIVERTED (WEST)  ***************************
* FUTURE SPLIT: ALL EXISTING FLOW TO THE SOUTH
*

KK  DA09QA
DT  A09QAI
DI       0      10      30      50     100     500    1000    2000
DQ       0     9.2    29.3    49.4    99.5     499     999    1999
*
* *** ROUTE CA09QA TO CA99YA ********************************************
*

KK  RA09QW
RS       4    FLOW       0
RC    0.03    0.03    0.03    2400  0.0085
RX       0      50     100     120     140     160     210     260
RY       6       4       3       0       0       3       4       6
*
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
955          KK   A99YA   BASIN
956          KM  SUB-BASIN A99Y East Portion
957          BA   0.103
958          LG    0.35    0.34    4.90    0.29       1
959          UC   0.413   0.291
960          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
961          UA     100
             *
             * *** COMBINE  RA09QW AND A99YA ***********************************************
             *

962          KK  CA99YA
963          HC       2
             *

964          KK  RA99YA
965          RS       3    FLOW       0
966          RC    0.03    0.03    0.03    2000  0.0085
967          RX       0      50     100     120     140     160     210     260
968          RY       6       4       3       0       0       3       4       6
             *

969          KK   A99YB   BASIN
970          KM  SUB-BASIN A99Y West Portion
971          BA   0.171
972          LG    0.34    0.34    3.78    0.55       4
973          UC   0.556   0.298
974          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
975          UA     100
             *
             * *** COMBINE  RA99YA, SOUTH AND A99YB ****************************************
             *

976          KK  CA99YB
977          HC       3
             *
             *
             * Dummy Combining at AFR and South of Happy Valley Rd.
             *

978          KK    AFR1
979          HC       3
             *
             * RECOVER DIVERTED FLOW FROM A09U
             *

980          KK  BA09UI
981          DR   A09UI
             *
             * *** ROUTE RA09US ************************************************************
             * ROUTE RA09US IS 3000 FT WITH A SLOPE OF 0.0076
             * CROSS SECTION IS A SMALL ROAD WITH HOMES ON THE WEST SIDE
             * ALONG local STREETS
             * *** ROUTE FLOW TO N11NB FROM Happy Valley RD (CA09U)
             *
1                                        HEC-1 INPUT                                        PAGE 29

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

982          KK  RA09US
983          RS       6    FLOW       0
984          RC    0.04    0.03    0.04    3000  0.0076
985          RX       0       1      54      55      95      96     124     624
986          RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
             *
             *

987          KK   N11NB   BASIN
988          KM  SUB-BASIN N11NBN
989          BA   0.140
990          LG    0.31    0.27    4.70    0.31       4
991          UC   0.567   0.481
992          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
993          UA     100
             *
             * Combining Flows
             *

994          KK  CN11NB
995          HC       2
             *
             * ROUTE RN11NW IS 2521 FT WITH A SLOPE OF 0.0016
```

```
                * CROSS SECTION IS A SMALL ROAD WITH HOMES TO BOTH SIDES
                * ALONG Mariposa GrANDe
                *

 996            KK  RN11NW
 997            RS      12    FLOW       0
 998            RC    0.04    0.03    0.04    2521  0.0016
 999            RX       0       1      70      71      96      97     182     183
1000            RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                *
                * RECOVER DIVERTED FLOW FROM N11OI

1001            KK  BN11OI
1002            DR   N11OI
                *
                * ROUTE RN11OS IS 1184 FT WITH A SLOPE OF 0.0068
                * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
                * ALONG natural pathways
                * ROUTE FLOW TO Mariposa GrANDe (CN11M) FROM CN11O
                *

1003            KK  RN11OS
1004            RS      15    FLOW       0
1005            RC    0.05     .06     .05    1184  0.0068
1006            RX       0     400     800    1200    1600    2000    2400    2800
1007            RY       3       1      .5       0       0      .5       1       3
                *
1                                        HEC-1 INPUT                                                    PAGE 30

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1008            KK    N11M   BASIN
1009            KM  SUB-BASIN N11M
1010            BA   0.100
1011            LG    0.35    0.35    4.15    0.45       0
1012            UC   0.477   0.261
1013            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1014            UA     100
                *
                * *** COMBINE  CN11M ******************************************************
                * COMBINE BASIN N11M, RN11OS, and RN11NW
                * Mariposa GrANDe AND 95st AVE
                *

1015            KK   CN11M
1016            HC       3
                *
                * *** DIVERSION DN11M ******************************************************
                * DIVERSION MAIN 95th AVE(SOUTH), SPLIT (WEST)
                *

1017            KK   DN11M
1018            DT   N11MI
1019            DI       0       1      40      80     100     300     600    1200    2200
1020            DQ       0     .25      10      20      25      75     150     184     184
                *
                * ROUTE RN11MS IS 2689 FT WITH A SLOPE OF 0.0071
                * CROSS SECTION IS A SMALL ROAD WITH HOMES TO ONE SIDE
                * ALONG 95st AVE
                * ROUTE FLOW TO PINNACLE PEAK (CN11J) FROM Mariposa GrANDe (CN11M)
                *

1021            KK  RN11MS
1022            RS       7    FLOW       0
1023            RC    0.05    0.03    0.05    2689  0.0071
1024            RX       0       1      50      51      73      74     124     524
1025            RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
                *

1026            KK    N11J   BASIN
1027            KM  SUB-BASIN N11J
1028            BA   0.244
1029            LG    0.30    0.25    4.10    0.51      13
1030            UC   0.851   0.601
1031            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1032            UA     100
                *
                * *** STORAGE ROUTING LN11J ************************************************
                * *** SMALL SUBDIVISION STORAGE (ACCOUNTED) *********************************
                *
                                         HEC-1 INPUT                                                    PAGE 31
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1033          KK   LN11J
1034          DT  LN11JD      1.8
1035          DI       0      100     1000   10000
1036          DQ       0      100     1000   10000
              *
              * COMBINE N11J AND RN11KW
              * Pinnacle Peak AND 95st AVE
              *

1037          KK   CN11J
1038          HC       2
              *
              * Existing Condition 100% to South
              *

1039          KK   DN11J
1040          DT   N11JI
1041          DI       0       10      100     1000     5000
1042          DQ       0       10      100     1000     5000
              *
              * ROUTE RN11JW IS 1080 FT WITH A SLOPE OF .0019
              * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
              *
              * ROUTE FLOW TO CX4 FROM CN11J
              *

1043          KK  RN11JW
1044          RS       1    FLOW       0
1045          RC     .04    0.04     .04     1080   .0019
1046          RX       0     100     140      160     200      300      400      500
1047          RY      10       9       0        0       9       10       11       12
              *
              * RECOVER DIVERTED FLOW FROM CN11M
              *

1048          KK  DRN11M
1049          DR   N11MI
              *
              * ROUTE RN11MW IS 3871 FT WITH A SLOPE OF .0046
              * CROSS SECTION IS A ROAD WITH HOMES TO THE WEST SIDE
              * ROUTE FLOW TO CX4 FROM CN11M
              *

1050          KK  RN11MW
1051          RS      15    FLOW       0
1052          RC    0.05    0.04     .05     3871   .0046
1053          RX       0       1      50       51      76       77      102      602
1054          RY      10       2       1     0.75    0.75        1        2      3.5
              *
              * *** COMBINE  CN11J AND CN11M ***************************************************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1055          KK     CX4
1056          HC       2
              *
              * ROUTE RX4 IS 2164 FT WITH A SLOPE OF .0023
              * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
              * *** ROUTE FLOW TO CA090 FROM CX4  ****************************
              *

1057          KK     RX4
1058          RS       6    FLOW      -1
1059          RC     .04    0.04     .04     2164  0.0023
1060          RX       0     100     140      160     200      300      400      500
1061          RY      10       9       0        0       9       10       11       12
              *

1062          KK    A090   BASIN
1063          KM  SUB-BASIN A090
1064          BA   0.194
1065          LG    0.32    0.29    4.40    0.41       6
1066          UC   0.937   0.939
1067          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1068          UA     100
              *
```

```
1069          KK   SA09O STORAGE
1070          KM  Online Detention Basin, 28.5 ac-ft.
1071          RS       1    STOR       0
1072          SV       0     9.0    15.0    21.0    28.5    38.0
1073          SE       0       2       3       4       5       6
1074          SL       0   7.065    0.62     0.5
1075          SS       5     100     2.7     1.5
              *
              * RECOVER DIVERTED FLOW FROM A09RI
              *

1076          KK  BA09RI
1077          DR   A09RI
              *
              * ROUTE RA09RS IS 3928 FT WITH A SLOPE OF .0074
              * CROSS SECTION IS A HIGHWAY
              * ROUTE FLOW TO CA09O FROM CA09R
              *

1078          KK  RA09RS
1079          RS      12    FLOW       0
1080          RC    0.05    0.04    0.05    3928   .0074
1081          RX       0     100     200     225     250     275     375     475
1082          RY       6       5       4       3       3       4       5       6
              *
              * *** COMBINE  CX4, RA09RS, AND A09O ******************************************
              *
1                                          HEC-1 INPUT                                          PAGE 33

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1083          KK   CA09O
1084          HC       3
              *
              * Existing Condition: All Flow to South
              *

1085          KK   DA09O
1086          DT   A09OI
1087          DI       0     100    1000    5000
1088          DQ       0     100    1000    5000
              *
              *
              * ROUTE RA09OW IS 1076 FT WITH A SLOPE OF .0019
              * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
              * *** ROUTE FLOW TO CA09P FROM CA09O  *************************
              *

1089          KK  RA09OW
1090          RS       1    FLOW       0
1091          RC     .04     .04     .04    1076  0.0019
1092          RX       0     100     140     160     200     300     400     500
1093          RY      10       9       0       0       9      10      11      12
              *

1094          KK    A09P   BASIN
1095          KM  SUB-BASIN A09P
1096          BA   0.187
1097          LG    0.32    0.29    4.65    0.34       6
1098          UC   0.727   0.513
1099          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1100          UA     100
              *

1101          KK   SA09P STORAGE
1102          KM  Online Detention Basin, 25.2 ac-ft.
1103          RS       1    STOR       0
1104          SV       0     7.0    13.0    19.0    25.2    33.0
1105          SE       0       2       3       4       5       6
1106          SL       0   7.065    0.62     0.5
1107          SS       5     100     2.7     1.5
              *
              * *** COMBINE  CA09O AND A09P ***************************************************
              *

1108          KK   CA09P
1109          HC       2
              *
              * ROUTE RA09P IS 884 FT WITH A SLOPE OF .0136
              * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
              * *** ROUTE FLOW TO CA09Q FROM CA09P  *************************
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1110          KK   RA09P
1111          RS       2    FLOW       0
1112          RC     .04     .04     .04     884  0.0136
1113          RX       0     100     140     160     200     300     400     500
1114          RY      10       9       0       0       9      10      11      12
              *
              * Retrieve Diverted Flow of A09QAI
              *

1115          KK  BA09QA
1116          DR  A09QAI
              *
              * *** ROUTE FLOW TO CA09QB FROM CA09QA *************************
              *

1117          KK  RA09QB
1118          RS       8    FLOW       0
1119          RC    0.05     .06     .05    2700  0.0095
1120          RX       0     100     300     360     380     420     620     720
1121          RY      10       8       6       2       0       6       8      10
              *

1122          KK   A09QB   BASIN
1123          KM  SUB-BASIN A09Q South Portion
1124          BA   0.144
1125          LG    0.30    0.25    4.15    0.44       5
1126          UC   0.636   0.449
1127          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1128          UA     100
              *
              * *** COMBINE Flows of A09QA,A09QB  and RA09P  ********************************
              *

1129          KK   CA09Q
1130          HC       3
              *
              * Existing Condition:All Flow to South
              *

1131          KK   DA09Q
1132          DT   A09QI
1133          DI       0      10     100     500    1000    5000
1134          DQ       0      10     100     500    1000    5000
              *
              * ROUTE RA09QW IS 2468 FT WITH A SLOPE OF 0.0158
              * CROSS SECTION IS A MEDIUM CHANNEL
              * *** ROUTE CA09Q TO CA10A ******************************************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1135          KK  RA09QW
1136          RS       1    FLOW       0
1137          RC     .05     .05     .05    2468  0.0158
1138          RX       0     100     140     160     200     300     400     500
1139          RY      10       9       0       0       9      10      11      12
              *

1140          KK    A10A   BASIN
1141          KM  SUB-BASIN A10A
1142          BA   0.189
1143          LG    0.33    0.32    5.30    0.24       2
1144          UC   0.524   0.330
1145          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1146          UA     100
              *

1147          KK   CA10A
1148          HC       2
              *
              * ROUTE RA10A IS 2831 FT WITH A SLOPE OF 0.0148
              * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
              *

1149          KK   RA10A
1150          RS       2    FLOW       0
```

```
1151          RC    0.05    0.05    0.05    1553     .03
1152          RX       0     100     140     170     210     310     410     510
1153          RY      10       9       0       0       9      10      11      12
              *

1154          KK    A99X   BASIN
1155          KM  SUB-BASIN A99X
1156          BA   0.264
1157          LG    0.21    0.28    4.20    0.53      39
1158          UC   0.419   0.203
1159          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1160          UA     100
              *

1161          KK   CA99X
1162          HC       2
              *
              * Dummy Combination at AFR and Pinnacle Peak Rd.
              *

1163          KK    AFR2
1164          HC       2
              *
              * Retrieve Diverted Flow of A09OI
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1165          KK  BA09OI
1166          DR   A09OI
              *
              * ROUTE RA09OS IS 5602 FT WITH A SLOPE OF .0062
              * CROSS SECTION IS A RURAL ROAD WITH A DITCH RIGHT
              * *** ROUTE FLOW TO CX7 FROM CA09O  ****************************
              *

1167          KK  RA09OS
1168          RS       8    FLOW       0
1169          RC     .03     .03     .03    5602   .0062
1170          RX       0     200     220   227.5     235     255     300     460
1171          RY       4       2       0       0       2     2.5       3       4
              *

1172          KK    A09K   BASIN
1173          KM  SUB-BASIN A09K
1174          BA   0.410
1175          LG    0.34    0.34    4.40    0.39       2
1176          UC   0.845   0.559
1177          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1178          UA     100
              *

1179          KK   DA09K
1180          KM  DIVERSION DA09K
1181          KM  DIVERSION SPLITS FLOW WITHIN SUB-BASIN A09K BASED ON TOPOGRAPHICAL SPLIT
1182          KM  A PORTION OF THE FLOW IS DIRECTED WEST TO LAKE PLEASANT PARKWAY
1183          KM  THE REMAINDER IS DIRECTED TO N11FA
1184          DT   A09KI
1185          DI       0     100     200     300     400     500     600     700    2000
1186          DQ       0      73     146     219     292     365     438     511    1460
              *

1187          KK     CX7
1188          KM  COMBINE Flows from North and East
1189          HC       2
              *

1190          KK    RX7S
1191          KM  ROUTE FLOW SOUTH TO CX8 FROM CX7
1192          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1193          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1194          KM  ADJACENT TO LAKE PLEASANT PARKWAY ON THE WEST SIDE
1195          RS       5    FLOW       0
1196          RC     .03     .03     .03    2800    .002
1197          RX       0       3       9      15      35      41      47      50
1198          RY       5       4       2       0       0       2       4       5
              *
              * North Portion of N11N
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1199          KK   N11NA   BASIN
1200          KM  UPPER PART OF SUBBASIN N11N
1201          BA   0.022
1202          LG    0.35    0.35    4.00    0.47      29
1203          UC   0.178   0.111
1204          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1205          UA     100
              *

1206          KK  RN11NA
1207          RS      13    FLOW       0
1208          RC    0.05    0.04     .05    3500  0.0083
1209          RX       0       1      51      52      82      83     108     608
1210          RY    9.25    1.25    0.25       0       0    0.25    1.25    3.75
              *

1211          KK   N11NC   BASIN
1212          KM  East PART OF SUBBASIN N11N
1213          BA   0.171
1214          LG    0.31    0.29    4.20    0.46       7
1215          UC   0.453   0.276
1216          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1217          UA     100
              *

1218          KK  CN11NC
1219          HC       2
              *

1220          KK  DN11NC
1221          KM  DIVERT FLOW 10-YEAR RUNOFF (149 cfs) to East
1222          DT   N11NP
1223          DI       0     149    2000
1224          DQ       0     149     149
              *

1225          KK  RN11NC
1226          KM  ROUTE N11NC to South
1227          RS       5    FLOW      -1
1228          RC    0.05    0.04     .05    1600  0.0089
1229          RX       0      10      20      30      70      80      90     100
1230          RY       3       2       1       0       0       1       2       3
              *

1231          KK   N11ND   BASIN
1232          KM  LOWER PART OF SUBBASIN N11N
1233          BA   0.053
1234          LG    0.29    0.25    4.60    0.36      12
1235          UC   0.564   0.502
1236          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1237          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1238          KK    N11K   BASIN
1239          KM  SUB-BASIN N11K
1240          BA   0.167
1241          LG    0.30    0.25    4.20    0.46       9
1242          UC   0.772   0.599
1243          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1244          UA     100
              *

1245          KK   CN11K
1246          KM  COMBINE N11K, RN11NC AND N11ND AT 91ST AVENUE AND PINNACLE PEAK
1247          HC       3
              *
              * Divert 10-Year Flow (55 cfs) into SD to East

1248          KK  DN11KS
1249          DT   N11KP
1250          DI       0      55     500    2000
1251          DQ       0      55      55      55
              *

1252          KK   RN11K
1253          RS      15    FLOW       0
```

```
1254        RC      .04     0.04      .04     5178    .0062
1255        RX        0      200      230      260      280      310      340      540
1256        RY       10        8        7        0        0        7        8       10
            *
            * Initial flow goes to west and excess flow splits to southeast
            * DIVERSION HAS BEEN MODIFIED FROM ORIGINAL ENTELLUS STUDY
            * PER CITY OF PEORIA COMMENTS (1/18/05)
            *

1257        KK     DX5
1258        DT     X5I
1259        DI        0       10      100      200      300      400      500     1000     2000
1260        DQ        0        0        0       94      154      249      344      844     1844
            *
            * ROUTE RX5W IS 1292 FT WITH A SLOPE OF 0.0008
            * CROSS SECTION IS DIRT ROAD
            * WEST ALONG DEER VALLEY RD
            * ROUTE FLOW FROM 91st AVE. (CN11H) TO WEST OF 91st AVE (CX5)
            *

1261        KK    RX5W
1262        RS       11     FLOW        0
1263        RC     0.05    0.045     0.05     1292    .0008
1264        RX        0      200      225      250      270      295      320      520
1265        RY     4.25     2.25     1.25        0        0     1.25     2.25     4.25
            *
1                                          HEC-1 INPUT                                                    PAGE 39

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1266        KK    N11H   BASIN
1267        KM  SUB-BASIN N11H
1268        BA    0.419
1269        LG     0.35     0.35     4.50     0.36        0
1270        UC    0.843    0.519
1271        UA        0      3.0      5.0      8.0     12.0     20.0     43.0     75.0     90.0     96.0
1272        UA      100
            *
            * COMBINE RX5W AND BASIN N11H
            *

1273        KK   CN11H
1274        HC        2
            *
            * NEW ALTERNATIVE CHANNEL ACROSS STATE LAND
            *

1275        KK   RN11H
1276        KM  ROUTE FLOW WEST TO CN11G FROM CN11H
1277        KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1278        KM  3:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1279        KM  ADJACENT TO DEAR VALLEY ROAD ON THE NORTH SIDE
1280        RS        7     FLOW        0
1281        RC      .03      .03      .03     3300     .001
1282        RX        0        3       12       18       38       44       53       56
1283        RY        6        5        2        0        0        2        5        6
            *
            * RECOVER DIVERTED FLOW FROM N11J                                                          G
            *

1284        KK  BN11JI
1285        DR   N11JI
            *
            * ROUTE RN11JS IS 5670 FT WITH A SLOPE OF 0.0062
            * CROSS SECTION IS A SMALL NATURAL WASH
            * ALONG NATURAL WASH
            * ROUTE FLOW TO DEER VALLEY RD. (CN11G) FROM PINNACLE PEAK (CN11J)
            *

1286        KK  RN11JS
1287        RS       12     FLOW        0
1288        RC     0.05     0.06     0.05     5670   0.0062
1289        RX        0      350      450      480      482      510      610      910
1290        RY        7        6        5        1        0        5        6        7
            *

1291        KK    N11G   BASIN
1292        KM  SUB-BASIN N11G
1293        BA    0.524
1294        LG     0.35     0.35     4.35     0.40        0
1295        UC    0.844    0.464
1296        UA        0      3.0      5.0      8.0     12.0     20.0     43.0     75.0     90.0     96.0
```

```
1297        UA     100
            *
            * COMBINE  RN11JS, RN11H AND N11G AT 98TH AVE
            *
                                        HEC-1 INPUT                                                    PAGE 40

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1298        KK   CN11G
1299        HC       3
            *

1300        KK   RN11G
1301        KM  ROUTE FLOW SOUTH TO CN11FB FROM CN11G
1302        KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1303        KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1304        KM  ADJACENT TO 98TH AVE ON THE WEST SIDE
1305        RS       4    FLOW       0
1306        RC     .03     .03     .03    2500    .002
1307        RX       0      12      24      36      62      68      72      80
1308        RY       6       4       2       0       0       2       4       6
            *

1309        KK   N11DA   BASIN
1310        KM  SUB-BASIN N11DA CREATED BY CVL 7/04
1311        BA   0.256
1312        LG    0.25    0.25    4.60    0.39      30
1313        UC   0.781   0.511
1314        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1315        UA     100
            *
            * DOVE VALLEY RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
            * STORAGE MODIFIED PER CITY OF PEORIA TO DISCHARGE UP TO 200CFS WEST
            * TOTAL DETENTION/RETENTION VOLUME = 18 AC-FT, 10 AC-FT MODELED AS RETENTION
            * 8 AC-FT MODELED AS ON-LINE DETENTION BASIN ON NEC OF RGL & 95TH
            *

1316        KK  LN11DA
1317        DT  LDAOUT     8.0
1318        DI       0     100    1000   10000
1319        DQ       0     100    1000   10000
            *

1320        KK  SN11DA
1321        KM  2-8'x3' BOX CULVERTS TO TAKE FLOW TO WEST
1322        KM  THE WEST + EAST DETENTION BASIN WERE COMBINED WITH 1-18"RCP TO SOUTH
1323        RS       1    STOR       0
1324        SV     0.0     .06    0.16    0.35    1.91    5.62   10.58   16.46
1325        SE    1257    1258    1259    1260    1261    1262    1263    1264
1326        SQ       0       5       9      50      84     113     140     205
            *

1327        KK  N11DAW
1328        KM  SPLIT THE FLOW BETWEEN BOX AND PIPE - Pipe Flow to South
1329        DT  D11DAS
1330        DI       0       5       9      50      84     113     140     205
1331        DQ       0       5       9      15      18      20      22      23
            *
1                                       HEC-1 INPUT                                                    PAGE 41

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1332        KK  RN11DA
1333        KM  ROUTE FLOW WEST TO CN11FB FROM N11DA
1334        KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1335        KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1336        KM  ADJACENT TO LAKE PLEASANT PARKWAY ON THE NORTH SIDE
1337        RS       5    FLOW       0
1338        RC     .03     .03     .03    2000    .001
1339        RX       0       6      18      30      35      41      47      50
1340        RY       5       4       2       0       0       2       4       5
            *

1341        KK   N11FB   BASIN
1342        KM  SUB-BASIN N11FB
1343        BA   0.121
1344        LG    0.24    0.26    4.40    0.45      30
1345        UC   0.740   0.694
1346        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1347        UA     100
            *
```

```
1348          KK  LN11FB
1349          KM  STORAGE ROUTING LN11FB
1350          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1351          DT  LN1FBD     10.6
1352          DI       0      100     1000    10000
1353          DQ       0      100     1000    10000
              *

1354          KK  CN11FB
1355          KM  COMBINE LN11FB and RN11DA
1356          HC       2
              *

1357          KK  C98RGL
1358          KM  COMBINE CN11FB AND RN11G AT WEST 98TH AVE AND RGL
1359          HC       2
              *

1360          KK  RN11FB
1361          KM  ROUTE FLOW WEST TO CN11FA FROM CN11FB
1362          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1363          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1364          KM  ADJACENT TO LAKE PLEASANT PARKWAY ON THE NORTH SIDE
1365          RS       2    FLOW       0
1366          RC     .03      .03      .03    1100     .001
1367          RX       0       12       24      36       62       68       72       80
1368          RY       8        4        2       0        0        2        4        8
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1369          KK  DRA09K
1370          KM  DIVERSION RECOVER DA09K
1371          KM  RECOVER DIVERTED FLOW FROM A09K
1372          DR   A09KI
              *

1373          KK  RA09KS
1374          KM  ROUTE FLOW SOUTH TO CN11FA
1375          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1376          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1377          KM  ADJACENT TO THE COMMERCIAL PROPERTY ON THE EAST SIDE
1378          RS       5    FLOW       0
1379          RC     .03      .03      .03    2700     .002
1380          RX       0       12       24      26       52       58       64       70
1381          RY       6        4        2       0        0        2        4        6
              *

1382          KK   N11FA   BASIN
1383          BA   0.180
1384          LG    0.22    0.26    4.40    0.46       34
1385          UC   0.730   0.580
1386          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1387          UA     100
              *

1388          KK  LN11FA
1389          KM  STORAGE ROUTING LN11FA
1390          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1391          DT  LN1FAD      7.7
1392          DI       0      100     1000    10000
1393          DQ       0      100     1000    10000
              *

1394          KK   A09GA   BASIN
1395          BA   0.074
1396          LG    0.10    0.25    4.35    0.56       80
1397          UC   0.287   0.164
1398          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1399          UA     100
              *

1400          KK  LA09GA
1401          KM  STORAGE ROUTING LA09GA
1402          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1403          DT  L09GAD      5.9
1404          DI       0      100     1000    10000
1405          DQ       0      100     1000    10000
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1406          KK  CN11FA
1407          KM  COMBINE RA09KS,LN11FA,LA09GA AND RN11FB
1408          HC       4
              *

1409          KK  RN11FA
1410          KM  ROUTE FLOW WEST TO CA09G FROM CN11FA
1411          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1412          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1413          KM  ADJACENT TO ROSE GARDEN LANE ON THE NORTH SIDE
1414          RS       2    FLOW       0
1415          RC     .03      .03      .03      800     .001
1416          RX       0        6       12       18       52       58       64       70
1417          RY       8        4        2        0        0        2        4        8
              *

1418          KK   A09GB   BASIN
1419          KM  SUB-BASIN A09GB
1420          BA   0.051
1421          LG    0.23    0.25    4.30    0.49      35
1422          UC   1.183   1.508
1423          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1424          UA     100
              *

1425          KK  LA09GB
1426          KM  STORAGE ROUTING LA09GB
1427          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1428          DT  L09GBD     2.8
1429          DI       0     100    1000   10000
1430          DQ       0     100    1000   10000
              *

1431          KK   CA09G
1432          KM  COMBINE CA09GA and A09GB
1433          HC       2
              *
              * DIVERSION TO SOUTH ALONG 101ST AVE, MAXIMUM 150 CFS PER CITY

1434          KK   DA09G
1435          DT   A09GI
1436          DI       0      50     100     300     750    1200    2000
1437          DQ       0      10      20      60     150     150     150
              *

1438          KK  RA09GW
1439          KM  ROUTE FLOW WEST TO CX8 FROM CA09G
1440          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1441          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1442          KM  ADJACENT TO ROSE GARDEN LANE ON THE NORTH SIDE
1443          RS       1    FLOW       0
1444          RC     .03      .03      .03      900     .001
1445          RX       0        6       12       18       52       58       64       70
1446          RY       8        4        2        0        0        2        4        8
              *
              * *** COMBINE  RX7S AND RA09GW ********************************************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1447          KK     CX8
1448          HC       2
              *
              * ROUTE RX8W IS 2300 FT WITH A SLOPE OF .001
              * CROSS SECTION IS THE NEW CHANNEL ALONG ROSE GARDEN LANE
              *

1449          KK    RX8W
1450          KM  ROUTE FLOW WEST TO CA09H1 FROM CX8
1451          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1452          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1453          KM  ADJACENT TO ROSE GARDEN LANE ON THE NORTH SIDE
1454          RS       4    FLOW       0
1455          RC     .03      .03      .03     2300     .001
1456          RX       0       12       24       36       62       68       74       80
1457          RY       8        4        2        0        0        2        4        8
              *
```

```
1458          KK    A09H   BASIN
1459          KM  SUB-BASIN A09H
1460          BA   0.237
1461          LG    0.24    0.25    4.55    0.41      31
1462          UC   0.937   0.801
1463          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1464          UA     100
              *

1465          KK   LA09H
1466          KM  STORAGE ROUTING LA09H
1467          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1468          DT  LA09HD    12.6
1469          DI       0     100    1000   10000
1470          DQ       0     100    1000   10000
              *

1471          KK  CA09H1
1472          KM  Combine flows from CX8 and A09H
1473          HC       2
              *

1474          KK    A09J   BASIN
1475          KM  SUB-BASIN A09J
1476          BA   0.168
1477          LG    0.25    0.25    4.35    0.46      30
1478          UC   0.749   0.639
1479          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1480          UA     100
              *
              * *** STORAGE ROUTING LA09J ***********************************************
              * *** FUTURE DEVELOPMENT STORAGE (ACCOUNTED) ****************************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1481          KK   LA09J
1482          DT  LA09JD     7.7
1483          DI       0     100    1000   10000
1484          DQ       0     100    1000   10000
              *
              * *** DIVERSION DA09J ******************************************************
              * *** DIVERTED  MAIN (SOUTH), DIVERTED (WEST)  ***************************
              * 100% Flows to South based on the report

1485          KK   DA09J
1486          DT   A09JI
1487          DI       0      10      30      50     100     500    1000    2000
1488          DQ       0       0       0       0       0       0       0       0
              *
              * *** ROUTE FLOW TO CA09H   *************************
              *

1489          KK  RA09JS
1490          RS      12    FLOW       0
1491          RC     .04     .04     .04    2800  .00350
1492          RX       0     100     200     225     245     270     370     470
1493          RY       8       7       6       0       0       6       7       8
              *

1494          KK   CA09H
1495          KM  COMBINE CA09H1 and RA09JS
1496          HC       2
              *
              * ROUTE FLOW TO CX10 FROM CA09H
              *

1497          KK   RA09H
1498          RS       1    FLOW       0
1499          RC     .03     .03     .03     850    .005
1500          RX     100     118     126     150     200     224     232     250
1501          RY      10       8       6       0       0       6       8      10
              *
              * *** RECOVER DIVERTED FLOW FROM A09QI****************************************
              *

1502          KK  BA09QI
1503          DR   A09QI
              *
              * *** ROUTE RA09QS ************************************************************
```

```
                 *
                 * ROUTE RA09QS IS 1655 FT WITH A SLOPE OF .0073
                 * CROSS SECTION IS A MEDIUM NATURAL WASH
                 * *** ROUTE FLOW TO CA09M FROM CA09Q  **************************
                 *
                                          HEC-1 INPUT                                                    PAGE 46

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1504             KK  RA09QS
1505             RS       6    FLOW       0
1506             RC    0.05     .06     .05    1655  0.0073
1507             RX       0      50     250     350     360     420     620     720
1508             RY      10       8       6       2       0       6       8      10
                 *

1509             KK    A09M   BASIN
1510             KM  SUB-BASIN A09M
1511             BA   0.249
1512             LG    0.28    0.28    4.45    0.42      22
1513             UC   0.721   0.546
1514             UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1515             UA     100
                 *
                 * *** STORAGE ROUTING LA09M ***********************************************
                 * *** IRONWOOD RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ****************
                 *

1516             KK   LA09M
1517             DT  LA09MD     6.9
1518             DI       0     100    1000   10000
1519             DQ       0     100    1000   10000
                 *
                 * *** COMBINE  CA09Q AND A09M ****************************************************
                 *

1520             KK   CA09M
1521             HC       2
                 *
                 * ROUTE RA09M IS 1102 FT WITH A SLOPE OF .0064
                 * CROSS SECTION IS A CHANNEL (MEASURED)
                 * *** ROUTE FLOW TO CA09N FROM CA09M  **************************
                 *

1522             KK   RA09M
1523             RS       2    FLOW       0
1524             RC    0.05    0.04     .05    1102  0.0064
1525             RX       0       1      21      41      51      71     101     102
1526             RY      10       4       0       4       5       6       6      10
                 *

1527             KK    A09N   BASIN
1528             KM  SUB-BASIN A09N
1529             BA   0.110
1530             LG    0.27    0.27    5.80    0.22      25
1531             UC   0.647   0.512
1532             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1533             UA     100
                 *
                 * *** COMBINE BASIN A09N AND ROUTE RA09M  *********************************
                 *
1                                         HEC-1 INPUT                                                    PAGE 47

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1534             KK   CA09N
1535             HC       2
                 *
                 * *** STORAGE ROUTING LA09N ***********************************************
                 * *** ALTA VISTA RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) **************
                 *

1536             KK   LA09N
1537             RS       1    STOR       0
1538             SV     0.0     2.30    4.67    7.11    9.63   12.23   14.90   17.65   20.48
1539             SE  1250.0  1250.5  1251.0  1251.5  1252.0  1252.5  1253.0  1253.5  1254.0
1540             SQ       0     9.3    31.4    66.0   114.1   160.1   226.2   208.5   475.0
                 *
                 * CROSS SECTION IS A CHANNEL (MEASURED)
                 * *** ROUTE FLOW TO CA09L FROM CA09N  **************************
                 *
```

```
1541        KK   RA09N
1542        RS      15    FLOW       0
1543        RC   0.025    0.02   0.025    2382  0.0040
1544        RX       0       1       7      11      17      21      29     100
1545        RY       5       4       2       0       0       2     3.0       5
            *
            * *** RECOVER DIVERTED FLOW FROM CA09J ****************************************
            *

1546        KK  DRA09J
1547        DR   A09JI
            *
            * ROUTE RA09JW IS 1749 FT WITH A SLOPE OF .0063
            * CROSS SECTION IS A CHANNEL ON THE WEST SIDE OF A ROAD
            * *** ROUTE FLOW TO CA09L FROM CA09J  **************************
            *

1548        KK  RA09JW
1549        RS       1    FLOW       0
1550        RC    0.04    0.03    0.04    1749  0.0063
1551        RX       0       1      21      31      41      51      81     281
1552        RY      14       6       6       0       0       6       6       8
            *

1553        KK    A09L   BASIN
1554        KM  SUB-BASIN A09L
1555        BA   0.136
1556        LG    0.23    0.26    4.90    0.32      26
1557        UC   0.760   0.625
1558        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1559        UA     100
            *
            * *** COMBINE BASIN A09L, RA09N, AND RA09JW   **********************************
            *
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1560        KK   CA09L
1561        HC       3
            *
            * LA09L is an Onlin Detention Basin, NOT Retention Basin
            *

1562        KK   LA09L
1563        RS       1    STOR       0
1564        SV     0.0    0.57    1.17    1.82    2.50    3.22    3.98    4.78    5.63    6.52
1565        SE     0.0     0.5     1.0     1.5     2.0     2.5     3.0     3.5     4.0     5.5
1566        SQ       0    10.0    30.0    52.0    80.0   110.0   140.0   155.0   180.0     600
            *
            * ROUTE RA09LS IS 2615 FT WITH A SLOPE OF .0019
            * CROSS SECTION IS A NEW CHANNEL ALONG THE EAST SIDE OF THE ROAD
            * *** ROUTE FLOW TO CA99W FROM CA09L  **************************
            *

1567        KK  RA09LS
1568        RS       3    FLOW       0
1569        RC   0.025     .02   0.025    2615  0.0040
1570        RX       0       1       6      12      19      25      29     100
1571        RY       6       5       4       0       0       4       5       6
            *

1572        KK   A09IH   BASIN
1573        KM   Subbasin for Rose Garden and Desert Star Areas
1574        KM   SUB-BASIN A09IH
1575        BA   0.091
1576        LG    0.25    0.26    4.60    0.39      27
1577        UC   0.599   0.568
1578        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1579        UA     100
            *
            * *** COMBINE BASIN A09N AND ROUTE RA09M  **********************************
            *

1580        KK  CA09IH
1581        HC       2
            *
            * Onlin Detention Basin (Box Culvert Outlet)
            *

1582        KK  LA09IH
```

```
1583          RS       1    STOR       0
1584          SV     0.0    1.12    2.29    3.52    4.79    6.12    7.51    8.95   10.45   12.01
1585          SE  1237.0  1237.5  1238.0  1238.5  1239.0  1239.5  1240.0  1240.5  1241.0  1242.5
1586          SQ       0    10.0    30.0    52.0    80.0   112.0   145.0   183.0   220.0   600.0
              *
                                          HEC-1  INPUT                                                PAGE 49

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1587          KK    A09I   BASIN
1588          KM  SUB-BASIN A09I
1589          BA   0.126
1590          LG    0.25    0.20    6.60    0.17      29
1591          UC   0.772   0.703
1592          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1593          UA     100
              *
              * *** ROSE GARDEN RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED)  ************
              *

1594          KK   LA09I
1595          DT  LA09ID     5.4
1596          DI       0     100    1000   10000
1597          DQ       0     100    1000   10000
              *
              * *** COMBINE  RA09IW AND RA09LS ***********************************************
              *

1598          KK    CX10
1599          HC       3
              *
              * ROUTE FLOW TO CA09F FROM CA09G
              *

1600          KK    RX10
1601          RS       5    FLOW       0
1602          RC    0.03    0.03    0.03    4470    .005
1603          RX     100     118     126     150     200     224     232     250
1604          RY      10       8       6       0       0       6       8      10
              *

1605          KK    A99V   BASIN
1606          KM  SUB-BASIN A99V
1607          BA   0.207
1608          LG    0.35    0.40    6.00    0.18       1
1609          UC   0.601   0.423
1610          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1611          UA     100
              *
              * *** COMBINE BASIN A99V AND RX11W  ************************************
              *

1612          KK   CA99V
1613          HC       2
              *

1614          KK     A10   BASIN
1615          KM  SUB-BASIN A10
1616          BA   0.214
1617          LG    0.34    0.34    4.65    0.33       2
1618          UC   0.467   0.220
1619          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1620          UA     100
              *
              *
1                                         HEC-1  INPUT                                                PAGE 50

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1621          KK    A99W   BASIN
1622          KM  SUB-BASIN A99W
1623          BA   0.215
1624          LG    0.27    0.29    6.40    0.17      20
1625          UC   0.851   0.514
1626          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1627          UA     100
              *
              * *** STORAGE ROUTING LA99W ***********************************************
              * *** DEER VALLEY RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              *
```

```
1628          KK   LA99W
1629          DT  LA99WD     6.7
1630          DI       0     100    1000   10000
1631          DQ       0     100    1000   10000
              *
              * Dummy Combination at AFR and Rose Garden Lane.
              *

1632          KK    AFR3
1633          HC       4
              *
              * *** RECOVER DIVERTED FLOW FROM CA09G ****************************************
              *

1634          KK  DRA09G
1635          DR   A09GI
              *
              * ROUTE RA09GS IS 3990 FT WITH A SLOPE OF .0015
              * CROSS SECTION IS A MEDIUM ROADSIDE CHANNEL
              * ROUTE FLOW TO CA09F FROM CA09G
              *

1636          KK  RA09GS
1637          RS      13    FLOW       0
1638          RC    0.04    0.04    0.04    3990   .0015
1639          RX       0     200     220     240     260     280     320     520
1640          RY       6       4       0       0       3       4       4       6
              *

1641          KK    A09F   BASIN
1642          KM  SUB-BASIN A09F
1643          BA   0.365
1644          LG    0.21    0.27    5.30    0.28      35
1645          UC   0.817   0.483
1646          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1647          UA     100
              *
              * *** STORAGE ROUTING LA09F ***********************************************
              * *** PARKRIDGE ESTATES RESIDENTIAL DEVELOPMENT (ACCOUNTED) ***************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1648          KK   LA09F
1649          DT  LA09FD    13.6
1650          DI       0     100    1000   10000
1651          DQ       0     100    1000   10000
              *
              * *** COMBINE  CA09G, CA09H, AND A09F ******************************************
              *

1652          KK   CA09F
1653          HC       2
              *
              * *** DIVERTED  MAIN (WEST), DIVERTED (SOUTH)  ****************************
              * BEARDSLEY ROAD CHANNEL TO THE WEST. EXCESS FLOW TO THE SOUTH.
              *

1654          KK   DA09F
1655          DT   A09FI
1656          DI       0      10      30      50     100     500     700    1000
1657          DQ       0      .2      .3      .4      .5      80     250     500
              *
              * ***************************************************************************
              * ********************   BEARDSLEY RD DRAINAGE    ******************************
              * ***************************************************************************
              *
              * ROUTE RA09FW IS 3031 FT WITH A SLOPE OF .002
              * CROSS SECTION IS BEARDSLEY CHANNEL (MEASURED)
              *
              * *** ROUTE FLOW TO CA09E FROM CA09F  **************************
              *

1658          KK  RA09FW
1659          RS       9    FLOW       0
1660          RC     .03    .025     .03    3031   0.002
1661          RX       0       1      16      36      51     123     148     648
1662          RY      16       8       0       0       8       8       9      11
              *

1663          KK    A09E   BASIN
```

```
1664          KM  SUB-BASIN A09E
1665          BA   0.147
1666          LG    0.22    0.24    4.70    0.35      34
1667          UC   0.763   0.697
1668          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1669          UA     100
              *
              * *** STORAGE ROUTING LA09E ***********************************************
              * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) *******************
              *
1                                          HEC-1 INPUT                                          PAGE 52

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1670          KK   LA09E
1671          DT  LA09ED     8.2
1672          DI       0     100    1000   10000
1673          DQ       0     100    1000   10000
              *
              * *** COMBINE LA09E AND A99E ****************************************
              *

1674          KK   CA09E
1675          HC       2
              *
              * ROUTE RA09E IS 2700 FT WITH A SLOPE OF .0041
              * CROSS SECTION IS BEARDSLEY CHANNEL (MEASURED)
              *
              * ROUTE FLOW TO CA09C FROM CA09E
              *

1676          KK   RA09E
1677          RS       3    FLOW       0
1678          RC    0.04    0.03    0.04    2700   .0041
1679          RX       0       1      16      36      51     123     148     648
1680          RY      16       8       0       0       8       8       9      11
              *

1681          KK    A09D   BASIN
1682          KM  SUB-BASIN A09D
1683          BA   0.254
1684          LG    0.23    0.20    6.60    0.16      31
1685          UC   0.480   0.185
1686          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1687          UA     100
              *
              * *** STORAGE ROUTING LA09D ***********************************************
              * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) *******************
              *

1688          KK   LA09D
1689          DT  LA09DD    15.3
1690          DI       0     100    1000   10000
1691          DQ       0     100    1000   10000
              *
              * *** COMBINE LA09D, AND RA09EW ************************
              *

1692          KK  CA09C*
1693          HC       2
              *
              * ROUTE RA09C* IS 841 FT WITH A SLOPE OF .0083
              * CROSS SECTION IS BEARDSLEY ROAD CHANNEL (MEASURED)
              * *** ROUTE FLOW TO CA09C FROM CA09C*   ***************************
              *
1                                          HEC-1 INPUT                                          PAGE 53

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1694          KK  RA09C*
1695          RS       1    FLOW       0
1696          RC    0.04    0.03    0.04     841   .0083
1697          RX       0      51      61      71      81     111     151     651
1698          RY       9       8       0       0       8       9       9      10
              *

1699          KK    A09C   BASIN
1700          KM  SUB-BASIN A09C
1701          BA   0.073
1702          LG    0.35    0.32    4.50    0.38       4
1703          UC   0.581   0.533
```

```
1704          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1705          UA     100
              *
              * *** COMBINE BASIN A09C AND RA09C*   ***********************************
              *

1706          KK   CA09C
1707          HC       2
              *
              * ROUTE RA09C IS 1978 FT WITH A SLOPE OF .0056
              * CROSS SECTION IS BEARDSLEY CHANNEL (MEASURED)
              *

1708          KK   RA09C
1709          RS       3    FLOW      -1
1710          RC    0.04    0.04    0.04    1978  0.0056
1711          RX       0     100     120     130     150     180     205     705
1712          RY      14       8       0       0       8       8       9      10
              *

1713          KK    A09B   BASIN
1714          KM  SUB-BASIN A09B
1715          BA   0.041
1716          LG    0.12    0.25    4.10    0.68      71
1717          UC   0.221   0.141
1718          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1719          UA     100
              *
              * ROUTE RA09B IS 2497 FT WITH A SLOPE OF .0012
              * CROSS SECTION IS A SMALL NATURAL CHANNEL
              * *** ROUTE FLOW TO CA09A FROM CA09B  **************************
              *

1720          KK   RA09B
1721          RS      14    FLOW       0
1722          RC    0.05     .06     .05    2497   .0012
1723          RX       0     350     450     480     482     510     610     910
1724          RY       7       6       5       1       0       5       6       7
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1725          KK    A09A   BASIN
1726          KM  SUB-BASIN A09A
1727          BA   0.084
1728          LG    0.29    0.15    3.74    0.80      38
1729          UC   0.824   0.737
1730          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1731          UA     100
              *
              * *** Combine  CA09C, A09B, AND A09A ******************************************
              *

1732          KK   CA09A
1733          HC       3
              *
              * THIS FLOW IS DIVERTED. THERE IS TWO 36" CMP THAT CARRIES
              * FLOW TO THE WEST, AND THE REST FLOWS SOUTH.
              *

1734          KK  DA09AO
1735          DT   A09AI
1736          DI       0      70     140     400     600     800    1000    3000    5000
1737          DQ       0     0.2     0.3     260     460     660     860    2860    4860
              *
              * ROUTE RA09AW IS 5898 FT WITH A SLOPE OF .0017
              * CROSS SECTION IS A LARGE NATURAL WASH
              * *** ROUTE THE DIVERTED FLOW TO THE WEST AND SOUTH TO CA09 ********************
              *

1738          KK  RA09AW
1739          RS      15    FLOW       0
1740          RC    0.05     .06     .05    5898  0.0017
1741          RX       0      50     250     310     360     420     620     720
1742          RY      10       8       6       0       0       6       8      10
              *

1743          KK    A99T   BASIN
1744          KM  SUB-BASIN A99T
1745          BA   0.030
1746          LG    0.20    0.30    2.79    1.39      42
```

```
1747          UC   0.205   0.056
1748          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1749          UA     100
              *
              * *** STORAGE ROUTING LA99T ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ************************************
              *

1750          KK   LA99T
1751          DT  LA99TD    0.64
1752          DI       0     100    1000   10000
1753          DQ       0     100    1000   10000
              *
              * ROUTE RA99T IS 886 FT WITH A SLOPE OF .0023
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * *** ROUTE FLOW TO CA09 FROM CA99T   **************************
              *
1                                        HEC-1 INPUT                                          PAGE 55

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1754          KK   RA99T
1755          RS       5    FLOW       0
1756          RC    0.05     .06     .05     886  0.0023
1757          RX       0      50     250     350     360     420     620     720
1758          RY      10       8       6       2       0       6       8      10
              *

1759          KK     A09   BASIN
1760          KM  SUB-BASIN A09
1761          BA   0.176
1762          LG    0.24    0.31    3.58    0.68      22
1763          UC   0.577   0.239
1764          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1765          UA     100
              *
              * COMBINE RA99T, CA09, AND RA09AW
              *

1766          KK    CA09
1767          HC       3
              *

1768          KK    A99U   BASIN
1769          KM  SUB-BASIN A99U
1770          BA   0.070
1771          LG    0.25    0.30    3.71    0.66      29
1772          UC   0.472   0.467
1773          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1774          UA     100
              *
              * COMBINE CA09, A99U, AND AFR3 at AFR & South of Beardsley Rd.
              *

1775          KK    AFR4
1776          HC       3
              *

1777          KK    A07G   BASIN
1778          KM  SUB-BASIN A07G
1779          BA   0.258
1780          LG    0.24    0.16    7.60    0.11      32
1781          UC   0.641   0.425
1782          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1783          UA     100
              *
              * *** STORAGE ROUTING LA07G ***********************************************
              * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) *******************
              *
1                                        HEC-1 INPUT                                          PAGE 56

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1784          KK   LA07G
1785          DT  LA07GD    12.9
1786          DI       0     100    1000   10000
1787          DQ       0     100    1000   10000
              *
              * ROUTE RA07G IS 2439 FT WITH A SLOPE OF .0012
              * CROSS SECTION IS 111TH AVE (MEASURED)
              * *** ROUTE FLOW FROM CA07G TO CA07E ************************************
```

```
*

KK   RA07G
RS       6    FLOW       0
RC    0.04     .02    0.04    2439  0.0012
RX       0       1      26      41      71      86     126     576
RY      12       7       5       1       1       5       6       7
*

KK    A07F   BASIN
KM  SUB-BASIN A07F
BA   0.233
LG    0.21    0.27    4.90    0.32      26
UC   0.949   0.902
UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
UA     100
*
* ROUTE RA07F IS 2619 FT WITH A SLOPE OF .0042
* CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
* *** ROUTE FLOW FROM CA07F TO CA07E ************************************
*

KK   RA07F
RS       3    FLOW       0
RC    0.03    0.02    0.03    2619  0.0042
RX       0       1      13      23      53      83     108     109
RY      14       6       0       0       6       6       7      15
*

KK    A07E   BASIN
KM  SUB-BASIN A07E
BA   0.227
LG    0.23    0.15    7.60    0.11      49
UC   0.567   0.345
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
* *** COMBINE BASIN A07E, RA07F, AND RA07G  ****************************
*

KK   CA07E
HC       3
*
* ROUTE RA07E IS 1771 FT WITH A SLOPE OF .004
* CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
* *** ROUTE FLOW FROM CA07E TO CA07C ************************************
*
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   RA07E
RS       3    FLOW       0
RC    0.03    0.03    0.03    1771   0.004
RX       0     100     112     122     134     154     189     689
RY       8       6       0       0       6       7       7       9
*

KK    A07C   BASIN
KM  SUB-BASIN A07C
BA   0.175
LG    0.34    0.31    4.90    0.30       5
UC   0.681   0.462
UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
UA     100
*
* *** COMBINE BASIN A07C AND RA07E ***************************************
*

KK   CA07C
HC       2
*
* ROUTE RA07C IS 1051 FT WITH A SLOPE OF .0067
* CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
* *** ROUTE FLOW FROM CA07C TO CA07D ************************************
*

KK   RA07C
RS       1    FLOW       0
RC    0.03    0.03    0.03    1051  0.0067
RX       0      50      62      72      84     104     139     640
RY       9       6       0       0       6       7       7       9
```

```
                *
1833            KK    A07H   BASIN
1834            KM  SUB-BASIN A07H
1835            BA   0.093
1836            LG    0.23    0.21    4.70    0.44      47
1837            UC   0.339   0.165
1838            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1839            UA     100
                *
                * ROUTE RA07H IS 2386 FT WITH A SLOPE OF .0461
                * CROSS SECTION IS THE FARM FIELDS IN THE AGUA FRIA RIVER (MEASURED)
                * *** ROUTE FLOW FROM CA07H TO CA07D **********************************
                *

1840            KK   RA07H
1841            RS       3    FLOW       0
1842            RC    0.03    0.03    0.03    2386  0.0461
1843            RX       0      14     125     250     500     800    1000    1014
1844            RY       7       0       0       0       0       0       0       7
                *
                * *** RECOVER DIVERTED FLOW FROM A09AI ****************************************
                *
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1845            KK  DA09AI
1846            DR   A09AI
                *

1847            KK  RA09AI
1848            RS      12    FLOW       0
1849            RC    0.03    0.03    0.03    3000   0.002
1850            RX       0      50     100     150     200     250     300     500
1851            RY       7       6       5       5       0       0       5       6
                *

1852            KK    A08B   BASIN
1853            KM  SUB-BASIN A08B
1854            BA   0.099
1855            LG    0.19    0.27    3.74    0.66      35
1856            UC   0.608   0.413
1857            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1858            UA     100
                *
                * *** COMBINE BASIN A09AI AND R80BE ************************************
                *

1859            KK   CA08B
1860            HC       2
                *
                * ROUTE RA08B IS 2925 FT WITH A SLOPE OF .001
                * CROSS SECTION IS 115TH AVE (MEASURED)
                * *** ROUTE FLOW FROM CA08B TO CA07D **********************************
                *

1861            KK   RA08B
1862            RS      12    FLOW       0
1863            RC    0.03    0.03    0.03    2925   0.001
1864            RX       0      50     100     150     200     250     300     500
1865            RY       7       6       5       5       0       0       5       6
                *

1866            KK    A07D   BASIN
1867            KM  SUB-BASIN A07D
1868            BA   0.229
1869            LG    0.49    0.02    4.10    0.67       1
1870            UC   1.327   1.248
1871            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1872            UA     100
                *
                * *** COMBINE BASIN A07D, RA08B, RA07H, AND RA07C *********************
                *

1873            KK   CA07D
1874            HC       4
                *
                * ROUTE RA07D IS 4828 FT WITH A SLOPE OF .0017
                * CROSS SECTION IS A CHANNEL AND 115TH AVE (MEASURED)
                *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1875          KK   RA07D
1876          RS       6    FLOW       0
1877          RC    0.03    0.03    0.03    4828  0.0017
1878          RX       0     100     112     147     159     179     214     580
1879          RY       8       6       0       0       6       7       7       9
              *

1880          KK    A99S   BASIN
1881          KM  SUB-BASIN A99S
1882          BA   0.077
1883          LG    0.35    0.35    3.64    0.59       0
1884          UC   0.862   0.851
1885          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1886          UA     100
              *

1887          KK    A08A   BASIN
1888          KM  SUB-BASIN A08A
1889          BA   0.138
1890          LG    0.20    0.30    3.31    0.77      18
1891          UC   1.054   1.135
1892          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1893          UA     100
              *
              * ROUTE RA08A IS 1747 FT WITH A SLOPE OF .0057
              * CROSS SECTION IS A SMALL NATURAL WASH
              * *** ROUTE FLOW TO CA08 FROM CA08A  ***************************
              *

1894          KK   RA08A
1895          RS       5    FLOW       0
1896          RC    0.05    0.05    0.05    1747  0.0057
1897          RX       0     350     450     480     482     510     610     910
1898          RY       7       6       5       1       0       5       6       7
              *

1899          KK    A99R   BASIN
1900          KM  SUB-BASIN A99R
1901          BA   0.037
1902          LG    0.31    0.31    3.55    0.66      12
1903          UC   0.408   0.237
1904          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1905          UA     100
              *
              * ROUTE RA99R IS 2159 FT WITH A SLOPE OF .0032
              * CROSS SECTION IS A SMALL NATURAL WASH
              * *** ROUTE FLOW TO CA08 FROM CA99R  ***************************
              *
1                                   HEC-1 INPUT                                          PAGE 60

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1906          KK   RA99R
1907          RS       9    FLOW       0
1908          RC    0.05    0.05    0.05    2159   .0032
1909          RX       0     350     450     480     482     510     610     910
1910          RY       7       6       5       1       0       5       6       7
              *

1911          KK     A08   BASIN
1912          KM  SUB-BASIN A08
1913          BA   0.077
1914          LG    0.30    0.31    3.19    0.88      14
1915          UC   0.308   0.074
1916          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1917          UA     100
              *
              * *** COMBINE RA07D, A99S, A08, RA99R AND RA08A   ******************
              *

1918          KK    CA08
1919          HC       5
              *
              * *** COMBINE HYDROGRAPHS OF CA08 AND AFR4 at AFR and South of Union Hills Dr.
              *

1920          KK    AFR5
1921          HC       2
```

```
*
*
* The Following Portion Came from Deer Valley Road HEC-1 Model with minor
* Revisions, May 2006
* This Model was Provided by Premier Engineering Corp.
*
* PREMIER ENGINEERING CORPORATION ADOPTED JACOBS MODEL FOR N. OF PINNACLE PEAK
* MODEL RUN WITH DRAINAGE IMPROVEMENTS NORTH & ALONG PINNACLE PEAK IN PLACE
* OPTION 2-83RD/PPEAK PROJECT WITH 7 FT DEPTH RET BASIN ON CORNER PROPERTY
* AT 89TH AVE AND WILLIAMS RD OUTFLOW AT ELEV 1295.0 WITH 24" BLED OFF PIPE
* MODEL ASSUMTPION: 10YR FLOW INTERCEPTED ALONG PINNACLE PEAK
* EAST OF 86TH AVE IS 84" SD WITH MAX. DISCHARGE CAPACITY OF 307 CFS
* ***********************************************************************
* BYPASS2.DAT COVERS AREA N. OF PINNACLE PEAK SUPPLIED BY J.P. FYIE OF JACOBS
* AREA SOUTH (SECTION 15) HEC-1 DATA ADDED TO THE BYPASS2.DAT
* FOR DEER VALLEY ROAD WIDENING AND DRAINAGE IMPROVEMENT PROJECT WITH CITY OF
* PERORIA,  MARCH 21, 2006
* ***********************************************************************
* FOLLOWING NOTES ARE ORIGINAL MODEL DEVELOPMENT DATA - Same as LEVEL3.DAT
* ***********************************************************************
*
* ***BYPASS2.DAT- SUPPLIED BY J.P. FYIE OF JACOBS-EMAIL TO J.HUBBARD 03-14-2006
* ***REVISED 9/19/05 BY AJR (J2):  MODIFIED SUBBASINS AND ROUTING OPERATIONS
* WITHIN SUBBASINS S91A, S91B, N11L5A, N11L5, N11L3A, N11L3, 87
* AND N21I1
* ***REVISED 8/23/05 BY AJR (J2):  MODIFIED 87TH AVE BASIN AND PINNACLE PEAK
* BASIN STAGE-STORAGE-DISCHARGE INFORMATION PER CURRENT DESIGN;
* MODIFIED STORM DRAIN ROUTING DATA PER CURRENT DESIGN
* ***REVISED 8/4/05 BY AJR (J2):  MODIFIED DIVERT OPERATION AT D11L5 TO DIVERT
* FLOW IN EXCESS OF THE 10-YEAR FLOW OUT OF MODEL; ADDED DIVERT
* OPERATION AFTER R91 TO DIVERT FLOW IN EXCESS OF 10 YEAR FLOW OUT OF
*  MODEL
* ***REVISED 7/29/05 BY AJR (J2):  CHANGED 87TH AVENUE BASIN AND PINNACLE PEAK
* BASIN STAGE-STORAGE-DISCHARGE PER JACOBS 7/28/05 REVISIONS
* ***REVISED 4/19/05 BY AJR (J2):  ADDED DIVERT OPERATIONS TO MODEL 10-YEAR
* STORM DRAIN IN AVENIDA DEL SOL TO 91ST AVENUE; EMAIL PER EMILI
* ***REVISED 4/5/05 BY AJR (J2): DELETED CALLE LEJOS BASIN; ADDED NEW 87TH
* AVENUE BASIN; MODIFIED MODEL STRUCTURE NEAR CALLE LEJOS BASIN;
* SUBDIVIDED SUBBASIN S91, DIVERTED UPPER PART OF S91 TO NEW 87TH
* AVENUE BASIN.
* ***REVISED 3/3/05 BY AJR (J2): PINNACLE PEAK BASIN STAGE-STORAGE-DISCHARGE
* RELATIONSHIP BASED ON DATA FROM JACOBS (ALTERNATIVE 2)
* ***REVISED 3/3/05 BY AJR (J2) TO CHANGE TC AND R FOR BASIN S91 TO 100-YEAR
* VALUES
* ***REVISED 2/21/05 BY AJR (J2) TO ADD JP AND JR RECORDS TO MODEL 10, 25, 50
* AND 100-YEAR STORM EVENTS
* ***REVISED 2/15/05 BY AJR (J2) TO ADD SUBBASIN S91 AND ROUTING OPERATIONS
* ALONG PINNACLE PEAK ROAD BETWEEN 91ST AVENUE AND CP PPSD;
* ***REVISED 12/27/04 BY DES TO REFLECT CHANGES IN LINEWORK TO REMOVE
* ANY BASIN EXCAVATION FROM THE TRACT B AREA.
* THE RBSN STAGE STORAGE RECORD WAS ADJUSTED FOR THE NEW VOLUMES.
* ***REVISED 12/08/04 BY DES TO REMOVE OVRLND DIVERSION STEP AND
* SPLIT UP ROUTING STEPS R11P4S, R11P7S, RTCAI, & SUMMIT
* TO ADD IN WITH CLPIPE (ROUTED OUTFLOW FROM RBSN).
* ***REVISED 12/07/04 BY DES TO CHANGE LEJOS DETEN BASIN
* STAGE STORAGE INPUT RECORD, BOTTOM AT 1337.
* INCLUDES A 10-FOOT O&M ROAD WITH 4:1 BACKSLOPES
* INCLUDES CHANGES BY J2 SUBMITTED 12-07-04.
* ***REVISED 11/16/04 BY JPF TO REMOVE DIVERSIONS NPIPE, WPIPE AND PPKES
* ***REVISED 11/15/04 BY JPF FOR PINNACLE PEAK BASIN MODIFICATIONS
* ***REVISED 11/4/04 BY JPF FOR CHANGES IN FAX TO JEFF H 11/2/04
* ***83RD AVENUE AND PINNACLE PEAK DRAINAGE IMPROVEMENTS
* ***THIS FILE MODELS THE HYDRYOLOGY FOR THE PROPOSED
* ***DRAINAGE IMPROVEMENTS FROM THE SUNRISE MOUNTAINS SOUTH TO
* ***TO PINNACLE PEAK ROAD AND FROM 89TH AVE WEST TO 81ST AVE
*
* ***J2 MODIFIED THE ENTELLUS GLENDALE/PEORIA ADMP UPDATE
* ***LEVEL3.DAT
* ***J2 UPDATED THE HYDROLOGY MODEL AND REDUCED THE LIMITS TO AREAS PERTINENT
* ***TO THIS PROJECT.
*
* ***PREPARED BY: KBD
* ***DATE: SEPTEMBER 2004
* ***REVISED OCTOBER 2004
* ***UPDATED FOR FCD PREDESIGN COMMENTS FROM STEVE TUCKER
*
* ***********************************************************************
* **********************       83RD AVENUE TO 91ST AVE NORTH OF PINNACLE PEAK****
* ***********************************************************************
*
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
1922          KK   N11P5   BASIN
1923          BA   0.027
1924          LG    0.35    0.35    4.00    0.47      15
1925          UC   0.215   0.157
1926          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1927          UA     100
              *

1928          KK  R11P5S
1929          KM  ROUTE N11P5 FLOWS South to N11P1
1930          RS       5    FLOW       0
1931          RC    0.04     .03    0.04    3000   .0162
1932          RX       0     200     210     220     240     250     260     460
1933          RY       4       2       0     1.5     1.5       0       2       4
              *

1934          KK   N11P1   BASIN
1935          BA   0.064
1936          LG    0.35    0.35    4.10    0.46       0
1937          UC   0.415   0.377
1938          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1939          UA     100
              *

1940          KK  CN11P1
1941          KM  COMBINE N11P5 AND N11P1
1942          HC       2
              *

1943          KK  R11P1E
1944          KM  ROUTE N11P1 FLOWS EAST IN CALLE LEJOS PROPOSED CHANNEL
1945          KM  THEN THRU BOX AT 88TH AVE
1946          RS       3    FLOW       0
1947          RC    0.02     .02    0.02    1450   .0020
1948          RX     160     192     196     200     210     214     218     250
1949          RY      10       2       1     0.0     0.0       1       2      10
              *

1950          KK   N11P6   BASIN
1951          BA   0.159
1952          LG    0.35    0.35    4.00    0.47      40
1953          UC   0.272   0.143
1954          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1955          UA     100
              *

1956          KK  R11P6S
1957          KM  ROUTE N11P6 FLOWS South to N11P9
1958          RS       2    FLOW       0
1959          RC    0.04     .03    0.04    1500   .0162
1960          RX       0     200     210     220     240     250     260     460
1961          RY       4       2       0     1.5     1.5       0       2       4
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1962          KK   N11P9   BASIN
1963          BA   0.043
1964          LG    0.35    0.35    4.10    0.46       0
1965          UC   0.247   0.130
1966          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1967          UA     100
              *

1968          KK  CN11P9
1969          KM  COMBINE N11P6 AND N11P9
1970          HC       2
              *

1971          KK  R11P9S
1972          KM  ROUTE THRU N11P2 TO JUST NORTH OF THE PROPOSED CALLE LEJOS BASIN
1973          KM  ROUTE R11P6S IS 1620 FT WITH A SLOPE OF 0.0222
1974          KM  CROSS SECTION IS A MEDIUM WASH
1975          RS       2    FLOW       0
1976          RC     .05     .05     .05    1620  0.0222
1977          RX       0     100     300     360     380     420     620     720
1978          RY      10       8       6       2       0       6       8      10
              *
```

```
1979          KK   N11P2   BASIN
1980          BA   0.063
1981          LG    0.35    0.35    4.10    0.46       0
1982          UC   0.337   0.187
1983          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1984          UA     100
              *

1985          KK  CN11P2
1986          KM  COMBINE N11P6 AND BASIN N11P2
1987          KM  BASICALLY THESE BASIN FLOWS OUTFALL TO THE NORTH SIDE OF THE PROPOSED CALLE
1988          KM  LEJOS BASIN
1989          HC       2
              *

1990          KK   LEJOS
1991          KM  COMBINE INFLOWS FROM N11P1 AND COMBINED FLOWS FROM N11P6 AND N11P2
1992          HC       2
              *

1993          KK   VPDIV
1994          KM  DIVERT 8.34 ACRE-FEET OUT OF MODEL FOR VENTANA PICACHOS RETENTION
1995          DT   VPRET    6.67
1996          DI       0   10000
1997          DQ       0   10000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1998          KK   N11P4   BASIN
1999          KM  SUBDIVIDE BASIN N11P4 INTO 3 SUBBASINS. EAST BASIN - CALL N11P4
2000          KM  LACAI- THE LA CAILLE DEVELOPMENT
2001          KM  SUMMIT - SUMMIT AT SUNRISE MOUTAIN DEVELOPMENT
2002          KM  ORIGINAL BASIN SIZE WAS 0.124
2003          BA   0.050
2004          LG    0.31    0.27    4.15    0.44       4
2005          UC   0.409   0.364
2006          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2007          UA     100
              *

2008          KK  R11P4S
2009          KM  ROUTE R11P4 IS 1570 WITH A SLOPE OF 0.002 FT/FT
2010          RS       3    FLOW       0
2011          RC    .016   0.020   0.035    1570   0.002  120.33
2012          RX     0.0      24      26    26.1      29      33      38      40
2013          RY     100     100     100  100.33  100.33   99.13  100.33  120.33
              *

2014          KK  DN11P4
2015          KM  ADDED BY DES
2016          KM  N11P4E IS APPROXIMATELY HALF THE RUNOFF THAT IS ROUTED TO
2017          KM  BE RECALLED AT RDP4E.
2018          KM  REMAINDER GOES INTO HEADWALL AND LATERAL AT 13+80.
2019          DT  N11P4E
2020          DI       0      10      50      80     120     200     300     400
2021          DQ       0       5      25      40      60     100     150     200
              *

2022          KK  SDLEJ1
2023          HC       2
              *

2024          KK   N11P8   BASIN
2025          KM  SUBBASIN NORTH OF LA CAILLE DEV.
2026          BA   0.043
2027          LG    0.35    0.35    4.15    0.44      21
2028          UC   0.210   0.121
2029          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2030          UA     100
              *

2031          KK  R11P8S
2032          KM  Route Flow from N11P8 to N11P7
2033          RS       2    FLOW       0
2034          RC    0.05    0.05    0.05    1000   0.016       8
2035          RX       0     200     250     260     270     280     330     530
2036          RY       3       2       1       0       0       1       2       8
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2037          KK   N11P7   BASIN
2038          KM  SUBBASIN NORTH OF LA CAILLE DEV.
2039          BA   0.060
2040          LG    0.35    0.35    4.25    0.42       0
2041          UC   0.192   0.068
2042          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2043          UA     100
              *

2044          KK  CN11P7
2045          KM  TOTAL Flow at N11P7
2046          HC       2
              *

2047          KK  DN11P7
2048          KM  DES SWITCHED REMAINDER FLOW FROM N11P7S TO CONTINUE SOUTH
2049          KM  DIVERSION N11P7E SPLITS FLOWS EAST ALONG HATFIELD THEN SOUTH ALONG
2050          KM  83RD AVE TO 83RD AND CALLE LEJOS INTERSECTION
2051          KM  (RECALL N11P7E JUST AFTER SUMMIT).
2052          DT  N11P7E
2053          DI       0      10      50      80     125     200     300     400
2054          DQ       0       2      10      16      25      40      60      80
              *

2055          KK  R11P7S
2056          KM  ROUTE R11P7S
2057          KM  ROUTE R11P7S IS 2707 FT WITH A SLOPE OF 0.0111
2058          KM  ROUTE IS LENGTH IS TO
2059          KM  CROSS SECTION IS SHALLOW CONCENTRATED FLOW
2060          RS       3    FLOW       0
2061          RC    0.05    0.05    0.05    1465   0.016       8
2062          RX       0     200     250     260     270     280     330     530
2063          RY       3       2       1       0       0       1       2       8
              *

2064          KK   RDP4E
2065          KM  DIVERSION RECOVER N11P4E
2066          KM  RECOVER FLOWS FROM DN11P4 (EASTERN DIVERT)
2067          DR  N11P4E
              *

2068          KK  SUMP7S
2069          KM  TOTAL INFLOW AT INLET HEADWALL FOR R11P7S AT STA 17+00
2070          HC       2
              *

2071          KK  SDLEJ2
2072          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2073          KK   RSDL2
2074          KM  ROUTE SCLEJ2 TO NEW BASIN AT 87TH AVENUE IN 78 IN DIA STORM DRAIN
2075          RD    1320   .0080    .013            CIRC       6
              *

2076          KK  BN11NP
2077          KM  DIVERSION RECOVER N11NP
2078          KM  RECOVER FLOWS FROM N11NP (EASTERN DIVERT of N11NC)
2079          DR   N11NP
              *

2080          KK  RN11NP
2081          KM  ROUTE from East of 91st Ave to New 87th Ave Detentnion Basin
2082          RK    1730   0.009    .035            DEEP     200
              *

2083          KK  N11L5A   BASIN
2084          KM  UPPER PART OF SUBBASIN N11L5
2085          BA   0.045
2086          LG    0.30    0.25    4.55    0.35       7
2087          UC   0.477   0.402
2088          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2089          UA     100
              *

2090          KK     C89
```

```
2091          KM  COMBINE RS91A AND N11L5A AT AVENIDA DEL SOL AND 89TH AVENUE
2092          HC       2
              *

2093          KK     D89
2094          KM  DIVERT FLOW IN EXCESS OF THE 10-YEAR RUNOFF SOUTH THROUGH N11L5
2095          DT    ED89
2096          DI       0     218   10000
2097          DQ       0       0    9782
              *

2098          KK    R89E
2099          KM  ROUTE D89 TO EAST TO CP C87
2100          RD     996    .002    .013            CIRC       6
              *

2101          KK  N11L3A   BASIN
2102          KM  RUNOFF FROM UPPER PART OF SUBBASIN N11L3
2103          BA   0.025
2104          LG    0.29    0.25    4.65    0.33       9
2105          UC   0.345   0.297
2106          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2107          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 66

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2108          KK     C87
2109          KM  COMBINE R89E AND N11L3A AT 87TH AVENUE AND AVENIDA DEL SOL
2110          HC       2
              *

2111          KK     D87
2112          KM  DIVERT FLOW IN EXCESS OF 10-YEAR FLOW SOUTH TO PPSD
2113          DT     SOL
2114          DI       0     246   10000
2115          DQ       0       0    9754
              *

2116          KK   C87BA
2117          KM  COMBINE RSDL2 AND C87 AT 87TH AVENUE AND AVENIDA DEL SOL
2118          HC       2
              *

2119          KK    87BP
2120          KM  DIVERT FLOW IN EXCESS OF BYPASS PIPE CAPACITY INTO 87TH AVE BASIN
2121          DT   87BAS
2122          DI       0      22     683   10000
2123          DQ       0       0     661    9978
              *

2124          KK   R87BP
2125          KM  ROUTE 87BP THROUGH 87TH AVE DET BASIN BYPASS PIPE
2126          RD    1320   .0093    .013            CIRC     3.5
              *

2127          KK      87   BASIN
2128          KM  RUNOFF DIRECTLY ENTERING 87TH AVENUE BASIN
2129          BA   0.028
2130          LG    0.31    0.30    4.70    0.32       8
2131          UC   0.406   0.388
2132          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2133          UA     100
              *

2134          KK    R87B
2135          KM  RETRIEVE DIVERTED FLOW 87BAS
2136          DR   87BAS
              *

2137          KK    C87B
2138          KM  COMBINE 87 AND R87B (TOTAL INFLOW INTO 87TH AVE BASIN)
2139          HC       2
              *

2140          KK    87BA
2141          KM  ROUTE C87B THROUGH NEW BASIN AT 87TH AVENUE (LAST UPDATED 12/22/05)
2142          RS       1    STOR       0
2143          SV       0    0.81    3.43    7.18   11.20   15.45   19.87   24.47   29.24
2144          SE    1313    1314    1315    1316    1317    1318    1319    1320    1321
2145          SQ       0       0   34.13   53.39   68.62   81.63   93.17  103.66  113.33
```

```
                *
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2146            KK  87BOUT
2147            KM  COMBINE 87BA AND BYPASS PIPE FLOW
2148            HC       2
                *

2149            KK   R87BA
2150            KM  ROUTE TOTAL OUTFLOW FROM 87TH AVE BAS & BYPASS TO PINNACLE PEAK ROAD
2151            RD    1155   .0093    .013            CIRC     3.5
                *

2152            KK   D87BA
2153            KM  DIVERT ALL OF R87BA OUT OF MODEL FOR LATER RETRIEVAL
2154            DT   87OUT
2155            DI       0    5000
2156            DQ       0    5000
                *

2157            KK   LACAI   BASIN
2158            KM  SUB-BASIN CAILLE
2159            KM  LA CAILLE DEVELOPMENT
2160            KM  OFFSITE CONVEYANCE SYSTEM IS A PASS THRU SYSTEM
2161            KM  REFER TO "DRAINAGE REPORT FOR LA CAILLE" DEC. 22, 1994
2162            KM  BY CMX - MICHAEL M. LLOYD, PE
2163            KM  IMPERVIOUS AREA BASED ON 1 ACRE LOTS OF SIMILAR AND TYPICAL SUBDIVISION TYPE
2164            KM  3,000 SQUARE FOOT HOUSE, DRIVEWAY AND 1/2 STREETS USED AS IMPERVIOUS
2165            KM  AREA OUT OF TOTAL 43,560 SQUARE FT
2166            BA   0.035
2167            LG    0.31    0.27    4.20    0.43       4      12
2168            UC   0.422   0.366
2169            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2170            UA     100
                *

2171            KK   RTCAI
2172            KM  ROUTE LA CAILLE FLOWS SOUTH THROUGH SUMMIT AT SUNRISE
2173            KM  CALLE LEJOS ROAD
2174            RS       1    FLOW       0
2175            RC    .035   0.020   0.016     572   0.009  100.17
2176            RX     0.0     8.8    17.5    32.4    32.9      33      49      65
2177            RY     100   97.08   98.54  100.03  100.03   99.53   99.85  100.17
                *

2178            KK  DNLECH
2179            KM  REMAINDER FLOW DRAINS ACROSS CALLE LEJOS INTO NEW CATCH BASINS
2180            KM  DIVERSION LECHE CARRIES CHANNEL FLOW EAST.
2181            KM  LECHE IS RECALLED PRIOR TO STEP 83CL
2182            DT   LECHE
2183            DI       0      10      20      40     120     200     300     400
2184            DQ       0      10      20      20      20      20      20      20
                *
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2185            KK  SDLEJ3
2186            KM  TOTAL Q IN CALLE LEJOS STORM DRAIN AT STA 22+00
2187            KM  INTERCEPT STREET OVERFLOW WITH DOUBLE MEDIAN DIKE CATCH BASINS
2188            HC       2
                *

2189            KK  SUMMIT   BASIN
2190            KM  SUMMIT AT SUNRISE MOUNTAIN DEVELOPMENT
2191            KM  REFER TO "PRELIMINARY DRAINAGE REPORT FOR SUMMIT AT SUNRISE MOUNTAIN"
2192            KM  JAN 25, 1999, REV. OCTOBER 30, 1999
2193            KM  SCOTT M. LARSON, P.E. & ROY B. MCDANIEL
2194            KM  IMPERVIOUS AREA BASED ON 1 ACRE LOTS OF SIMILAR AND TYPICAL SUBDIVISION TYPE
2195            KM  3,000 SQUARE FOOT HOUSE, DRIVEWAY AND 1/2 STREETS USED AS IMPERVIOUS
2196            KM  AREA OUT OF TOTAL 43,560 SQUARE FT
2197            BA   0.026
2198            LG    0.30    0.25    4.35    0.40       5      12
2199            UC   0.449   0.389
2200            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2201            UA     100
                *

2202            KK  RDLECH
```

```
2203          KM  DIVERSION RECOVER LECHE
2204          KM  FLOWS ALONG NORTH SIDE OF CALLE LEJOS
2205          DR   LECHE
              *

2206          KK  LEJCHL
2207          KM  TOTAL FLOW INTO EXIST CHL ON N. SIDE OF CALLE LEJOS
2208          HC       2
              *

2209          KK   RDP7E
2210          KM  DIVERSION RECOVER N11P7E
2211          KM  RECOVER FLOWS FROM DN11P7 (EASTERN DIVERT)
2212          DR  N11P7E
              *

2213          KK  R11P7E
2214          KM  ROUTE R11P7E IS 2356 FT WITH A SLOPE OF 0.0144
2215          KM  ROUTE EAST TO NORTHWEST CORNER OF 83RD AVE AND CALLE LEJOS RD - VIA
2216          KM  HATFIELD ROAD AND RIPRAP SWALE ON WEST SIDE OF 83RD AVE
2217          RS       7    FLOW       0
2218          RC    0.05    0.05    0.05    2356  0.0144
2219          RX       0     200     250     260     270     280     330     530
2220          RY       3       2       1       0       0       1       2       8
              *

2221          KK   D2-18
2222          KM  DIVERT FLOWS VIA 2-18" PIPE AT SE CORNER OF LA CAILLE DEV.
2223          KM  SUMMIT AT SUNRISE MOUTAIN REPORT INDICATED 34 CFS BEING
2224          KM  PASSED DURING THE 100-YEAR STORM. J2 ESTIMATED 20 CFS.
2225          DT  EAST83
2226          DI       0       6      12      18    1000    2000
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2227          DQ       0       6      12      18      20      20
              *

2228          KK    83CL
2229          KM  COMBINE RDLECH FROM WEST AND D2-18 FROM NORTH
2230          KM  LOCATION IS NW CORNER OF 83RD AVE AND CALLE LEJOS
2231          KM  CONC POINT IS LOCATED JUST BEFORE THE ENTRANCE TO THE 3-24 INCH CROSS PIPES
2232          KM  USED TO BE CALLED CNP11P4 IN ADMP UPDATE MODEL
2233          HC       2
              *

2234          KK  24PIPE
2235          KM  DIVERT FLOWS THAT PASS THRU EXISTING 3-24" CMPS (PASSED TO EAGLE CANYON
2236          KM  RETENTION BASIN)
2237          KM  CULVERT CAPACITY FOR 3-24 INCH PIPES WAS CALCUALTED TO BE ABOUT 60 CFS.
2238          KM  OUTFALL IS AT THE EAGLE CANYON DEVLOPMENT DETENTION BASIN ON THE SE CORNER
2239          KM  OF 83RD AND CALLE LEJOS
2240          KM  FLOWS UP TO 60 CFS DIVERTED TO EAGLE CANYON ESTATES - OVERFLOWS TO SOUTH
2241          KM
2242          DT   EAGLE
2243          DI       0      30      60     100    1000    2000
2244          DQ       0      30      60      60      60      60
              *

2245          KK  SDLEJ4
2246          KM  TOTAL Q IN CALLE LEJOS STORM DRAIN AT STA 27+00
2247          KM  OVERFLOW FROM 24PIPE INTERCEPTED WITH DOUBLE MEDIAN DIKE CATCH BASINS
2248          HC       2
              *

2249          KK  RT83CL
2250          KM  ROUTE LEJOS STORM DRAIN FLOWS SOUTH ALONG WEST SIDE OF 83RD AVE
2251          KM  8-FT BOT WIDTH UNLINED ROADSIDE CHANNEL, 4:1 SS
2252          RS       3    FLOW       0
2253          RC    .035   0.025   0.016    1177   0.002
2254          RX     0.0      50      70      94     102     126     146     200
2255          RY     100      99      98      92      92      98      99     100
              *

2256          KK   N11P3   BASIN
2257          BA   0.041
2258          LG    0.30    0.25    4.80    0.30       5
2259          UC   0.611   0.711
2260          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2261          UA     100
              *
```

```
2262          KK    83SD
2263          KM  FLOWS AT BEGINNING OF PROPOSED 83RD AVE RCBC
2264          KM  INCLUDES FLOWS FROM N11P3, FLOWS FROM RT83CL
2265          HC       2
              *
                                        HEC-1 INPUT                                                    PAGE 70

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2266          KK   R83SD
2267          KM  ROUTE THRU PROPOSED 10x4 RCBC
2268          RK     771    .0089     .013            DEEP       10     0.01
              *

2269          KK  BN11KP
2270          KM  RETRIEVE DIVERTED FLOW N11KP
2271          DR   N11KP
              *

2272          KK     R91
2273          KM  ROUTE N11KP TO PPSD ALONG PINNACLE PEAK ROAD
2274          RD    1700     .002     .013            CIRC        5
              *

2275          KK   N11L5   BASIN
2276          KM  SUBBASIN CONTRIBUTING TO 89TH AND PINNACLE PEAK ROAD
2277          KM  FLOWS TO BE COLLECTED BY INLETS ALONG 89TH AVE.
2278          KM  AND ENTER PROPOSED STORMDRAIN (RCBC) ALONG PINNACLE PEAK DIRECTLY.
2279          BA   0.042
2280          LG    0.29     0.25     4.80     0.34       13
2281          UC   0.433    0.331
2282          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
2283          UA     100
              *

2284          KK   RED89
2285          KM  RETRIEVE DIVERTED FLOW ED89
2286          DR    ED89
              *

2287          KK    R89S
2288          KM  ROUTE ED89 THROUGH SUBBASIN N11L5 TO PINNACLE PEAK RD
2289          RD    1310     .011     .035            DEEP      200
              *

2290          KK   N11L2   BASIN
2291          KM  ASSUMED THAT FLOWS GENERATED ARE COLLECTED BY INLETS
2292          KM  AND ENTER PROPOSED STORMDRAIN ALONG PINNACLE PEAK DIRECTLY.
2293          BA   0.010
2294          LG    0.30     0.25     4.80     0.35       15
2295          UC   0.332    0.294
2296          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
2297          UA     100
              *

2298          KK  CN11L5
2299          KM  COMBINE 91R, N11L5, N11L2, AND R89S
2300          HC       4
              *
1                                       HEC-1 INPUT                                                    PAGE 71

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2301          KK   D11L5
2302          KM  DIVERT FLOW IN EXCESS OF 10-YEAR FLOW FROM RN11L5 OUT OF MODEL (8/4/05)
              * KM DIVERT RN11L5 OUT OF MODEL (4/19/05, MODIFIED ALT 3A)
2303          DT  DIVS89
2304          DI       0       84    10000
2305          DQ       0        0     9910
              *

2306          KK  RN11L5
2307          KM  ROUTE D11L5 TO PPSD ALONG PINNACLE PEAK ROAD
2308          RD    1335     .002     .013            CIRC        5
              *

2309          KK   N11L3   BASIN
2310          KM  SUBBASIN RUNOFF
2311          BA   0.039
2312          LG    0.30     0.26     4.80     0.35       14
2313          UC   0.414    0.319
```

```
2314          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2315          UA     100
              *

2316          KK    RSOL
2317          KM  RETRIEVE DIVERTED FLOW FROM AVENIDA DEL SOL WEST OF 87TH AVENUE
2318          DR     SOL
              *

2319          KK   RTSOL
2320          KM  ROUTE SOL THROUGH N11L3 TO PPSD
2321          RS       1    FLOW       0
2322          RC   0.035   0.035   0.035    1470  0.0100
2323          RX       0      50     100     120     150     170     220     270
2324          RY       3       2       1       0       0       1       2       8
              *

2325          KK   PPSD1
2326          KM  COMBINE RN11L5, N11L3, AND RTSOL AT PINNACLE PEAK ROAD
2327          HC       3
              *

2328          KK   PPDIV
2329          KM  DIVERT FLOW IN EXCESS OF 10-YEAR FLOW OUT OF MODEL
2330          DT  DIVS87
2331          DI       0     122   10000
2332          DQ       0       0    9878
              *

2333          KK   N11L4   BASIN
2334          KM  FLOWS COLLECTED BY INLETS AND
2335          KM  ENTER PROPOSED STORMDRAIN ALONG PINNACLE PEAK DIRECTLY.
2336          BA   0.010
2337          LG    0.31    0.28    4.80    0.33      10
2338          UC   0.410   0.586
2339          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2340          UA     100
              *

2341          KK   N21I1   BASIN
2342          KM  CONTRIBUTES TO PROPOSED STORMDRAIN AT 85TH AVE.
2343          BA   0.083
2344          LG    0.30    0.25    4.70    0.32       7
2345          UC   0.558   0.496
2346          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2347          UA     100
              *

2348          KK   87OUT
2349          KM  RETRIEVE DIVERTED FLOW FROM 87TH AVE BASIN
2350          DR   87OUT
              *

2351          KK    PPSD
2352          KM  COMBINE 87OUT,PPDIV, N11L4, AND N21I1 AT PINNACLE PEAK ROAD
2353          HC       4
              *

2354          KK   DIVS3
2355          KM  DIVERT EXCESS FLOW INTO 86TH AVE,CHANNEL CAPACITY OF 122 CFS PER MODEL (4/
2356          KM  PROPOSED 84" SD HAS 307 CFS MAXIMUM DISCHARGE CAPACITY
2357          DT  DIVS86
2358          DI       0     307   10000
2359          DQ       0       0    9737
              *

2360          KK   RPPSD
2361          KM  ROUTE IN PROPOSED 84 INCH PIPE TO PINNACLE PEAK BASIN
2362          RK    1870    .002    .013            CIRC       7
              *

2363          KK   N21I2   BASIN
2364          KM  ASSUME THE FLOWS FROM N21I2 ENTER THE PINNACLE PEAK DETENTION BASIN DIRECTLY
2365          BA   0.057
2366          LG    0.30    0.25    4.70    0.31       5
2367          UC   0.626   0.749
2368          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2369          UA     100
              *
```

```
2370          KK   N21I4   BASIN
2371          KM  ADMP UPDATE BASIN N21I4 RE-DELINEATED (old name = N21I3)
2372          KM  ORIGINAL BASIN SIZE WAS 0.115 SQ MILES
2373          BA   0.027
2374          LG    0.30    0.25    4.80    0.30       5
2375          UC   0.455   0.486
2376          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2377          UA     100
              *
1                                        HEC-1 INPUT                                          PAGE 73

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2378          KK   TEMP0
2379          KM  COMBINE R83Sp, RPPSD, N21I2, and N21I4 to Reduce the Hydrograph Path
2380          HC       4
              *
              * ==========================================================================
              * ADMP FLOWS FROM EAST FACE OF SUNRISE MOUNTAINS AND DEVLOPMENTS EAST OF
              * 83RD AVE
              * RUNOFF GENERATED ON EAST FACE OF SUNRISE MOUNTAINS FLOWS SOUTHEAST TO
              * 83RD AVE.  FLOWS ARE ROUTED EAST UNDER 83RD VIA 48" CMPS.
              * FLOWS IS ROUTED AROUND CALLE LEJOS ESTATES TO 81ST AVE WHERE FLOWS ROUTE
              * SOUTH AND EAST.
              * ==========================================================================
              *
              * ADMP UPDATE SUBBASIN N21J NOT INCLUDED AS PART OF THE CONTRIBUTING AREA
              * TO THE PROJECT SITE
              * PORTION OF SUBBASIN ABOVE HATFIELD ROAD IS CUT OFF BY A CONCRETE
              * TRAPEZOIDAL CHANNEL THAT RUNS WEST TO EAST FROM 83RD AVENUE TO THE OUTFALL
              * AT NEW RIVER (APPROXIMATELY 79TH AVE)
              * THE CHANNEL WAS BUILT AS PART OF THE CALLE LEJOS ESTATES AND SILVER CREST AT
              * TREASURE CANYON DEVLOPMENTS
              * CALLE LEJOS ROAD FROM 83RD AVENUE TO END OF STREET (79TH AVE - NEW RIVER) ACTS
              * AS A COLLECTOR OF FLOWS GNERATED BETWEEN HATFIELD ROADS AND CALLE LEJOS BETWEE
              * 83RD AVENUE AND 79TH AVE.
              *

2381          KK    N21Z   BASIN
2382          KM  APPEARS THAT FLOWS FROM N21J ARE DIVERTED BY WALL AROUND
2383          KM  CALLE LEJOS ESTATES TO WASH ON WEST
2384          KM  CALLE LEJOS PICKS UP REST OF FLOWS GENERATED NORTH AND DIVERTS EAST
2385          KM  THEREFORE N21J HAS BEEN ELIMINATED FROM THE PROJECT WATERSHED
2386          BA   0.110
2387          LG    0.17    0.32    6.40    0.15       7
2388          UC   0.493   0.352
2389          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2390          UA     100
              *

2391          KK   LN21Z
2392          KM  EAST SIDE OF EAGLE STORAGE ACCOUNTED FOR
2393          KM  EAGLE WEST OF 81ST AVE AVAILABLE RETENTION = 3.42 ACRE-FT
2394          DT   N21ZI    2.73
2395          DI       0     100    1000   10000
2396          DQ       0     100    1000   10000
              *

2397          KK  DN21ZO
2398          KM  DIVERSION DN21Z
2399          KM  SPLIT EAST TO NEW RIVER ALONG PINNACLE PEAK
2400          KM  ORIGINAL ADMP COMMENT INDICATED FLOWS WENT WEST
2401          KM  THIS WAS VERIFIED AS A TYPOGRAPHICAL ERROR AND HAS BEEN CORRECTED HERE
2402          KM  KBD PER PAW 9-2004
2403          DT  DN21ZI
2404          DI       0       1     100     200     300     400     450     500
2405          DQ       0     .05      .1      .2      .3       5      27      35
              *
1                                        HEC-1 INPUT                                          PAGE 74

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2406          KK  DN21Z*
2407          KM  FLOW SPLIT AT 81ST AVENUE AND PINNACLE PEAK ROAD
2408          KM  FLOW SPLIT ESTIMATED IN THE FIELD WITH FCD (ST) 10-26-2004
2409          KM  MAIN FLOWS WEST ALONG PINNACLE PEAK TO 83RD, SPLIT CONTINUES SOUTH
2410          DT  N21ZI*
2411          DI       0       1     300     500
2412          DQ       0      .5     150     250
              *
```

```
2413          KK  RN21ZW
2414          KM  ROUTE RN21ZW
2415          KM  ROUTE RN21ZW IS 871 FT WITH A SLOPE OF 0.0011
2416          KM  CROSS SECTION IS MEDIUM ROAD WITH FENCE ON WEST SIDE
2417          KM  ALONG PINNACLE PEAK RD
2418          KM  ROUTE FLOW FROM 81ST AVE (CN21Z) TO 83RD AVE, (CN21I)
2419          RS       7    FLOW       0
2420          RC    .035    .035    .035     871   .0011
2421          RX       0       1      15      16      56      57      82     582
2422          RY    9.25    1.25    0.25       0       0    0.25    1.25    4.25
              *

2423          KK   1/2ST
2424          KM  DIVERT 1/2 STREET FLOW (NORTH SIDE PINNACLE PEAK)
2425          KM  TO CLEARVIEW BASIN
2426          DT  D1/2ST
2427          DI       0       1      12      50     100     500    1000
2428          DQ       0       1      12      12      12      12      12
              *

2429          KK  R1/2ST
2430          KM  RECALL DIVERT 1/2 STREET INTERCEPT
2431          DR  D1/2ST
              *

2432          KK  18PIPE
2433          KM  RECALL DIVERT FROM 2-18" PIPES PASSING FLOW FROM LA CAILLE
2434          KM  WEST SIDE 83RD AVE SWALE TO EAST SIDE SWALE
2435          DR  EAST83
              *

2436          KK   CLDIV
2437          KM  RECALL DIVERT FROM 3-24" PIPES PASSING FLOW FROM NW CORNER OF
2438          KM  CALLE LEJOS ROAD AND 83RD AVE
2439          DR   EAGLE
              *

2440          KK   CPIPE
2441          KM  COMBINE EAST83 AND EAGLE FLOWS
2442          HC       2    0.23
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2443          KK  RCPIPE
2444          KM  ROUTE CPIPE TO CN21I3
2445          RK    2640    .003    .035            DEEP     200
              *

2446          KK   N21I3   BASIN
2447          KM  BASIN INCLUDES THE WEST HALF OF EAGLE AND CLEARVIEW DEV
2448          BA   0.087
2449          LG    0.13    0.37    5.70    0.19       4
2450          UC   0.452   0.371
2451          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2452          UA     100
              *

2453          KK  CN21I3
2454          KM  COMBINE N21I3, RCPIPE AND R1/2ST
2455          HC       3
              *

2456          KK   R21I3
2457          KM  WEST SIDE OF EAGLE AND CLEARVIEW RETENTION ACCOUNTED FOR
2458          KM  EAGLE WEST SIDE TRACTS ARE F AND L COMBINED IS 2.2 AND E = 9.8
2459          KM  CLEARVIEW WEST OF 81ST AVE AVAILABLE RETETNION = 5.19
2460          DT  N21I3O   13.76
2461          DI       0     100    1000   10000
2462          DQ       0     100    1000   10000
              *
              * ==========================================================================
              *

2463          KK   PPK_E
2464          KM  COMBINE FLOWS TRAVELING ALONG PINNACLE PEAK FROM THE EAST
2465          KM  INTERCEPT ENTIRETY VIA CULVERT AND CONVEY PART TO 48" STORM DRAIN
2466          HC       2
              *
```

```
2467          KK  PPKEW2
2468          KM  DIVERSION PPKEW2 AT PINNACLE PEAK RD AND 83RD AVE
2469          DT  PPKEW3
2470          DI       0      10      20      30      40      50      70     100
2471          DQ       0      10      20      30      40      50      70     100
              *

2472          KK  US_BSN
2473          KM  COMBINE INLFOWS JUST AS THEY ENTER PROPOSED 83RD
2474          KM  SEE OUTPUT FOR VOLUME AND PEAK FLOW ENTERING BASIN
2475          HC       2
              *
1                                    HEC-1 INPUT                                                    PAGE 76

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2476          KK    PPBP
2477          KM  DIVERT BYPASS FLOWS
2478          DT   PPBAS
2479          DI       0      10     100    1000
2480          DQ       0      10      10      10
              *

2481          KK  R83BSN
2482          KM  STORAGE ROUTING REGIONAL BASIN ON 83RD AVENUE AND PINNACLE PEAK (LAST UPDATED
2483          RS       1    STOR       0
2484          SV    0.41    1.96    4.32    6.86    9.60   12.51   15.62   18.93   22.43   26.13
2485          SV   30.04   34.15   38.47   43.00   47.74   52.69
2486          SE    1298    1299    1300    1301    1302    1303    1304    1305    1306    1307
2487          SE    1308    1309    1310    1311    1312    1313
2488          SQ       0       0       0       0    1.03    2.10   11.31   13.59   15.65   17.54
2489          SQ   19.29   20.95   22.51   24.00   25.43   26.79
2490          SE    1298    1299    1300    1301    1302    1303    1304    1305    1306    1307
2491          SE    1308    1309    1310    1311    1312    1313
              *

2492          KK    RPPB
2493          KM  RETREIVE DIVERTED BYPASS FLOWS
2494          DR   PPBAS
              *

2495          KK    JCT1
2496          KM  COMBINE DIVERTED BYPASS FLOWS WITH BASIN DISCHARGE
2497          HC       2
              *

2498          KK    RESD
2499          KM  RETRIEVE FLOWS DIVERTED IN EAST PIPE
2500          DR  PPKEW3
              *

2501          KK     JCT
2502          KM  COMBINE DIVERTED PIPE FLOWS FROM THE NORTH, EAST AND WEST WITH BASIN ROUTE FL
2503          HC       2
              *

2504          KK  OUTLET
2505          KM  ROUTE FLOWS IN PROPOSED PIPE
2506          KM  ROUTE RN21I IS 3117 FT WITH A SLOPE OF 0.004
2507          KM  ALONG 83RD AVE. ROADWAY TO JUST SOUTH OF WILLIAMS DRIVE
2508          RK    3117   .0019    .013            CIRC       4
              *
              * ***************************************************************************
              * FROM THE LEVEL.DAT HEC-1 MODEL
              * ***************************************************************************
              *
              *
1                                    HEC-1 INPUT                                                    PAGE 77

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2509          KK    N21F   BASIN
2510          KM  SUB-BASIN N21F
2511          BA   0.125
2512          LG    0.30    0.11   11.20    0.03      13
2513          UC   0.765   0.653
2514          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2515          UA     100
              *

2516          KK   CN21F
```

```
2517          KM  COMBINE N21F and Outlet
2518          KM  INTERSECTION OF 83RD AVE. AND WILLIAMS RD.
2519          HC       2
              *

2520          KK    N21G   BASIN
2521          KM  SUB-BASIN N21G
2522          BA   0.063
2523          LG    0.30    0.10   11.20    0.03      15
2524          UC   0.556   0.544
2525          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2526          UA     100
              *
              * *** DIVERSION RECOVER DR21Z*  ***********************************************
              * RECOVERS FLOWS FROM THE NORTH (CN21Z)
              *

2527          KK  DR21Z*
2528          DR  N21ZI*
              *
              * ROUTE RN21ZS IS 2677 FT WITH A SLOPE OF 0.0052
              * CROSS SECTION IS A ROAD WITH HOMES ON THE RIGHT SIDE
              * ROUTE FLOW FROM PINNACLE PEAK RD. (CN11Z) TO WILLIAMS RD (CN21G)
              *

2529          KK  RN21ZS
2530          RS      15    FLOW       0
2531          RC    0.05     .06     .05    2677   .0052
2532          RX       0     500     525     526     561     562     587     588
2533          RY       5       2       1    0.75    0.75       1       2      10
              *
              * *** COMBINE  CN21G ***********************************************************
              * COMBINE  RN21ZS, N21G
              * INTERSECTION OF 81ST AVE. AND PINNACLE PEAK
              *

2534          KK   CN21G
2535          HC       2
              *
              * *** DIVERSION DN21G ***********************************************************
              * MAIN SOUTHWEST TO 83RD AVE SPLIT EAST TO NEW RIVER ALONG WILLIAMS
              *
                                          HEC-1 INPUT                                          PAGE 78

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2536          KK  DN21GO
2537          DT   N21GI
2538          DI       0       1      50      90     300     400     500
2539          DQ       0      .1      .2       1     210     310     410
              *
              * ROUTE RN21GS IS 2795 FT WITH A SLOPE OF 0.0064
              * CROSS SECTION IS A MEDIUM ROAD (MEASURED)
              * ALONG CHANNEL ON WILLIAMS DR AND CHANNEL ON 83RD AVE.
              * ROUTE FLOW FROM 81ST & WILLIAMS (CN21G) TO VIA MONTOYA & 83RD AVE(CN21E)
              *

2540          KK  RN21GS
2541          RS       9    FLOW       0
2542          RC    0.05    0.04    0.05    2795   .0064
2543          RX       0       1      91     106     136     158     182     183
2544          RY      10       3       3       2       0       0    1.25      10
              *
              * *** BASIN N21E ****************************************************************
              *

2545          KK    N21E   BASIN
2546          KM  SUB-BASIN N21E
2547          BA   0.063
2548          LG    0.26    0.10   11.20    0.03      28
2549          UC   0.556   0.483
2550          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2551          UA     100
              *
              * COMBINE BASIN N21E, RN21GS, AND RN21F
              * INTERSECTION OF 83RD AVE AND VIA MONTOYA
              *

2552          KK   CN21E
2553          HC       3
              *
              *
```

```
                * *** ROUTE RN21E ***************************************************************
                * ROUTE RN21E IS 1379 FT WITH A SLOPE OF 0.0051
                * CROSS SECTION IS A SMALL ROAD
                * ALONG 83RD AVE. ROADWAY AND Channel
                * ROUTE FLOW TO DEER VALLEY RD (CN21D) FROM VIA MONTOYA (CN21E)
                *

2554            KK   RN21E
2555            RS       5    FLOW       0
2556            RC    0.05    0.04    0.05    1379  0.0051
2557            RX       0     500     525     526     546     547     572    1072
2558            RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
                *
                * *** BASIN N21D ******************************************************************
                *
1                                          HEC-1 INPUT                                          PAGE 79

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2559            KK    N21D   BASIN
2560            KM  SUB-BASIN N21D
2561            BA   0.053
2562            LG    0.25    0.15    9.70    0.06      30
2563            UC   0.566   0.515
2564            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2565            UA     100
                *
                * *** STORAGE ROUTING LN21D ***********************************************
                * *** FLETCHER HEIGHTS RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ********
                *

2566            KK   LN21D
2567            DT  LN21DD    3.84
2568            DI       0     100    1000   10000
2569            DQ       0     100    1000   10000
                *
                * COMBINE RN21E AND BASIN N21D
                * INTERSECTION OF DEER VALLEY RD AND 83RD AVE.
                *

2570            KK   CN21D
2571            HC       2
                *
                * *** DIVERSION DN21D *****************************************************************
                * MAIN ALONG 83RD AVENUE SPLIT EAST
                *

2572            KK   DN21D
2573            DT   N21DI
2574            DI       0       1      10      50     100     150     200
2575            DQ       0       1      10      42      85     125     170
                *
                * ROUTE RN21DE IS 4696 FT WITH A SLOPE OF 0.0013
                * CROSS SECTION IS A SMALL ROAD WITH AN ORCHARD ON THE WEST SIDE (MEASURED)
                * ALONG DEER VALLEY RD.
                * *** ROUTE FLOW TO WEST OF 75 AVE (CN23) FROM 83RD AVE. (CN21D)
                *

2576            KK  RN21DE
2577            RS      15    FLOW       0
2578            RC    0.06    0.03    0.04    4696  0.0013
2579            RX       0     200     262     274     275     300     301     327
2580            RY    4.25    2.25    1.25    0.25       0       0    0.25    4.25
                *
                *
                * West Wing Mountain Ranch
                * The Following Portion of the HEC-1 Model is from Wood/Patel Model of
                * WWPH1100.DAT, Dated Jan. 25, 2005
                *
                * REVISED MODEL REFLECTING PONDING BEHIND NORTH LOOP ROAD
                * REMOVAL OF BASIN 36, & BREAKUP OF SUB-BASINS 26 & 28 TO YIELD
                * 26R, 28R, AND 100
                * REVISED SUB-BASIN AREAS IN PARCEL 1A
                * REVISED BASIN 51 VOLUME
                * REVISED BASIN 52 VOLUME (3-1-1)
                * FILE: WWPH1100.DAT
                *
                * ***************************************************
                * ***************************************************
                * WestWing Mountain - CONCEPTUAL MASTER DRAINAGE PLAN
                * 100-yr Proposed Condition Hydrology
                * By:  Wood, Patel & Associates, Inc.
```

```
                 * Project No. 96561.03
                 *
                 *
1                                          HEC-1 INPUT                                                    PAGE 80

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2581             KK      20   BASIN
2582             KM  SUB-BASIN 20
2583             BA   0.040
2584             LG    0.29    0.19    8.80    0.07      23
2585             UC   0.271   0.272
2586             UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2587             UA     100
                 *

2588             KK     R20
2589             KM  ROUTE HYDROGRAPH FROM 20 TO 19
2590             KM  USE STREET SECTION: BC TO BC=49 FT
2591             RS       1    FLOW       0
2592             RC    .025    .016    .025     900     .02
2593             RX     100   100.5     110   110.5   158.5     159   169.5     170
2594             RY     5.8      .8      .5       0       0      .5      .8     5.8
                 *

2595             KK      19   BASIN
2596             KM  SUB-BASIN 19
2597             BA   0.045
2598             LG    0.27    0.25    6.20    0.19      27
2599             UC   0.311   0.232
2600             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2601             UA     100
                 *

2602             KK     HC6
2603             KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 19 AND 20
2604             HC       2
                 *

2605             KK     B19
2606             KM  Storage Route Runoff through Detention Basin @HC6
2607             KM  Outlet Structure: 1-12" PIPE @ INVERT 1399
2608             KM  40' WEIR AT ELEVATION 1402
2609             RS       1    STOR       0
2610             SA    1.41    1.52    1.75    1.86    1.97
2611             SE    1399    1400    1402    1403    1404
2612             SQ       0     2.2       6   115.1   313.7
                 *

2613             KK    RHC6
2614             KM  ROUTE HYDROGRAPH FROM 19 TO 21
2615             KM  USE CONCRETE CHANNEL:B=8', Z=1
2616             RS       1    FLOW       0
2617             RC    .013    .013    .013    1000    .005
2618             RX     100     101     104     105     113     114     117     118
2619             RY       5       4       1       0       0       1       4       5
                 *
1                                          HEC-1 INPUT                                                    PAGE 81

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2620             KK      21   BASIN
2621             KM  SUB-BASIN 21
2622             BA   0.029
2623             LG    0.25    0.23    6.20    0.20      30
2624             UC   0.327   0.315
2625             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2626             UA     100
                 *

2627             KK     HC7
2628             KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 19, 20 AND 21
2629             HC       2
                 *

2630             KK    RHC7
2631             KM  ROUTE HYDROGRAPH FROM HC7 TO 35
2632             KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
2633             RS       4    FLOW       0
2634             RC    .055    .045    .055    1400     .01
2635             RX     100     110     120     130     205     215     225     235
```

```
2636          RY       3       2       1       0       0       1       2       3
              *

2637          KK      33   BASIN
2638          KM  SUB-BASIN 33
2639          BA   0.042
2640          LG    0.25    0.25    4.25    0.49      38
2641          UC   0.319   0.323
2642          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2643          UA     100
              *

2644          KK     B33
2645          KM  Storage Route Runoff through Detention Basin @33
2646          KM  Outlet Structure: 12" PIPE
2647          RS       1    STOR       0
2648          SA    1.27    1.51    1.76
2649          SE    1396    1398    1400
2650          SQ       0     4.5     7.1
              *

2651          KK     R33
2652          KM  ROUTE HYDROGRAPH FROM 33 TO 35
2653          KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
2654          RS      15    FLOW       0
2655          RC    .055    .045    .055    1850   .0081
2656          RX     100     110     120     130     205     215     225     235
2657          RY       3       2       1       0       0       1       2       3
              *
1                                          HEC-1 INPUT                                          PAGE 82

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2658          KK      34   BASIN
2659          KM  SUB-BASIN 34
2660          BA   0.028
2661          LG    0.27    0.27    4.35    0.45      39
2662          UC   0.194   0.117
2663          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2664          UA     100
              *

2665          KK     B34
2666          KM  Storage Route Runoff through Detention Basin @34
2667          KM  Outlet Structure: 12" PIPE
2668          RS       1    STOR       0
2669          SA    1.15    1.36    1.56
2670          SE    1387    1389    1391
2671          SQ       0     4.5     7.1
              *

2672          KK     R34
2673          KM  ROUTE HYDROGRAPH FROM 34 TO 35
2674          KM  USE TRAPEZIDAL SECTION: B=75', Z=1
2675          RS      15    FLOW       0
2676          RC    .055    .045    .055    1400   .0086
2677          RX     100     110     120     130     205     215     225     235
2678          RY       3       2       1       0       0       1       2       3
              *

2679          KK      35   BASIN
2680          KM  SUB-BASIN 35
2681          BA   0.044
2682          LG    0.25    0.25    4.25    0.49      33
2683          UC   0.577   0.706
2684          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2685          UA     100
              *

2686          KK    HC8A
2687          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS HC7, 33, 34, AND 35
2688          HC       4
              *

2689          KK      22   BASIN
2690          KM  SUB-BASIN 22
2691          BA   0.041
2692          LG    0.30    0.22    8.40    0.08      18
2693          UC   0.238   0.182
2694          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2695          UA     100
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2696          KK     R22
2697          KM  ROUTE HYDROGRAPH FROM 22 TO 23
2698          KM  USE TRAPEZOIDAL SECTION: B=8',Z=3
2699          RS       1    FLOW       0
2700          RC    .055    .045    .055    1450    .026
2701          RX     100     110     120     132     140     152     162     172
2702          RY       6       5       4       0       0       4       5       6
              *

2703          KK      23   BASIN
2704          KM  SUB-BASIN 23
2705          BA   0.031
2706          LG    0.25    0.21    6.40    0.18      30
2707          UC   0.294   0.270
2708          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2709          UA     100
              *

2710          KK     HC8
2711          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 22 AND 23
2712          HC       2
              *

2713          KK     B23
2714          KM  Storage Route Runoff through Detention Basin @23
2715          KM  40' WEIR AT ELEVATION 1393
2716          RS       1    STOR       0
2717          SA    0.59    0.65    0.78    0.87    0.94
2718          SE    1390    1391    1393    1394    1395
2719          SQ       0       0       0     108     305
              *

2720          KK      25   BASIN
2721          KM  SUB-BASIN 25
2722          BA   0.015
2723          LG    0.25    0.21    6.40    0.18      30
2724          UC   0.323   0.453
2725          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2726          UA     100
              *

2727          KK     HC9
2728          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 25, HC8, AND HC8A
2729          HC       3
              *

2730          KK    RHC9
2731          KM  ROUTE HYDROGRAPH FROM HC9 TO 37W
2732          KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
2733          RS       2    FLOW       0
2734          RC    .055    .045    .055     835   .0091
2735          RX     100     110     120     130     205     215     225     235
2736          RY       3       2       1       0       0       1       2       3
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2737          KK      27   BASIN
2738          KM  SUB-BASIN 27
2739          BA   0.039
2740          LG    0.25    0.23    6.20    0.20      30
2741          UC   0.317   0.271
2742          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2743          UA     100
              *

2744          KK      36   BASIN
2745          KM  SUB-BASIN 36
2746          BA   0.045
2747          LG    0.27    0.27    4.35    0.45      38
2748          UC   0.287   0.261
2749          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2750          UA     100
              *

2751          KK     R36
```

```
2752          KM  ROUTE HYDROGRAPH FROM 36 TO 37
2753          KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
2754          RS       2    FLOW       0
2755          RC    .055    .045    .055     500   .0078
2756          RX     100     110     120     130     205     215     225     235
2757          RY       3       2       1       0       0       1       2       3
              *

2758          KK     37w   BASIN
2759          KM  SUB-BASIN 37w
2760          BA   0.009
2761          LG    0.25    0.25    4.15    0.52      33
2762          UC   0.572   0.639
2763          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2764          UA     100
              *

2765          KK    C37W
2766          KM  COMBINE HYDROGRAPHS AT 37W
2767          HC       4
              *

2768          KK    B37W
2769          KM  DETENTION BASIN AT CONCENTRATION POINT OF 37W
2770          KM  18" PIPE AT STAGE 1382 & WEIR FLOW AT STAGE 1384
2771          RS       1    STOR      -1
2772          SA       0    0.25    0.73    1.50    2.63    3.76
2773          SE    1382    1383    1384    1385    1386    1387
2774          SQ       0      10      27     120     277     475
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2775          KK   RB37W
2776          KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
2777          KM
2778          RS       2    FLOW      -1
2779          RC    .055    .045    .055    1213  0.0058
2780          RX     100     110     120     130     205     215     225     235
2781          RY       3       2       1       0       0       1       2       3
              *

2782          KK     37e   BASIN
2783          KM  SUB-BASIN 37e
2784          BA   0.012
2785          LG    0.26    0.26    4.25    0.48      28
2786          UC   0.357   0.405
2787          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2788          UA     100
              *

2789          KK      24   BASIN
2790          KM  SUB-BASIN 24
2791          BA   0.020
2792          LG    0.30    0.22    8.00    0.09      19
2793          UC   0.265   0.349
2794          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2795          UA     100
              *

2796          KK     R24
2797          KM  ROUTE HYDROGRAPH FROM 24 TO 100
2798          KM  USE CIRC 36" CROSS SECTION
2799          RS       1    FLOW       0
2800          RC   0.012   0.012   0.012     600   0.039
2801          RX       0    0.15    0.56    1.17    1.83    2.44    2.85       3
2802          RY     1.5    0.85    0.33    0.04    0.04    0.33    0.85     1.5
              *

2803          KK     100   BASIN
2804          KM  SUB-BASIN 100
2805          BA   0.039
2806          LG    0.31    0.27    7.00    0.13      18
2807          UC   0.281   0.303
2808          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2809          UA     100
              *

2810          KK   HC100
2811          KM
2812          HC       2
```

```
                *
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2813            KK    R100
2814            KM  ROUTE HYDROGRAPH FROM 100 TO 28
2815            KM  USE 48" CIRC CROSS SECTION
2816            RS       1    FLOW       0
2817            RC   0.012   0.012   0.012     901   0.015
2818            RX       0    0.01    0.38    1.38    2.62    3.62       4    4.01
2819            RY       4       2    0.82    0.10    0.10    0.82       2       4
                *

2820            KK     28R   BASIN
2821            KM  SUB-BASIN 28R
2822            BA   0.013
2823            LG    0.25    0.23    6.20    0.20      30
2824            UC   0.283   0.311
2825            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2826            UA     100
                *

2827            KK   HC28R
2828            KM  COMBINE HYDROGRAPHS 24, 100, AND 28R
2829            HC       2
                *

2830            KK    R28R
2831            KM  ROUTE HYDROGRAPH FROM HC10 TO 37
2832            KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
2833            RS       2    FLOW       0
2834            RC    .055    .045    .055     900   .0078
2835            RX     100     110     120     130     205     215     225     235
2836            RY       3       2       1       0       0       1       2       3
                *

2837            KK     26R   BASIN
2838            KM  SUB-BASIN 26R
2839            BA   0.062
2840            LG    0.30    0.32    5.70    0.22      19
2841            UC   0.275   0.215
2842            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2843            UA     100
                *

2844            KK    R26R
2845            KM  ROUTE HYDROGRAPH FROM 26 TO 29
2846            KM  USE TRAPEZOIDAL SECTION: B=8',Z=3
2847            RS       1    FLOW       0
2848            RC    .055    .045    .055    1475     .02
2849            RX     100     110     120     132     140     152     162     172
2850            RY       6       5       4       0       0       4       5       6
                *
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2851            KK      29   BASIN
2852            KM  SUB-BASIN 29
2853            BA   0.034
2854            LG    0.25    0.21    6.40    0.18      30
2855            UC   0.307   0.261
2856            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2857            UA     100
                *

2858            KK    HC11
2859            KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 26 AND 29
2860            HC       2
                *

2861            KK     B29
2862            KM  Storage Route Runoff through Detention Basin @29
2863            KM  Outlet Structure: 12" PIPE @ INVERT 1375.5
2864            KM  80' WEIR @ ELEVATION 1378.5
2865            RS       1    STOR       0
2866            SA    1.02    1.25    1.71    1.85    1.98
2867            SE  1375.5  1376.5  1378.5  1379.5  1380.5
2868            SQ       0     2.2       6   223.1   619.1
                *
```

```
2869          KK      48   BASIN
2870          KM  SUB-BASIN 48
2871          BA   0.025
2872          LG    0.25    0.25    3.92    0.57      31
2873          UC   0.419   0.440
2874          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2875          UA     100
              *

2876          KK    HC12
2877          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 36, 48, 37, HC11, 28, HC10 AND HC9
2878          HC       5
              *

2879          KK      49   BASIN
2880          KM  SUB-BASIN 49
2881          BA   0.024
2882          LG    0.25    0.25    4.10    0.53      30
2883          UC   0.452   0.397
2884          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2885          UA     100
              *

2886          KK     B49
2887          KM  Basin B49 to retain 100-year, 2-hour retention volume
2888          KM  Outlet Structure: Weir overflow along property line
2889          RS       1    STOR       0
2890          SA    0.63    0.70    0.78    0.85    0.92
2891          SE    1375    1376    1377    1378    1379
2892          SQ       0       0       0       0     945
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2893          KK  C-N24M
2894          KM  Combined Flow to N24M
2895          HC       2
              *

2896          KK    RB49
2897          RS      14   FLOW       0
2898          RC    0.05     .06     .05    2000   .0085
2899          RX       0     400     800    1200    1600    2000    2400    2800
2900          RY       3       1      .5       0       0      .5       1       3
              *
              * *** BASIN N24V ***************************************************************
              *

2901          KK    N24V   BASIN
2902          KM  SUB-BASIN N24V
2903          BA   0.045
2904          LG    0.35    0.35    4.15    0.45      13
2905          UC   0.288   0.261
2906          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2907          UA     100
              *
              * ROUTE RN24V IS 2650 FT WITH A SLOPE OF 0.0121
              * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
              * SOUTH ALONG NATURAL Washes
              *

2908          KK   RN24V
2909          RS      15    FLOW       0
2910          RC    0.05     .06     .05    2650   .0121
2911          RX       0     400     800    1200    1600    2000    2400    2800
2912          RY       3       1      .5       0       0      .5       1       3
              *

2913          KK    N24M   BASIN
2914          KM  SUB-BASIN N24M
2915          BA   0.169
2916          LG    0.30    0.30    4.60    0.36      17
2917          UC   0.505   0.283
2918          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2919          UA     100
              *
              * COMBINE Flows of N24M, C-N24M, AND RN24V
              * At ROCK SPRINGS CREEK
              *
```

```
2920          KK   CN24M
2921          HC       3
              *
              * ROUTE RN24M IS 5500 FT WITH A SLOPE OF 0.0059
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * ALONG ROCK SPRINGS CREEK
              *
1                                   HEC-1 INPUT                                                    PAGE 89

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2922          KK   RN24M
2923          RS      13    FLOW       0
2924          RC     .05     .06     .05    5500   .0059
2925          RX       0     100     300     360     380     420     620     720
2926          RY      10       8       6       2       0       6       8      10
              *

2927          KK      45   BASIN
2928          KM  SUB-BASIN 45
2929          BA   0.062
2930          LG    0.28    0.28    4.45    0.41      34
2931          UC   0.257   0.168
2932          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2933          UA     100
              *

2934          KK     R45
2935          KM  ROUTE HYDROGRAPH FROM 45 TO 47
2936          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
2937          RS       2    FLOW       0
2938          RC    .055    .045    .055    1550    .014
2939          RX     100     104     108     120     128     140     144     148
2940          RY       5       4       3       0       0       3       4       5
              *

2941          KK      47   BASIN
2942          KM  SUB-BASIN 47
2943          BA   0.039
2944          LG    0.25    0.25    4.45    0.43      36
2945          UC   0.314   0.241
2946          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2947          UA     100
              *

2948          KK    HC14
2949          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 45 AND 47
2950          HC       2
              *

2951          KK   RHC14
2952          KM  ROUTE HYDROGRAPH FROM 47 TO 51
2953          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
2954          RS       2    FLOW       0
2955          RC    .055    .045    .055    1075    .014
2956          RX     100     104     108     120     128     140     144     148
2957          RY       5       4       3       0       0       3       4       5
              *

2958          KK      50   BASIN
2959          KM  SUB-BASIN 50
2960          BA   0.028
2961          LG    0.25    0.25    6.00    0.21      30
2962          UC   0.358   0.383
2963          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1                                   HEC-1 INPUT                                                    PAGE 90

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2964          UA     100
              *

2965          KK     R50
2966          KM  ROUTE HYDROGRAPH FROM 50 TO 51
2967          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
2968          RS       1    FLOW       0
2969          RC    .055    .045    .055     800   .0088
2970          RX     100     104     108     120     128     140     144     148
2971          RY       5       4       3       0       0       3       4       5
              *

2972          KK      51   BASIN
```

```
2973          KM  SUB-BASIN 51
2974          BA   0.012
2975          LG    0.25    0.25    5.00    0.32      30
2976          UC   0.354   0.448
2977          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2978          UA     100
              *

2979          KK    HC15
2980          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 45, 47, 50 AND 51
2981          HC       3
              *

2982          KK     B51
2983          KM  Storage Route Runoff through Detention Basin @51
2984          KM  Outlet Structure: 1-18" PIPE @ ELEVATION 1378.84
2985          KM  70'WEIR AT ELEVATION 1382
2986          RS       1    STOR       0
2987          SA    0.25    1.04    1.19   1.355   1.522   1.698   1.862   2.075
2988          SE    1378 1378.84    1379    1380    1381    1382    1383    1384
2989          SQ     0.0     0.0    0.15    4.50    9.70    13.3   205.1   553.5
              *

2990          KK      46   BASIN
2991          KM  SUB-BASIN 46
2992          BA   0.061
2993          LG    0.32    0.32    4.20    0.46      41
2994          UC   0.260   0.177
2995          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2996          UA     100
              *

2997          KK     R46
2998          KM  ROUTE HYDROGRAPH FROM 46 TO 52
2999          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
3000          RS       2    FLOW       0
3001          RC    .055    .045    .055    2225    .018
3002          RX     100     104     108     120     128     140     144     148
3003          RY       5       4       3       0       0       3       4       5
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3004          KK      52   BASIN
3005          KM  SUB-BASIN 52
3006          BA   0.043
3007          LG    0.25    0.25    5.70    0.24      30
3008          UC   0.364   0.355
3009          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3010          UA     100
              *

3011          KK    HC16
3012          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 46, 50  AND 52
3013          HC       2
              *

3014          KK     53R   BASIN
3015          KM  SUB-BASIN 53R
3016          BA   0.068
3017          LG    0.28    0.28    4.40    0.43      41
3018          UC   0.281   0.229
3019          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3020          UA     100
              *

3021          KK     R53
3022          KM  ROUTE HYDROGRAPH FROM 53 TO 54
3023          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
3024          RS       1    FLOW       0
3025          RC    .055    .045    .055    1100    .015
3026          RX     100     104     108     120     128     140     144     148
3027          RY       5       4       3       0       0       3       4       5
              *

3028          KK     54R   BASIN
3029          KM  SUB-BASIN 54R
3030          BA   0.021
3031          LG    0.25    0.25    6.00    0.21      32
3032          UC   0.313   0.361
3033          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
```

```
3034          UA     100
              *

3035          KK    HC17
3036          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 53 AND 54
3037          HC       2
              *

3038          KK   HC17A
3039          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS HC16 AND HC17
3040          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3041          KK     B52
3042          KM  Storage Route Runoff through Detention Basin @52
3043          KM  Basin bottom at 1377.1 per asbuilt data
3044          KM  Outfall consists of 1-12" pipe and 30' weir at el=1380
3045          RS       1    STOR       0
3046          SA   2.023   3.115   3.535   3.992   4.498
3047          SE  1377.1    1379    1380    1381    1382
3048          SQ       0     4.5       6    88.1   237.2
              *

3049          KK     56R   BASIN
3050          KM  SUB-BASIN 56R
3051          BA   0.012
3052          LG    0.25    0.23    6.20    0.20      30
3053          UC   0.189   0.141
3054          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3055          UA     100
              *

3056          KK     B56
3057          KM  Storage Route Runoff through Detention Basin @56
3058          KM  Outlet Structucture: 1 - 4' weir @ elevation 1380.14
3059          KM  Retained volume below outfall to be drained by drywell (s)
3060          RS       1    STOR       0
3061          SA   0.134   0.166   0.280   0.366   0.413
3062          SE  1377.7    1378 1380.14    1381    1382
3063          SQ       0       0       0     8.6    27.4
              *

3064          KK  C-N24I
3065          KM  COMBINED HYDROGRAPH to N24I
3066          HC       3
              *

3067          KK  R-N24I
3068          RS      10    FLOW       0
3069          RC     .05     .06     .05    3500   .0080
3070          RX       0     350     450     480     482     510     610     910
3071          RY       7       6       5       1       0       5       6       7
              *

3072          KK      55   BASIN
3073          KM  SUB-BASIN 55
3074          BA   0.055
3075          LG    0.34    0.34    3.95    0.49      65
3076          UC   0.252   0.193
3077          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3078          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3079          KK     R55
3080          KM  ROUTE HYDROGRAPH FROM 55 TO 57
3081          KM  USE STREET SECTION: BC TO BC=30 FT
3082          RS       1    FLOW       0
3083          RC    .025    .016    .025     925    .041
3084          RX     100   100.5     105   105.5   134.5     135   139.5     140
3085          RY     5.8      .8      .5       0       0      .5      .8     5.8
              *

3086          KK     57R   BASIN
3087          KM  SUB-BASIN 57R
3088          BA   0.008
```

```
3089          LG    0.25    0.25    5.80    0.22      37
3090          UC   0.200   0.202
3091          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3092          UA     100
              *

3093          KK    HC18
3094          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 55 AND 57
3095          HC       2
              *

3096          KK    B57R
3097          KM  Storage Route Runoff through Detention Basin @57
3098          KM  Outlet Structure:
3099          KM  25'WEIR @ ELEVATION 1382.16
3100          RS       1    STOR       0
3101          SA   0.486   0.560   0.647   0.747   0.849   0.903   0.952
3102          SE  1378.6  1379.5  1380.5  1381.5  1382.5  1383.0  1383.5
3103          SQ       0       0       0       0    67.5     124     191
              *

3104          KK   RB57R
3105          KM  ROUTE HYDROGRAPH FROM 57R TO N24H
3106          RS       3    FLOW       0
3107          RC    .025    .016    .025    2600    .011
3108          RX     100   100.5     105   105.5   134.5     135   139.5     140
3109          RY     5.8      .8      .5       0       0      .5      .8     5.8
              *
              * *** BASIN N24I ***************************************************************
              *

3110          KK    N24I   BASIN
3111          KM  SUB-BASIN N24I
3112          BA   0.300
3113          LG    0.35    0.35    4.15    0.44       0
3114          UC   0.965   0.844
3115          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3116          UA     100
              *
              * *** BASIN N24H ***************************************************************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3117          KK    N24H   BASIN
3118          KM  SUB-BASIN N24H
3119          BA   0.229
3120          LG    0.35    0.35    4.10    0.46      29
3121          UC   0.562   0.351
3122          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3123          UA     100
              *
              * *** BASIN N24N ***************************************************************
              *

3124          KK    N24N   BASIN
3125          KM  SUB-BASIN N24N
3126          BA   0.130
3127          LG    0.29    0.29    3.95    0.53      23
3128          UC   0.545   0.519
3129          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3130          UA     100
              *
              * ROUTE RN24N IS 4720 FT WITH A SLOPE OF 0.0064
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * ALONG NATURAL WASH
              * ROUTE FLOW TO CN24J FROM CN24N
              *

3131          KK   RN24N
3132          RS      15    FLOW       0
3133          RC    0.05     .06     .05    4720   .0064
3134          RX       0     100     300     360     380     420     620     720
3135          RY      10       8       6       2       0       6       8      10
              *
              * *** BASIN N24J ***************************************************************
              *

3136          KK    N24J   BASIN
3137          KM  SUB-BASIN N24J
3138          BA   0.121
```

```
3139          LG    0.35    0.35    3.95    0.48       0
3140          UC   0.867   0.958
3141          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3142          UA     100
              *
              * COMBINE BASINS N24J AND RN24N
              * Near Happy Valley RD. AND ROCK SPRINGS CREEK
              *

3143          KK   CN24J
3144          HC       2
              *
              * ROUTE RN24J IS 688 FT WITH A SLOPE OF 0.0058
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * ALONG NATURAL WASH
              * ROUTE FLOW TO CN24I FROM CN24J
              *
1                                          HEC-1 INPUT                                          PAGE 95

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3145          KK   RN24J
3146          RS       2    FLOW       0
3147          RC    0.05     .06     .05     688   .0058
3148          RX       0     100     300     360     380     420     620     720
3149          RY      10       8       6       2       0       6       8      10
              *

3150          KK    N24K   BASIN
3151          KM  SUB-BASIN N24K
3152          BA   0.212
3153          LG    0.34    0.34    4.15    0.45       3
3154          UC   1.032   1.166
3155          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3156          UA     100
              *
              * COMBINE Flows of N24H, N24K, N24I, RB57K,R-N24I, RN24M, AND RN24J
              * ROCK SPRINGS CREEK AT HAPPY VALLEY RD. ALIGNMENT
              *

3157          KK   CN24I
3158          HC       7
              *
              * ROUTE RN24I IS 2747 FT WITH A SLOPE OF 0.006
              * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
              * ALONG ROCK SPRINGS CREEK
              * ROUTE FLOW TO CN24G* FROM CN24I
              *

3159          KK   RN24I
3160          RS       4    FLOW       0
3161          RC    0.05     .06     .05    2747   0.006
3162          RX       0     480     500     518     544     609     900    1121
3163          RY      11      10       0     0.2      10      11      12      13
              *

3164          KK   N21JA   BASIN
3165          KM  SUB-BASIN N21JA
3166          BA   0.080
3167          LG    0.35    0.35    4.15    0.44      26
3168          UC   0.308   0.258
3169          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3170          UA     100
              *
              * ROUTE FLOW FROM N21JA to N21JB (south of Happy Valley Rd)
              *

3171          KK  RN21JS
3172          RS       7    FLOW       0
3173          RC    0.05     .06     .05    2600  0.0054
3174          RX       0     350     460     480     490     510     610     910
3175          RY       7       6       5       0       0       5       6       7
              *
1                                          HEC-1 INPUT                                          PAGE 96

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3176          KK   N21JB   BASIN
3177          KM  SUB-BASIN N21J
3178          BA   0.166
3179          LG    0.32    0.28    4.55    0.36       5
```

```
3180          UC   0.501   0.322
3181          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3182          UA     100
              *
              * Combining flows of N21JA and N21JB

3183          KK   CN21J
3184          HC       2
              *
              * ROUTE RN21JE IS 1741 FT WITH A SLOPE OF 0.0029
              * CROSS SECTION IS A DIRT ROAD
              * ALONG CALLES LEJOS
              * ROUTE FLOW FROM 83RD AVE. (CN21J) TO ROCK SPRINGS CREEK (CN24G*)
              *

3185          KK  RN21JE
3186          RS      11    FLOW       0
3187          RC    0.05     .06     .05    1741  0.0029
3188          RX       0     500     525     526     556     557     572    1072
3189          RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
              *
              * COMBINE DIVERTED FLOW FROM RN21JE AND RN24I
              * AT ROCK SPRINGS CREEK AND THE ALIGNMENT OF CALLES LEJOS
              *

3190          KK  CN24G*
3191          HC       2
              *
              * ROUTE RN24G* IS 2913 FT WITH A SLOPE OF 0.0053
              * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
              * ALONG ROCK SPRINGS CREEK
              * ROUTE DIVERTED FLOW TO CN24G FROM CN21G*
              *

3192          KK  RN24G*
3193          RS       4    FLOW       0
3194          RC    0.05     .06     .05    2913  0.0053
3195          RX       0     480     500     518     544     609     900    1121
3196          RY      11      10       0       0      10      11      12      13
              *
              * *** BASIN N24G ***************************************************************
              *

3197          KK    N24G   BASIN
3198          KM  SUB-BASIN N24G
3199          BA   0.430
3200          LG    0.32    0.31    4.20    0.45       4
3201          UC   0.919   0.571
3202          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3203          UA     100
              *
              * *** CLEARVIEW ESTATES RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              *
1                                        HEC-1 INPUT                                          PAGE 97

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3204          KK   LN24G
3205          DT  LN24GD    0.48
3206          DI       0     100    1000   10000
3207          DQ       0     100    1000   10000
              *
              * COMBINE DIVERTED FLOW FROM RN24G*, AND BASIN N24G
              * ROCK SPRINGS CREEK @ PINNACLE PEAK RD Alignment (FLOW IN THE CREEK)

3208          KK   CN24G
3209          HC       2
              *
              * RECOVER DIVERTED FLOW FROM N21Z (PINNACLE PEAK & 81ST AVE.)
              * THE AREA FROM CN21N WAS ADDED TO GET THE CORRECT AREA REDUCTION
              *

3210          KK  DRN21Z
3211          DR  DN21ZI
              *
              * ROUTE RN21ZE IS 2413 FT WITH A SLOPE OF 0.0025
              * CROSS SECTION IS A ROAD WITH A DITCH ON RIGHT
              * ROUTE DIVERTED FLOW FROM 81ST AVE (CN21Z) TO ROCK SPRINGS CREEK (CN24G)
              *

3212          KK  RN21ZE
3213          RS      15    FLOW       0
```

```
3214          RC    0.05     .06     .05    2413   .0025
3215          RX       0     500     525     555     570     585     610     910
3216          RY       5       3       2       2       0       2       3       5
              *
              * COMBINE DIVERTED FLOW FROM RN21ZE, (RN24G*, AND BASIN N21G)
              * ADD DIVERTED FLOW FROM 81ST AVE. TO ROCK SPRINGS CREEK (PINNACLE PEAK)
              * AREA OF CN21Z (0.35) WAS TO N24G (2.69) TOTAL AREA 3.04
              *

3217          KK  CN24G+
3218          HC       2
              *
              * ROUTE RN24G IS 1400 FT WITH A SLOPE OF 0.01
              * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
              * ALONG ROCK SPRINGS CREEK
              * ROUTE DIVERTED FLOW FROM PINNACLE PEAK (CN24G) TO Patrick lane (CN24F)
              *

3219          KK   RN24G
3220          RS       2    FLOW       0
3221          RC    0.05     .06     .05    1400    0.01
3222          RX       0     256     372     397     407     419     464     800
3223          RY      12      10       8       0       0       6       8      12
              *
              * *** BASIN N24F ***************************************************************
              *
1                                          HEC-1 INPUT                                                    PAGE 98

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3224          KK    N24F   BASIN
3225          KM  SUB-BASIN N24F
3226          BA   0.106
3227          LG    0.32    0.30    5.00    0.30       9
3228          UC   0.605   0.430
3229          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3230          UA     100
              *
              * COMBINE FLOW FROM BASIN N24F AND RN24G
              * At ROCK SPRINGS CREEK AND Patrick lane Alignment
              *

3231          KK   CN24F
3232          HC       2
              *
              * *** BASIN N24D ***************************************************************
              *

3233          KK    N24D   BASIN
3234          KM  SUB-BASIN N24D
3235          BA   0.088
3236          LG    0.22    0.26    4.25    0.52      35
3237          UC   0.518   0.369
3238          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3239          UA     100
              *
              * *** COMBINE  CN24D ************************************************************
              * COMBINE FLOW FROM BASIN N24D, RN24F
              *

3240          KK   CN24D
3241          HC       2
              *
              * RETENTION at existing sAND AND gravel operation
              * it was assumed that most OF THE FLOW is sTOre at this location
              * sTOrage VOLUME AND stages were assumed TO be large enough  TO sTOre all VOLUME
              *

3242          KK   LN24D
3243          RS       1    STOR       0
3244          SQ       0      10      10      20      30      40      50      60
3245          SE    1321    1325    1328  1328.5    1329  1329.5    1330  1330.5
3246          SV       0      80     180     200     220     240     260     270
3247          SE    1321    1325    1328  1328.5    1329  1329.5    1330  1330.5
              *
              * *** BASIN N21H ***************************************************************
              *

3248          KK    N21H   BASIN
3249          KM  SUB-BASIN N21H
3250          BA   0.033
3251          LG    0.30    0.25    5.10    0.31      15
```

```
3252          UC   0.453   0.365
3253          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3254          UA     100
              *
              * RECOVER DIVERTED FLOW FROM N21G (WILLIAMS Dr.)
              *

3255          KK  DRN21G
3256          DR   N21GI
              *
              * ROUTE RN21GE IS 1254 FT WITH A SLOPE OF 0.0048
              * CROSS SECTION IS A SMALL ROAD WITH FENCE ON THE RIGHT SIDE
              * ALONG WILLIAMS Dr.
              * ROUTE DIVERTED FLOW FROM 81ST AVE. (CN21G) TO 79th AVE (CN21H)
              *

3257          KK  RN21GE
3258          RS      12    FLOW       0
3259          RC    0.05     .06     .05    1254   .0048
3260          RX       0     500     525     526     541     542     634     635
3261          RY    3.75    1.25    0.25       0       0    0.25    1.25    9.25
              *
              * *** COMBINE FLOW FROM RN21GE AND BASIN N21H ***********************************
              *

3262          KK   CN21H
3263          HC       2
              *
              * ROUTE RN21H IS 1812 FT WITH A SLOPE OF 0.0011
              * CROSS SECTION IS THE GRAVEL PIT (MEASURED)
              * ALONG SOUTH boundary OF existing SAND AND gravel operation
              * ROUTE FLOW FROM 87th AVE (CN21H) TO ROCK SPRINGS CREEK (CN24D)
              *

3264          KK   RN21H
3265          RS      15    FLOW       0
3266          RC    0.05     .06     .05    1812  0.0011
3267          RX       0     242     292     400     600     809     840    1010
3268          RY      11      10       0       0       0       0      10      11
              *

3269          KK    N24E   BASIN
3270          KM  SUB-BASIN N24E
3271          BA   0.021
3272          LG    0.35    0.35    3.95    0.48       0
3273          UC   0.654   0.818
3274          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3275          UA     100
              *
              * ROUTE RN24E IS 1585 FT WITH A SLOPE OF 0.0076
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * EAST TO ROCK SPRINGS CREEK AND SOUTH ON ROCK SPRINGS CREEK
              * ROUTE DIVERTED FLOW FROM 79th AVE AND Patrick (CN24E) TO Rock Springs (CN24D)
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3276          KK   RN24E
3277          RS      10    FLOW       0
3278          RC    0.05     .06     .05    1585   .0076
3279          RX       0     100     300     360     380     420     620     720
3280          RY      10       8       6       2       0       6       8      10
              *
              * COMBINE FLOW FROM BASIN (N24D, RN24F), RN21H, AND RN24E
              *

3281          KK  CN24D*
3282          HC       3
              *

3283          KK     N27   BASIN
3284          KM  SUB-BASIN N27
3285          BA   0.282
3286          LG    0.32    0.34    3.33    0.77      11
3287          UC   0.828   0.988
3288          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3289          UA     100
```

```
                *
                * ROUTE RN27 IS 1501 FT WITH A SLOPE OF 0.0027
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO Happy Valley RD. (CN27) FROM (CN26*)
                *

3290            KK    RN27
3291            RS      10    FLOW       0
3292            RC    0.05     .06     .05    1501  0.0027
3293            RX       0     281     386     436     672     828    1093    1300
3294            RY      17      13       1       0       1      11      12      13
                *

3295            KK     N26   BASIN
3296            KM  SUB-BASIN N26
3297            BA   0.040
3298            LG    0.35    0.35    3.88    0.50       0
3299            UC   0.476   0.419
3300            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3301            UA     100
                *
                * COMBINE (N26,N26A, RN27) AND RX3W
                * NEW RIVER at Happy Valley RD.
                *

3302            KK    CN26
3303            HC       2
                *
                * ROUTE RN26 IS 1667 FT WITH A SLOPE OF 0.006
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO CN25J(Hatfield RD.) FROM CN26 (happy Valley RD.)
                *
1                                          HEC-1 INPUT                                          PAGE101

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3304            KK    RN26
3305            RS      11    FLOW       0
3306            RC    0.05     .06     .05    1667   0.006
3307            RX       0     281     386     436     672     828    1093    1300
3308            RY      17      13       1       0       1      11      12      13
                *

3309            KK     N25   BASIN
3310            KM  SUB-BASIN N25
3311            BA   0.243
3312            LG    0.35    0.35    3.53    0.64       0
3313            UC   0.959   0.842
3314            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3315            UA     100
                *
                * COMBINE BASINS N25, N25H, CN25A, AND RN25I
                * NEW RIVER at PINNACLE PEAK Alignment
                * AREA hardcoded TO prevent doubling OF some areas
                *

3316            KK    CN25
3317            HC       2
                *
                * ROUTE RN25 IS 2939 FT WITH A SLOPE OF 0.0065
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO CN24 (WILLIAMS) FROM CN25 (PINNACLE PEAK)
                *

3318            KK    RN25
3319            RS      11    FLOW       0
3320            RC    0.05     .06     .05    2939  0.0065
3321            RX       0     225     330     386     408     600     890    1110
3322            RY       8       8       4       2       1       4       2       8
                *

3323            KK     N24   BASIN
3324            KM  SUB-BASIN N24
3325            BA   0.108
3326            LG    0.33    0.34    3.45    0.69       6
3327            UC   0.651   0.507
3328            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3329            UA     100
                *
```

```
                 * COMBINE CN25,N24, AND CN24D
                 * NEW RIVER at WILLIAMS RD Alignment
                 * AREA hard-coded TO prevent doubling
                 *
                                        HEC-1 INPUT                                                    PAGE102

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3330             KK    CN24
3331             HC       3
                 *
                 * ROUTE RN24 IS 2795 FT WITH A SLOPE OF 0.0043
                 * CROSS SECTION IS NEW RIVER (MEASURED)
                 * ALONG NEW RIVER
                 * ROUTE FLOW TO CN23 (DEER VALLEY RD) FROM CN24 (WILLIAMS)
                 *

3332             KK   RCN24
3333             RS      15    FLOW       0
3334             RC    0.05    0.05     .05    2795  0.0043
3335             RX       0     271     355     500     700     712     776     873
3336             RY      11       8       0       0       0       6       6       8
                 *

3337             KK     N23   BASIN
3338             KM  SUB-BASIN N23
3339             BA   0.389
3340             LG    0.26    0.27    4.30    0.47      27
3341             UC   0.945   0.614
3342             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3343             UA     100
                 *
                 * COMBINE BASIN N23, RN21DE, and RCN24
                 * DEER VALLEY RD WEST OF 75th AVE.
                 *

3344             KK    CN23
3345             HC       3
                 *
                 * ROUTE RN23 IS 6182 FT WITH A SLOPE OF 0.0055
                 * CROSS SECTION IS NEW RIVER (MEASURED)
                 * ALONG NEW RIVER
                 * ROUTE FLOW TO BEARDSLEY RD (CN21) FROM DEER VALLEY (CN23)
                 *

3346             KK    RN23
3347             RS      15    FLOW       0
3348             RC    0.05    0.04    0.05    6182  0.0055
3349             RX       0     318     358     443     649     699     817     843
3350             RY      22      20       6       0       0       8      10      18
                 *
                 * RECOVER DIVERTED FLOW FROM N21D (Deer Valley )
                 *

3351             KK  BN21DI
3352             DR   N21DI
                 *
                 * ROUTE RN21DS IS 7844 FT WITH A SLOPE OF 0.0046
                 * CROSS SECTION IS A DITCH ON WEST SIDE WITH TWO WALLS
                 * SOUTH ALONG 83RD AVE. ROADWAY AND CHANNEL
                 * ROUTE FLOW TO BEARDSLEY THEN NEW RIVER(CN21C) FROM DEER VALLEY(CN21D)
                 *
1                                       HEC-1 INPUT                                                    PAGE103

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3353             KK  RN21DS
3354             RS      15    FLOW       0
3355             RC    0.05    0.04    0.05    7844  0.0046
3356             RX       0       1     121     151     186     211     236     237
3357             RY      13       5       3       0       0       3       4      13
                 *

3358             KK    N21C   BASIN
3359             KM  SUB-BASIN N21C
3360             BA   0.394
3361             LG    0.24    0.15    8.00    0.10      32
3362             UC   0.894   0.711
3363             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3364             UA     100
                 *
```

```
                * *** FLETCHER HEIGHTS RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ********
                *

3365            KK   LN21C
3366            DT  LN21CD      2.4
3367            DI        0      100     1000    10000
3368            DQ        0      100     1000    10000
                *
                * COMBINE RN21DS AND BASIN N21C
                * NEAR BEARDSLEY RD. AND NEW RIVER (END OF 83RD AVE. CHANNEL)
                *

3369            KK   CN21C
3370            HC        2
                *
                *

3371            KK     N21   BASIN
3372            KM  SUB-BASIN N21
3373            BA   0.622
3374            LG    0.21     0.20     4.60     0.42       45
3375            UC   0.997    0.658
3376            UA        0      4.5     12.6     23.2     35.8     50.0     64.2     76.8     87.4     95.5
3377            UA      100
                *
                * COMBINE  CN21C, RN23, AND N21
                * NEW RIVER AND BEARDSLEY RD Alignment
                *

3378            KK    CN21
3379            HC        3
                *
                * ROUTE RN21 IS 5633 FT WITH A SLOPE OF 0.0039
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO Union Hills (CN20) FROM Beardsley RD. (CN21)
                *
1                                   HEC-1 INPUT                                                    PAGE104

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3380            KK    RN21
3381            RS      12    FLOW        0
3382            RC    0.05    0.04     0.05     5633  0.0039
3383            RX       0     100      652      722     800      900     1006     1400
3384            RY      16       4        8        0       0        0       10       16
                *
                * A Dummy Diversion to Avoid Change to the Westbrook Village Schematic
                *

3385            KK  N21-20
3386            DT   N20DI
3387            DI        0      100     1000    10000
3388            DQ        0      100     1000    10000
                *

3389            KK   N11DB   BASIN
3390            KM  SUB-BASIN N11DB CREATED BY CVL 7/04
3391            BA   0.254
3392            LG    0.25     0.25     4.60     0.39       30
3393            UC   0.736    0.447
3394            UA        0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
3395            UA      100
                *
                * *** RECOVER DIVERTED FLOW FROM N11DA ****************************************
                *

3396            KK  B11DAS
3397            DR  D11DAS
                *
                * ROUTE FLOW TO N11DB
                *

3398            KK  R11DAS
3399            RS      15    FLOW        0
3400            RC    0.04    0.04     0.04     3000   .0015
3401            RX       0     200      220      240     260      280      320      520
3402            RY       6       4        0        0       3        4        4        6
                *

3403            KK  C11DAB
3404            KM  THIS COMBINES N11DAS AND N11DB
```

```
3405          HC       2
              *
              * *** STORAGE ROUTING LN11D ***********************************************
              * *** DOVE VALLEY RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              *

3406          KK  LN11DB
3407          DT  LNBOUT    14.4
3408          DI       0     100    1000   10000
3409          DQ       0     100    1000   10000
              *
              * *** DIVERSION DN11D ******************************************************
              *
              * A PORTION OF THE SUBDIVISION TO THE NORTH SPILLS OVER 91ST AVENUE TO THE
              * DETENTION BASIN ON THE EAST SIDE.  (ABOUT 10%)
              *
1                                        HEC-1 INPUT                                    PAGE105

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3410          KK   DN11D
3411          DT   N11DI
3412          DI       0       1     100     200     300     500    1000    1500    2000
3413          DQ       0      .9      90     180     270     450     900    1350    1800
              *
              * ROUTE RN11DE IS 2500 FT WITH A SLOPE OF 0.002
              *

3414          KK  RN11DE
3415          RS      15    FLOW       0
3416          RC    0.04    0.04    0.04    2500    .002
3417          RX       0       1      16      40      50      65     100     200
3418          RY      15       8       7       0       0       7       8      12
              *
              * *** DIVERSION RECALL DR5S ************************************************
              * RECALL THE DIVERTED FLOW FROM CX5
              *

3419          KK    DRX5
3420          DR     X5I
              *
              * ROUTE RX5S IS 5270 FT WITH A SLOPE OF 0.0059
              * CROSS SECTION IS SMALL ROAD WITH HOMES ON BOTH SIDES
              * ALONG 91st AVE
              * ROUTE FLOW TO BEARDSLEY RD. (CX5) FROM DEER VALLEY RD (CX51)
              *

3421          KK    RX5S
3422          RS       1    FLOW       0
3423          RC    0.04    0.04    0.04    5270  0.0059
3424          RX       0       1      20      21      51      52     272     273
3425          RY      11       3    0.25       0       0    0.25    3.25      10
              *
              * COMBINE DN11D, DX5
              *

3426          KK     CX1
3427          HC       2
              *
              * SOME FLOW WILL TRAVEL DOWN 91ST AVENUE
              *

3428          KK     DX1
3429          DT     X1I
3430          DI       0      30      60     100     300     500     600    1000    2000
3431          DQ       0       0       0       0       0      50      60     100     130
              *
              * ROUTE RX1E IS 1254 FT WITH A SLOPE OF 0.0048
              * CROSS SECTION IS A LARGE DITCH (MEASURED)
              *
1                                        HEC-1 INPUT                                    PAGE106

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3432          KK    RX1E
3433          RS       5    FLOW       0
3434          RC    0.04    0.04    0.04    1254   .0048
3435          RX       0       1      16      40      50      65     100     200
3436          RY      15       8       7       0       0       7       8      12
              *
              * DEER VALLEY ROAD WIDENING AND DRAINAGE IMPROVEMENTS
```

```
                 * PREMIER ENGINEERING CORP. PROJECT 2006002
                 * FLOW IN EXCESS OF 10-YEAR Q DIVERTED THROUGH 89TH, 87TH AND 86TH AVENUE
                 *

3437             KK   DIVS1
3438             KM  RETRIEVE DIVERTED INTO 89 AVE FROM NORTH, EXCESS FLOW
3439             DR  DIVS89
                 *

3440             KK  RNDV89
3441             KM  ROUTE THROUGH 89TH AVENUE TO WILLIAMS ROAD
3442             RS       6    FLOW       0
3443             RC    0.02    0.02    0.02    2400   .0050
3444             RX       0      10      13      25      37      40      50      52
3445             RY    1.00     .80    0.00     .24       0     .80    1.00    1.05
                 *

3446             KK     DV1   BASIN
3447             KM  SUB-BASIN DV1
3448             BA   0.091
3449             LG    0.25    0.26    4.65    0.37      29
3450             UC   0.629   0.545
3451             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3452             UA     100
                 *

3453             KK    CPD1
3454             KM  COMBINE FFLOW FROM DV1 AND ROUTED FLOW ALONG 89TH
3455             HC       2
                 *

3456             KK   RNCP1
3457             RS       1    FLOW       0
3458             RC    0.02    0.02    0.02     200   .0050
3459             RX       0      10      13      25      37      40      50      52
3460             RY    2.00     .80    0.00     .24       0     .80    1.00    2.00
                 *

3461             KK     DV2   BASIN
3462             KM  SUB-BASIN DV2
3463             BA   0.032
3464             LG    0.25    0.25    4.80    0.35      30
3465             UC   0.650   0.893
3466             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3467             UA     100
                 *
1                                          HEC-1 INPUT                                          PAGE107

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3468             KK    CPD2
3469             KM  COMBINE DV2 AND ROUTED
3470             HC       2
                 *

3471             KK   89WRB
3472             KM  RETENTION BASIN ON CORNER PROPERTY 155' X 300' OR 1.07 ACRES
3473             KM  ROUTE CP2 THROUGH RETENTION BASIN AT NE OF 89TH AVE & WILLIAMS RD INTERSECTIO
3474             KM  BLED OFF 20 CFS THROUGH 24" SD ALONG 89TH AVENUE
3475             KM  DIVERT THE STORAGE VOLUME OF 5.59 AC-FT ABD THE 18 CFS BLED OFF
3476             DT    DVRB    4.48
3477             DI       0      20      53     100     200
3478             DQ       0       0       0      53      53
                 *

3479             KK  RNRDV2
3480             RS       2    FLOW       0
3481             RC    0.02    0.02    0.02    1350   .0050
3482             RX       0      10      13      25      37      40      50      52
3483             RY    1.00     .80    0.00     .24       0     .80    1.00    1.05
                 *

3484             KK     DV3   BASIN
3485             KM  SUB-BASIN DV3
3486             BA   0.050
3487             LG    0.25    0.25    4.80    0.35      30
3488             UC   0.574   0.529
3489             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3490             UA     100
                 *

3491             KK    CPD3
```

```
3492          KM  COMBINE DV3 AND ROUTRED
3493          HC       2
              *

3494          KK  RNRDV3
3495          RS       2    FLOW       0
3496          RC    0.02    0.02    0.02    1300   .0050
3497          RX       0      10      13      25      37      40      50      52
3498          RY    2.00     .80    0.00     .24       0     .80    1.00    2.00
              *

3499          KK     DV4   BASIN
3500          KM  SUB-BASIN DV4
3501          BA   0.060
3502          LG    0.25    0.25    4.80    0.35      30
3503          UC   0.676   0.833
3504          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3505          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3506          KK     DV5   BASIN
3507          KM  SUB-BASIN DV5
3508          BA   0.029
3509          LG    0.25    0.25    4.80    0.35      30
3510          UC   0.445   0.398
3511          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3512          UA     100
              *

3513          KK    CPD5
3514          KM  COMBINE FLOW FROM DV5, ROUTED DV4 OUT, ROUTED CP3
3515          HC       3
              *

3516          KK     DV6   BASIN
3517          KM  SUB-BASIN DV6
3518          BA   0.090
3519          LG    0.25    0.25    4.80    0.35      30
3520          UC   0.627   0.578
3521          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3522          UA     100
              *

3523          KK   CPDV6
3524          HC       2
              *
              * ROUTE RN11IS IS 2600 FT WITH A SLOPE OF 0.0051
              * CROSS SECTION IS A LARGE DITCH ON THE EAST SIDE (MEASURED)
              *

3525          KK  RN11IS
3526          RS       3    FLOW       0
3527          RC    0.04    0.04    0.04    2600  0.0051
3528          RX       0      20      50      60      70      80      90     250
3529          RY      10       8       8       7       0       0       7      10
              *

3530          KK   N11EA   BASIN
3531          KM  SUB-BASIN N11E North portion
3532          BA   0.259
3533          LG    0.23    0.26    5.60    0.25      31
3534          UC   0.928   0.700
3535          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3536          UA     100
              *

3537          KK  CN11EA
3538          HC       2
              *
              * ROUTE RN11ES IS 2600 FT WITH A SLOPE OF 0.0051
              * CROSS SECTION IS A LARGE DITCH ON THE EAST SIDE (MEASURED)
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3539          KK  RN11ES
3540          RS       3    FLOW       0
```

```
3541          RC    0.04    0.04    0.04    2600  0.0051
3542          RX       0      20      50      60      70      80      90     250
3543          RY      10       8       8       7       0       0       7      10
              *
              * *** Route flows entering into a retention basin at the south end of
              * *** the Deer Village development which combines with a retention basin
              * *** that collects flow from RN11IS. The information for the stage-storage
              * *** of the retention basin was obtained from the Deer Village Final Drainage
              * *** Report (#34 in Data Collection Log) and the Westbrook Village East
              * *** Drainage Study (#85 in Data Collection Log).
              *

3544          KK    LX50
3545          RS       1    STOR       0
3546          SQ     144    1900    2956
3547          SE  1253.4  1259.9  1263.9
3548          SV       0   22.73    53.9
3549          SE  1253.4  1259.9  1263.9
              *
              * DIVERSION MAIN (EAST PATH), SPLIT (WEST PATH)
              * THE TWO OUTLETS OF THE LAKE PLEASANT PARK DETENTION BASIN
              *

3550          KK    DX50
3551          DT   DX50I
3552          DI       0       1     127    1856    2932
3553          DQ       0       1     127    1296    1180
              *
              * ROUTE RX50E IS 2549 FT WITH A SLOPE OF 0.0031
              * CROSS SECTION IS A LARGE DITCH (MEASURED)
              *

3554          KK   RX50E
3555          RS       8    FLOW       0
3556          RC    0.04    0.04    0.04    2549  0.0031
3557          RX       0     200     300     325     345     395     500     700
3558          RY      10       9     7.3       0       0     7.3       9      10
              *

3559          KK   DIVS2
3560          KM  RETRIEVE DIVERTED INTO 87 AVE FROM NORTH, EXCESS FLOW
3561          DR  DIVS87
              *

3562          KK  RNDV87
3563          KM  ROUTE CN11L5 TO PPSD ALONG PINNACLE PEAK ROAD
3564          RS      15    FLOW       0
3565          RC   0.015   0.015   0.015    5250  0.0050
3566          RX     280     290     295     300     330     335     340     350
3567          RY       4       2     1.0       0       0     1.0       2       4
              *
1                                          HEC-1 INPUT                                                    PAGE110

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3568          KK     DV7   BASIN
3569          KM  SUB-BASIN DV7
3570          BA   0.131
3571          LG    0.22    0.25    6.40    0.17      20
3572          UC   0.622   0.499
3573          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3574          UA     100
              *

3575          KK    CPD7
3576          HC       2
              *

3577          KK  RNRDV7
3578          RS       7    FLOW       0
3579          RC    0.02    0.02    0.02    2650   .0049
3580          RX       0      10      12      42      72      74      84      90
3581          RY    1.25     .50    0.51       0       0     .51     .50    1.25
              *

3582          KK     DV8   BASIN
3583          KM  SUB-BASIN DV8
3584          BA   0.093
3585          LG    0.26    0.15    8.40    0.08      24
3586          UC   0.669   0.634
3587          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3588          UA     100
```

```
                *

3589            KK    CPD8
3590            KM  COMBINE DV8 WITH ROUTED DV7
3591            HC       2
                *

3592            KK     DV9   BASIN
3593            KM  SUB-BASIN DV9
3594            BA   0.042
3595            LG    0.29    0.15    8.80    0.06       7
3596            UC   0.346   0.214
3597            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3598            UA     100
                *

3599            KK   DVCP9
3600            HC       2
                *

3601            KK  DIVS13
3602            KM  RETRIEVE DIVERTED INTO 86TH AVE FROM NORTH, EXCESS FLOW
3603            DR  DIVS86
                *
1                                          HEC-1 INPUT                                          PAGE111

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3604            KK  RNRS86
3605            RS       1    FLOW       0
3606            RC    0.02    0.02    0.02    2650   .0049
3607            RX       0      10      13      25      37      40      50      52
3608            RY    1.00     .80    0.00     .24       0     .80    1.00    1.05
                *

3609            KK    DV10   BASIN
3610            KM  SUB-BASIN DV10
3611            BA   0.211
3612            LG    0.30    0.16    7.00    0.12       5
3613            UC   0.666   0.395
3614            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3615            UA     100
                *

3616            KK   CPD10
3617            KM  COMBINE DV10 WITH RETRIEVE FLOW
3618            HC       2
                *

3619            KK  RNRD10
3620            KM  ROUTE COMBINE FLOW THROYFH 86TH AVE
3621            RS       4    FLOW       0
3622            RC    0.02    0.02    0.02    2650   .0053
3623            RX       0      10      13      25      37      40      50      52
3624            RY    2.00     .80    0.00     .24       0     .80    1.00    2.00
                *

3625            KK    DV11   BASIN
3626            KM  SUB-BASIN DV11
3627            BA   0.144
3628            LG    0.22    0.10   11.20    0.03      41
3629            UC   0.590   0.435
3630            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3631            UA     100
                *

3632            KK   CPD11
3633            KM  COMBINE FLOW FROM SUBB11 WITH ROUTED DV10
3634            HC       3
                *
                * ROUTE RN11IS IS 3000 FT WITH A SLOPE OF 0.0051
                *

3635            KK  RCP11S
3636            RS       3    FLOW       0
3637            RC    0.04    0.04    0.04    3000  0.0051
3638            RX       0      20      50      60      70      80      90     250
3639            RY      10       8       8       7       0       0       7      10
                *
                                           HEC-1 INPUT                                          PAGE112

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
3640          KK    N22A   BASIN
3641          KM  SUB-BASIN N22 north portion
3642          BA   0.299
3643          LG    0.19    0.14   10.10    0.04      39
3644          UC   0.816   0.564
3645          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3646          UA     100
              *

3647          KK   CN22A
3648          HC       2
              *
              * *** STORAGE ROUTING LN22A (22 = 60% of 37 Ac-Ft) ************************
              * *** SILVERTON RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ***************
              *

3649          KK   LN22A
3650          DT  LN22DA    17.6
3651          DI       0     100    1000   10000
3652          DQ       0     100    1000   10000
              *
              * Route flow to south to N22B
              *

3653          KK   R22AS
3654          RS       2    FLOW       0
3655          RC    0.04    0.04    0.04    2500  0.0051
3656          RX       0      20      50      60      70      80      90     250
3657          RY      10       8       8       7       0       0       7      10
              *

3658          KK    N22B   BASIN
3659          KM  SUB-BASIN N22 south portion
3660          BA   0.175
3661          LG    0.25    0.15    9.70    0.06      30
3662          UC   0.652   0.483
3663          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3664          UA     100
              *
              * *** STORAGE ROUTING LN22 (15 = 40% of 37 Ac-Ft)  ************************
              * *** SILVERTON RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ***************
              *

3665          KK   LN22B
3666          DT  LN22DB    12.0
3667          DI       0     100    1000   10000
3668          DQ       0     100    1000   10000
              *
              * COMBINE  BASINs N22A, N22B, and RX50E
              * WETBROOK VILLAGE EAST - EAST INLET
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3669          KK    CN22
3670          HC       3
              *
              * DIVERSION MAIN BEARDSLEY RD(WEST), SPLIT (TO DETEN. BASIN)
              * WESTBROOK VILLAGE EAST - EAST INLET CAN TAKE ONLY 500 CFS ADDITIONAL FLOW
              * IS DIRECTED TO THE WEST INLET IN AN EQUALIZATION CHANNEL
              *

3671          KK    DN22
3672          DT    N22I
3673          DI       0      30      60     100     300     500     600    1000    2000
3674          DQ       0      30      60     100     300     500     500     500     500
              *
              * ROUTE RN22W IS 1764 FT WITH A SLOPE OF 0.0023
              * CROSS SECTION IS A ROAD WITH A WALL TO THE WEST SIDE ORCHARD TO THE RIGHT
              * ON EQUALIZATION CHANNEL ALONG BEARDSLEY RD
              * ROUTE FLOW TO WESTBROOK VILLAGE EAST WEST INLET (CN11E) FROM EAST INLET (CN22)
              *

3675          KK   RN22W
3676          RS       7    FLOW       0
3677          RC    0.04    0.03    0.06    1764  0.0023
3678          RX       0       1      34      69     119     144     244     544
3679          RY      10     2.5       0     2.5     2.5     3.5     4.5     5.5
              *
```

```
                * RECOVER diverted FLOW FROM LAKE PLEASANT DETENTION BASIN
                *

3680            KK  DRX50I
3681            DR   DX50I
                *
                * ROUTE RX50W IS 2586 FT WITH A SLOPE OF 0.0046
                * CROSS SECTION IS A LARGE DITCH (MEASURED)
                * ROUTE FLOW TO WESTBROOK VILLAGE EAST WEST INLET (CN11E) FROM EAST INLET (CN22)
                *

3682            KK   RX50W
3683            RS       6    FLOW       0
3684            RC    0.04    0.04    0.04    2586  0.0046
3685            RX       0     200     300     330     390     420     620     820
3686            RY      10       8       5       0       0       5       8      10
                *

3687            KK   N11EB   BASIN
3688            KM  SUB-BASIN N11E south portion
3689            BA   0.231
3690            LG    0.25    0.23    6.20    0.20      30
3691            UC   0.684   0.416
3692            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3693            UA     100
                *
                * COMBINE BASIN N11EA, N11EB, RX1E, AND RN22W
                *
1                                          HEC-1 INPUT                                          PAGE114

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3694            KK   CN11E
3695            HC       4
                *
                * *** DEER VILLAGE RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ************
                *

3696            KK   LN11E
3697            DT  LN11ED    31.4
3698            DI       0     100    1000   10000
3699            DQ       0     100    1000   10000
                *
                * ***************************************************************************
                * *** THIS PORTION OF THE MODEL WAS COPIED FROM THE                        ***
                * *** HEC-1 MODEL FROM THE DESERT AMETHYST DRAINAGE PROJECT                ***
                * *** BY WOOD, PATEL & INC. 5/4/99 FOR THE 60% DESIGN LEVEL.               ***
                * *** ORIGINAL MODEL WAS DEVELOPED BY THE FCDMC, 1991                      ***
                * ***************************************************************************
                * ************************ EAST WESTBROOK VILLAGE GOLF COURSE ******************
                * ***************************************************************************
                * ROUTE FLOW TO CPWB1 FROM WBE1 (EAST INLET TO W.B. VILLAGE)
                *

3700            KK  R-WBE1
3701            RS       1    FLOW      -1
3702            RC     .03     .02     .03     260  .00192
3703            RX       0      12    17.5    22.5    33.5    37.5      43      55
3704            RY      48      42      40      40      40      40      42      48
                *
                * RUN OFF FROM WESTBROOK PARCELS 9,10A,11,12, AND R-3(GC)
                *

3705            KK     WB1   BASIN
3706            BA   0.115
3707            LG    0.23    0.18    7.30    0.12      26
3708            UC   0.703   0.570
3709            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3710            UA     100
                *
                * COMBINE PARCELS WB1 AND R-WBE1
                *

3711            KK   CPWB1
3712            HC       2
                *
                * ROUTE FLOW TO CPWB2 FROM CPWB1 (THRU G.C.)
                *

3713            KK    R-R3
3714            RS       1    STOR      -1       0
3715            SV       0     .19    1.23    3.71    7.87    12.1    12.5      13
```

```
3716          SE      32      33      34      35      36      37    38.0      39
3717          SQ       0       2      12      19     195     811  1200.0    1500
              *
              * ************** BASIN IDENTIFICATION ****************************************
              * RUN OFF FROM WESTBROOK PARCELS 18B,19, AND R-4&5(GC)
              *
                                          HEC-1 INPUT                                          PAGE115

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3718          KK     WB2   BASIN
3719          BA   0.090
3720          LG    0.20    0.19    8.80    0.06      20
3721          UC   0.589   0.488
3722          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3723          UA     100
              *
              * COMBINE PARCELS WB2 AND R-R3
              *

3724          KK   CPWB2
3725          HC       2
              *
              * ROUTE FLOW TO CPWB3 FROM CPWB2 (THRU G.C.)
              *

3726          KK   R-4-5
3727          RS       1    STOR      -1       0
3728          SV       0    2.57    7.19   13.71    22.4      32      37      42      47      52
3729          SE      27      28      29      30      31      33      34      35      36      37
3730          SQ       0       2      12      19      21      21      21      21     386    1401
              *
              * RUN OFF FROM WESTBROOK GOLF COURSE R-6
              *

3731          KK     WB3   BASIN
3732          BA   0.010
3733          LG    0.12    0.26    8.80    0.05       3
3734          UC   0.181   0.131
3735          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3736          UA     100
              *
              * COMBINE PARCELS WB3 AND R-4-5
              *

3737          KK   CPWB3
3738          HC       2
              *
              * ROUTE FLOW TO CPR6 FROM CPWB3 (INTO G.C.)
              *

3739          KK     R-6
3740          RS       1    STOR      -1       0
3741          SV       0       2       4       6       8     8.2
3742          SE      33      34      35      36      37      38
3743          SQ       0       0     227     811    1200    2000
              *
              * ************************************************************************
              * *** DIVERSION RECOVER DRN22  ***********************************************
              * RECOVER diverted FLOW AT EAST INLET OF EAST WESTBROOK VILLAGE (CN22)
              *
1                                         HEC-1 INPUT                                          PAGE116

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3744          KK   DRN22
3745          DR    N22I
              *
              * RUN OFF FROM WESTBROOK PARCELS 13,14, AND R-1(GC)
              *

3746          KK     WB4   BASIN
3747          BA   0.109
3748          LG    0.23    0.17    8.80    0.07      25
3749          UC   0.521   0.365
3750          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3751          UA     100
              *
              * COMBINE PARCELS WB4 AND DRN22
              *
```

```
3752          KK   CPWB4
3753          HC       2
              *
              * ROUTE FLOW TO CPWB5 FROM CPWB4 (THRU W.B. GOLF COURSE)
              *

3754          KK    R-R1
3755          RS       1    STOR      -1       0
3756          SV       0   .1138   .6342  1.4316     3.3     5.5    6.46    6.94     7.5    10.5
3757          SE      36      37      38      39      40      41      42      43      44    45.5
3758          SQ       0       2      12      19    21.8    23.1    24.1      25     750    1350
              *
              * *** BASIN WB5 ***************************************************************
              * RUN OFF FROM WESTBROOK PARCELS 15-17,18A,23A, AND R-2(GC)
              *

3759          KK     WB5   BASIN
3760          BA   0.114
3761          LG    0.20    0.19    8.80    0.06      19
3762          UC   0.452   0.244
3763          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3764          UA     100
              *
              * COMBINE PARCELS WB5 AND R-R1
              *

3765          KK   CPWB5
3766          HC       2
              *
              * ROUTE FLOW TO CPR6 FROM CPWB5 (THRU G.C.)
              *

3767          KK    R-R2
3768          RS       1    STOR      -1       0
3769          SV       0    1.97    4.86    9.02   14.99      20      25      30      34      38
3770          SE      26      27      28      29      30      31      32      33      34      35
3771          SQ       0       2      12      19      21      21      21      21     930    1400
              *
              * COMBINE FLOWS FROM R-R2 AND R-R6
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3772          KK    CPR6
3773          HC       2
              *
              * ROUTE FLOW TO CR6W7 FROM CPR6
              *

3774          KK   RCR26
3775          RS       3    FLOW      -1
3776          RC     .04     .03     .04    1420   .0018
3777          RX       0      30      60      90     120     150     180     210
3778          RY     104     102     100     100     100     100     102     104
              *
              * *** BASIN WB7 ***************************************************************
              * RUN OFF FROM WESTBROOK PARCELS 23B,21A, AND R-7(GC)
              *

3779          KK     WB7   BASIN
3780          BA   0.045
3781          LG    0.14    0.20    8.80    0.07      34
3782          UC   0.401   0.340
3783          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3784          UA     100
              *
              * COMBINE PARCELS WB7 AND RCR26
              *

3785          KK   CR6W7
3786          HC       2
              *
              * ROUTE FLOW TO C7R8 FROM CR6W7 (THRU W.B. GOLF COURSE)
              *

3787          KK    R-R7
3788          RS       1    STOR      -1       0
3789          SV       0     .15     .85    2.26    4.71     6.0     7.0     9.0
3790          SE      27      28      29      30      31      32      33      34
3791          SQ       0      11      23      35      46     526    1391    2500
              *
```

```
                 * *** BASIN WB6 ***************************************************************
                 * RUN OFF FROM WESTBROOK PARCELS 24,25,26A,27A, AND R-8(GC)
                 *
3792             KK     WB6   BASIN
3793             BA   0.115
3794             LG    0.22    0.18    8.80    0.07      24
3795             UC   0.723   0.674
3796             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3797             UA     100
                 *
                 * ROUTE FLOW TO C7R8 FROM WB6 (THRU G.C.)
                 *
1                                          HEC-1 INPUT                                          PAGE118

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3798             KK    R-R8
3799             RS       1    STOR      -1       0
3800             SV       0     .36    2.13    5.54   10.63   15.29    16.0
3801             SE      27      28      29      30      31      32      33
3802             SQ       0       2      12      19      22      30     100
                 *
                 * COMBINE PARCELS R-R7 AND R-R8
                 *

3803             KK    C7R8
3804             HC       2
                 *
                 * ROUTE FLOW TO CP-678 FROM C7R8 (ALONG MAIN STREET)
                 *

3805             KK    RC78
3806             RS       1    FLOW      -1
3807             RC     .03     .02     .03    1120   .0032
3808             RX       0      15      30      60      80     105     120     135
3809             RY     104     102     100     100     100     100     102     104
                 *
                 * RUN OFF FROM WESTBROOK PARCELS 1B,26B, AND R/C
                 *

3810             KK     WB8   BASIN
3811             BA   0.067
3812             LG    0.21    0.15    8.80    0.07      44
3813             UC   1.270   1.847
3814             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3815             UA     100
                 *
                 * COMBINE PARCELS WB8 AND RC78
                 *

3816             KK  CP-678
3817             HC       2
                 *
                 * RUN OFF FROM WESTBROOK PARCELS 1A,2A,3A,20,21B, AND R-9A&9B(GC)
                 *

3818             KK    WB10   BASIN
3819             BA   0.095
3820             LG    0.21    0.19    8.00    0.09      23
3821             UC   0.615   0.548
3822             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3823             UA     100
                 *
                 * ROUTE FLOW TO WBEOT FROM WB10 (THRU G.C.)
                 *
1                                          HEC-1 INPUT                                          PAGE119

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3824             KK    R-R9
3825             RS       1    STOR      -1       0
3826             SV       0     .03    .376   1.698   4.517   9.114  12.000
3827             SE      25      26      27      28      29      30      31
3828             SQ       0       2      11      18      24     128     200
                 *
                 * COMBINE FLOWS FROM R-R9 AND CP-678
                 * AT INTERSECTION OF OUTLET WITH UNION HILLS RD, W.B. MAIN ENTRANCE
                 *

3829             KK   WBEOT
```

```
3830        HC       2
            *
            * DIVERSION AT UNION HILLS RD
            * MAIN WEST ALONG UNION HILLS DIVERSION EAST TO NEW RIVER
            * DIVERT 100CFS TO NEW RIVER: 50 CFS THRU 42"CMP AND 50 CFS OVERLAND
            * third DQ was change by Entellus from 100 to 50
            *

3831        KK    DVNR
3832        DT   TONRI
3833        DI       0      50     100     150     300     600     900
3834        DQ       0     .01     .02      50     100     100     100
            *
            * DIVERT THRU COUNTRY CLUB ROAD AND EVENTUALLY LOSS TO NEW RIVER
            * RATING AS PER ERIE'S REPORT, ASSUMES OVERFLOW PROPORTIONAL TO WEIR LENGTH
            *

3835        KK   CCLUB
3836        DT   DCLUB
3837        DI       0      50      80     982    2670    7461   13454
3838        DQ       0       0       0     214     607    1716    3152
            *
            * ROUTE REMAINING TO INTERSECTION OF UNION HILLS & 87TH AVE
            *

3839        KK   RR287
3840        RS       1    FLOW      -1
3841        RC     .02   0.015     .02     660   .0015
3842        RX       0       1       5      35      40      70      74      75
3843        RY     104     102     100     101     101     100     102     104
            *
            * DIVERT SOUTH THRU 87TH AVE, PART  GO TO 91ST AVENUE AT UNION HILLS
            * USING RATING CURVE DEVELOPED BY ERIE & ASSOCIATES
            * INFLOW IS ASSUMED SUM OF RATED Q AT RD INTERSECTION
            * THIS APPLIES TO SUCCEEDING DIVERSIONS USING ERIE'S DATA
            *

3844        KK   DV87S
3845        DT  DV87SI
3846        DI       0      50      80     762    2067    5745
3847        DQ       0     .01     .02     221     625    1768
            *
            * ROUTE REMAINING FLOW TO 89TH AVE THRU NORTH SIDE OF UNION HILLS RD.
            *
                                        HEC-1 INPUT                                          PAGE120

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3848        KK   RR289
3849        RS       1    FLOW      -1
3850        RC   0.015   0.015   0.015    1320   .0037
3851        RX       0       1       5      35      40      70      74      75
3852        RY     104     102     100     101     101     100     102     104
            *
            * ASSUME SPLIT OCCURS WHEN DEPTH IS 0.5 FT ABOVE 91ST AVE CROWN AT INTERSECTION
            * PER ERIE'S RATING Q=145 CFS ABOVE WHICH FLOW WILL HAVE 50-50 SPLIT
            * FLOW LESS OR EQ TO 145 CFS WILL SIMPLY CONTINUE WESTWARD TO 91ST AVENUE
            * ******** LTM:  Diversion was prev. modeled incorrectly to split flow 50/50
            * starting at Q=0.  Corrected so 50/50 begins AFTER Q=145 ******
            *

3853        KK    DS89
3854        DT   DV89I
3855        DI       0      80     145     155     305     505     805    1205
3856        DQ       0     .01     .02       5      80     180     330     530
            *
            * Hydrograph remaining after 125 cfs flows to 91st Ave.
            * Route short distance to eliminate diversion error messages
            *

3857        KK   TODET
3858        RS       2    FLOW      -1
3859        RC     .02   0.015     .02    1000   .0015
3860        RX       0     101     105     135     140     170     174     275
3861        RY     104     102     100     101     101     100     102     104
            *
            * Allow max 125 cfs to continue to 91st Ave.
            * ENTELLUS CHANGED THE SWITCHED MAIN/SPLIT HYDROGRAPHS AND ALSO MODIFIED
            * THE THIRD DQ RECORD
            *

3862        KK    DV91
```

```
3863          DT   DV91I
3864          DI       0      100      345      350      500      800     1200
3865          DQ       0      .01      220      230      475      675     1075
              *
              * ******************************************************************************
              * **************** EAST WESTBROOK VILLAGE GOLF COURSE TO 91ST AVE **************
              * ******************************************************************************
              * ******************************************************************************
              *

3866          KK     WB9   BASIN
3867          KM  COMBINE PARCELS 8A,10B,7,6,5,G10,2B,3B
3868          BA   0.217
3869          LG    0.22     0.26     5.10     0.31       32
3870          UC   0.986    0.911
3871          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
3872          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE121

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3873          KK   R-R10
3874          KM  ROUTE FLOWS THROUGH RESERVOIR 10, WESTBROOK VILLAGE EAST
3875          KM  THE RESERVOIR BLEEDS INTO 91ST AVENUE
3876          RS       1     STOR       -1        0
3877          SV       0      .35     2.28      6.4    12.82     24.0     24.0
3878          SE    27.5     28.5     29.5     30.5     31.5     32.5     33.5
3879          SQ       0        2       12       19       22     44.0      100
              *
              * RECOVER DIVERTED FLOW FROM CX1
              *

3880          KK   DRX1I
3881          DR     X1I
              *
              * ROUTE RX1S IS 5321 FT WITH A SLOPE OF 0.0048
              *

3882          KK    RX1S
3883          RS       1     FLOW        0
3884          RC    0.04      .03     0.04     5321    .0048
3885          RX       0      100      300      340      380      420      620      720
3886          RY      10        8        6        0        0        6        8       10
              *
              * COMBINE WEST-WESTBROOK VILLAGE RX1S AND DV91 R-R10
              * INTERSECTION OF UNION HILLS AND 91ST AVE.
              *

3887          KK  CN11B1
3888          HC       3
              *

3889          KK    N11C   BASIN
3890          KM  SUB-BASIN N11C
3891          BA   0.255
3892          LG    0.22     0.27     4.45     0.41       24
3893          UC   0.741    0.493
3894          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
3895          UA     100
              *
              * *** STORAGE ROUTING LN11C ***********************************************
              * *** PARKRIDGE ESTATES RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              *

3896          KK   LN11C
3897          DT  LN11CD    12.5
3898          DI       0      100     1000    10000
3899          DQ       0      100     1000    10000
              *
              * DIVERSION FROM MAIN CHANNEL TO WEST BASIN MAIN (CHANNEL), SPLIT (BASIN)
              * FROM SUBDIVISION report (Parkridge report No. 40)
              *
1                                          HEC-1 INPUT                                          PAGE122

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3900          KK  DN11CW
3901          DT  N11CWI
3902          DI       0      175      400      600      750      900      986     2000
3903          DQ       0        0      2.5       26       64     93.4    110.7      120
```

```
                *
                * *** DIVERSION DN11CE ***********************************************************
                * DIVERSION FROM MAIN CHANNEL TO EAST BASIN. MAIN (CHANNEL), SPLIT (BASIN)
                * FROM SUBDIVISION report (Parkridge report No. 40)
                *

3904            KK  DN11CE
3905            DT  N11CEI
3906            DI       0       7      50     175   397.5     574     686   806.6     875     200
3907            DQ       0       7       8    12.7    16.6    20.3    23.3    28.6    32.5      35
                *
                * RECALL THE DIVERTED FLOW FROM WEST RETENTION BASIN (DN11CW)
                *

3908            KK  DRN11C
3909            DR  N11CWI
                *
                * WEST BASIN Storage from Subdivision report (Parkridge report no. 40)
                *

3910            KK  LN11CW
3911            RS       1    STOR      -1
3912            SA    2.55    2.77    2.98     3.2    3.45     3.5
3913            SE       0       1       2       3       4       5
3914            SQ       0       2     3.3       5       5    5000
                *
                * *** DIVERSION RECOVER DR11C* ****************************************************
                * RECALL THE DIVERTED FLOW FROM EAST RETENTION BASIN (DN11CE)
                *

3915            KK  DR11C*
3916            DR  N11CEI
                *
                * *** STORAGE LN11CE **************************************************************
                * EAST BASIN sTOrage FROM SUBDIVISION report (Parkridge report no. 40)
                *

3917            KK  LN11CE
3918            RS       1    STOR      -1
3919            SA       0   .7657    3.91    4.61    4.86    5.11     5.2
3920            SE       0     0.5       1       2       3       4       5
3921            SQ       0       2     3.3       5       5       5    5000
                *
                * Downstream FROM DETENTION BASIN, Includes overFLOW FROM both basins
                *
1                                    HEC-1 INPUT                                          PAGE123

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3922            KK  CN11C1
3923            HC       3
                *
                * RECALL THE DIVERTED FLOW FROM N11DB
                *

3924            KK  BN11DI
3925            DR   N11DI
                *
                * COMBINE CN11C1 AND N11DB
                *

3926            KK   CN11D
3927            HC       2
                *
                * ***************************************************************************
                * *** THIS PORTION OF THE MODEL WAS COPIED FROM THE                       ***
                * *** HEC-1 MODEL FROM THE DESERT AMETHYST DRAINAGE PROJECT               ***
                * *** BY WOOD, PATEL & INC. 5/4/99 FOR THE 60% DESIGN LEVEL.              ***
                * *** ORIGINAL MODEL WAS DEVELOPED BY THE FCDMC, 1991                     ***
                * ***************************************************************************
                * ************************* WEST WESTBROOK VILLAGE GOLF COURSE ******************
                * ***************************************************************************
                *
                * ROUTE FLOW TO N11A (WBW) FROM CN11D (THRU WESTBROOK VILLAGE GC)
                *

3928            KK   RWBW1
3929            RS      15    FLOW      -1
3930            RC     .03     .02     .03    5280   .0050
3931            RX       0      30      60      90     190     300     330     360
3932            RY     104     103     101     100     100     101     103     104
                *
```

```
                 * RUN OFF FROM WESTBROOK GC PARCELS 1-28 ( 23% OF AREA)
                 * Old Subbasin Name was WBW
                 *

3933             KK    N11A   BASIN
3934             BA   0.929
3935             LG    0.21    0.27    4.80    0.33      29
3936             UC   1.367   0.966
3937             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3938             UA     100
                 *
                 * COMBINE PARCELS N11A AND RWBW1
                 *

3939             KK    CWBW
3940             HC       2
                 *
                 * STORAGE ROUTING TO GOLF COURSE FROM CWBW
                 * STORAGE CAPACITY OF 472 AC-FT ASSUMED MAXIMUM 350 AC-FT (UDC REPORT 1983)
                 *
1                                          HEC-1 INPUT                                          PAGE124

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3941             KK    RBWB
3942             RS       1    STOR       0
3943             SV       0      50     100     150     200     300     350     400     500     501
3944             SE      26      27      28      29      30      32      34      36      38    38.2
3945             SQ       0      25      25      25      25      25      25     300     400    2000
                 *
                 * ROUTE FLOW TO CN11B (91ST AVE) FROM CWBW (WEST WESTBROOK VILLAGE)
                 * ALONG UNION HILLS RD
                 *

3946             KK   RWBW2
3947             RS      15    FLOW      -1
3948             RC     .03     .02     .03    5280   .0050
3949             RX       0      30      60      90     190     300     330     360
3950             RY     104     103     101     100     100     101     103     104
                 *
                 * COMBINE WEST-WESTBROOK VILLAGE CN11B1 AND RBWB2
                 * INTERSECTION OF UNION HILLS AND 91ST AVE.
                 *

3951             KK   CN11B
3952             HC       2
                 *
                 * ****************************************************************************
                 * *** END OF COPIED CODE FROM WOOD, PATEL & INC.'S DESERT AMATHYST MODEL     ***
                 * ****************************************************************************
                 *

3953             KK    S30D   BASIN
3954             KM  SUB-BASIN S30D
3955             BA   0.131
3956             LG    0.25    0.17    6.80    0.15      30
3957             UC   0.638   0.385
3958             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3959             UA     100
                 *
                 * ROUTE RS30D IS 6176 FT WITH A SLOPE OF .0023
                 * CROSS SECTION IS 99TH AVENUE
                 * *** ROUTE S30D THROUGH S30C ******************************************
                 *

3960             KK   RS30D
3961             RS      10    FLOW       0
3962             RC     .02     .02     .02    6176  0.0023
3963             RX       0       1      85      95     109     134     239     240
3964             RY      12       6       5       0       0       5       6      12
                 *

3965             KK    S30C   BASIN
3966             KM  SUB-BASIN S30C
3967             BA   0.454
3968             LG    0.23    0.15    7.30    0.13      36
3969             UC   0.892   0.703
3970             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1                                          HEC-1 INPUT                                          PAGE125

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
3971          UA     100
              *
              * RECOVER DIVERTED FLOW FROM A09FI
              *

3972          KK  DA09FI
3973          DR   A09FI
              *

3974          KK  RA09FI
3975          RS      10    FLOW       0
3976          RC     .02     .02     .02    7000  0.0023
3977          RX       0       1      85      95     109     134     239     240
3978          RY      12       6       5       0       0       5       6      12
              *

3979          KK     XX1
3980          HC       3
              *

3981          KK    S30B   BASIN
3982          KM  SUB-BASIN S30B
3983          BA   0.399
3984          LG    0.19    0.29    5.80    0.21      24
3985          UC   0.995   0.918
3986          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3987          UA     100
              *
              * *** COMBINE BASIN S30C, S30B, AND RS30D ****************************
              *

3988          KK   CS30B
3989          HC       2
              *
              * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  **********************
              * THERE IS A DIVERSION AT THIS LOCATION. THE DEL WEBB CHANNEL CAN CARRY
              * 550 CFS, THE REST OF THE FLOW OVERFLOWS TO THE SOUTH.
              *

3990          KK  DS30BO
3991          DT  DS30BI
3992          DI       1     250     550     750    1000    1500    1750    2000
3993          DQ      .1      .2      .3     200     450     950    1200    1450
              *
              * ROUTE RS30BW IS 5060 FT WITH A SLOPE OF .0008
              * CROSS SECTION IS DEL WEBB BLVD
              * *** ROUTED S30BO THROUGH S30A ****************************************
              *

3994          KK  RS30BW
3995          RS       9    FLOW       0
3996          RC     .02    0.02     .02    5060  0.0008
3997          RX       0       1     100     120     140     155     239     240
3998          RY      12       6       5       0       0       5       6      12
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3999          KK    S30A   BASIN
4000          KM  SUB-BASIN S30A
4001          BA   0.531
4002          LG    0.22    0.21    6.40    0.21      28
4003          UC   1.005   0.674
4004          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4005          UA     100
              *
              * *** COMBINE BASIN S30A AND RS30B ****************************************
              *

4006          KK   CS30A
4007          HC       2
              *
              * RECOVER DIVERTED FLOW FROM TONRI
              *

4008          KK  DRTONR
4009          DR   TONRI
              *
              * RECOVER DIVERTED FLOW FROM N20DI
              *
```

```
4010            KK  BN20DI
4011            DR   N20DI
                *
                *

4012            KK     N20   BASIN
4013            KM  SUB-BASIN N20
4014            BA   0.355
4015            LG    0.14    0.22    4.70    0.33      51
4016            UC   0.482   0.187
4017            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4018            UA     100
                *
                * *** COMBINE BASIN N20, TONRI, RN21 at New River
                *

4019            KK    CN20
4020            HC       3     8.0
                *
                *
4021            ZZ
```

1

```
              SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   58         CBA
                V
                V
   65        RCBA
                .
                .
   68           .          P28
                .            .
                .            .
   75        CP28............
                .
                .
   80           .-------->    DB28
   78        DT28
                .
                .
   83           .          CBB
                .            V
                .            V
   90           .         RCBB
                .            .
                .            .
   93       CP28a............
                V
                V
   96        R28a
                .
                .
   99           .          P27
                .            .
                .            .
  108           .            .-------->    DB27
  106           .         DT27
                .            .
                .            .
  111        CP27............
                .
                .
  114           .         P27A
                .            .
                .            .
  123           .            .-------->   DB27a
  121           .        DT27a
                .            .
                .            .
  126           .            .        P27B
                .            .          .
                .            .          .
  135           .            .          .-------->   DB27b
  133           .            .       DT27b
                .            .          .
                .            .          .
  138           .            .          .         CBL
                .            .          .           .
                .            .          .           .
```

```
145        CCBL.................................
              V
              V
148        RCBL
              .
              .
153           .          CBK
              .            .
              .            .
160        CCBK............
              V
              V
163        RCBK
              .
              .
166           .          P14
              .            .
              .            .
175           .            .-------->    RB14
173           .        RT14
              .            .
              .            .
178        CP14............
              .
              .
181           .          P15
              .            .
              .            .
190           .            .-------->    DB15
188           .        DT15
              .            .
              .            .
193           .            .          CBJ
              .            .            .
              .            .            .
200        CP15........................
              V
              V
203         R15
              .
              .
206           .          CBH
              .            V
              .            V
13            .        RCBH
              .            .
              .            .
218           .            .        P25S
              .            .            .
              .            .            .
225           .       CP25S............
              .            .
              .            .
228        AFR0............
              .
              .
231           .           E1
              .            V
              .            V
238           .          RE1
              .            .
              .            .
241           .            .           E2
              .            .            V
              .            .            V
248           .            .          RE2
              .            .            .
              .            .            .
251           .            .            .          P13
              .            .            .            .
              .            .            .            .
260           .            .            .            .-------->    DB13
258           .            .            .        DT13
              .            .            .            .
              .            .            .            .
263           .       CP13........................
              .            V
              .            V
266           .          R13
              .            .
              .            .
69            .            .          P12
              .            .            .
```

```
278                 .-------->    DB12
276            DT12
               .
               .
81        CP12............
               .
               .
284            E3
               V
               V
291            RE3
               .
               .
294                P10
                     .
                     .
303                  .-------->    DB10
301                DT10
                     .
                     .
306            CP10............
               V
               V
309            R10
               .
               .
312                P11
                     .
                     .
321                  .-------->    DB11
319                DT11
                     .
                     .
324            CP11............
               .
               .
327                E4
                   V
                   V
334                RE4
                     .
                     .
41                     .          P9
                       .          .
                       .          .
350                    .          .-------->     DB9
348                    .        DT9
                       .          .
                       .          .
353                    .          .         HV1
                       .          .           .
                       .          .           .
360                RE4.......................
                   V
                   V
363                R9
                     .
                     .
370                    .          P8
                       .          .
                       .          .
379                    .          .-------->     DB8
377                    .        DT8
                       .          .
                       .          .
382                    .          .           P7
                       .          .           .
                       .          .           .
391                    .          .           .-------->     DB7
389                    .          .         DT7
                       .          .           .
                       .          .           .
394                RE4.......................
                   V
                   V
397                R7
                     .
                     .
403                    .          P6
                       .          .
                       .          .
2                      .          .-------->     DB6
```

```
410          .          .          .          .        DT6
             .          .          .          .          .
             .          .          .          .          .
415          .          .          .       CP6............
             .          .          .          .
             .          .          .          .
418          .     HPVLY.......................
             .          .
             .          .
421          .          .     A11MA
             .          .          .
             .          .          .
429          .          .          .-------> DA11MA
428          .          .     A11MAQ
             .          .          V
             .          .          V
432          .          .     SA11MA
             .          .          V
             .          .          V
439          .          .     RA11MA
             .          .          .
             .          .          .
444          .          .          .     A11MB
             .          .          .          .
             .          .          .          .
452          .          .          .          .-------> DA11MB
451          .          .          .     A11MBQ
             .          .          .          V
             .          .          .          V
455          .          .          .     SA11MB
             .          .          .          .
             .          .          .          .
462          .          .          .          .     A11NA
             .          .          .          .         V
             .          .          .          .         V
469          .          .          .          .    SA11NA
             .          .          .          .         V
             .          .          .          .         V
476          .          .          .          .    RA11NA
             .          .          .          .          .
             .          .          .          .          .
481          .          .     CA11MB.......................
             .          .          V
             .          .          V
483          .          .     RA11MB
             .          .          .
             .          .          .
488          .          .          .     A11O
             .          .          .          V
             .          .          .          V
495          .          .          .    SA11O
             .          .          .          V
             .          .          .          V
502          .          .          .    RA11O
             .          .          .          .
             .          .          .          .
507          .          .          .          .     A11KB
             .          .          .          .         V
             .          .          .          .         V
514          .          .          .          .    SA11KB
             .          .          .          .          .
             .          .          .          .          .
521          .          .          .          .          .     A11KA
             .          .          .          .          .         V
             .          .          .          .          .         V
528          .          .          .          .          .    SA11KA
             .          .          .          .          .         V
             .          .          .          .          .         V
535          .          .          .          .          .    RA11KA
             .          .          .          .          .          .
             .          .          .          .          .          .
540          .          .          .     CA11KB.......................
             .          .          .          V
             .          .          .          V
542          .          .          .     RA11KB
             .          .          .          .
             .          .          .          .
547          .          .          .          .     A11G
             .          .          .          .         V
             .          .          .          .         V
554          .          .          .          .    RA11GN
             .          .          .          .          .
             .          .          .          .          .
```

```
559   .   .   .   .   .   A11KC
      .   .   .   .   .       V
      .   .   .   .   .       V
566   .   .   .   .   .  SA11KC
      .   .   .   .   .       .
      .   .   .   .   .       .
573   .   .   .  CA11KC.......................
      .   .   .       V
      .   .   .       V
575   .   .   .  RA11KC
      .   .   .       .
      .   .   .       .
580   .   .   .   .   A11J
      .   .   .   .      V
      .   .   .   .      V
587   .   .   .   .  SA11J
      .   .   .   .      .
      .   .   .   .      .
594   .   .  CA11J........................
      .   .   .
      .   .   .
596   .   .   .   A11L
      .   .   .       .
      .   .   .       .
604   .   .   .       .-------->   DA11L
603   .   .   .  DA11LQ
      .   .   .       V
      .   .   .       V
607   .   .   .  RA11L
      .   .   .       .
      .   .   .       .
612   .   .   .   .   A11I
      .   .   .   .      .
      .   .   .   .      .
620   .   .   .   .      .-------->   DA11I
619   .   .   .   .  DA11IQ
      .   .   .   .      .
      .   .   .   .      .
623   .   .  CA11I........................
      .   .   V
      .   .   V
625   .   .  RA11I
      .   .   .
      .   .   .
630   .   .   .  A11EA
      .   .   .       V
      .   .   .       V
637   .   .   .  RA11EA
      .   .   .       .
      .   .   .       .
642   .   .   .   .  A11EB
      .   .   .   .      .
      .   .   .   .      .
649   .   .  CA11EB.......................
      .   .   .
      .   .   .
651   .   .   .     41
      .   .   .      V
      .   .   .      V
658   .   .   .    B41
      .   .   .       .
      .   .   .       .
665   .   .   .   .     42
      .   .   .   .      V
      .   .   .   .      V
672   .   .   .   .    B42
      .   .   .   .      .
      .   .   .   .      .
679   .   .   .    C41............
      .   .   .      V
      .   .   .      V
681   .   .   .   RC41
      .   .   .       .
      .   .   .       .
686   .   .   .   .   A11F
      .   .   .   .      .
      .   .   .   .      .
693   .   .   .  CA11F............
      .   .   .       .
      .   .   .       .
695   .   .  CA11E............
      .   .   V
      .   .   V
```

```
697                 RA11E
                      .
                      .
702                   .        A09U
                      .          .
                      .          .
710                   .          .-------->   A09UI
709                   .       DA09U
                      .          V
                      .          V
713                   .      RA09UW
                      .          .
                      .          .
718                   .          .        A09T
                      .          .          .
                      .          .          .
725                   .       CA09T...........
                      .          .
                      .          .
728                   .          .-------->   A09TI
727                   .       DA09T
                      .          V
                      .          V
731                   .      RA09TW
                      .          .
                      .          .
736                   .          .        A11A
                      .          .          .
                      .          .          .
744                   .          .          .-------->   DA11A
743                   .          .      DA11AQ
                      .          .          .
                      .          .          .
747                   .     CX23.......................
                      .        V
                      .        V
749                   .     RX23
                      .        .
                      .        .
754                   .        .         S1
                      .        .          .
                      .        .          .
761                   .        .          .          P2
                      .        .          .          .
                      .        .          .          .
770                   .        .          .          .-------->     RB2
768                   .        .          .        RT2
                      .        .          .          .
                      .        .          .          .
773                   .     CS1........................
                      .        V
                      .        V
776                   .     RS1
                      .        .
                      .        .
779                   .        .         S2
                      .        .          .
                      .        .          .
786                   .        .          .          S3
                      .        .          .          .
                      .        .          .          .
793                   .     CS2........................
                      .        V
                      .        V
796                   .     RS2
                      .        .
                      .        .
799                   .        .         P3
                      .        .          .
                      .        .          .
808                   .        .          .-------->     RB3
806                   .        .        RT3
                      .        .          .
                      .        .          .
811                   .     CP3............
                      .        .
                      .        .
814                   .        .        P4b
                      .        .          .
                      .        .          .
823                   .        .          .-------->   RB4b
821                   .        .       RT4b
                      .        .          .
```

```
826                                  S4
833                                      P1
842                                      .------->     DB1
840                                    DT1
845                                CP1............
848                                    HV2
                                         V
                                         V
855                                   RHV2
860                                      .------->   DBHV2
858                                 DTHV2
863                                            P4a
872                                            .-------->    DB4a
870                                          DT4a
875                        SOUTH.............................................
878                          N11O
886                          .------->   N11OI
885                       DN11O
                             V
                             V
889                      RN11OW
895                                   .<-------   A09TI
894                            DRA09T
                                  V
                                  V
896                            RA09TS
901                                        A09R
908                       CA09R......................
911                          .------->   A09RI
910                       DA09R
                             V
                             V
914                      RA09RW
919                              A09S
927                                   .------->   DA09S
926                            DA09SQ
930                       CA09S............
                             V
                             V
932                      RA09SW
937                              A09QA
944                      CA09QA............
```

```
947          .           .           .           .-------->  A09QAI
946          .           .           .      DA09QA
             .           .           .           V
             .           .           .           V
950          .           .           .      RA09QW
             .           .           .           .
             .           .           .           .
955          .           .           .           .       A99YA
             .           .           .           .           .
             .           .           .           .           .
962          .           .           .      CA99YA............
             .           .           .           V
             .           .           .           V
964          .           .           .      RA99YA
             .           .           .           .
             .           .           .           .
969          .           .           .           .       A99YB
             .           .           .           .           .
             .           .           .           .           .
976          .           .      CA99YB........................
             .           .           .
             .           .           .
978       AFR1........................
             .
             .
981          .           .<--------   A09UI
980          .      BA09UI
             .           V
             .           V
982          .      RA09US
             .           .
             .           .
987          .           .       N11NB
             .           .           .
             .           .           .
994          .      CN11NB............
             .           V
             .           V
996          .      RN11NW
             .           .
             .           .
1002         .           .           .<--------   N11OI
1001         .           .      BN11OI
             .           .           V
             .           .           V
1003         .           .      RN11OS
             .           .           .
             .           .           .
1008         .           .           .        N11M
             .           .           .           .
             .           .           .           .
1015         .       CN11M........................
             .           .
             .           .
1018         .           .-------->   N11MI
1017         .       DN11M
             .           V
             .           V
1021         .      RN11MS
             .           .
             .           .
1026         .           .        N11J
             .           .           .
             .           .           .
1034         .           .           .-------->  LN11JD
1033         .           .       LN11J
             .           .           .
             .           .           .
1037         .       CN11J............
             .           .
             .           .
1040         .           .-------->   N11JI
1039         .       DN11J
             .           V
             .           V
1043         .      RN11JW
             .           .
             .           .
1049         .           .           .<--------   N11MI
1048         .           .      DRN11M
             .           .           V
             .           .           V
1050         .           .      RN11MW
```

```
                .           .           .
                .           .           .
1055            .         CX4............
                .           V
                .           V
1057            .         RX4
                .           .
                .           .
1062            .           .        A09O
                .           .           V
                .           .           V
1069            .           .       SA09O
                .           .           .
                .           .           .
1077            .           .           .          .<-------   A09RI
1076            .           .           .      BA09RI
                .           .           .           V
                .           .           .           V
1078            .           .           .      RA09RS
                .           .           .           .
                .           .           .           .
1083            .       CA09O........................
                .           .
                .           .
1086            .           .-------->   A09OI
1085            .       DA09O
                .           V
                .           V
1089            .      RA09OW
                .           .
                .           .
1094            .           .        A09P
                .           .           V
                .           .           V
1101            .           .       SA09P
                .           .           .
                .           .           .
1108            .       CA09P............
                .           V
                .           V
1110            .       RA09P
                .           .
                .           .
1116            .           .           .<-------  A09QAI
1115            .           .      BA09QA
                .           .           V
                .           .           V
1117            .           .      RA09QB
                .           .           .
                .           .           .
1122            .           .           .       A09QB
                .           .           .           .
                .           .           .           .
1129            .       CA09Q........................
                .           .
                .           .
1132            .           .-------->   A09QI
1131            .       DA09Q
                .           V
                .           V
1135            .      RA09QW
                .           .
                .           .
1140            .           .        A10A
                .           .           .
                .           .           .
1147            .       CA10A............
                .           V
                .           V
1149            .       RA10A
                .           .
                .           .
1154            .           .        A99X
                .           .           .
                .           .           .
1161            .       CA99X............
                .           .
                .           .
1163        AFR2............
                .
                .
1166            .           .<-------   A09OI
1165            .      BA09OI
```

```
                 .          V
                 .          V
1167             .     RA09OS
                 .          .
                 .          .
[redacted]72     .          .        A09K
                 .          .          .
                 .          .          .
1184             .          .          .-------->   A09KI
1179             .          .      DA09K
                 .          .          .
                 .          .          .
1187             .        CX7............
                 .          V
                 .          V
1190             .       RX7S
                 .          .
                 .          .
1199             .          .      N11NA
                 .          .          V
                 .          .          V
1206             .          .     RN11NA
                 .          .          .
                 .          .          .
1211             .          .          .       N11NC
                 .          .          .           .
                 .          .          .           .
1218             .          .     CN11NC............
                 .          .          .
                 .          .          .
1222             .          .          .-------->   N11NP
1220             .          .     DN11NC
                 .          .          V
                 .          .          V
1225             .          .     RN11NC
                 .          .          .
                 .          .          .
1231             .          .          .       N11ND
                 .          .          .           .
                 .          .          .           .
1238             .          .          .           .        N11K
                 .          .          .           .          .
                 .          .          .           .          .
[redacted]45     .          .      CN11K........................
                 .          .          .
                 .          .          .
1249             .          .          .-------->   N11KP
1248             .          .     DN11KS
                 .          .          V
                 .          .          V
1252             .          .      RN11K
                 .          .          .
                 .          .          .
1258             .          .          .-------->     X5I
1257             .          .        DX5
                 .          .          V
                 .          .          V
1261             .          .       RX5W
                 .          .          .
                 .          .          .
1266             .          .          .        N11H
                 .          .          .           .
                 .          .          .           .
1273             .          .      CN11H............
                 .          .          V
                 .          .          V
1275             .          .      RN11H
                 .          .          .
                 .          .          .
1285             .          .          .           .<--------   N11JI
1284             .          .          .      BN11JI
                 .          .          .           V
                 .          .          .           V
1286             .          .          .      RN11JS
                 .          .          .           .
                 .          .          .           .
1291             .          .          .           .        N11G
                 .          .          .           .          .
                 .          .          .           .          .
1298             .          .      CN11G........................
                 .          .          V
                 .          .          V
[redacted]00     .          .      RN11G
```

```
                .         .         .
                .         .         .
1309            .         .         .      N11DA
                .         .         .          .
                .         .         .          .
17              .         .         .          .-------->  LDAOUT
1316            .         .         .     LN11DA
                .         .         .          V
                .         .         .          V
1320            .         .         .     SN11DA
                .         .         .          .
                .         .         .          .
1329            .         .         .          .-------->  D11DAS
1327            .         .         .     N11DAW
                .         .         .          V
                .         .         .          V
1332            .         .         .     RN11DA
                .         .         .          .
                .         .         .          .
1341            .         .         .          .      N11FB
                .         .         .          .          .
                .         .         .          .          .
1351            .         .         .          .          .-------->  LN1FBD
1348            .         .         .          .     LN11FB
                .         .         .          .          .
                .         .         .          .          .
1354            .         .         .     CN11FB............
                .         .         .          .
                .         .         .          .
1357            .         .     C98RGL............
                .         .         V
                .         .         V
1360            .         .     RN11FB
                .         .         .
                .         .         .
1372            .         .         .          .<--------   A09KI
1369            .         .         .     DRA09K
                .         .         .          V
                .         .         .          V
1373            .         .         .     RA09KS
                .         .         .          .
                .         .         .          .
82              .         .         .          .      N11FA
                .         .         .          .          .
                .         .         .          .          .
1391            .         .         .          .          .-------->  LN1FAD
1388            .         .         .          .     LN11FA
                .         .         .          .          .
                .         .         .          .          .
1394            .         .         .          .          .      A09GA
                .         .         .          .          .          .
                .         .         .          .          .          .
1403            .         .         .          .          .          .-------->  L09GAD
1400            .         .         .          .          .     LA09GA
                .         .         .          .          .          .
                .         .         .          .          .          .
1406            .         .     CN11FA.................................
                .         .         V
                .         .         V
1409            .         .     RN11FA
                .         .         .
                .         .         .
1418            .         .         .      A09GB
                .         .         .          .
                .         .         .          .
1428            .         .         .          .-------->  L09GBD
1425            .         .         .     LA09GB
                .         .         .          .
                .         .         .          .
1431            .         .      CA09G............
                .         .         .
                .         .         .
1435            .         .         .-------->   A09GI
1434            .         .      DA09G
                .         .         V
                .         .         V
1438            .         .     RA09GW
                .         .         .
                .         .         .
1447            .       CX8............
                .         V
                .         V
49              .      RX8W
```

```
                .           .
                .           .
1458            .           .        A09H
                .           .           .
                .           .           .
1468            .           .           .-------->  LA09HD
1465            .           .       LA09H
                .           .           .
                .           .           .
1471            .      CA09H1............
                .           .
                .           .
1474            .           .        A09J
                .           .           .
                .           .           .
1482            .           .           .-------->  LA09JD
1481            .           .       LA09J
                .           .           .
                .           .           .
1486            .           .           .-------->   A09JI
1485            .           .       DA09J
                .           .           V
                .           .           V
1489            .           .      RA09JS
                .           .           .
                .           .           .
1494            .       CA09H............
                .           V
                .           V
1497            .       RA09H
                .           .
                .           .
1503            .           .           .<--------   A09QI
1502            .           .      BA09QI
                .           .           V
                .           .           V
1504            .           .      RA09QS
                .           .           .
                .           .           .
1509            .           .           .        A09M
                .           .           .           .
                .           .           .           .
1517            .           .           .           .-------->  LA09MD
1516            .           .           .       LA09M
                .           .           .           .
                .           .           .           .
1520            .           .       CA09M............
                .           .           V
                .           .           V
1522            .           .       RA09M
                .           .           .
                .           .           .
1527            .           .           .        A09N
                .           .           .           .
                .           .           .           .
1534            .           .       CA09N............
                .           .           V
                .           .           V
1536            .           .       LA09N
                .           .           V
                .           .           V
1541            .           .       RA09N
                .           .           .
                .           .           .
1547            .           .           .           .<--------   A09JI
1546            .           .           .      DRA09J
                .           .           .           V
                .           .           .           V
1548            .           .           .      RA09JW
                .           .           .           .
                .           .           .           .
1553            .           .           .           .        A09L
                .           .           .           .           .
                .           .           .           .           .
1560            .           .       CA09L........................
                .           .           V
                .           .           V
1562            .           .       LA09L
                .           .           V
                .           .           V
1567            .           .      RA09LS
                .           .           .
                .           .           .
```

```
1572          .           .           .       A09IH
              .           .           .           .
              .           .           .           .
1580          .           .      CA09IH...........
              .           .           V
              .           .           V
1582          .           .      LA09IH
              .           .           .
              .           .           .
1587          .           .           .        A09I
              .           .           .           .
              .           .           .           .
1595          .           .           .           .-------> LA09ID
1594          .           .           .       LA09I
              .           .           .           .
              .           .           .           .
1598          .        CX10........................
              .           V
              .           V
1600          .        RX10
              .           .
              .           .
1605          .           .        A99V
              .           .           .
              .           .           .
1612          .       CA99V............
              .           .
              .           .
1614          .           .         A10
              .           .           .
              .           .           .
1621          .           .           .        A99W
              .           .           .           .
              .           .           .           .
1629          .           .           .           .-------> LA99WD
1628          .           .           .       LA99W
              .           .           .           .
              .           .           .           .
1632       AFR3...................................
              .
              .
1635          .           .<-------   A09GI
1634          .      DRA09G
              .           V
              .           V
1636          .      RA09GS
              .           .
              .           .
1641          .           .        A09F
              .           .           .
              .           .           .
1649          .           .           .-------> LA09FD
1648          .           .       LA09F
              .           .           .
              .           .           .
1652          .       CA09F............
              .           .
              .           .
1655          .           .------->   A09FI
1654          .       DA09F
              .           V
              .           V
1658          .      RA09FW
              .           .
              .           .
1663          .           .        A09E
              .           .           .
              .           .           .
1671          .           .           .-------> LA09ED
1670          .           .       LA09E
              .           .           .
              .           .           .
1674          .       CA09E............
              .           V
              .           V
1676          .       RA09E
              .           .
              .           .
1681          .           .        A09D
              .           .           .
              .           .           .
1689          .           .           .-------> LA09DD
1688          .           .       LA09D
```

```
                .           .
                .           .
1692            .      CA09C*............
                .           V
                .           V
1694            .      RA09C*
                .           .
                .           .
1699            .           .        A09C
                .           .           .
                .           .           .
1706            .       CA09C............
                .           V
                .           V
1708            .       RA09C
                .           .
                .           .
1713            .           .        A09B
                .           .           V
                .           .           V
1720            .           .       RA09B
                .           .           .
                .           .           .
1725            .           .           .        A09A
                .           .           .           .
                .           .           .           .
1732            .       CA09A........................
                .           .
                .           .
1735            .           .-------->   A09AI
1734            .      DA09AO
                .           V
                .           V
1738            .      RA09AW
                .           .
                .           .
1743            .           .        A99T
                .           .           .
                .           .           .
1751            .           .           .-------->  LA99TD
1750            .           .       LA99T
                .           .           V
                .           .           V
1754            .           .       RA99T
                .           .           .
                .           .           .
1759            .           .           .         A09
                .           .           .           .
                .           .           .           .
1766            .        CA09........................
                .           .
                .           .
1768            .           .        A99U
                .           .           .
                .           .           .
1775        AFR4........................
                .
                .
1777            .        A07G
                .           .
                .           .
1785            .           .-------->  LA07GD
1784            .       LA07G
                .           V
                .           V
1788            .       RA07G
                .           .
                .           .
1793            .           .        A07F
                .           .           V
                .           .           V
1800            .           .       RA07F
                .           .           .
                .           .           .
1805            .           .           .        A07E
                .           .           .           .
                .           .           .           .
1812            .       CA07E........................
                .           V
                .           V
1814            .       RA07E
                .           .
                .           .
```

```
1819          .           .        A07C
              .           .           .
              .           .           .
1826          .      CA07C.............
              .          V
              .          V
1828          .      RA07C
              .           .
              .           .
1833          .           .        A07H
              .           .           V
              .           .           V
1840          .           .       RA07H
              .           .           .
              .           .           .
1846          .           .           .<-------   A09AI
1845          .           .      DA09AI
              .           .           V
              .           .           V
1847          .           .      RA09AI
              .           .           .
              .           .           .
1852          .           .           .        A08B
              .           .           .           .
              .           .           .           .
1859          .           .       CA08B............
              .           .           V
              .           .           V
1861          .           .       RA08B
              .           .           .
              .           .           .
1866          .           .           .        A07D
              .           .           .           .
              .           .           .           .
1873          .      CA07D..................................
              .          V
              .          V
1875          .      RA07D
              .           .
              .           .
1880          .           .        A99S
              .           .           .
              .           .           .
[illegible]7  .           .       A08A
              .           .           V
              .           .           V
1894          .           .       RA08A
              .           .           .
              .           .           .
1899          .           .           .        A99R
              .           .           .           V
              .           .           .           V
1906          .           .           .       RA99R
              .           .           .           .
              .           .           .           .
1911          .           .           .           .         A08
              .           .           .           .           .
              .           .           .           .           .
1918          .       CA08.............................................
              .           .
              .           .
1920       AFR5............
              .
              .
1922          .      N11P5
              .          V
              .          V
1928          .     R11P5S
              .           .
              .           .
1934          .           .      N11P1
              .           .           .
              .           .           .
1940          .     CN11P1............
              .          V
              .          V
1943          .     R11P1E
              .           .
              .           .
1950          .           .      N11P6
              .           .          V
              .           .          V
[illegible]6  .           .     R11P6S
```

```
                .           .
                .           .
1962            .           .       N11P9
                .           .           .
                .           .           .
58              .      CN11P9............
                .           V
                .           V
1971            .      R11P9S
                .           .
                .           .
1979            .           .       N11P2
                .           .           .
                .           .           .
1985            .      CN11P2............
                .           .
                .           .
1990            .   LEJOS............
                .           .
                .           .
1995            .           .-------->  VPRET
1993            .   VPDIV
                .           .
                .           .
1998            .       N11P4
                .           V
                .           V
2008            .      R11P4S
                .           .
                .           .
2019            .           .-------->  N11P4E
2014            .      DN11P4
                .           .
                .           .
2022            .  SDLEJ1............
                .           .
                .           .
2024            .       N11P8
                .           V
                .           V
2031            .      R11P8S
                .           .
                .           .
7               .           .       N11P7
                .           .           .
                .           .           .
2044            .      CN11P7............
                .           .
                .           .
2052            .           .-------->  N11P7E
2047            .      DN11P7
                .           V
                .           V
2055            .      R11P7S
                .           .
                .           .
2067            .           .           .<--------  N11P4E
2064            .           .       RDP4E
                .           .           .
                .           .           .
2068            .      SUMP7S............
                .           .
                .           .
2071            .  SDLEJ2............
                .       V
                .       V
2073            .   RSDL2
                .           .
                .           .
2079            .           .<--------  N11NP
2076            .      BN11NP
                .           V
                .           V
2080            .      RN11NP
                .           .
                .           .
2083            .           .      N11L5A
                .           .           .
                .           .           .
2090            .         C89............
                .           .
                .           .
5               .           .-------->   ED89
```

```
2093          .           .         D89
              .           .          V
              .           .          V
2098          .           .        R89E
              .           .           .
              .           .           .
2101          .           .           .      N11L3A
              .           .           .           .
              .           .           .           .
2108          .           .         C87............
              .           .           .
              .           .           .
2113          .           .           .-------->     SOL
2111          .           .         D87
              .           .           .
              .           .           .
2116          .       C87BA............
              .           .
              .           .
2121          .           .-------->   87BAS
2119          .        87BP
              .          V
              .          V
2124          .       R87BP
              .           .
              .           .
2127          .           .           87
              .           .           .
              .           .           .
2136          .           .           .           .<--------   87BAS
2134          .           .           .        R87B
              .           .           .           .
              .           .           .           .
2137          .           .        C87B............
              .           .          V
              .           .          V
2140          .           .        87BA
              .           .           .
              .           .           .
2146          .      87BOUT............
              .          V
              .          V
2149          .       R87BA
              .           .
              .           .
2154          .           .-------->   87OUT
2152          .       D87BA
              .           .
              .           .
2157          .           .       LACAI
              .           .          V
              .           .          V
2171          .           .       RTCAI
              .           .           .
              .           .           .
2182          .           .           .-------->   LECHE
2178          .           .      DNLECH
              .           .           .
              .           .           .
2185          .      SDLEJ3............
              .           .
              .           .
2189          .           .      SUMMIT
              .           .           .
              .           .           .
2205          .           .           .           .<--------   LECHE
2202          .           .           .      RDLECH
              .           .           .           .
              .           .           .           .
2206          .           .      LEJCHL............
              .           .           .
              .           .           .
2212          .           .           .           .<--------  N11P7E
2209          .           .           .       RDP7E
              .           .           .          V
              .           .           .          V
2213          .           .           .      R11P7E
              .           .           .           .
              .           .           .           .
2225          .           .           .           .-------->  EAST83
2221          .           .           .       D2-18
              .           .           .           .
              .           .           .           .
```

```
2228                83CL............
                      .
                      .
2242                  .-------->   EAGLE
234             24PIPE
                      .
                      .
2245          SDLEJ4............
                 V
                 V
2249          RT83CL
                 .
                 .
2256                N11P3
                      .
                      .
2262            83SD............
                 V
                 V
2266           R83SD
                 .
                 .
2271                  .<--------   N11KP
2269            BN11KP
                 V
                 V
2272              R91
                      .
                      .
2275                  .       N11L5
                      .           .
                      .           .
2286                  .           .           .<-------     ED89
2284                  .           .       RED89
                      .           .           V
                      .           .           V
2287                  .           .        R89S
                      .           .           .
                      .           .           .
2290                  .           .           .       N11L2
                      .           .           .           .
                      .           .           .           .
298             CN11L5.................................
                      .
                      .
2303                  .-------->  DIVS89
2301             D11L5
                 V
                 V
2306            RN11L5
                      .
                      .
2309                  .       N11L3
                      .           .
                      .           .
2318                  .           .           .<-------     SOL
2316                  .           .        RSOL
                      .           .           V
                      .           .           V
2319                  .           .       RTSOL
                      .           .           .
                      .           .           .
2325             PPSD1......................
                      .
                      .
2330                  .-------->  DIVS87
2328             PPDIV
                      .
                      .
2333                  .       N11L4
                      .           .
                      .           .
2341                  .           .       N21I1
                      .           .           .
                      .           .           .
2350                  .           .           .           .<-------   87OUT
2348                  .           .           .       87OUT
                      .           .           .           .
                      .           .           .           .
2351              PPSD...................................
                      .
                      .
57                    .-------->  DIVS86
```

```
2354          .           .       DIVS3
              .           .          V
              .           .          V
2360          .           .       RPPSD
              .           .          .
              .           .          .
2363          .           .          .       N21I2
              .           .          .          .
              .           .          .          .
2370          .           .          .          .       N21I4
              .           .          .          .          .
              .           .          .          .          .
2378          .       TEMPO.................................
              .           .
              .           .
2381          .           .        N21Z
              .           .          .
              .           .          .
2394          .           .          .-------->   N21ZI
2391          .           .       LN21Z
              .           .          .
              .           .          .
2403          .           .          .-------->  DN21ZI
2397          .           .      DN21ZO
              .           .          .
              .           .          .
2410          .           .          .-------->  N21ZI*
2406          .           .      DN21Z*
              .           .          V
              .           .          V
2413          .           .      RN21ZW
              .           .          .
              .           .          .
2426          .           .          .-------->  D1/2ST
2423          .           .       1/2ST
              .           .          .
              .           .          .
2431          .           .          .           .<-------  D1/2ST
2429          .           .          .      R1/2ST
              .           .          .          .
              .           .          .          .
2435          .           .          .          .           .<-------  EAST83
2432          .           .          .          .      18PIPE
              .           .          .          .          .
              .           .          .          .          .
2439          .           .          .          .          .           .<-------   EAGLE
2436          .           .          .          .          .       CLDIV
              .           .          .          .          .           .
              .           .          .          .          .           .
2440          .           .          .          .       CPIPE............
              .           .          .          .          V
              .           .          .          .          V
2443          .           .          .          .      RCPIPE
              .           .          .          .          .
              .           .          .          .          .
2446          .           .          .          .          .       N21I3
              .           .          .          .          .           .
              .           .          .          .          .           .
2453          .           .          .      CN21I3........................
              .           .          .          .
              .           .          .          .
2460          .           .          .          .-------->  N21I3O
2456          .           .          .       R21I3
              .           .          .          .
              .           .          .          .
2463          .           .       PPK_E............
              .           .          .
              .           .          .
2469          .           .          .-------->  PPKEW3
2467          .           .      PPKEW2
              .           .          .
              .           .          .
2472          .       US_BSN............
              .           .
              .           .
2478          .           .-------->   PPBAS
2476          .        PPBP
              .           V
              .           V
2481          .       R83BSN
              .           .
              .           .
94            .           .           .<-------   PPBAS
```

```
2613          .          .        RHC6
              .          .          .
              .          .          .
2620          .          .          .          21
              .          .          .           .
              .          .          .           .
2627          .          .         HC7............
              .          .           V
              .          .           V
2630          .          .        RHC7
              .          .          .
              .          .          .
2637          .          .          .          33
              .          .          .           V
              .          .          .           V
2644          .          .          .         B33
              .          .          .           V
              .          .          .           V
2651          .          .          .         R33
              .          .          .           .
              .          .          .           .
2658          .          .          .           .          34
              .          .          .           .           V
              .          .          .           .           V
2665          .          .          .           .         B34
              .          .          .           .           V
              .          .          .           .           V
2672          .          .          .           .         R34
              .          .          .           .           .
              .          .          .           .           .
2679          .          .          .           .           .          35
              .          .          .           .           .           .
              .          .          .           .           .           .
2686          .          .        HC8A.................................
              .          .          .
              .          .          .
2689          .          .          .          22
              .          .          .           V
              .          .          .           V
2696          .          .          .         R22
              .          .          .           .
              .          .          .           .
2703          .          .          .           .          23
              .          .          .           .           .
              .          .          .           .           .
2710          .          .          .         HC8............
              .          .          .           V
              .          .          .           V
2713          .          .          .         B23
              .          .          .           .
              .          .          .           .
2720          .          .          .           .          25
              .          .          .           .           .
              .          .          .           .           .
2727          .          .         HC9........................
              .          .           V
              .          .           V
2730          .          .        RHC9
              .          .          .
              .          .          .
2737          .          .          .          27
              .          .          .           .
              .          .          .           .
2744          .          .          .           .          36
              .          .          .           .           V
              .          .          .           .           V
2751          .          .          .           .         R36
              .          .          .           .           .
              .          .          .           .           .
2758          .          .          .           .           .         37w
              .          .          .           .           .           .
              .          .          .           .           .           .
2765          .          .        C37W.................................
              .          .           V
              .          .           V
2768          .          .        B37W
              .          .           V
              .          .           V
2775          .          .       RB37W
              .          .          .
              .          .          .
2782          .          .          .         37e
              .          .          .           .
```

```
2789                                  24
                                       V
                                       V
796                                   R24
2803                                                100
2810                                 HC100............
                                       V
                                       V
2813                                 R100
2820                                                28R
2827                                 HC28R............
                                       V
                                       V
2830                                 R28R
2837                                                26R
                                                     V
                                                     V
2844                                               R26R
2851                                                                  29
2858                                               HC11............
                                                     V
                                                     V
2861                                               B29
2869                                                                  48
76                        HC12.............................................
2879                                  49
                                       V
                                       V
2886                                 B49
2893                      C-N24M............
                                       V
                                       V
2896                      RB49
2901                                N24V
                                       V
                                       V
2908                               RN24V
2913                                          N24M
2920                      CN24M........................
                                       V
                                       V
2922                      RN24M
2927                                  45
                                       V
                                       V
2934                                 R45
2941                                           47
48                                 HC14............
```

```
                 .         .         .         V
                 .         .         .         V
2952             .         .         .       RHC14
                 .         .         .         .
                 .         .         .         .
58               .         .         .         .          50
                 .         .         .         .           V
                 .         .         .         .           V
2965             .         .         .         .         R50
                 .         .         .         .           .
                 .         .         .         .           .
2972             .         .         .         .           .          51
                 .         .         .         .           .           .
                 .         .         .         .           .           .
2979             .         .         .       HC15.......................
                 .         .         .         V
                 .         .         .         V
2982             .         .         .        B51
                 .         .         .         .
                 .         .         .         .
2990             .         .         .         .          46
                 .         .         .         .           V
                 .         .         .         .           V
2997             .         .         .         .         R46
                 .         .         .         .           .
                 .         .         .         .           .
3004             .         .         .         .           .          52
                 .         .         .         .           .           .
                 .         .         .         .           .           .
3011             .         .         .         .        HC16............
                 .         .         .         .           .
                 .         .         .         .           .
3014             .         .         .         .           .         53R
                 .         .         .         .           .           V
                 .         .         .         .           .           V
3021             .         .         .         .           .         R53
                 .         .         .         .           .           .
                 .         .         .         .           .           .
3028             .         .         .         .           .           .         54R
                 .         .         .         .           .           .           .
                 .         .         .         .           .           .           .
3035             .         .         .         .           .        HC17............
                 .         .         .         .           .           .
                 .         .         .         .           .           .
38               .         .         .         .      HC17A............
                 .         .         .         .          V
                 .         .         .         .          V
3041             .         .         .         .        B52
                 .         .         .         .           .
                 .         .         .         .           .
3049             .         .         .         .           .         56R
                 .         .         .         .           .           V
                 .         .         .         .           .           V
3056             .         .         .         .           .         B56
                 .         .         .         .           .           .
                 .         .         .         .           .           .
3064             .         .         .     C-N24I.......................
                 .         .         .         V
                 .         .         .         V
3067             .         .         .     R-N24I
                 .         .         .         .
                 .         .         .         .
3072             .         .         .         .          55
                 .         .         .         .           V
                 .         .         .         .           V
3079             .         .         .         .         R55
                 .         .         .         .           .
                 .         .         .         .           .
3086             .         .         .         .           .         57R
                 .         .         .         .           .           .
                 .         .         .         .           .           .
3093             .         .         .         .        HC18............
                 .         .         .         .           V
                 .         .         .         .           V
3096             .         .         .         .        B57R
                 .         .         .         .           V
                 .         .         .         .           V
3104             .         .         .         .       RB57R
                 .         .         .         .           .
                 .         .         .         .           .
3110             .         .         .         .           .        N24I
                 .         .         .         .           .           .
                 .         .         .         .           .           .
```

```
3117                                                                  N24H
                                                                        .
                                                                        .
3124                                                                  N24N
                                                                        V
                                                                        V
3131                                                                 RN24N
                                                                        .
                                                                        .
3136                                                                    .        N24J
                                                                        .          .
                                                                        .          .
3143                                                                 CN24J............
                                                                        V
                                                                        V
3145                                                                 RN24J
                                                                        .
                                                                        .
3150                                                                    .        N24K
                                                                        .          .
                                                                        .          .
3157                    CN24I.......................................................................
                            V
                            V
3159                    RN24I
                            .
                            .
3164                            .       N21JA
                                            V
                                            V
3171                            .      RN21JS
                                            .
                                            .
3176                            .            .       N21JB
                                            .           .
                                            .           .
3183                            .       CN21J............
                                            V
                                            V
3185                            .      RN21JE
                                            .
                                            .
3190                    CN24G*............
                            V
                            V
3192                    RN24G*
                            .
                            .
3197                            .        N24G
                                            .
                                            .
3205                                        .-------->  LN24GD
3204                            .       LN24G
                                            .
                                            .
3208                    CN24G............
                            .
                            .
3211                                        .<--------  DN21ZI
3210                            .      DRN21Z
                                            V
                                            V
3212                            .      RN21ZE
                                            .
                                            .
3217                    CN24G+............
                            V
                            V
3219                    RN24G
                            .
                            .
3224                            .        N24F
                                            .
                                            .
3231                    CN24F............
                            .
                            .
3233                            .        N24D
                                            .
                                            .
3240                    CN24D............
                            V
                            V
```

```
3242          .          .        LN24D
              .          .           .
              .          .           .
3248          .          .           .        N21H
              .          .           .           .
              .          .           .           .
3256          .          .           .           .           .<-------   N21GI
3255          .          .           .           .      DRN21G
              .          .           .           .           V
              .          .           .           .           V
3257          .          .           .           .      RN21GE
              .          .           .           .           .
              .          .           .           .           .
3262          .          .           .       CN21H............
              .          .           .           V
              .          .           .           V
3264          .          .           .       RN21H
              .          .           .           .
              .          .           .           .
3269          .          .           .           .        N24E
              .          .           .           .           V
              .          .           .           .           V
3276          .          .           .           .       RN24E
              .          .           .           .           .
              .          .           .           .           .
3281          .          .       CN24D*......................
              .          .           .
              .          .           .
3283          .          .           .         N27
              .          .           .           V
              .          .           .           V
3290          .          .           .        RN27
              .          .           .           .
              .          .           .           .
3295          .          .           .           .         N26
              .          .           .           .           .
              .          .           .           .           .
3302          .          .           .        CN26............
              .          .           .           V
              .          .           .           V
3304          .          .           .        RN26
              .          .           .           .
              .          .           .           .
3309          .          .           .           .         N25
              .          .           .           .           .
              .          .           .           .           .
3316          .          .           .        CN25............
              .          .           .           V
              .          .           .           V
3318          .          .           .        RN25
              .          .           .           .
              .          .           .           .
3323          .          .           .           .         N24
              .          .           .           .           .
              .          .           .           .           .
3330          .          .         CN24......................
              .          .            V
              .          .            V
3332          .          .        RCN24
              .          .           .
              .          .           .
3337          .          .           .         N23
              .          .           .           .
              .          .           .           .
3344          .       CN23......................
              .          V
              .          V
3346          .       RN23
              .          .
              .          .
3352          .          .           .<-------   N21DI
3351          .          .       BN21DI
              .          .            V
              .          .            V
3353          .          .       RN21DS
              .          .           .
              .          .           .
3358          .          .           .        N21C
              .          .           .           .
              .          .           .           .
3366          .          .           .           .-------> LN21CD
3365          .          .           .       LN21C
              .          .           .           .
```

```
3369                CN21C............
                                 .
                                 .
3371                             .          N21
                                 .            .
                                 .            .
3378            CN21........................
                   V
                   V
3380            RN21
                   .
                   .
3386               .-------->   N20DI
3385         N21-20
                   .
                   .
3389               .       N11DB
                   .           .
                   .           .
3397               .           .            .<-------  D11DAS
3396               .           .      B11DAS
                   .           .           V
                   .           .           V
3398               .           .      R11DAS
                   .           .           .
                   .           .           .
3403               .      C11DAB............
                   .           .
                   .           .
3407               .           .-------->  LNBOUT
3406               .      LN11DB
                   .           .
                   .           .
3411               .           .-------->   N11DI
3410               .       DN11D
                   .           V
                   .           V
3414               .      RN11DE
                   .           .
                   .           .
3420               .           .            .<-------     X5I
3419               .           .        DRX5
                   .           .           V
                   .           .           V
3421               .           .        RX5S
                   .           .           .
                   .           .           .
3426               .         CX1............
                   .           .
                   .           .
3429               .           .-------->     X1I
3428               .         DX1
                   .           V
                   .           V
3432               .        RX1E
                   .           .
                   .           .
3439               .           .            .<-------  DIVS89
3437               .           .       DIVS1
                   .           .           V
                   .           .           V
3440               .           .      RNDV89
                   .           .           .
                   .           .           .
3446               .           .           .         DV1
                   .           .           .           .
                   .           .           .           .
3453               .           .        CPD1............
                   .           .           V
                   .           .           V
3456               .           .       RNCP1
                   .           .           .
                   .           .           .
3461               .           .           .         DV2
                   .           .           .           .
                   .           .           .           .
3468               .           .        CPD2............
                   .           .           .
                   .           .           .
3476               .           .           .-------->    DVRB
3471               .           .       89WRB
                   .           .           V
```

```
                    .         .         .         V
3479                .         .         .     RNRDV2
                    .         .         .         .
                    .         .         .         .
3484                .         .         .         .         DV3
                    .         .         .         .           .
                    .         .         .         .           .
3491                .         .         .      CPD3............
                    .         .         .         V
                    .         .         .         V
3494                .         .         .     RNRDV3
                    .         .         .         .
                    .         .         .         .
3499                .         .         .         .         DV4
                    .         .         .         .           .
                    .         .         .         .           .
3506                .         .         .         .           .         DV5
                    .         .         .         .           .           .
                    .         .         .         .           .           .
3513                .         .         .      CPD5........................
                    .         .         .         .
                    .         .         .         .
3516                .         .         .         .         DV6
                    .         .         .         .           .
                    .         .         .         .           .
3523                .         .         .     CPDV6............
                    .         .         .         V
                    .         .         .         V
3525                .         .         .     RN11IS
                    .         .         .         .
                    .         .         .         .
3530                .         .         .         .       N11EA
                    .         .         .         .           .
                    .         .         .         .           .
3537                .         .         .     CN11EA............
                    .         .         .         V
                    .         .         .         V
3539                .         .         .     RN11ES
                    .         .         .         V
                    .         .         .         V
3544                .         .         .      LX50
                    .         .         .         .
                    .         .         .         .
51                  .         .         .         .-------->   DX50I
50                  .         .         .      DX50
                    .         .         .         V
                    .         .         .         V
3554                .         .         .     RX50E
                    .         .         .         .
                    .         .         .         .
3561                .         .         .         .           .<-------  DIVS87
3559                .         .         .         .       DIVS2
                    .         .         .         .           V
                    .         .         .         .           V
3562                .         .         .         .      RNDV87
                    .         .         .         .           .
                    .         .         .         .           .
3568                .         .         .         .           .         DV7
                    .         .         .         .           .           .
                    .         .         .         .           .           .
3575                .         .         .         .       CPD7............
                    .         .         .         .           V
                    .         .         .         .           V
3577                .         .         .         .      RNRDV7
                    .         .         .         .           .
                    .         .         .         .           .
3582                .         .         .         .           .         DV8
                    .         .         .         .           .           .
                    .         .         .         .           .           .
3589                .         .         .         .       CPD8............
                    .         .         .         .           .
                    .         .         .         .           .
3592                .         .         .         .           .         DV9
                    .         .         .         .           .           .
                    .         .         .         .           .           .
3599                .         .         .         .      DVCP9............
                    .         .         .         .           .
                    .         .         .         .           .
3603                .         .         .         .           .           .<-------  DIVS86
3601                .         .         .         .           .      DIVS13
                    .         .         .         .           .           V
                    .         .         .         .           .           V
4                   .         .         .         .           .      RNRS86
```

```
3609                                                                  DV10
                                                                        .
                                                                        .
16                                                        CPD10............
                                                              V
                                                              V
3619                                                      RNRD10
                                                                        .
                                                                        .
3625                                                                  DV11
                                                                        .
                                                                        .
3632                                                CPD11......................
                                                        V
                                                        V
3635                                                RCP11S
                                                                        .
                                                                        .
3640                                                            N22A
                                                                        .
                                                                        .
3647                                                CN22A............
                                                                        .
                                                                        .
3650                                                        -------> LN22DA
3649                                                LN22A
                                                        V
                                                        V
3653                                                R22AS
                                                                        .
                                                                        .
3658                                                            N22B
                                                                        .
                                                                        .
3666                                                                    -------> LN22DB
3665                                                      LN22B
                                                                        .
                                                                        .
3669                                        CN22......................
                                                        .
                                                        .
72                                                      -------> N22I
71                                          DN22
                                                        V
                                                        V
3675                                        RN22W
                                                        .
                                                        .
3681                                                        <-------  DX50I
3680                                                DRX50I
                                                        V
                                                        V
3682                                                RX50W
                                                                        .
                                                                        .
3687                                                      N11EB
                                                                        .
                                                                        .
3694                                    CN11E...................................
                                                        .
                                                        .
3697                                                    -------> LN11ED
3696                                    LN11E
                                                        V
                                                        V
3700                                    R-WBE1
                                                        .
                                                        .
3705                                                    WB1
                                                        .
                                                        .
3711                                    CPWB1............
                                                        V
                                                        V
3713                                     R-R3
                                                        .
                                                        .
3718                                                    WB2
                                                        .
                                                        .
4                                       CPWB2............
```

```
                 .          .          V
                 .          .          V
3726             .          .       R-4-5
                 .          .          .
                 .          .          .
31               .          .          .          WB3
                 .          .          .            .
                 .          .          .            .
3737             .          .       CPWB3............
                 .          .          V
                 .          .          V
3739             .          .        R-6
                 .          .          .
                 .          .          .
3745             .          .          .          .<-------    N22I
3744             .          .          .       DRN22
                 .          .          .            .
                 .          .          .            .
3746             .          .          .            .         WB4
                 .          .          .            .           .
                 .          .          .            .           .
3752             .          .          .       CPWB4............
                 .          .          .           V
                 .          .          .           V
3754             .          .          .        R-R1
                 .          .          .            .
                 .          .          .            .
3759             .          .          .            .         WB5
                 .          .          .            .           .
                 .          .          .            .           .
3765             .          .          .       CPWB5............
                 .          .          .           V
                 .          .          .           V
3767             .          .          .        R-R2
                 .          .          .            .
                 .          .          .            .
3772             .          .       CPR6............
                 .          .          V
                 .          .          V
3774             .          .       RCR26
                 .          .          .
                 .          .          .
3779             .          .          .          WB7
                 .          .          .            .
                 .          .          .            .
3785             .          .       CR6W7............
                 .          .          V
                 .          .          V
3787             .          .       R-R7
                 .          .          .
                 .          .          .
3792             .          .          .          WB6
                 .          .          .            V
                 .          .          .            V
3798             .          .          .       R-R8
                 .          .          .            .
                 .          .          .            .
3803             .          .       C7R8............
                 .          .          V
                 .          .          V
3805             .          .       RC78
                 .          .          .
                 .          .          .
3810             .          .          .          WB8
                 .          .          .            .
                 .          .          .            .
3816             .          .     CP-678............
                 .          .          .
                 .          .          .
3818             .          .          .       WB10
                 .          .          .           V
                 .          .          .           V
3824             .          .          .       R-R9
                 .          .          .            .
                 .          .          .            .
3829             .          .       WBEOT............
                 .          .          .
                 .          .          .
3832             .          .          .------->   TONRI
3831             .          .       DVNR
                 .          .          .
                 .          .          .
6                .          .          .------->   DCLUB
```

```
3835          .          .        CCLUB
              .          .            V
              .          .            V
3839          .          .        RR287
              .          .            .
              .          .            .
3845          .          .            .-------> DV87SI
3844          .          .        DV87S
              .          .            V
              .          .            V
3848          .          .        RR289
              .          .            .
              .          .            .
3854          .          .            .-------> DV89I
3853          .          .         DS89
              .          .            V
              .          .            V
3857          .          .        TODET
              .          .            .
              .          .            .
3863          .          .            .-------> DV91I
3862          .          .         DV91
              .          .            .
              .          .            .
3866          .          .            .        WB9
              .          .            .          V
              .          .            .          V
3873          .          .            .      R-R10
              .          .            .          .
              .          .            .          .
3881          .          .            .          .          .<-------     X1I
3880          .          .            .      DRX1I
              .          .            .          .          V
              .          .            .          .          V
3882          .          .            .       RX1S
              .          .            .          .          .
              .          .            .          .          .
3887          .          .      CN11B1.......................
              .          .            .
              .          .            .
3889          .          .            .       N11C
              .          .            .          .
              .          .            .          .
3897          .          .            .          .-------> LN11CD
3896          .          .            .      LN11C
              .          .            .          .
              .          .            .          .
3901          .          .            .          .-------> N11CWI
3900          .          .            .     DN11CW
              .          .            .          .
              .          .            .          .
3905          .          .            .          .-------> N11CEI
3904          .          .            .     DN11CE
              .          .            .          .
              .          .            .          .
3909          .          .            .          .          .<-------  N11CWI
3908          .          .            .          .     DRN11C
              .          .            .          .          V
              .          .            .          .          V
3910          .          .            .          .     LN11CW
              .          .            .          .          .
              .          .            .          .          .
3916          .          .            .          .          .           .<-------  N11CEI
3915          .          .            .          .          .      DR11C*
              .          .            .          .          .           V
              .          .            .          .          .           V
3917          .          .            .          .          .      LN11CE
              .          .            .          .          .           .
              .          .            .          .          .           .
3922          .          .            .     CN11C1.......................
              .          .            .          .
              .          .            .          .
3925          .          .            .          .          .<-------   N11DI
3924          .          .            .          .     BN11DI
              .          .            .          .          .
              .          .            .          .          .
3926          .          .            .      CN11D............
              .          .            .          V
              .          .            .          V
3928          .          .            .      RWBW1
              .          .            .          .
              .          .            .          .
3933          .          .            .          .       N11A
```

```
                .         .         .         .         .
                .         .         .         .         .
 3939           .         .         .      CWBW...........
                .         .         .         V
                .         .         .         V
 [illegible]11  .         .         .      RBWB
                .         .         .         V
                .         .         .         V
 3946           .         .         .      RWBW2
                .         .         .         .
                .         .         .         .
 3951           .         .      CN11B...........
                .         .         .
                .         .         .
 3953           .         .         .      S30D
                .         .         .         V
                .         .         .         V
 3960           .         .         .      RS30D
                .         .         .         .
                .         .         .         .
 3965           .         .         .         .        S30C
                .         .         .         .         .
                .         .         .         .         .
 3973           .         .         .         .         .          .<-------   A09FI
 3972           .         .         .         .         .     DA09FI
                .         .         .         .         .          V
                .         .         .         .         .          V
 3974           .         .         .         .         .     RA09FI
                .         .         .         .         .         .
                .         .         .         .         .         .
 3979           .         .         .      XX1........................
                .         .         .         .
                .         .         .         .
 3981           .         .         .         .        S30B
                .         .         .         .         .
                .         .         .         .         .
 3988           .         .         .      CS30B...........
                .         .         .         .
                .         .         .         .
 3991           .         .         .         .-------> DS30BI
 3990           .         .         .     DS30BO
                .         .         .         V
                .         .         .         V
 [illegible]94  .         .         .     RS30BW
                .         .         .         .
                .         .         .         .
 3999           .         .         .         .        S30A
                .         .         .         .         .
                .         .         .         .         .
 4006           .         .         .      CS30A...........
                .         .         .         .
                .         .         .         .
 4009           .         .         .         .         .<-------   TONRI
 4008           .         .         .         .     DRTONR
                .         .         .         .         .
                .         .         .         .         .
 4011           .         .         .         .         .          .<-------   N20DI
 4010           .         .         .         .         .     BN20DI
                .         .         .         .         .         .
                .         .         .         .         .         .
 4012           .         .         .         .         .         .         N20
                .         .         .         .         .         .          .
                .         .         .         .         .         .          .
 4019           .         .         .         .        CN20........................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1****************************************                                    ****************************************
 *                                      *                                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                    *    U.S. ARMY CORPS OF ENGINEERS      *
 *              JUN   1998              *                                    *    HYDROLOGIC ENGINEERING CENTER     *
 *           VERSION 4.1                *                                    *          609 SECOND STREET           *
 *                                      *                                    *       DAVIS, CALIFORNIA 95616        *
 *  RUN DATE   02MAY07  TIME  16:05:49  *                                    *          (916) 756-1104              *
 *                                      *                                    *                                      *
 ****************************************                                    ****************************************
```

Project ID: GP_NW ADMP_EX1 - Major Basin: 01 - Return Period: 100 Years **

Glendale/Peoria ADMP Northwest Region Update **

```
Original HEC-1 Model: L3R5DVR.DAT, Wood/Patel, APRIL 14, 2006            **
                      REVISED FOR DOVE VALLEY RANCH IMPROVEMENTS         **
Modified HEC-1 Model: EC06BASE.DAT, Wood/Patel, SZ, May 2007             **
                      100-Year 6-Hour HEC-1 Model for Existing Conditions **
1) NOAA 2 Rainfall Data                                                  **
2) DDMSW MCUHP1 V3.3.2 Used                                              **
                                                                         **
*************************************************************************
*****************************************************************************
**                                                                         **
** CONCEPT REFINEMENT STUDY FOR ROSE GARDEN LANE DRAINAGE IMPROVEMENTS     **
** ORIGINAL HEC-1 FILE FROM GLENDAL/PEORIA ADMP UPDATE STUDY               **
** MODIFIED HEC-1 MODEL: LEVEL3R5.DAT, Wood/Patel & CVL, May 2005          **
** THIS IS THE PREFERRED ALTERNATIVE MODEL                                 **
** WPA REVISED APRIL 14, 2006 FOR DOVE VALLEY RANCH IMPROVEMENTS           **
** USING LATEST SURVEY DATA.                                               **
*****************************************************************************
*****************************************************************************
**                                                                         **
**                    Glendale/Peoria ADMP Update                          **
**                                                                         **
*****************************************************************************
*****************************************************************************
PROJECT:                 Glendale Peoria ADMP Update
CLIENT:                  Flood Control District of Maricopa County
PREPARED BY:             Entellus, Inc.
PROJECT No:              FCD 99-44              Entellus 310.017
FILE NAME: LEVEL3.DAT              CREATED DATE: JUNE 6, 2001
STORM:                   100-year 6-hour Storm
DEVELOPMENT CONDITIONS: LEVEL 3 HYDROLOGY


36 IO        OUTPUT CONTROL VARIABLES
                IPRNT          5  PRINT CONTROL
                IPLOT          0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT        HYDROGRAPH TIME DATA
                 NMIN          2  MINUTES IN COMPUTATION INTERVAL
                IDATE     1    0  STARTING DATE
                ITIME        0000  STARTING TIME
                   NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE     2    0  ENDING DATE
               NDTIME        0918  ENDING TIME
               ICENT          19  CENTURY MARK

          COMPUTATION INTERVAL     .03 HOURS
               TOTAL TIME BASE   33.30 HOURS

     ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT

38 JD        INDEX STORM NO. 1
                STRM        3.20  PRECIPITATION DEPTH
                TRDA         .01  TRANSPOSITION DRAINAGE AREA

39 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .01       .01
                .01       .01       .01       .01       .01       .02       .02       .02       .02       .02
                .02       .02       .04       .06       .06       .06       .06       .06       .06       .06
                .01       .01       .01       .01       .01       .01       .01       .01       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00

   JD        INDEX STORM NO. 2
```

```
                STRM        3.18  PRECIPITATION DEPTH
                TRDA         .50  TRANSPOSITION DRAINAGE AREA

43 PI        PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .01       .01
                .01       .01       .01       .01       .01       .02       .02       .02       .02       .02
                .02       .02       .04       .06       .06       .06       .06       .06       .06       .06
                .01       .01       .01       .01       .01       .01       .01       .01       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00

46 JD        INDEX STORM NO. 3
                STRM        3.12  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

47 PI        PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .03       .03       .03       .03       .03
                .03       .03       .03       .03       .03       .03       .03       .03       .03       .03
                .02       .02       .02       .02       .02       .02       .02       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .01       .01       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00

50 JD        INDEX STORM NO. 4
                STRM        2.95  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

51 PI        PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .02       .02       .02       .02       .02
                .02       .02       .02       .03       .03       .03       .03       .03       .03       .03
                .02       .02       .02       .02       .02       .02       .02       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00

54 JD        INDEX STORM NO. 5
                STRM        2.60  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

55 PI        PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
```

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.02	.02	.02	.02	.02
.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
.02	.02	.02	.02	.02	.02	.02	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	CBA	16.	4.10	1.	0.	0.	.01		
+	ROUTED TO	RCBA	16.	4.20	1.	0.	0.	.01		
+	HYDROGRAPH AT	P28	56.	4.13	7.	2.	1.	.03		
+	2 COMBINED AT	CP28	70.	4.13	9.	2.	2.	.03		
+	DIVERSION TO	DB28	55.	4.03	2.	1.	0.	.03		
+	HYDROGRAPH AT	DT28	70.	4.13	6.	2.	1.	.03		
+	HYDROGRAPH AT	CBB	40.	4.07	3.	1.	1.	.02		
+	ROUTED TO	RCBB	40.	4.10	3.	1.	1.	.02		
+	2 COMBINED AT	CP28a	110.	4.13	9.	2.	2.	.05		
+	ROUTED TO	R28a	93.	4.30	9.	2.	2.	.05		
+	HYDROGRAPH AT	P27	107.	4.17	17.	4.	3.	.06		
	DIVERSION TO	DB27	54.	3.93	3.	1.	0.	.06		
+	HYDROGRAPH AT	DT27	107.	4.17	14.	3.	3.	.06		
+	2 COMBINED AT	CP27	191.	4.27	23.	6.	4.	.12		
+	HYDROGRAPH AT	P27A	16.	4.07	2.	0.	0.	.01		
+	DIVERSION TO	DB27a	9.	3.90	0.	0.	0.	.01		
+	HYDROGRAPH AT	DT27a	16.	4.07	1.	0.	0.	.01		
+	HYDROGRAPH AT	P27B	24.	4.10	3.	1.	1.	.01		
+	DIVERSION TO	DB27b	10.	3.87	1.	0.	0.	.01		
+	HYDROGRAPH AT	DT27b	24.	4.10	3.	1.	0.	.01		
+	HYDROGRAPH AT	CBL	54.	4.10	6.	2.	1.	.03		
+	4 COMBINED AT	CCBL	260.	4.23	33.	8.	6.	.16		
+	ROUTED TO	RCBL	260.	4.30	33.	8.	6.	.16		
+	HYDROGRAPH AT	CBK	108.	4.17	9.	2.	2.	.05		
	2 COMBINED AT	CCBK	344.	4.23	41.	10.	7.	.22		

+	ROUTED TO	RCBK	341.	4.27	41.	10.	7.	.22
	HYDROGRAPH AT	P14	16.	4.10	1.	0.	0.	.01
+	DIVERSION TO	RB14	16.	4.10	1.	0.	0.	.01
+	HYDROGRAPH AT	RT14	0.	.00	0.	0.	0.	.01
+	2 COMBINED AT	CP14	341.	4.27	41.	10.	7.	.22
+	HYDROGRAPH AT	P15	5.	4.30	1.	0.	0.	.01
+	DIVERSION TO	DB15	5.	4.30	1.	0.	0.	.01
+	HYDROGRAPH AT	DT15	2.	4.80	0.	0.	0.	.01
+	HYDROGRAPH AT	CBJ	29.	4.13	2.	1.	0.	.01
+	3 COMBINED AT	CP15	363.	4.23	44.	11.	8.	.25
+	ROUTED TO	R15	362.	4.27	44.	11.	8.	.25
+	HYDROGRAPH AT	CBH	34.	4.07	2.	1.	0.	.01
+	ROUTED TO	RCBH	30.	4.13	2.	1.	0.	.01
	HYDROGRAPH AT	P25S	36.	4.20	5.	1.	1.	.03
	2 COMBINED AT	CP25S	64.	4.13	7.	2.	1.	.04
+	2 COMBINED AT	APR0	415.	4.23	51.	13.	9.	.29
+	HYDROGRAPH AT	E1	32.	4.07	2.	0.	0.	.01
+	ROUTED TO	RE1	32.	4.13	2.	0.	0.	.01
+	HYDROGRAPH AT	E2	28.	4.10	3.	1.	0.	.02
+	ROUTED TO	RE2	28.	4.13	3.	1.	0.	.02
+	HYDROGRAPH AT	P13	125.	4.10	11.	3.	2.	.06
+	DIVERSION TO	DB13	43.	3.87	2.	1.	0.	.06
+	HYDROGRAPH AT	DT13	125.	4.10	9.	2.	2.	.06
+	3 COMBINED AT	CP13	182.	4.10	14.	3.	2.	.09
+	ROUTED TO	R13	178.	4.17	14.	3.	2.	.09
+	HYDROGRAPH AT	P12	69.	4.17	8.	2.	2.	.04
	DIVERSION TO	DB12	53.	4.03	2.	1.	0.	.04
	HYDROGRAPH AT							

+	DT12	69.	4.17	6.	2.	1.	.04
+ 2 COMBINED AT	CP12	246.	4.17	20.	5.	4.	.13
HYDROGRAPH AT	E3	74.	4.40	12.	3.	2.	.08
+ ROUTED TO	RE3	74.	4.43	12.	3.	2.	.08
+ HYDROGRAPH AT	P10	98.	4.13	11.	3.	2.	.05
+ DIVERSION TO	DB10	46.	3.93	2.	1.	0.	.05
+ HYDROGRAPH AT	DT10	98.	4.13	9.	2.	2.	.05
+ 2 COMBINED AT	CP10	142.	4.20	21.	5.	4.	.14
+ ROUTED TO	R10	141.	4.33	21.	5.	4.	.14
+ HYDROGRAPH AT	P11	39.	4.30	8.	2.	2.	.04
+ DIVERSION TO	DB11	39.	4.27	2.	1.	0.	.04
+ HYDROGRAPH AT	DT11	39.	4.33	6.	1.	1.	.04
+ 2 COMBINED AT	CP11	180.	4.33	27.	7.	5.	.18
+ HYDROGRAPH AT	E4	33.	4.37	6.	1.	1.	.04
+ ROUTED TO	RE4	33.	4.40	6.	1.	1.	.04
+ HYDROGRAPH AT	P9	82.	4.10	9.	2.	2.	.05
+ DIVERSION TO	DB9	45.	3.93	2.	0.	0.	.05
+ HYDROGRAPH AT	DT9	82.	4.10	7.	2.	1.	.05
+ HYDROGRAPH AT	HV1	6.	4.30	1.	0.	0.	.01
+ 3 COMBINED AT	CP9	104.	4.13	14.	4.	3.	.09
+ ROUTED TO	R9	104.	4.17	14.	4.	3.	.09
+ HYDROGRAPH AT	P8	14.	4.23	3.	1.	0.	.01
+ DIVERSION TO	DB8	12.	4.10	1.	0.	0.	.01
+ HYDROGRAPH AT	DT8	14.	4.23	2.	1.	0.	.01
+ HYDROGRAPH AT	P7	17.	4.20	3.	1.	1.	.01
+ DIVERSION TO	DB7	13.	4.07	1.	0.	0.	.01
+ HYDROGRAPH AT	DT7	17.	4.20	2.	1.	0.	.01
3 COMBINED AT	CP7	135.	4.17	18.	5.	3.	.12

	ROUTED TO						
+	R7	134.	4.20	18.	5.	3.	.12
	HYDROGRAPH AT						
	P6	46.	4.50	14.	4.	3.	.07
	DIVERSION TO						
+	DB6	45.	4.40	4.	1.	1.	.07
	HYDROGRAPH AT						
+	DT6	46.	4.50	11.	3.	2.	.07
	2 COMBINED AT						
+	CP6	145.	4.47	29.	7.	5.	.19
	3 COMBINED AT						
+	HPVLY	498.	4.20	75.	19.	14.	.50
	HYDROGRAPH AT						
+	A11MA	207.	4.07	17.	4.	3.	.07
	DIVERSION TO						
+	DA11MA	182.	4.00	7.	2.	1.	.07
	HYDROGRAPH AT						
+	A11MAQ	207.	4.07	10.	2.	2.	.07
	ROUTED TO						
+	SA11MA	30.	4.47	10.	2.	2.	.07
	ROUTED TO						
+	RA11MA	30.	4.70	10.	2.	2.	.07
	HYDROGRAPH AT						
+	A11MB	494.	4.10	51.	13.	9.	.19
	DIVERSION TO						
+	DA11MB	142.	3.77	7.	2.	1.	.19
	HYDROGRAPH AT						
+	A11MBQ	494.	4.10	43.	11.	8.	.19
	ROUTED TO						
	SA11MB	267.	4.33	41.	11.	8.	.19
	HYDROGRAPH AT						
+	A11NA	198.	4.07	16.	4.	3.	.08
	ROUTED TO						
+	SA11NA	32.	4.47	16.	4.	3.	.08
	ROUTED TO						
+	RA11NA	32.	4.70	16.	4.	3.	.08
	3 COMBINED AT						
+	CA11MB	308.	4.37	66.	17.	12.	.34
	ROUTED TO						
+	RA11MB	279.	4.60	66.	17.	12.	.34
	HYDROGRAPH AT						
+	A11O	116.	4.13	12.	3.	2.	.06
	ROUTED TO						
+	SA11O	35.	4.53	12.	3.	2.	.06
	ROUTED TO						
+	RA11O	35.	4.83	12.	3.	2.	.06
	HYDROGRAPH AT						
+	A11KB	227.	4.13	23.	6.	4.	.11
	ROUTED TO						
+	SA11KB	32.	4.67	21.	6.	4.	.11
	HYDROGRAPH AT						
+	A11KA	191.	4.07	19.	5.	3.	.08
	ROUTED TO						
+	SA11KA	31.	4.57	18.	5.	3.	.08
	ROUTED TO						
	RA11KA	31.	4.80	18.	5.	3.	.08

3 COMBINED AT							
+	CA11KB	98.	4.80	51.	14.	10.	.24
ROUTED TO							
	RA11KB	98.	5.03	51.	14.	10.	.24
HYDROGRAPH AT							
+	A11G	90.	4.23	12.	3.	2.	.06
ROUTED TO							
+	RA11GN	86.	4.43	12.	3.	2.	.06
HYDROGRAPH AT							
+	A11KC	276.	4.13	26.	7.	5.	.13
ROUTED TO							
+	SA11KC	82.	4.47	25.	7.	5.	.13
3 COMBINED AT							
+	CA11KC	240.	4.50	87.	23.	17.	.44
ROUTED TO							
+	RA11KC	237.	4.60	87.	23.	17.	.44
HYDROGRAPH AT							
+	A11J	157.	4.37	25.	6.	5.	.11
ROUTED TO							
+	SA11J	88.	4.77	25.	6.	5.	.11
3 COMBINED AT							
+	CA11J	515.	4.67	170.	45.	33.	.89
HYDROGRAPH AT							
+	A11L	382.	4.30	72.	18.	13.	.26
DIVERSION TO							
+	DA11L	285.	4.10	15.	4.	3.	.26
HYDROGRAPH AT							
+	DA11LQ	382.	4.30	57.	14.	10.	.26
ROUTED TO							
	RA11L	375.	4.50	57.	14.	10.	.26
HYDROGRAPH AT							
+	A11I	298.	4.20	43.	11.	8.	.15
DIVERSION TO							
+	DA11I	298.	4.20	24.	6.	4.	.15
HYDROGRAPH AT							
+	DA11IQ	249.	4.37	19.	5.	3.	.15
3 COMBINED AT							
+	CA11I	919.	4.63	241.	63.	45.	1.31
ROUTED TO							
+	RA11I	898.	4.83	240.	63.	45.	1.31
HYDROGRAPH AT							
+	A11EA	143.	4.40	24.	6.	4.	.14
ROUTED TO							
+	RA11EA	141.	4.53	24.	6.	4.	.14
HYDROGRAPH AT							
+	A11EB	126.	4.60	29.	7.	5.	.19
3 COMBINED AT							
+	CA11EB	1040.	4.83	281.	73.	53.	1.64
HYDROGRAPH AT							
+	41	126.	4.13	10.	3.	2.	.05
ROUTED TO							
+	B41	96.	4.23	10.	3.	2.	.05
HYDROGRAPH AT							
	42	180.	4.13	17.	4.	3.	.08
ROUTED TO							

+	B42	136.	4.23	17.	4.	3.	.08
+ 2 COMBINED AT	C41	232.	4.23	27.	7.	5.	.13
ROUTED TO	RC41	212.	4.63	27.	7.	5.	.13
+ HYDROGRAPH AT	A11F	368.	4.40	54.	14.	10.	.33
+ 2 COMBINED AT	CA11F	517.	4.53	81.	20.	15.	.46
+ 2 COMBINED AT	CA11E	1279.	4.80	343.	89.	64.	2.11
+ ROUTED TO	RA11E	1270.	4.90	342.	89.	64.	2.11
+ HYDROGRAPH AT	A09U	324.	4.17	33.	8.	6.	.17
+ DIVERSION TO	A09UI	259.	4.17	26.	7.	5.	.17
+ HYDROGRAPH AT	DA09U	65.	4.17	7.	2.	1.	.17
+ ROUTED TO	RA09UW	58.	4.47	7.	2.	1.	.17
+ HYDROGRAPH AT	A09T	210.	4.33	27.	7.	5.	.18
+ 2 COMBINED AT	CA09T	261.	4.37	34.	8.	6.	.36
+ DIVERSION TO	A09TI	51.	4.37	2.	1.	0.	.36
HYDROGRAPH AT	DA09T	210.	4.27	32.	8.	6.	.36
+ ROUTED TO	RA09TW	210.	4.50	32.	8.	6.	.36
+ HYDROGRAPH AT	A11A	452.	4.33	69.	17.	13.	.30
+ DIVERSION TO	DA11A	315.	4.10	16.	4.	3.	.30
+ HYDROGRAPH AT	DA11AQ	452.	4.33	54.	14.	10.	.30
+ 3 COMBINED AT	CX23	1469.	4.87	409.	106.	77.	2.76
+ ROUTED TO	RX23	1442.	5.03	408.	106.	77.	2.76
+ HYDROGRAPH AT	S1	124.	4.40	21.	5.	4.	.12
+ HYDROGRAPH AT	P2	111.	4.10	11.	3.	2.	.05
+ DIVERSION TO	RB2	111.	4.10	10.	2.	2.	.05
+ HYDROGRAPH AT	RT2	18.	4.57	1.	0.	0.	.05
+ 3 COMBINED AT	CS1	1466.	5.03	419.	110.	79.	2.93
+ ROUTED TO	RS1	1466.	5.07	419.	110.	79.	2.93
HYDROGRAPH AT	S2	31.	4.07	2.	0.	0.	.01

+	HYDROGRAPH AT	S3	18.	4.03	1.	0.	0.	.01
	3 COMBINED AT	CS2	1465.	5.07	420.	110.	79.	2.95
+	ROUTED TO	RS2	1462.	5.10	420.	110.	79.	2.95
+	HYDROGRAPH AT	P3	85.	4.17	11.	3.	2.	.05
+	DIVERSION TO	RB3	85.	4.17	11.	3.	2.	.05
+	HYDROGRAPH AT	RT3	9.	5.17	1.	0.	0.	.05
+	2 COMBINED AT	CP3	1462.	5.10	420.	110.	79.	3.01
+	HYDROGRAPH AT	P4b	45.	4.07	4.	1.	1.	.02
+	DIVERSION TO	RB4b	12.	3.80	1.	0.	0.	.02
+	HYDROGRAPH AT	RT4b	45.	4.07	3.	1.	1.	.02
+	HYDROGRAPH AT	S4	16.	4.23	2.	1.	0.	.01
+	HYDROGRAPH AT	P1	42.	4.20	5.	1.	1.	.03
+	DIVERSION TO	DB1	33.	4.07	1.	0.	0.	.03
+	HYDROGRAPH AT	DT1	42.	4.20	4.	1.	1.	.03
	2 COMBINED AT	CP1	57.	4.20	6.	2.	1.	.04
+	HYDROGRAPH AT	HV2	7.	5.20	5.	1.	1.	.03
+	ROUTED TO	RHV2	7.	5.27	5.	1.	1.	.03
+	DIVERSION TO	DBHV2	7.	5.27	1.	0.	0.	.03
+	HYDROGRAPH AT	DTHV2	7.	5.50	4.	1.	1.	.03
+	HYDROGRAPH AT	P4a	51.	4.20	8.	2.	1.	.04
+	DIVERSION TO	DB4a	30.	4.00	1.	0.	0.	.04
+	HYDROGRAPH AT	DT4a	51.	4.20	6.	2.	1.	.04
+	5 COMBINED AT	SOUTH	1467.	5.10	432.	114.	82.	3.14
+	HYDROGRAPH AT	N11O	78.	4.30	8.	2.	1.	.05
+	DIVERSION TO	N11OI	70.	4.30	7.	2.	1.	.05
+	HYDROGRAPH AT	DN11O	8.	4.30	1.	0.	0.	.05
+	ROUTED TO	RN11OW	5.	5.20	1.	0.	0.	.05
	HYDROGRAPH AT	DRA09T	51.	4.37	2.	1.	0.	.36

+	ROUTED TO	RA09TS	11.	5.93	2.	1.	0.	.36
	HYDROGRAPH AT	A09R	104.	4.57	20.	5.	4.	.14
+	3 COMBINED AT	CA09R	104.	4.57	23.	6.	4.	.20
+	DIVERSION TO	A09RI	104.	4.57	23.	6.	4.	.20
+	HYDROGRAPH AT	DA09R	1.	5.23	0.	0.	0.	.20
+	ROUTED TO	RA09RW	1.	7.17	0.	0.	0.	.20
+	HYDROGRAPH AT	A09S	116.	4.20	21.	5.	4.	.07
+	DIVERSION TO	DA09S	116.	4.20	14.	4.	3.	.07
+	HYDROGRAPH AT	DA09SQ	69.	4.60	7.	2.	1.	.07
+	2 COMBINED AT	CA09S	69.	4.60	7.	2.	1.	.27
+	ROUTED TO	RA09SW	61.	4.77	7.	2.	1.	.27
+	HYDROGRAPH AT	A09QA	112.	4.30	13.	3.	2.	.09
+	2 COMBINED AT	CA09QA	111.	4.30	20.	5.	4.	.36
	DIVERSION TO	A09QAI	111.	4.30	19.	5.	4.	.36
	HYDROGRAPH AT	DA09QA	1.	5.97	0.	0.	0.	.36
+	ROUTED TO	RA09QW	1.	6.10	0.	0.	0.	.36
+	HYDROGRAPH AT	A99YA	157.	4.23	16.	4.	3.	.10
+	2 COMBINED AT	CA99YA	157.	4.23	17.	4.	3.	.46
+	ROUTED TO	RA99YA	152.	4.30	17.	4.	3.	.46
+	HYDROGRAPH AT	A99YB	205.	4.30	23.	6.	4.	.17
+	3 COMBINED AT	CA99YB	1463.	5.07	452.	119.	85.	3.77
+	3 COMBINED AT	AFR1	1620.	5.03	538.	141.	101.	4.56
+	HYDROGRAPH AT	BA09UI	259.	4.17	26.	7.	5.	.17
+	ROUTED TO	RA09US	237.	4.37	26.	7.	5.	.17
+	HYDROGRAPH AT	N11NB	159.	4.37	24.	6.	4.	.14
+	2 COMBINED AT	CN11NB	396.	4.37	50.	13.	9.	.14
	ROUTED TO	RN11NW	375.	4.63	50.	13.	9.	.14
	HYDROGRAPH AT							

+		BN11OI	70.	4.30	7.	2.	1.	.05
	ROUTED TO							
+		RN11OS	57.	4.73	7.	2.	1.	.05
	HYDROGRAPH AT							
		N11M	137.	4.27	14.	3.	2.	.10
	3 COMBINED AT							
+		CN11M	455.	4.67	71.	18.	13.	.24
	DIVERSION TO							
+		N11MI	114.	4.67	18.	4.	3.	.24
	HYDROGRAPH AT							
+		DN11M	341.	4.67	53.	13.	10.	.24
	ROUTED TO							
+		RN11MS	319.	4.90	53.	13.	10.	.24
	HYDROGRAPH AT							
+		N11J	214.	4.37	41.	10.	7.	.24
	DIVERSION TO							
+		LN11JD	80.	4.03	4.	1.	1.	.24
	HYDROGRAPH AT							
+		LN11J	214.	4.37	38.	9.	7.	.24
	2 COMBINED AT							
+		CN11J	448.	4.87	91.	23.	16.	.48
	DIVERSION TO							
+		N11JI	448.	4.87	91.	23.	16.	.48
	HYDROGRAPH AT							
+		DN11J	0.	.00	0.	0.	0.	.48
	ROUTED TO							
+		RN11JW	0.	.00	0.	0.	0.	.48
	HYDROGRAPH AT							
		DRN11M	114.	4.67	18.	4.	3.	.24
	ROUTED TO							
+		RN11MW	100.	5.17	18.	4.	3.	.24
	2 COMBINED AT							
+		CX4	100.	5.17	18.	4.	3.	.48
	ROUTED TO							
+		RX4	96.	5.37	18.	4.	3.	.48
	HYDROGRAPH AT							
+		A09O	119.	4.70	31.	8.	6.	.19
	ROUTED TO							
+		SA09O	45.	5.73	28.	8.	6.	.19
	HYDROGRAPH AT							
+		BA09RI	104.	4.57	23.	6.	4.	.20
	ROUTED TO							
+		RA09RS	100.	4.90	23.	6.	4.	.20
	3 COMBINED AT							
+		CA09O	198.	5.33	65.	17.	12.	.68
	DIVERSION TO							
+		A09OI	198.	5.33	65.	17.	12.	.68
	HYDROGRAPH AT							
+		DA09O	0.	.00	0.	0.	0.	.68
	ROUTED TO							
+		RA09OW	0.	.00	0.	0.	0.	.68
	HYDROGRAPH AT							
+		A09P	184.	4.47	31.	8.	6.	.19
	ROUTED TO							
		SA09P	54.	5.23	30.	8.	6.	.19

+	2 COMBINED AT	CA09P	52.	5.23	28.	7.	5.	.87
	ROUTED TO	RA09P	52.	5.27	28.	7.	5.	.87
+	HYDROGRAPH AT	BA09QA	111.	4.30	19.	5.	4.	.36
+	ROUTED TO	RA09QB	104.	4.53	19.	5.	4.	.36
+	HYDROGRAPH AT	A09QB	163.	4.27	23.	6.	4.	.14
+	3 COMBINED AT	CA09Q	234.	4.50	66.	17.	12.	1.01
+	DIVERSION TO	A09QI	234.	4.50	66.	17.	12.	1.01
+	HYDROGRAPH AT	DA09Q	0.	.00	0.	0.	0.	1.01
+	ROUTED TO	RA09QW	0.	.00	0.	0.	0.	1.01
+	HYDROGRAPH AT	A10A	266.	4.30	32.	8.	6.	.19
+	2 COMBINED AT	CA10A	219.	4.30	29.	7.	5.	1.20
+	ROUTED TO	RA10A	217.	4.37	29.	7.	5.	1.20
+	HYDROGRAPH AT	A99X	507.	4.20	57.	14.	10.	.26
+	2 COMBINED AT	CA99X	562.	4.23	82.	21.	15.	1.46
	2 COMBINED AT	AFR2	1652.	4.63	584.	154.	111.	6.02
+	HYDROGRAPH AT	BA09OI	198.	5.33	65.	17.	12.	.68
+	ROUTED TO	RA09OS	173.	6.07	65.	17.	12.	.68
+	HYDROGRAPH AT	A09K	382.	4.57	60.	15.	11.	.41
+	DIVERSION TO	A09KI	279.	4.57	44.	11.	8.	.41
+	HYDROGRAPH AT	DA09K	103.	4.57	16.	4.	3.	.41
+	2 COMBINED AT	CX7	197.	5.40	83.	22.	16.	.41
+	ROUTED TO	RX7S	196.	5.57	83.	22.	16.	.41
+	HYDROGRAPH AT	N11NA	60.	4.07	4.	1.	1.	.02
+	ROUTED TO	RN11NA	46.	4.43	4.	1.	1.	.02
+	HYDROGRAPH AT	N11NC	250.	4.23	27.	7.	5.	.17
+	2 COMBINED AT	CN11NC	265.	4.27	31.	8.	6.	.19
+	DIVERSION TO	N11NP	149.	4.03	24.	6.	4.	.19
	HYDROGRAPH AT	DN11NC	116.	4.27	7.	2.	1.	.19

+	ROUTED TO	RN11NC	111.	4.37	7.	2.	1.	.19
	HYDROGRAPH AT	N11ND	62.	4.23	10.	2.	2.	.05
+	HYDROGRAPH AT	N11K	152.	4.33	28.	7.	5.	.17
+	3 COMBINED AT	CN11K	318.	4.37	44.	11.	8.	.41
+	DIVERSION TO	N11KP	55.	3.97	19.	5.	4.	.41
+	HYDROGRAPH AT	DN11KS	263.	4.37	24.	6.	4.	.41
+	ROUTED TO	RN11K	246.	4.63	24.	6.	4.	.41
+	DIVERSION TO	X5I	122.	4.63	7.	2.	1.	.41
+	HYDROGRAPH AT	DX5	124.	4.63	17.	4.	3.	.41
+	ROUTED TO	RX5W	118.	4.93	17.	4.	3.	.41
+	HYDROGRAPH AT	N11H	410.	4.57	61.	15.	11.	.42
+	2 COMBINED AT	CN11H	364.	4.57	72.	18.	13.	.83
+	ROUTED TO	RN11H	351.	4.80	72.	18.	13.	.83
+	HYDROGRAPH AT	BN11JI	448.	4.87	91.	23.	16.	.48
	ROUTED TO	RN11JS	423.	5.23	90.	23.	16.	.48
+	HYDROGRAPH AT	N11G	526.	4.57	73.	18.	13.	.52
+	3 COMBINED AT	CN11G	865.	4.80	209.	52.	38.	1.36
+	ROUTED TO	RN11G	855.	4.90	209.	52.	38.	1.36
+	HYDROGRAPH AT	N11DA	295.	4.30	54.	14.	10.	.26
+	DIVERSION TO	LDAOUT	277.	4.23	16.	4.	3.	.26
+	HYDROGRAPH AT	LN11DA	295.	4.30	38.	10.	7.	.26
+	ROUTED TO	SN11DA	121.	5.00	38.	10.	7.	.26
+	DIVERSION TO	D11DAS	21.	5.00	8.	2.	1.	.26
+	HYDROGRAPH AT	N11DAW	100.	5.00	30.	8.	5.	.26
+	ROUTED TO	RN11DA	100.	5.20	30.	8.	5.	.26
+	HYDROGRAPH AT	N11FB	114.	4.33	25.	6.	5.	.12
	DIVERSION TO	LN1FBD	114.	4.33	21.	5.	4.	.12
	HYDROGRAPH AT							

+	LN11FB	29.	5.57	4.	1.	1.	.12
+ 2 COMBINED AT	CN11FB	124.	5.57	34.	8.	6.	.38
2 COMBINED AT	C98RGL	894.	4.93	227.	57.	41.	1.73
+ ROUTED TO	RN11FB	889.	5.00	227.	57.	41.	1.73
+ HYDROGRAPH AT	DRA09K	279.	4.57	44.	11.	8.	.41
+ ROUTED TO	RA09KS	271.	4.73	44.	11.	8.	.41
+ HYDROGRAPH AT	N11FA	194.	4.30	38.	10.	7.	.18
+ DIVERSION TO	LN1FAD	194.	4.30	16.	4.	3.	.18
+ HYDROGRAPH AT	LN11FA	185.	4.43	23.	6.	4.	.18
+ HYDROGRAPH AT	A09GA	200.	4.07	22.	6.	4.	.07
+ DIVERSION TO	L09GAD	198.	4.07	12.	3.	2.	.07
+ HYDROGRAPH AT	LA09GA	193.	4.10	10.	3.	2.	.07
+ 4 COMBINED AT	CN11FA	1135.	4.93	286.	72.	52.	1.99
+ ROUTED TO	RN11FA	1132.	4.97	286.	72.	52.	1.99
+ HYDROGRAPH AT	A09GB	27.	4.67	10.	3.	2.	.05
+ DIVERSION TO	L09GBD	27.	4.67	6.	1.	1.	.05
+ HYDROGRAPH AT	LA09GB	20.	5.40	5.	1.	1.	.05
+ 2 COMBINED AT	CA09G	1127.	4.97	289.	73.	52.	2.04
+ DIVERSION TO	A09GI	150.	4.73	50.	13.	9.	2.04
+ HYDROGRAPH AT	DA09G	976.	4.97	239.	60.	43.	2.04
+ ROUTED TO	RA09GW	969.	5.03	239.	60.	43.	2.04
+ 2 COMBINED AT	CX8	1006.	5.07	294.	75.	54.	2.45
+ ROUTED TO	RX8W	998.	5.20	293.	75.	54.	2.45
+ HYDROGRAPH AT	A09H	199.	4.43	50.	13.	9.	.24
+ DIVERSION TO	LA09HD	199.	4.43	25.	6.	5.	.24
+ HYDROGRAPH AT	LA09H	166.	4.80	25.	6.	5.	.24
+ 2 COMBINED AT	CA09H1	1074.	5.17	307.	78.	56.	2.69
HYDROGRAPH AT	A09J	166.	4.33	34.	9.	6.	.17

+	DIVERSION TO	LA09JD	166.	4.33	16.	4.	3.	.17
	HYDROGRAPH AT	LA09J	151.	4.53	19.	5.	3.	.17
+	DIVERSION TO	A09JI	0.	.00	0.	0.	0.	.17
+	HYDROGRAPH AT	DA09J	151.	4.53	19.	5.	3.	.17
+	ROUTED TO	RA09JS	130.	4.87	19.	5.	3.	.17
+	2 COMBINED AT	CA09H	1137.	5.17	318.	81.	58.	2.85
+	ROUTED TO	RA09H	1135.	5.20	318.	81.	58.	2.85
+	HYDROGRAPH AT	BA09QI	234.	4.50	66.	17.	12.	1.01
+	ROUTED TO	RA09QS	230.	4.63	66.	17.	12.	1.01
+	HYDROGRAPH AT	A09M	251.	4.47	47.	12.	9.	.25
+	DIVERSION TO	LA09MD	230.	4.33	14.	3.	3.	.25
+	HYDROGRAPH AT	LA09M	251.	4.47	34.	8.	6.	.25
+	2 COMBINED AT	CA09M	500.	4.57	106.	27.	19.	.25
+	ROUTED TO	RA09M	497.	4.60	106.	27.	19.	.25
	HYDROGRAPH AT	A09N	138.	4.27	24.	6.	4.	.11
+	2 COMBINED AT	CA09N	598.	4.57	128.	33.	24.	.36
+	ROUTED TO	LA09N	415.	4.93	123.	33.	24.	.36
+	ROUTED TO	RA09N	414.	5.03	123.	33.	24.	.36
+	HYDROGRAPH AT	DRA09J	0.	.00	0.	0.	0.	.17
+	ROUTED TO	RA09JW	0.	.00	0.	0.	0.	.17
+	HYDROGRAPH AT	A09L	142.	4.33	29.	7.	5.	.14
+	3 COMBINED AT	CA09L	480.	5.03	149.	40.	29.	.50
+	ROUTED TO	LA09L	478.	5.07	148.	40.	29.	.50
+	ROUTED TO	RA09LS	475.	5.10	148.	40.	29.	.50
+	HYDROGRAPH AT	A09IH	103.	4.27	19.	5.	3.	.09
+	2 COMBINED AT	CA09IH	490.	5.10	162.	44.	32.	.59
+	ROUTED TO	LA09IH	468.	5.20	159.	44.	32.	.59
	HYDROGRAPH AT	A09I	134.	4.37	30.	8.	5.	.13

+	DIVERSION TO	LA09ID	134.	4.37	11.	3.	2.	.13
	HYDROGRAPH AT	LA09I	131.	4.47	19.	5.	3.	.13
+	3 COMBINED AT	CX10	1328.	5.40	448.	118.	85.	3.57
+	ROUTED TO	RX10	1321.	5.50	447.	118.	85.	3.57
+	HYDROGRAPH AT	A99V	276.	4.40	35.	9.	6.	.21
+	2 COMBINED AT	CA99V	1330.	5.47	464.	124.	89.	3.77
+	HYDROGRAPH AT	A10	347.	4.23	33.	8.	6.	.21
+	HYDROGRAPH AT	A99W	237.	4.57	46.	12.	8.	.22
+	DIVERSION TO	LA99WD	211.	4.37	14.	3.	2.	.22
+	HYDROGRAPH AT	LA99W	237.	4.57	33.	8.	6.	.22
+	4 COMBINED AT	AFR3	2352.	5.27	969.	258.	186.	10.22
+	HYDROGRAPH AT	DRA09G	150.	4.73	50.	13.	9.	2.04
+	ROUTED TO	RA09GS	150.	5.63	50.	13.	9.	2.04
+	HYDROGRAPH AT	A09F	426.	4.53	84.	21.	15.	.37
	DIVERSION TO	LA09FD	392.	4.37	27.	7.	5.	.37
+	HYDROGRAPH AT	LA09F	426.	4.53	57.	14.	10.	.37
+	2 COMBINED AT	CA09F	426.	4.53	110.	28.	20.	.37
+	DIVERSION TO	A09FI	65.	4.53	12.	3.	2.	.37
+	HYDROGRAPH AT	DA09F	360.	4.53	98.	25.	18.	.37
+	ROUTED TO	RA09FW	363.	4.63	98.	25.	18.	.37
+	HYDROGRAPH AT	A09E	148.	4.33	33.	8.	6.	.15
+	DIVERSION TO	LA09ED	148.	4.33	17.	4.	3.	.15
+	HYDROGRAPH AT	LA09E	123.	4.67	17.	4.	3.	.15
+	2 COMBINED AT	CA09E	478.	4.67	115.	29.	21.	.51
+	ROUTED TO	RA09E	443.	4.83	114.	29.	21.	.51
+	HYDROGRAPH AT	A09D	577.	4.13	62.	15.	11.	.25
	DIVERSION TO	LA09DD	577.	4.13	31.	8.	6.	.25
	HYDROGRAPH AT							

+	LA09D	553.	4.20	31.	8.	6.	.25
2 COMBINED AT +	CA09C*	458.	4.23	141.	36.	26.	.77
ROUTED TO	RA09C*	452.	4.87	141.	36.	26.	.77
HYDROGRAPH AT +	A09C	78.	4.40	11.	3.	2.	.07
2 COMBINED AT +	CA09C	480.	4.27	150.	38.	27.	.84
ROUTED TO +	RA09C	469.	4.97	150.	38.	27.	.84
HYDROGRAPH AT +	A09B	115.	4.07	12.	3.	2.	.04
ROUTED TO +	RA09B	91.	4.50	11.	3.	2.	.04
HYDROGRAPH AT +	A09A	72.	4.57	18.	4.	3.	.08
3 COMBINED AT +	CA09A	556.	4.40	174.	45.	32.	.96
DIVERSION TO +	A09AI	416.	4.40	86.	22.	16.	.96
HYDROGRAPH AT +	DA09AO	140.	4.40	87.	23.	17.	.96
ROUTED TO +	RA09AW	140.	6.20	85.	23.	17.	.96
HYDROGRAPH AT +	A99T	83.	4.03	6.	1.	1.	.03
DIVERSION TO	LA99TD	16.	3.73	1.	0.	0.	.03
HYDROGRAPH AT +	LA99T	83.	4.03	5.	1.	1.	.03
ROUTED TO +	RA99T	70.	4.17	5.	1.	1.	.03
HYDROGRAPH AT +	A09	249.	4.30	30.	8.	5.	.18
3 COMBINED AT +	CA09	241.	4.27	110.	31.	22.	1.17
HYDROGRAPH AT +	A99U	82.	4.30	13.	3.	2.	.07
3 COMBINED AT +	AFR4	2344.	5.30	1056.	283.	204.	11.46
HYDROGRAPH AT +	A07G	400.	4.27	66.	17.	12.	.26
DIVERSION TO +	LA07GD	400.	4.23	26.	7.	5.	.26
HYDROGRAPH AT +	LA07G	395.	4.30	40.	10.	7.	.26
ROUTED TO +	RA07G	352.	4.53	40.	10.	7.	.26
HYDROGRAPH AT +	A07F	179.	4.70	48.	12.	9.	.23
ROUTED TO +	RA07F	178.	4.80	48.	12.	9.	.23
HYDROGRAPH AT	A07E	413.	4.20	63.	16.	11.	.23

	3 COMBINED AT						
+		CA07E	726.	4.53	147.	37.	27.	.72
	ROUTED TO						
		RA07E	716.	4.60	147.	37.	27.	.72
	HYDROGRAPH AT						
+		A07C	187.	4.43	29.	7.	5.	.17
	2 COMBINED AT						
+		CA07C	841.	4.60	173.	44.	32.	.89
	ROUTED TO						
+		RA07C	833.	4.63	173.	44.	32.	.89
	HYDROGRAPH AT						
+		A07H	217.	4.13	23.	6.	4.	.09
	ROUTED TO						
+		RA07H	202.	4.27	23.	6.	4.	.09
	HYDROGRAPH AT						
+		DA09AI	416.	4.40	86.	22.	16.	.96
	ROUTED TO						
+		RA09AI	378.	5.17	86.	22.	16.	.96
	HYDROGRAPH AT						
+		A08B	122.	4.37	20.	5.	4.	.10
	2 COMBINED AT						
+		CA08B	560.	4.60	115.	29.	21.	.10
	ROUTED TO						
+		RA08B	480.	4.90	115.	29.	21.	.10
	HYDROGRAPH AT						
+		A07D	117.	5.03	39.	10.	7.	.23
	4 COMBINED AT						
+		CA07D	1030.	4.87	323.	82.	59.	1.31
	ROUTED TO						
		RA07D	1021.	5.03	323.	82.	59.	1.31
	HYDROGRAPH AT						
+		A99S	47.	4.63	10.	2.	2.	.08
	HYDROGRAPH AT						
+		A08A	70.	4.80	22.	6.	4.	.14
	ROUTED TO						
+		RA08A	69.	4.97	22.	6.	4.	.14
	HYDROGRAPH AT						
+		A99R	57.	4.20	6.	1.	1.	.04
	ROUTED TO						
+		RA99R	51.	4.47	6.	1.	1.	.04
	HYDROGRAPH AT						
+		A08	185.	4.07	11.	3.	2.	.08
	5 COMBINED AT						
+		CA08	1076.	4.93	354.	91.	65.	1.64
	2 COMBINED AT						
+		AFR5	2926.	5.27	1294.	345.	249.	13.11
	HYDROGRAPH AT						
+		N11P5	62.	4.10	4.	1.	1.	.03
	ROUTED TO						
+		R11P5S	54.	4.27	4.	1.	1.	.03
	HYDROGRAPH AT						
+		N11P1	83.	4.27	9.	2.	2.	.06
	2 COMBINED AT						
+		CN11P1	138.	4.27	13.	3.	2.	.09
	ROUTED TO						
		R11P1E	133.	4.33	13.	3.	2.	.09

+	HYDROGRAPH AT	N11P6	401.	4.13	34.	9.	6.	.16
	ROUTED TO	R11P6S	378.	4.20	34.	9.	6.	.16
+	HYDROGRAPH AT	N11P9	99.	4.13	6.	1.	1.	.04
+	2 COMBINED AT	CN11P9	459.	4.17	40.	10.	7.	.20
+	ROUTED TO	R11P9S	442.	4.23	40.	10.	7.	.20
+	HYDROGRAPH AT	N11P2	122.	4.20	8.	2.	2.	.06
+	2 COMBINED AT	CN11P2	557.	4.23	48.	12.	9.	.26
+	2 COMBINED AT	LEJOS	659.	4.23	61.	15.	11.	.36
+	DIVERSION TO	VPRET	416.	4.10	13.	3.	2.	.36
+	HYDROGRAPH AT	VPDIV	659.	4.23	48.	12.	9.	.36
+	HYDROGRAPH AT	N11P4	67.	4.23	8.	2.	1.	.05
+	ROUTED TO	R11P4S	65.	4.33	8.	2.	1.	.05
+	DIVERSION TO	N11P4E	33.	4.33	4.	1.	1.	.05
+	HYDROGRAPH AT	DN11P4	33.	4.33	4.	1.	1.	.05
	2 COMBINED AT	SDLEJ1	689.	4.27	52.	13.	9.	.41
+	HYDROGRAPH AT	N11P8	112.	4.10	8.	2.	1.	.04
+	ROUTED TO	R11P8S	105.	4.17	8.	2.	1.	.04
+	HYDROGRAPH AT	N11P7	167.	4.07	8.	2.	2.	.06
+	2 COMBINED AT	CN11P7	259.	4.10	16.	4.	3.	.10
+	DIVERSION TO	N11P7E	52.	4.10	3.	1.	1.	.10
+	HYDROGRAPH AT	DN11P7	207.	4.10	13.	3.	2.	.10
+	ROUTED TO	R11P7S	187.	4.17	13.	3.	2.	.10
+	HYDROGRAPH AT	RDP4E	33.	4.33	4.	1.	1.	.05
+	2 COMBINED AT	SUMP7S	213.	4.20	17.	4.	3.	.10
+	2 COMBINED AT	SDLEJ2	887.	4.23	68.	17.	12.	.51
+	ROUTED TO	RSDL2	877.	4.23	68.	17.	12.	.51
	HYDROGRAPH AT	BN11NP	149.	4.03	24.	6.	4.	.19
	ROUTED TO							

+		RN11NP	149.	4.10	24.	6.	4.	.19
+	HYDROGRAPH AT	N11L5A	62.	4.20	8.	2.	1.	.05
	2 COMBINED AT	C89	211.	4.20	32.	8.	6.	.05
+	DIVERSION TO	ED89	0.	.00	0.	0.	0.	.05
+	HYDROGRAPH AT	D89	211.	4.20	32.	8.	6.	.05
+	ROUTED TO	R89E	209.	4.23	32.	8.	6.	.05
+	HYDROGRAPH AT	N11L3A	44.	4.13	5.	1.	1.	.03
+	2 COMBINED AT	C87	249.	4.20	37.	9.	7.	.07
+	DIVERSION TO	SOL	3.	4.20	0.	0.	0.	.07
+	HYDROGRAPH AT	D87	246.	4.17	37.	9.	7.	.07
+	2 COMBINED AT	C87BA	1090.	4.23	104.	26.	19.	.58
+	DIVERSION TO	87BAS	1068.	4.23	93.	23.	17.	.58
+	HYDROGRAPH AT	87BP	22.	3.80	11.	3.	2.	.58
+	ROUTED TO	R87BP	23.	3.83	11.	3.	2.	.58
+	HYDROGRAPH AT	87	39.	4.23	5.	1.	1.	.03
+	HYDROGRAPH AT	R87B	1068.	4.23	93.	23.	17.	.58
+	2 COMBINED AT	C87B	1150.	4.23	100.	25.	18.	.03
+	ROUTED TO	87BA	133.	4.97	91.	25.	18.	.03
+	2 COMBINED AT	87BOUT	153.	4.97	97.	27.	19.	.61
+	ROUTED TO	R87BA	153.	5.00	97.	27.	19.	.61
+	DIVERSION TO	87OUT	153.	5.00	97.	27.	19.	.61
+	HYDROGRAPH AT	D87BA	0.	.00	0.	0.	0.	.61
+	HYDROGRAPH AT	LACAI	49.	4.17	6.	1.	1.	.04
+	ROUTED TO	RTCAI	48.	4.20	6.	1.	1.	.04
+	DIVERSION TO	LECHE	20.	4.00	4.	1.	1.	.04
+	HYDROGRAPH AT	DNLECH	28.	4.20	2.	0.	0.	.04
+	2 COMBINED AT	SDLEJ3	25.	4.20	1.	0.	0.	.64
	HYDROGRAPH AT	SUMMIT	36.	4.17	4.	1.	1.	.03

+	HYDROGRAPH AT	RDLECH	20.	4.00	4.	1.	1.	.04
	2 COMBINED AT	LEJCHL	56.	4.17	8.	2.	1.	.03
+	HYDROGRAPH AT	RDP7E	52.	4.10	3.	1.	1.	.10
+	ROUTED TO	R11P7E	45.	4.27	3.	1.	1.	.10
+	DIVERSION TO	EAST83	18.	4.27	2.	1.	0.	.10
+	HYDROGRAPH AT	D2-18	27.	4.27	1.	0.	0.	.10
+	2 COMBINED AT	83CL	79.	4.27	9.	2.	2.	.13
+	DIVERSION TO	EAGLE	60.	4.17	9.	2.	2.	.13
+	HYDROGRAPH AT	24PIPE	19.	4.27	1.	0.	0.	.13
+	2 COMBINED AT	SDLEJ4	36.	4.23	2.	0.	0.	.77
+	ROUTED TO	RT83CL	31.	4.33	2.	0.	0.	.77
+	HYDROGRAPH AT	N11P3	38.	4.30	7.	2.	1.	.04
+	2 COMBINED AT	83SD	64.	4.33	9.	2.	2.	.81
+	ROUTED TO	R83SD	64.	4.37	9.	2.	2.	.81
	HYDROGRAPH AT	BN11KP	55.	3.97	19.	5.	4.	.41
+	ROUTED TO	R91	55.	4.27	19.	5.	4.	.41
+	HYDROGRAPH AT	N11L5	67.	4.17	8.	2.	1.	.04
+	HYDROGRAPH AT	RED89	0.	.00	0.	0.	0.	.05
+	ROUTED TO	R89S	0.	.00	0.	0.	0.	.05
+	HYDROGRAPH AT	N11L2	18.	4.13	2.	0.	0.	.01
+	4 COMBINED AT	CN11L5	139.	4.17	29.	7.	5.	.05
+	DIVERSION TO	DIVS89	55.	4.17	3.	1.	1.	.05
+	HYDROGRAPH AT	D11L5	84.	4.13	26.	7.	5.	.05
+	ROUTED TO	RN11L5	84.	4.23	26.	6.	5.	.05
+	HYDROGRAPH AT	N11L3	63.	4.17	7.	2.	1.	.04
+	HYDROGRAPH AT	RSOL	3.	4.20	0.	0.	0.	.07
+	ROUTED TO	RTSOL	1.	4.23	0.	0.	0.	.07
	3 COMBINED AT	PPSD1	147.	4.17	33.	8.	6.	.09

+	DIVERSION TO	DIVS87	25.	4.17	1.	0.	0.	.09
	HYDROGRAPH AT	PPDIV	122.	4.03	32.	8.	6.	.09
+	HYDROGRAPH AT	N11L4	11.	4.27	2.	0.	0.	.01
+	HYDROGRAPH AT	N21I1	98.	4.23	15.	4.	3.	.08
+	HYDROGRAPH AT	87OUT	153.	5.00	97.	27.	19.	.61
+	4 COMBINED AT	PPSD	345.	4.40	144.	39.	28.	.18
+	DIVERSION TO	DIVS86	38.	4.40	2.	0.	0.	.18
+	HYDROGRAPH AT	DIVS3	307.	4.20	143.	39.	28.	.18
+	ROUTED TO	RPPSD	307.	4.67	143.	39.	28.	.18
+	HYDROGRAPH AT	N21I2	50.	4.30	10.	3.	2.	.06
+	HYDROGRAPH AT	N21I4	34.	4.20	5.	1.	1.	.03
+	4 COMBINED AT	TEMPO	425.	4.37	157.	42.	30.	1.08
+	HYDROGRAPH AT	N21Z	170.	4.27	22.	6.	4.	.11
+	DIVERSION TO	N21ZI	142.	4.13	6.	1.	1.	.11
	HYDROGRAPH AT	LN21Z	170.	4.27	17.	4.	3.	.11
+	DIVERSION TO	DN21ZI	0.	4.27	0.	0.	0.	.11
+	HYDROGRAPH AT	DN21ZO	170.	4.27	17.	4.	3.	.11
+	DIVERSION TO	N21ZI*	85.	4.27	8.	2.	2.	.11
+	HYDROGRAPH AT	DN21Z*	85.	4.27	8.	2.	2.	.11
+	ROUTED TO	RN21ZW	82.	4.43	8.	2.	2.	.11
+	DIVERSION TO	D1/2ST	12.	4.30	3.	1.	1.	.11
+	HYDROGRAPH AT	1/2ST	70.	4.43	5.	1.	1.	.11
+	HYDROGRAPH AT	R1/2ST	12.	4.30	3.	1.	1.	.11
+	HYDROGRAPH AT	18PIPE	18.	4.27	2.	1.	0.	.10
+	HYDROGRAPH AT	CLDIV	60.	4.17	9.	2.	2.	.13
+	2 COMBINED AT	CPIPE	78.	4.27	11.	3.	2.	.23
	ROUTED TO	RCPIPE	78.	4.40	11.	3.	2.	.23
	HYDROGRAPH AT							

+	N21I3	129.	4.27	16.	4.	3.	.09
+ 3 COMBINED AT	CN21I3	216.	4.30	30.	8.	5.	.32
DIVERSION TO	N21I3O	216.	4.30	28.	7.	5.	.32
+ HYDROGRAPH AT	R21I3	32.	5.37	2.	1.	0.	.32
+ 2 COMBINED AT	PPK_E	70.	4.43	8.	2.	1.	.43
+ DIVERSION TO	PPKEW3	70.	4.43	8.	2.	1.	.43
+ HYDROGRAPH AT	PPKEW2	0.	.00	0.	0.	0.	.43
+ 2 COMBINED AT	US_BSN	425.	4.37	157.	42.	30.	1.51
+ DIVERSION TO	PPBAS	10.	3.47	10.	4.	3.	1.51
+ HYDROGRAPH AT	PPBP	401.	4.40	143.	37.	26.	1.51
+ ROUTED TO	R83BSN	29.	9.63	28.	24.	19.	1.51
+ HYDROGRAPH AT	RPPB	10.	3.47	10.	4.	3.	1.51
+ 2 COMBINED AT	JCT1	39.	9.63	37.	27.	22.	1.51
+ HYDROGRAPH AT	RESD	70.	4.43	8.	2.	1.	.43
+ 2 COMBINED AT	JCT	75.	4.50	41.	28.	23.	1.51
+ ROUTED TO	OUTLET	75.	4.60	41.	28.	23.	1.51
+ HYDROGRAPH AT	N21F	154.	4.33	33.	8.	6.	.13
+ 2 COMBINED AT	CN21F	200.	4.57	68.	36.	29.	1.63
+ HYDROGRAPH AT	N21G	92.	4.23	17.	4.	3.	.06
+ HYDROGRAPH AT	DR21Z*	85.	4.27	8.	2.	2.	.11
+ ROUTED TO	RN21ZS	73.	4.77	8.	2.	2.	.11
+ 2 COMBINED AT	CN21G	126.	4.70	25.	6.	5.	.06
+ DIVERSION TO	N21GI	37.	4.70	2.	0.	0.	.06
+ HYDROGRAPH AT	DN21GO	89.	4.70	23.	6.	4.	.06
+ ROUTED TO	RN21GS	89.	5.07	23.	6.	4.	.06
+ HYDROGRAPH AT	N21E	100.	4.23	18.	4.	3.	.06
+ 3 COMBINED AT	CN21E	339.	4.53	107.	45.	36.	1.76
ROUTED TO	RN21E	326.	4.77	107.	45.	36.	1.76

+	HYDROGRAPH AT N21D	78.	4.23	14.	4.	3.	.05
+	DIVERSION TO LN21DD	78.	4.23	8.	2.	1.	.05
+	HYDROGRAPH AT LN21D	61.	4.53	6.	2.	1.	.05
+	2 COMBINED AT CN21D	368.	4.73	113.	47.	37.	1.81
+	DIVERSION TO N21DI	321.	4.73	96.	40.	32.	1.81
+	HYDROGRAPH AT DN21D	47.	4.73	16.	6.	5.	1.81
+	ROUTED TO RN21DE	44.	5.40	16.	6.	5.	1.81
+	HYDROGRAPH AT 20	86.	4.13	10.	2.	2.	.04
+	ROUTED TO R20	84.	4.17	10.	2.	2.	.04
+	HYDROGRAPH AT 19	100.	4.10	10.	3.	2.	.05
+	2 COMBINED AT HC6	180.	4.13	20.	5.	4.	.09
+	ROUTED TO B19	92.	4.43	14.	5.	4.	.09
+	ROUTED TO RHC6	91.	4.43	14.	5.	4.	.09
+	HYDROGRAPH AT 21	56.	4.13	7.	2.	1.	.03
+	2 COMBINED AT HC7	122.	4.40	20.	6.	5.	.11
+	ROUTED TO RHC7	118.	4.53	20.	6.	5.	.11
+	HYDROGRAPH AT 33	74.	4.13	9.	2.	2.	.04
+	ROUTED TO B33	5.	5.17	5.	2.	2.	.04
+	ROUTED TO R33	5.	5.80	5.	2.	2.	.04
+	HYDROGRAPH AT 34	79.	4.03	6.	2.	1.	.03
+	ROUTED TO B34	5.	4.50	4.	2.	1.	.03
+	ROUTED TO R34	5.	5.00	4.	2.	1.	.03
+	HYDROGRAPH AT 35	43.	4.27	9.	2.	2.	.04
+	4 COMBINED AT HC8A	159.	4.53	36.	12.	9.	.23
+	HYDROGRAPH AT 22	104.	4.10	10.	2.	2.	.04
+	ROUTED TO R22	99.	4.13	10.	2.	2.	.04
+	HYDROGRAPH AT 23	66.	4.10	7.	2.	1.	.03
	2 COMBINED AT HC8	163.	4.13	17.	4.	3.	.07

+	ROUTED TO B23	148.	4.20	13.	3.	2.	.07
	HYDROGRAPH AT 25	24.	4.13	4.	1.	1.	.01
+	3 COMBINED AT HC9	268.	4.23	52.	16.	12.	.31
+	ROUTED TO RHC9	264.	4.30	52.	16.	12.	.31
+	HYDROGRAPH AT 27	81.	4.10	9.	2.	2.	.04
+	HYDROGRAPH AT 36	87.	4.13	10.	2.	2.	.05
+	ROUTED TO R36	86.	4.17	10.	2.	2.	.05
+	HYDROGRAPH AT 37w	9.	4.27	2.	0.	0.	.01
+	4 COMBINED AT C37W	411.	4.27	71.	22.	16.	.41
+	ROUTED TO B37W	343.	4.47	71.	22.	16.	.41
+	ROUTED TO RB37W	340.	4.57	71.	22.	16.	.41
+	HYDROGRAPH AT 37e	18.	4.13	2.	1.	0.	.01
+	HYDROGRAPH AT 24	38.	4.13	5.	1.	1.	.02
+	ROUTED TO R24	38.	4.13	5.	1.	1.	.02
	HYDROGRAPH AT 100	75.	4.13	9.	2.	2.	.04
+	2 COMBINED AT HC100	112.	4.13	13.	3.	2.	.06
+	ROUTED TO R100	112.	4.17	13.	3.	2.	.06
+	HYDROGRAPH AT 28R	26.	4.10	3.	1.	1.	.01
+	2 COMBINED AT HC28R	137.	4.13	16.	4.	3.	.07
+	ROUTED TO R28R	132.	4.23	16.	4.	3.	.07
+	HYDROGRAPH AT 26R	131.	4.13	13.	3.	2.	.06
+	ROUTED TO R26R	125.	4.17	13.	3.	2.	.06
+	HYDROGRAPH AT 29	73.	4.10	8.	2.	1.	.03
+	2 COMBINED AT HC11	194.	4.13	21.	5.	4.	.10
+	ROUTED TO B29	139.	4.33	16.	5.	4.	.10
+	HYDROGRAPH AT 48	34.	4.17	5.	1.	1.	.03
	5 COMBINED AT HC12	563.	4.40	107.	32.	24.	.61
	HYDROGRAPH AT						

+	49	34.	4.17	5.	1.	1.	.02
ROUTED TO							
+	B49	4.	5.17	0.	0.	0.	.02
2 COMBINED AT							
	C-N24M	562.	4.40	108.	32.	24.	.64
ROUTED TO							
+	RB49	531.	4.73	107.	32.	24.	.64
HYDROGRAPH AT							
+	N24V	81.	4.17	7.	2.	1.	.05
ROUTED TO							
+	RN24V	44.	5.23	7.	2.	1.	.05
HYDROGRAPH AT							
+	N24M	258.	4.27	31.	8.	6.	.17
3 COMBINED AT							
+	CN24M	592.	4.73	139.	41.	30.	.85
ROUTED TO							
+	RN24M	554.	5.17	139.	41.	30.	.85
HYDROGRAPH AT							
+	45	145.	4.10	13.	3.	2.	.06
ROUTED TO							
+	R45	139.	4.17	13.	3.	2.	.06
HYDROGRAPH AT							
+	47	81.	4.10	9.	2.	2.	.04
2 COMBINED AT							
+	HC14	215.	4.13	22.	6.	4.	.10
ROUTED TO							
+	RHC14	211.	4.20	22.	6.	4.	.10
HYDROGRAPH AT							
	50	47.	4.13	6.	2.	1.	.03
ROUTED TO							
+	R50	45.	4.20	6.	2.	1.	.03
HYDROGRAPH AT							
+	51	18.	4.13	3.	1.	0.	.01
3 COMBINED AT							
+	HC15	274.	4.20	31.	8.	6.	.14
ROUTED TO							
+	B51	206.	4.37	27.	7.	5.	.14
HYDROGRAPH AT							
+	46	140.	4.10	13.	3.	2.	.06
ROUTED TO							
+	R46	129.	4.20	13.	3.	2.	.06
HYDROGRAPH AT							
+	52	75.	4.13	10.	2.	2.	.04
2 COMBINED AT							
+	HC16	202.	4.17	23.	6.	4.	.10
HYDROGRAPH AT							
+	53R	141.	4.13	15.	4.	3.	.07
ROUTED TO							
+	R53	136.	4.17	15.	4.	3.	.07
HYDROGRAPH AT							
+	54R	38.	4.13	5.	1.	1.	.02
2 COMBINED AT							
+	HC17	173.	4.17	20.	5.	4.	.09
2 COMBINED AT							
	HC17A	374.	4.17	43.	11.	8.	.19

+	ROUTED TO	B52	150.	4.53	30.	10.	7.	.19
	HYDROGRAPH AT	56R	34.	4.03	3.	1.	1.	.01
+	ROUTED TO	B56	15.	4.23	2.	0.	0.	.01
+	3 COMBINED AT	C-N24I	346.	4.40	58.	18.	13.	.35
+	ROUTED TO	R-N24I	332.	4.63	58.	18.	13.	.35
+	HYDROGRAPH AT	55	137.	4.13	15.	4.	3.	.05
+	ROUTED TO	R55	136.	4.17	15.	4.	3.	.05
+	HYDROGRAPH AT	57R	20.	4.07	2.	0.	0.	.01
+	2 COMBINED AT	HC18	153.	4.13	17.	4.	3.	.06
+	ROUTED TO	B57R	133.	4.23	13.	3.	2.	.06
+	ROUTED TO	RB57R	130.	4.30	13.	3.	2.	.06
+	HYDROGRAPH AT	N24I	195.	4.70	41.	10.	7.	.30
+	HYDROGRAPH AT	N24H	342.	4.37	44.	11.	8.	.23
+	HYDROGRAPH AT	N24N	140.	4.33	24.	6.	4.	.13
	ROUTED TO	RN24N	128.	4.83	24.	6.	4.	.13
+	HYDROGRAPH AT	N24J	72.	4.63	16.	4.	3.	.12
+	2 COMBINED AT	CN24J	193.	4.80	40.	10.	7.	.25
+	ROUTED TO	RN24J	192.	4.87	40.	10.	7.	.25
+	HYDROGRAPH AT	N24K	111.	4.77	30.	8.	5.	.21
+	7 COMBINED AT	CN24I	990.	5.10	311.	88.	64.	2.25
+	ROUTED TO	RN24I	984.	5.20	311.	88.	64.	2.25
+	HYDROGRAPH AT	N21JA	151.	4.20	15.	4.	3.	.08
+	ROUTED TO	RN21JS	135.	4.40	15.	4.	3.	.08
+	HYDROGRAPH AT	N21JB	231.	4.27	27.	7.	5.	.17
+	2 COMBINED AT	CN21J	351.	4.33	42.	11.	8.	.25
+	ROUTED TO	RN21JE	321.	4.67	42.	11.	8.	.25
+	2 COMBINED AT	CN24G*	1110.	4.87	342.	96.	70.	2.50
	ROUTED TO	RN24G*	1101.	5.00	342.	96.	70.	2.50

+	HYDROGRAPH AT	N24G	330.	4.63	64.	16.	12.	.43
	DIVERSION TO	LN24GD	16.	3.83	1.	0.	0.	.43
+	HYDROGRAPH AT	LN24G	330.	4.63	63.	16.	11.	.43
+	2 COMBINED AT	CN24G	1239.	4.97	382.	106.	77.	2.93
+	HYDROGRAPH AT	DRN21Z	0.	4.27	0.	0.	0.	.11
+	ROUTED TO	RN21ZE	0.	6.63	0.	0.	0.	.11
+	2 COMBINED AT	CN24G+	1239.	4.97	382.	106.	77.	2.93
+	ROUTED TO	RN24G	1234.	5.03	382.	106.	77.	2.93
+	HYDROGRAPH AT	N24F	125.	4.37	19.	5.	3.	.11
+	2 COMBINED AT	CN24F	1261.	5.00	394.	110.	80.	3.03
+	HYDROGRAPH AT	N24D	130.	4.20	19.	5.	3.	.09
+	2 COMBINED AT	CN24D	1280.	5.00	407.	113.	82.	3.12
+	ROUTED TO	LN24D	21.	13.07	21.	18.	15.	3.12
+	HYDROGRAPH AT	N21H	50.	4.17	6.	2.	1.	.03
	HYDROGRAPH AT	DRN21G	37.	4.70	2.	0.	0.	.06
+	ROUTED TO	RN21GE	30.	5.00	2.	0.	0.	.06
+	2 COMBINED AT	CN21H	50.	4.17	8.	2.	1.	.03
+	ROUTED TO	RN21H	37.	5.10	8.	2.	1.	.03
+	HYDROGRAPH AT	N24E	15.	4.47	3.	1.	1.	.02
+	ROUTED TO	RN24E	14.	4.70	3.	1.	1.	.02
+	3 COMBINED AT	CN24D*	43.	5.17	21.	20.	16.	3.18
+	HYDROGRAPH AT	N27	149.	4.63	39.	10.	7.	.28
+	ROUTED TO	RN27	146.	4.87	39.	10.	7.	.28
+	HYDROGRAPH AT	N26	47.	4.30	5.	1.	1.	.04
+	2 COMBINED AT	CN26	161.	4.83	44.	11.	8.	.32
+	ROUTED TO	RN26	156.	5.10	44.	11.	8.	.32
	HYDROGRAPH AT	N25	142.	4.70	29.	7.	5.	.24
	2 COMBINED AT							

+	CN25	247.	5.07	71.	18.	13.	.56
+ ROUTED TO	RN25	222.	5.53	71.	18.	13.	.56
HYDROGRAPH AT	N24	90.	4.43	14.	4.	3.	.11
+ 3 COMBINED AT	CN24	223.	5.30	100.	46.	36.	3.85
+ ROUTED TO	RCN24	157.	5.97	72.	32.	25.	3.85
+ HYDROGRAPH AT	N23	361.	4.40	76.	19.	14.	.39
+ 3 COMBINED AT	CN23	253.	4.57	132.	47.	37.	6.05
+ ROUTED TO	RN23	244.	5.20	132.	47.	37.	6.05
+ HYDROGRAPH AT	BN21DI	321.	4.73	96.	40.	32.	1.81
+ ROUTED TO	RN21DS	302.	5.27	95.	40.	32.	1.81
+ HYDROGRAPH AT	N21C	430.	4.40	100.	25.	18.	.39
+ DIVERSION TO	LN21CD	37.	3.67	5.	1.	1.	.39
+ HYDROGRAPH AT	LN21C	430.	4.40	97.	24.	17.	.39
+ 2 COMBINED AT	CN21C	564.	5.10	193.	67.	52.	.39
+ HYDROGRAPH AT	N21	583.	4.67	147.	37.	27.	.62
+ 3 COMBINED AT	CN21	1010.	5.03	415.	134.	103.	7.06
+ ROUTED TO	RN21	1000.	5.37	415.	134.	102.	7.06
+ DIVERSION TO	N20DI	1000.	5.37	415.	134.	102.	7.06
+ HYDROGRAPH AT	N21-20	0.	.00	0.	0.	0.	7.06
+ HYDROGRAPH AT	N11DB	320.	4.30	54.	14.	10.	.25
+ HYDROGRAPH AT	B11DAS	21.	5.00	8.	2.	1.	.26
+ ROUTED TO	R11DAS	21.	5.53	8.	2.	1.	.26
+ 2 COMBINED AT	C11DAB	320.	4.30	61.	16.	11.	.25
+ DIVERSION TO	LNBOUT	320.	4.30	29.	7.	5.	.25
+ HYDROGRAPH AT	LN11DB	262.	4.53	33.	8.	6.	.25
+ DIVERSION TO	N11DI	236.	4.53	30.	7.	5.	.25
+ HYDROGRAPH AT	DN11D	26.	4.53	3.	1.	1.	.25
ROUTED TO	RN11DE	19.	5.00	3.	1.	1.	.25

	HYDROGRAPH AT						
+		DRX5	122.	4.63	7.	2.	1.	.41
	ROUTED TO						
		RX5S	37.	4.93	7.	2.	1.	.41
	2 COMBINED AT						
+		CX1	55.	5.00	10.	3.	2.	.25
	DIVERSION TO						
+		X1I	0.	.00	0.	0.	0.	.25
	HYDROGRAPH AT						
+		DX1	55.	5.00	10.	3.	2.	.25
	ROUTED TO						
+		RX1E	53.	5.10	10.	3.	2.	.25
	HYDROGRAPH AT						
+		DIVS1	55.	4.17	3.	1.	1.	.05
	ROUTED TO						
+		RNDV89	52.	4.30	3.	1.	1.	.05
	HYDROGRAPH AT						
+		DV1	106.	4.27	19.	5.	3.	.09
	2 COMBINED AT						
+		CPD1	157.	4.30	23.	6.	4.	.09
	ROUTED TO						
+		RNCP1	157.	4.30	23.	6.	4.	.09
	HYDROGRAPH AT						
+		DV2	28.	4.33	7.	2.	1.	.03
	2 COMBINED AT						
+		CPD2	184.	4.30	29.	7.	5.	.12
	DIVERSION TO						
+		DVRB	53.	4.13	7.	2.	1.	.12
	HYDROGRAPH AT						
		89WRB	131.	4.30	22.	6.	4.	.12
	ROUTED TO						
+		RNRDV2	125.	4.40	22.	6.	4.	.12
	HYDROGRAPH AT						
+		DV3	62.	4.23	11.	3.	2.	.05
	2 COMBINED AT						
+		CPD3	182.	4.37	33.	8.	6.	.17
	ROUTED TO						
+		RNRDV3	180.	4.43	33.	8.	6.	.17
	HYDROGRAPH AT						
+		DV4	54.	4.33	13.	3.	2.	.06
	HYDROGRAPH AT						
+		DV5	44.	4.17	6.	2.	1.	.03
	3 COMBINED AT						
+		CPD5	264.	4.40	52.	13.	9.	.26
	HYDROGRAPH AT						
+		DV6	103.	4.27	19.	5.	4.	.09
	2 COMBINED AT						
+		CPDV6	361.	4.40	71.	18.	13.	.35
	ROUTED TO						
+		RN11IS	353.	4.50	71.	18.	13.	.35
	HYDROGRAPH AT						
+		N11EA	251.	4.40	58.	15.	11.	.26
	2 COMBINED AT						
+		CN11EA	581.	4.50	127.	32.	23.	.61
	ROUTED TO						
		RN11ES	575.	4.57	127.	32.	23.	.61

+	ROUTED TO	LX50	532.	4.73	203.	159.	155.	.61
	DIVERSION TO	DX50I	401.	4.73	178.	148.	146.	.61
+	HYDROGRAPH AT	DX50	131.	4.73	24.	10.	9.	.61
+	ROUTED TO	RX50E	128.	4.93	24.	10.	9.	.61
+	HYDROGRAPH AT	DIVS2	25.	4.17	1.	0.	0.	.09
+	ROUTED TO	RNDV87	14.	4.73	1.	0.	0.	.09
+	HYDROGRAPH AT	DV7	166.	4.40	29.	7.	5.	.13
+	2 COMBINED AT	CPD7	168.	4.40	30.	8.	5.	.13
+	ROUTED TO	RNRDV7	166.	4.53	30.	8.	5.	.13
+	HYDROGRAPH AT	DV8	115.	4.30	23.	6.	4.	.09
+	2 COMBINED AT	CPD8	270.	4.50	53.	13.	10.	.22
+	HYDROGRAPH AT	DV9	100.	4.10	10.	3.	2.	.04
+	2 COMBINED AT	DVCP9	309.	4.40	63.	16.	11.	.27
+	HYDROGRAPH AT	DIVS13	38.	4.40	2.	0.	0.	.18
	ROUTED TO	RNRS86	21.	4.57	2.	0.	0.	.18
+	HYDROGRAPH AT	DV10	319.	4.27	46.	11.	8.	.21
+	2 COMBINED AT	CPD10	320.	4.27	48.	12.	9.	.21
+	ROUTED TO	RNRD10	316.	4.37	48.	12.	9.	.21
+	HYDROGRAPH AT	DV11	241.	4.23	42.	11.	8.	.14
+	3 COMBINED AT	CPD11	821.	4.33	151.	38.	27.	.62
+	ROUTED TO	RCP11S	811.	4.47	151.	38.	27.	.62
+	HYDROGRAPH AT	N22A	403.	4.33	84.	21.	15.	.30
+	2 COMBINED AT	CN22A	1132.	4.43	231.	58.	42.	.92
+	DIVERSION TO	LN22DA	622.	4.13	35.	9.	6.	.92
+	HYDROGRAPH AT	LN22A	1132.	4.43	198.	49.	36.	.92
+	ROUTED TO	R22AS	1075.	4.63	198.	49.	36.	.92
	HYDROGRAPH AT	N22B	260.	4.27	46.	12.	8.	.17
	DIVERSION TO							

+		LN22DB	260.	4.27	24.	6.	4.	.17
+	HYDROGRAPH AT	LN22B	221.	4.50	22.	6.	4.	.17
	3 COMBINED AT	CN22	1214.	4.70	235.	63.	47.	1.71
+	DIVERSION TO	N22I	500.	4.27	155.	43.	32.	1.71
+	HYDROGRAPH AT	DN22	714.	4.70	80.	20.	14.	1.71
+	ROUTED TO	RN22W	710.	4.80	80.	20.	14.	1.71
+	HYDROGRAPH AT	DRX50I	401.	4.73	178.	148.	146.	.61
+	ROUTED TO	RX50W	397.	4.87	178.	148.	144.	.61
+	HYDROGRAPH AT	N11EB	333.	4.27	53.	13.	10.	.23
+	4 COMBINED AT	CN11E	1146.	4.80	298.	179.	166.	2.19
+	DIVERSION TO	LN11ED	145.	2.93	63.	16.	11.	2.19
+	HYDROGRAPH AT	LN11E	1146.	4.80	297.	178.	155.	2.19
+	ROUTED TO	R-WBE1	1146.	4.80	297.	178.	155.	2.19
+	HYDROGRAPH AT	WB1	146.	4.30	28.	7.	5.	.12
	2 COMBINED AT	CPWB1	1222.	4.80	322.	184.	159.	2.31
+	ROUTED TO	R-R3	1222.	4.80	319.	184.	157.	2.31
+	HYDROGRAPH AT	WB2	134.	4.23	23.	6.	4.	.09
+	2 COMBINED AT	CPWB2	1281.	4.80	338.	188.	161.	2.40
+	ROUTED TO	R-4-5	1210.	4.90	278.	173.	145.	2.40
+	HYDROGRAPH AT	WB3	30.	4.03	2.	1.	0.	.01
+	2 COMBINED AT	CPWB3	1210.	4.90	278.	173.	145.	2.41
+	ROUTED TO	R-6	1165.	5.00	276.	173.	145.	2.41
+	HYDROGRAPH AT	DRN22	500.	4.27	155.	43.	32.	1.71
+	HYDROGRAPH AT	WB4	193.	4.20	28.	7.	5.	.11
+	2 COMBINED AT	CPWB4	686.	4.27	178.	49.	37.	.11
+	ROUTED TO	R-R1	787.	4.30	170.	49.	37.	.11
+	HYDROGRAPH AT	WB5	247.	4.17	29.	7.	5.	.11
	2 COMBINED AT	CPWB5	988.	4.30	196.	56.	42.	.22

+	ROUTED TO	R-R2	611.	4.77	141.	51.	40.	.22
	2 COMBINED AT	CPR6	1744.	4.97	416.	224.	184.	2.63
+	ROUTED TO	RCR26	1726.	5.07	415.	223.	183.	2.63
+	HYDROGRAPH AT	WB7	87.	4.13	12.	3.	2.	.05
+	2 COMBINED AT	CR6W7	1737.	5.07	417.	224.	185.	2.67
+	ROUTED TO	R-R7	1732.	5.10	416.	223.	183.	2.67
+	HYDROGRAPH AT	WB6	136.	4.33	29.	7.	5.	.12
+	ROUTED TO	R-R8	22.	5.83	20.	7.	5.	.12
+	2 COMBINED AT	C7R8	1744.	5.10	434.	229.	188.	2.79
+	ROUTED TO	RC78	1735.	5.13	433.	229.	188.	2.79
+	HYDROGRAPH AT	WB8	39.	4.77	17.	5.	3.	.07
+	2 COMBINED AT	CP-678	1762.	5.13	445.	232.	191.	2.86
+	HYDROGRAPH AT	WB10	128.	4.27	23.	6.	4.	.09
+	ROUTED TO	R-R9	55.	4.93	23.	6.	4.	.09
	2 COMBINED AT	WBEOT	1796.	5.13	462.	237.	195.	2.95
+	DIVERSION TO	TONRI	100.	4.93	80.	60.	51.	2.95
+	HYDROGRAPH AT	DVNR	1696.	5.13	382.	176.	144.	2.95
+	DIVERSION TO	DCLUB	380.	5.13	71.	23.	17.	2.95
+	HYDROGRAPH AT	CCLUB	1316.	5.13	310.	153.	127.	2.95
+	ROUTED TO	RR287	1313.	5.13	310.	153.	126.	2.95
+	DIVERSION TO	DV87SI	391.	5.13	74.	24.	18.	2.95
+	HYDROGRAPH AT	DV87S	921.	5.13	236.	130.	109.	2.95
+	ROUTED TO	RR289	917.	5.17	236.	130.	108.	2.95
+	DIVERSION TO	DV89I	386.	5.17	57.	14.	10.	2.95
+	HYDROGRAPH AT	DS89	531.	5.17	179.	116.	98.	2.95
+	ROUTED TO	TODET	529.	5.23	179.	116.	98.	2.95
+	DIVERSION TO	DV91I	491.	5.23	82.	20.	15.	2.95
	HYDROGRAPH AT	DV91	124.	5.83	103.	96.	83.	2.95

+	HYDROGRAPH AT	WB9	173.	4.50	47.	12.	9.	.22
	ROUTED TO	R-R10	30.	6.47	25.	12.	9.	.22
+	HYDROGRAPH AT	DRX1I	0.	.00	0.	0.	0.	.25
+	ROUTED TO	RX1S	0.	.00	0.	0.	0.	.25
+	3 COMBINED AT	CN11B1	148.	5.83	125.	105.	91.	3.17
+	HYDROGRAPH AT	N11C	293.	4.30	51.	13.	9.	.25
+	DIVERSION TO	LN11CD	293.	4.30	25.	6.	5.	.25
+	HYDROGRAPH AT	LN11C	256.	4.50	26.	6.	5.	.25
+	DIVERSION TO	N11CWI	1.	4.50	0.	0.	0.	.25
+	HYDROGRAPH AT	DN11CW	255.	4.50	26.	6.	5.	.25
+	DIVERSION TO	N11CEI	14.	4.50	4.	1.	1.	.25
+	HYDROGRAPH AT	DN11CE	241.	4.50	22.	6.	4.	.25
+	HYDROGRAPH AT	DRN11C	1.	4.50	0.	0.	0.	.25
+	ROUTED TO	LN11CW	0.	4.70	0.	0.	0.	.25
	HYDROGRAPH AT	DR11C*	14.	4.50	4.	1.	1.	.25
+	ROUTED TO	LN11CE	3.	6.80	3.	1.	1.	.25
+	3 COMBINED AT	CN11C1	242.	4.50	25.	6.	5.	.25
+	HYDROGRAPH AT	BN11DI	236.	4.53	30.	7.	5.	.25
+	2 COMBINED AT	CN11D	469.	4.53	55.	14.	10.	.25
+	ROUTED TO	RWBW1	364.	4.97	55.	14.	10.	.25
+	HYDROGRAPH AT	N11A	596.	4.67	187.	48.	35.	.93
+	2 COMBINED AT	CWBW	754.	5.13	230.	59.	43.	1.18
+	ROUTED TO	RBWB	25.	5.23	25.	25.	22.	1.18
+	ROUTED TO	RWBW2	25.	7.03	25.	25.	21.	1.18
+	2 COMBINED AT	CN11B	166.	5.83	149.	130.	111.	4.35
+	HYDROGRAPH AT	S30D	209.	4.23	32.	8.	6.	.13
	ROUTED TO	RS30D	198.	4.53	32.	8.	6.	.13
	HYDROGRAPH AT							

```
+                    S30C      496.   4.40      116.      29.      21.      .45

     HYDROGRAPH AT
+                   DA09FI      65.   4.53       12.       3.       2.      .37

     ROUTED TO
                    RA09FI      49.   5.13       12.       3.       2.      .37

     3 COMBINED AT
+                     XX1     671.   4.50      158.      40.      29.      .58

     HYDROGRAPH AT
+                     S30B     311.   4.73       86.      22.      16.      .40

     2 COMBINED AT
+                    CS30B     892.   4.57      237.      60.      43.      .98

     DIVERSION TO
+                   DS30BI     342.   4.57       36.       9.       7.      .98

     HYDROGRAPH AT
+                   DS30BO     550.   4.47      201.      51.      37.      .98

     ROUTED TO
+                   RS30BW     550.   4.90      201.      51.      37.      .98

     HYDROGRAPH AT
+                     S30A     524.   4.43      120.      30.      22.      .53

     2 COMBINED AT
+                    CS30A     995.   4.60      313.      80.      58.     1.51

     HYDROGRAPH AT
+                   DRTONR     100.   4.93       80.      60.      51.     2.95

     HYDROGRAPH AT
+                   BN20DI    1000.   5.37      415.     134.     102.     7.06

     HYDROGRAPH AT
+                      N20     801.   4.17       92.      23.      17.      .35

     3 COMBINED AT
                     CN20    1115.   5.33      543.     206.     166.     8.00

                    SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                        (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                          INTERPOLATED TO
                                                        COMPUTATION INTERVAL
  ISTAQ    ELEMENT      DT       PEAK    TIME TO     VOLUME     DT      PEAK    TIME TO     VOLUME
                                         PEAK                                    PEAK

                       (MIN)     (CFS)    (MIN)      (IN)     (MIN)    (CFS)    (MIN)       (IN)

 FOR STORM = 1  STORM AREA (SQ MI) =        .01
     RCBA  MANE        2.00     16.20   252.00      1.88      2.00    16.20   252.00       1.88

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7029E+00 EXCESS= .0000E+00 OUTFLOW= .7028E+00 BASIN STORAGE= .6822E-03 PERCENT ERROR=   -.1

 FOR STORM = 2  STORM AREA (SQ MI) =        .50
     RCBA  MANE        2.00     16.06   252.00      1.87      2.00    16.06   252.00       1.87

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6964E+00 EXCESS= .0000E+00 OUTFLOW= .6964E+00 BASIN STORAGE= .6790E-03 PERCENT ERROR=   -.1

 FOR STORM = 3  STORM AREA (SQ MI) =       2.80
     RCBA  MANE        2.00      9.23   252.00      1.65      2.00     9.23   252.00       1.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6177E+00 EXCESS= .0000E+00 OUTFLOW= .6177E+00 BASIN STORAGE= .6721E-03 PERCENT ERROR=   -.1

 FOR STORM = 4  STORM AREA (SQ MI) =      16.00
     RCBA  MANE        2.00      6.93   254.00      1.38      2.00     6.93   254.00       1.38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5170E+00 EXCESS= .0000E+00 OUTFLOW= .5169E+00 BASIN STORAGE= .6849E-03 PERCENT ERROR=   -.1

 FOR STORM = 5  STORM AREA (SQ MI) =      90.00
     RCBA  MANE        2.00      4.43   254.00       .98      2.00     4.43   254.00        .98
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3666E+00 EXCESS= .0000E+00 OUTFLOW= .3665E+00 BASIN STORAGE= .7026E-03 PERCENT ERROR=   -.2

     FOR STORM = 1  STORM AREA (SQ MI) =        .01
         RCBB  MANE        2.00     40.33    246.00      1.67      2.00     40.33    246.00        1.67

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1511E+01 EXCESS= .0000E+00 OUTFLOW= .1511E+01 BASIN STORAGE= .4107E-03 PERCENT ERROR=    .0

     FOR STORM = 2  STORM AREA (SQ MI) =        .50
         RCBB  MANE        2.00     39.98    246.00      1.65      2.00     39.98    246.00        1.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1495E+01 EXCESS= .0000E+00 OUTFLOW= .1496E+01 BASIN STORAGE= .4087E-03 PERCENT ERROR=    .0

     FOR STORM = 3  STORM AREA (SQ MI) =       2.80
         RCBB  MANE        2.00     20.79    248.00      1.37      2.00     20.79    248.00        1.37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1240E+01 EXCESS= .0000E+00 OUTFLOW= .1240E+01 BASIN STORAGE= .4385E-03 PERCENT ERROR=    .0

     FOR STORM = 4  STORM AREA (SQ MI) =      16.00
         RCBB  MANE        2.00     14.74    248.00      1.08      2.00     14.74    248.00        1.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9835E+00 EXCESS= .0000E+00 OUTFLOW= .9836E+00 BASIN STORAGE= .4458E-03 PERCENT ERROR=   -.1

     FOR STORM = 5  STORM AREA (SQ MI) =      90.00
         RCBB  MANE        2.00      8.21    248.00       .70      2.00      8.21    248.00         .70

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6322E+00 EXCESS= .0000E+00 OUTFLOW= .6323E+00 BASIN STORAGE= .4268E-03 PERCENT ERROR=   -.1

     FOR STORM = 1  STORM AREA (SQ MI) =        .01
         R28a  MANE        2.00     93.47    258.00      1.69      2.00     93.47    258.00        1.69

TINUITY SUMMARY (AC-FT) - INFLOW= .4661E+01 EXCESS= .0000E+00 OUTFLOW= .4606E+01 BASIN STORAGE= .2152E-02 PERCENT ERROR=   1.1

     FOR STORM = 2  STORM AREA (SQ MI) =        .50
         R28a  MANE        2.00     92.51    258.00      1.68      2.00     92.51    258.00        1.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4611E+01 EXCESS= .0000E+00 OUTFLOW= .4556E+01 BASIN STORAGE= .2141E-02 PERCENT ERROR=   1.1

     FOR STORM = 3  STORM AREA (SQ MI) =       2.80
         R28a  MANE        2.00     61.51    262.00      1.52      2.00     61.51    262.00        1.52

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4171E+01 EXCESS= .0000E+00 OUTFLOW= .4140E+01 BASIN STORAGE= .2113E-02 PERCENT ERROR=    .7

     FOR STORM = 4  STORM AREA (SQ MI) =      16.00
         R28a  MANE        2.00     46.45    264.00      1.28      2.00     46.45    264.00        1.28

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3518E+01 EXCESS= .0000E+00 OUTFLOW= .3492E+01 BASIN STORAGE= .2118E-02 PERCENT ERROR=    .7

     FOR STORM = 5  STORM AREA (SQ MI) =      90.00
         R28a  MANE        2.00     30.11    270.00       .90      2.00     30.11    270.00         .90

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2479E+01 EXCESS= .0000E+00 OUTFLOW= .2462E+01 BASIN STORAGE= .2175E-02 PERCENT ERROR=    .6

     FOR STORM = 1  STORM AREA (SQ MI) =        .01
         RCBL  MANE        2.00    261.85    258.00      1.87      2.00    261.85    258.00        1.87

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1649E+02 EXCESS= .0000E+00 OUTFLOW= .1650E+02 BASIN STORAGE= .7427E-04 PERCENT ERROR=    .0

     FOR STORM = 2  STORM AREA (SQ MI) =        .50
```

```
RCBL  MANE        2.00    259.55    258.00      1.86      2.00    259.55    258.00        1.86

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1633E+02 EXCESS= .0000E+00 OUTFLOW= .1634E+02 BASIN STORAGE= .7378E-04 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
RCBL  MANE        2.00    186.09    260.00      1.70      2.00    186.09    260.00        1.70

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1495E+02 EXCESS= .0000E+00 OUTFLOW= .1495E+02 BASIN STORAGE= .7962E-04 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
RCBL  MANE        2.00    141.36    262.00      1.45      2.00    141.36    262.00        1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1280E+02 EXCESS= .0000E+00 OUTFLOW= .1280E+02 BASIN STORAGE= .7387E-04 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
RCBL  MANE        2.00     91.72    270.00      1.06      2.00     91.72    270.00        1.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9365E+01 EXCESS= .0000E+00 OUTFLOW= .9364E+01 BASIN STORAGE= .7616E-04 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
RCBK  MANE        1.21    345.61    254.80      1.79      2.00    344.17    254.00        1.79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2075E+02 EXCESS= .0000E+00 OUTFLOW= .2075E+02 BASIN STORAGE= .3977E-03 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
RCBK  MANE        1.21    341.62    255.52      1.77      2.00    340.43    256.00        1.77

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2053E+02 EXCESS= .0000E+00 OUTFLOW= .2053E+02 BASIN STORAGE= .3927E-03 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
RCBK  MANE        1.35    231.84    261.32      1.58      2.00    230.58    262.00        1.58

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1832E+02 EXCESS= .0000E+00 OUTFLOW= .1832E+02 BASIN STORAGE= .3845E-03 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
RCBK  MANE        1.47    172.48    263.68      1.33      2.00    172.08    264.00        1.33

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1534E+02 EXCESS= .0000E+00 OUTFLOW= .1534E+02 BASIN STORAGE= .3787E-03 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
RCBK  MANE        1.69    105.90    269.24       .93      2.00    105.53    268.00         .93

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1082E+02 EXCESS= .0000E+00 OUTFLOW= .1082E+02 BASIN STORAGE= .3902E-03 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
 R15  MANE        1.59    364.60    255.19      1.68      2.00    364.40    256.00        1.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2207E+02 EXCESS= .0000E+00 OUTFLOW= .2207E+02 BASIN STORAGE= .5519E-03 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
 R15  MANE        1.59    361.32    256.10      1.66      2.00    361.17    256.00        1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2182E+02 EXCESS= .0000E+00 OUTFLOW= .2182E+02 BASIN STORAGE= .5449E-03 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
 R15  MANE        1.78    242.06    262.19      1.47      2.00    242.04    262.00        1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1925E+02 EXCESS= .0000E+00 OUTFLOW= .1925E+02 BASIN STORAGE= .5437E-03 PERCENT ERROR=    .0
```

```
FOR STORM = 4  STORM AREA (SQ MI) =       16.00
     R15  MANE          1.94     178.96     264.24       1.22       2.00     178.70     264.00         1.22

NTINUITY SUMMARY (AC-FT) - INFLOW= .1604E+02 EXCESS= .0000E+00 OUTFLOW= .1604E+02 BASIN STORAGE= .5145E-03 PERCENT ERROR=     .0

FOR STORM = 5  STORM AREA (SQ MI) =       90.00
     R15  MANE          2.00     108.84     270.00        .86       2.00     108.84     270.00          .86

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1122E+02 EXCESS= .0000E+00 OUTFLOW= .1122E+02 BASIN STORAGE= .5202E-03 PERCENT ERROR=     .0

FOR STORM = 1  STORM AREA (SQ MI) =         .01
     RE1  MANE          2.00      31.63     248.00       1.33       2.00      31.63     248.00         1.33

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9906E+00 EXCESS= .0000E+00 OUTFLOW= .9916E+00 BASIN STORAGE= .9785E-03 PERCENT ERROR=    -.2

FOR STORM = 2  STORM AREA (SQ MI) =         .50
     RE1  MANE          2.00      31.33     248.00       1.31       2.00      31.33     248.00         1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9789E+00 EXCESS= .0000E+00 OUTFLOW= .9800E+00 BASIN STORAGE= .9741E-03 PERCENT ERROR=    -.2

FOR STORM = 3  STORM AREA (SQ MI) =        2.80
     RE1  MANE          2.00      14.94     250.00        .98       2.00      14.94     250.00          .98

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7298E+00 EXCESS= .0000E+00 OUTFLOW= .7305E+00 BASIN STORAGE= .9297E-03 PERCENT ERROR=    -.2

FOR STORM = 4  STORM AREA (SQ MI) =       16.00
     RE1  MANE          2.00       9.90     250.00        .66       2.00       9.90     250.00          .66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4921E+00 EXCESS= .0000E+00 OUTFLOW= .4924E+00 BASIN STORAGE= .9535E-03 PERCENT ERROR=    -.3

FOR STORM = 5  STORM AREA (SQ MI) =       90.00
     RE1  MANE          2.00       4.48     252.00        .29       2.00       4.48     252.00          .29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2165E+00 EXCESS= .0000E+00 OUTFLOW= .2165E+00 BASIN STORAGE= .9318E-03 PERCENT ERROR=    -.4

FOR STORM = 1  STORM AREA (SQ MI) =         .01
     RE2  MANE          2.00      28.17     248.00       1.48       2.00      28.17     248.00         1.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1266E+01 EXCESS= .0000E+00 OUTFLOW= .1266E+01 BASIN STORAGE= .4434E-03 PERCENT ERROR=    -.1

FOR STORM = 2  STORM AREA (SQ MI) =         .50
     RE2  MANE          2.00      27.90     248.00       1.47       2.00      27.90     248.00         1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1251E+01 EXCESS= .0000E+00 OUTFLOW= .1252E+01 BASIN STORAGE= .4414E-03 PERCENT ERROR=    -.1

FOR STORM = 3  STORM AREA (SQ MI) =        2.80
     RE2  MANE          2.00      15.28     250.00       1.14       2.00      15.28     250.00         1.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9756E+00 EXCESS= .0000E+00 OUTFLOW= .9758E+00 BASIN STORAGE= .4537E-03 PERCENT ERROR=    -.1

FOR STORM = 4  STORM AREA (SQ MI) =       16.00
     RE2  MANE          2.00      10.53     250.00        .83       2.00      10.53     250.00          .83

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7092E+00 EXCESS= .0000E+00 OUTFLOW= .7093E+00 BASIN STORAGE= .4172E-03 PERCENT ERROR=    -.1

FOR STORM = 5  STORM AREA (SQ MI) =       90.00
     RE2  MANE          2.00       5.33     252.00        .45       2.00       5.33     252.00          .45

TINUITY SUMMARY (AC-FT) - INFLOW= .3842E+00 EXCESS= .0000E+00 OUTFLOW= .3842E+00 BASIN STORAGE= .4384E-03 PERCENT ERROR=    -.1
```

```
FOR STORM = 1  STORM AREA (SQ MI) =        .01
     R13  MANE         2.00    178.99    250.00      1.45      2.00    178.99    250.00        1.45

TINUITY SUMMARY (AC-FT) - INFLOW= .6914E+01 EXCESS= .0000E+00 OUTFLOW= .6896E+01 BASIN STORAGE= .1287E-02 PERCENT ERROR=    .2

FOR STORM = 2  STORM AREA (SQ MI) =        .50
     R13  MANE         2.00    177.35    250.00      1.44      2.00    177.35    250.00        1.44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6837E+01 EXCESS= .0000E+00 OUTFLOW= .6822E+01 BASIN STORAGE= .1281E-02 PERCENT ERROR=    .2

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
     R13  MANE         2.00     96.23    252.00      1.15      2.00     96.23    252.00        1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5447E+01 EXCESS= .0000E+00 OUTFLOW= .5438E+01 BASIN STORAGE= .1461E-02 PERCENT ERROR=    .1

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
     R13  MANE         2.00     66.74    252.00       .85      2.00     66.74    252.00         .85

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4042E+01 EXCESS= .0000E+00 OUTFLOW= .4035E+01 BASIN STORAGE= .1282E-02 PERCENT ERROR=    .1

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
     R13  MANE         2.00     35.14    256.00       .48      2.00     35.14    256.00         .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2285E+01 EXCESS= .0000E+00 OUTFLOW= .2281E+01 BASIN STORAGE= .1289E-02 PERCENT ERROR=    .1

FOR STORM = 1  STORM AREA (SQ MI) =        .01
     RE3  MANE         2.00     74.17    266.00      1.42      2.00     74.17    266.00        1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6215E+01 EXCESS= .0000E+00 OUTFLOW= .6216E+01 BASIN STORAGE= .6845E-03 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
     RE3  MANE         2.00     73.37    266.00      1.40      2.00     73.37    266.00        1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6143E+01 EXCESS= .0000E+00 OUTFLOW= .6143E+01 BASIN STORAGE= .6814E-03 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
     RE3  MANE         2.00     48.52    268.00      1.08      2.00     48.52    268.00        1.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4722E+01 EXCESS= .0000E+00 OUTFLOW= .4722E+01 BASIN STORAGE= .6793E-03 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
     RE3  MANE         2.00     33.13    270.00       .76      2.00     33.13    270.00         .76

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3336E+01 EXCESS= .0000E+00 OUTFLOW= .3336E+01 BASIN STORAGE= .6983E-03 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
     RE3  MANE         2.00     16.02    272.00       .39      2.00     16.02    272.00         .39

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1702E+01 EXCESS= .0000E+00 OUTFLOW= .1702E+01 BASIN STORAGE= .6575E-03 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
     R10  MANE         2.00    141.93    260.00      1.43      2.00    141.93    260.00        1.43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1046E+02 EXCESS= .0000E+00 OUTFLOW= .1045E+02 BASIN STORAGE= .1845E-02 PERCENT ERROR=    .1

FOR STORM = 2  STORM AREA (SQ MI) =        .50
     R10  MANE         2.00    140.50    260.00      1.41      2.00    140.50    260.00        1.41

INUITY SUMMARY (AC-FT) - INFLOW= .1034E+02 EXCESS= .0000E+00 OUTFLOW= .1033E+02 BASIN STORAGE= .1818E-02 PERCENT ERROR=    .1
```

```
FOR STORM = 3  STORM AREA (SQ MI) =       2.80
     R10  MANE          2.00     92.85    266.00      1.11      2.00     92.85    266.00        1.11

NTINUITY SUMMARY (AC-FT) - INFLOW= .8091E+01 EXCESS= .0000E+00 OUTFLOW= .8080E+01 BASIN STORAGE= .1701E-02 PERCENT ERROR=    .1

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
     R10  MANE          2.00     64.26    266.00       .80      2.00     64.26    266.00         .80

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5876E+01 EXCESS= .0000E+00 OUTFLOW= .5867E+01 BASIN STORAGE= .1796E-02 PERCENT ERROR=    .1

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
     R10  MANE          2.00     33.07    270.00       .43      2.00     33.07    270.00         .43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3177E+01 EXCESS= .0000E+00 OUTFLOW= .3171E+01 BASIN STORAGE= .1875E-02 PERCENT ERROR=    .1

FOR STORM = 1  STORM AREA (SQ MI) =        .01
     RE4  MANE          2.00     33.30    264.00      1.34      2.00     33.30    264.00        1.34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2853E+01 EXCESS= .0000E+00 OUTFLOW= .2854E+01 BASIN STORAGE= .1069E-03 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
     RE4  MANE          2.00     32.94    264.00      1.32      2.00     32.94    264.00        1.32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2820E+01 EXCESS= .0000E+00 OUTFLOW= .2821E+01 BASIN STORAGE= .1052E-03 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
     RE4  MANE          2.00     21.16    266.00       .99      2.00     21.16    266.00         .99

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2115E+01 EXCESS= .0000E+00 OUTFLOW= .2115E+01 BASIN STORAGE= .1198E-03 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
     RE4  MANE          2.00     14.06    268.00       .68      2.00     14.06    268.00         .68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1442E+01 EXCESS= .0000E+00 OUTFLOW= .1442E+01 BASIN STORAGE= .1092E-03 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
     RE4  MANE          2.00      6.12    270.00       .31      2.00      6.12    270.00         .31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6571E+00 EXCESS= .0000E+00 OUTFLOW= .6571E+00 BASIN STORAGE= .1077E-03 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
      R9  MANE          1.20    104.61    250.83      1.44      2.00    104.60    250.00        1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7088E+01 EXCESS= .0000E+00 OUTFLOW= .7090E+01 BASIN STORAGE= .8732E-04 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
      R9  MANE          1.21    103.65    249.50      1.43      2.00    103.65    250.00        1.43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7006E+01 EXCESS= .0000E+00 OUTFLOW= .7008E+01 BASIN STORAGE= .8777E-04 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
      R9  MANE          1.42     65.29    256.25      1.13      2.00     65.29    256.00        1.13

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5560E+01 EXCESS= .0000E+00 OUTFLOW= .5561E+01 BASIN STORAGE= .8130E-04 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
      R9  MANE          1.57     45.78    255.48       .84      2.00     45.78    256.00         .84
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .4104E+01 EXCESS= .0000E+00 OUTFLOW= .4104E+01 BASIN STORAGE= .7945E-04 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =       90.00
             R9  MANE          1.87     24.83    245.53       .47      2.00     24.48    258.00        .47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2301E+01 EXCESS= .0000E+00 OUTFLOW= .2302E+01 BASIN STORAGE= .8181E-04 PERCENT ERROR=   -.1

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
             R7  MANE          1.71    135.73    253.30      1.45      2.00    134.52    252.00       1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9217E+01 EXCESS= .0000E+00 OUTFLOW= .9221E+01 BASIN STORAGE= .1383E-03 PERCENT ERROR=    .0

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
             R7  MANE          1.72    134.06    252.28      1.44      2.00    133.30    252.00       1.44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9119E+01 EXCESS= .0000E+00 OUTFLOW= .9123E+01 BASIN STORAGE= .1401E-03 PERCENT ERROR=    .0

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
             R7  MANE          2.00     88.48    254.00      1.15      2.00     88.48    254.00       1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7286E+01 EXCESS= .0000E+00 OUTFLOW= .7288E+01 BASIN STORAGE= .1238E-03 PERCENT ERROR=    .0

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
             R7  MANE          2.00     62.30    256.00       .85      2.00     62.30    256.00        .85

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5422E+01 EXCESS= .0000E+00 OUTFLOW= .5424E+01 BASIN STORAGE= .1246E-03 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
             R7  MANE          2.00     34.02    266.00       .49      2.00     34.02    266.00        .49

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3088E+01 EXCESS= .0000E+00 OUTFLOW= .3090E+01 BASIN STORAGE= .1296E-03 PERCENT ERROR=   -.1

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RS1  MANE          2.00   1986.75    300.00      1.61      2.00   1986.75    300.00       1.61

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2525E+03 EXCESS= .0000E+00 OUTFLOW= .2525E+03 BASIN STORAGE= .3607E-02 PERCENT ERROR=    .0

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
            RS1  MANE          2.00   1959.19    300.00      1.60      2.00   1959.19    300.00       1.60

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2499E+03 EXCESS= .0000E+00 OUTFLOW= .2499E+03 BASIN STORAGE= .3673E-02 PERCENT ERROR=    .0

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
            RS1  MANE          2.00   1477.38    304.00      1.40      2.00   1477.38    304.00       1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2186E+03 EXCESS= .0000E+00 OUTFLOW= .2186E+03 BASIN STORAGE= .3616E-02 PERCENT ERROR=    .0

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
            RS1  MANE          2.00   1074.32    308.00      1.15      2.00   1074.32    308.00       1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1799E+03 EXCESS= .0000E+00 OUTFLOW= .1799E+03 BASIN STORAGE= .3677E-02 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
            RS1  MANE          2.00    640.07    322.00       .79      2.00    640.07    322.00        .79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1239E+03 EXCESS= .0000E+00 OUTFLOW= .1239E+03 BASIN STORAGE= .3677E-02 PERCENT ERROR=    .0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RS2  MANE           .75   1984.64    300.34      1.61      2.00   1984.13    300.00       1.61
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2540E+03 EXCESS= .0000E+00 OUTFLOW= .2540E+03 BASIN STORAGE= .5382E-03 PERCENT ERROR=    .0

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
            RS2  MANE          .75   1956.69    300.15      1.60      2.00   1956.19    300.00        1.60

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2514E+03 EXCESS= .0000E+00 OUTFLOW= .2514E+03 BASIN STORAGE= .5396E-03 PERCENT ERROR=    .0

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
            RS2  MANE          .82   1476.72    304.86      1.40      2.00   1474.94    306.00        1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2198E+03 EXCESS= .0000E+00 OUTFLOW= .2198E+03 BASIN STORAGE= .5399E-03 PERCENT ERROR=    .0

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
            RS2  MANE          .90   1074.18    309.58      1.15      2.00   1073.64    310.00        1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1808E+03 EXCESS= .0000E+00 OUTFLOW= .1808E+03 BASIN STORAGE= .5442E-03 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
            RS2  MANE         1.06    639.93    322.43       .79      2.00    639.73    322.00         .79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1244E+03 EXCESS= .0000E+00 OUTFLOW= .1244E+03 BASIN STORAGE= .5446E-03 PERCENT ERROR=    .0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
           RHV2  MANE         2.00      7.08    316.00      1.75      2.00      7.08    316.00        1.75

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2888E+01 EXCESS= .0000E+00 OUTFLOW= .2888E+01 BASIN STORAGE= .5656E-03 PERCENT ERROR=    .0

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
           RHV2  MANE         2.00      7.02    316.00      1.73      2.00      7.02    316.00        1.73

TINUITY SUMMARY (AC-FT) - INFLOW= .2862E+01 EXCESS= .0000E+00 OUTFLOW= .2862E+01 BASIN STORAGE= .5630E-03 PERCENT ERROR=    .0

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
           RHV2  MANE         2.00      5.93    320.00      1.50      2.00      5.93    320.00        1.50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2483E+01 EXCESS= .0000E+00 OUTFLOW= .2483E+01 BASIN STORAGE= .5801E-03 PERCENT ERROR=    .0

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
           RHV2  MANE         2.00      4.79    324.00      1.26      2.00      4.79    324.00        1.26

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2081E+01 EXCESS= .0000E+00 OUTFLOW= .2080E+01 BASIN STORAGE= .5954E-03 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
           RHV2  MANE         2.00      3.29    328.00       .92      2.00      3.29    328.00         .92

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1515E+01 EXCESS= .0000E+00 OUTFLOW= .1515E+01 BASIN STORAGE= .5886E-03 PERCENT ERROR=    .0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
          RSDL2  MANE         1.04    894.04    254.71      1.27      2.00    888.98    254.00        1.27

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3448E+02 EXCESS= .0000E+00 OUTFLOW= .3444E+02 BASIN STORAGE= .1564E-03 PERCENT ERROR=    .1

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
          RSDL2  MANE         1.04    885.48    255.21      1.25      2.00    881.43    254.00        1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3408E+02 EXCESS= .0000E+00 OUTFLOW= .3404E+02 BASIN STORAGE= .1599E-03 PERCENT ERROR=    .1

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
          RSDL2  MANE         1.17    486.69    254.94       .97      2.00    486.38    256.00         .97
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2636E+02 EXCESS= .0000E+00 OUTFLOW= .2634E+02 BASIN STORAGE= .1626E-03 PERCENT ERROR=    .1

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
           RSDL2  MANE        1.28    323.47    257.63       .69      2.00    323.10    258.00        .69

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1867E+02 EXCESS= .0000E+00 OUTFLOW= .1867E+02 BASIN STORAGE= .1658E-03 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
           RSDL2  MANE        1.48    156.83    267.28       .34      2.00    152.46    266.00        .34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9165E+01 EXCESS= .0000E+00 OUTFLOW= .9162E+01 BASIN STORAGE= .1614E-03 PERCENT ERROR=    .0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
          RN11NP  MANE        1.41    149.00    245.58      1.18      2.00    149.00    246.00       1.18

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1219E+02 EXCESS= .0000E+00 OUTFLOW= .1219E+02 BASIN STORAGE= .1305E-07 PERCENT ERROR=   -.1

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
          RN11NP  MANE        1.33    149.00    245.39      1.18      2.00    149.00    246.00       1.18

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1212E+02 EXCESS= .0000E+00 OUTFLOW= .1213E+02 BASIN STORAGE= .1900E-07 PERCENT ERROR=   -.1

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
          RN11NP  MANE        1.38    149.00    253.35      1.16      2.00    149.00    254.00       1.16

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1192E+02 EXCESS= .0000E+00 OUTFLOW= .1193E+02 BASIN STORAGE= .1473E-07 PERCENT ERROR=   -.1

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
          RN11NP  MANE        1.49    113.22    261.24       .88      2.00    113.17    260.00        .88

TINUITY SUMMARY (AC-FT) - INFLOW= .9008E+01 EXCESS= .0000E+00 OUTFLOW= .9015E+01 BASIN STORAGE= .1586E-07 PERCENT ERROR=   -.1

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
          RN11NP  MANE        1.72     57.29    261.49       .50      2.00     57.28    262.00        .50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5186E+01 EXCESS= .0000E+00 OUTFLOW= .5191E+01 BASIN STORAGE= .1568E-07 PERCENT ERROR=   -.1

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
             R89E  MANE        1.83    209.56    253.77      6.71      2.00    209.47    254.00       6.71

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1614E+02 EXCESS= .0000E+00 OUTFLOW= .1611E+02 BASIN STORAGE= .2013E-03 PERCENT ERROR=    .2

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
             R89E  MANE        1.83    208.96    253.91      6.67      2.00    208.93    254.00       6.67

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1604E+02 EXCESS= .0000E+00 OUTFLOW= .1600E+02 BASIN STORAGE= .2160E-03 PERCENT ERROR=    .2

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
             R89E  MANE        1.87    187.44    259.66      6.30      2.00    187.39    258.00       6.30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1514E+02 EXCESS= .0000E+00 OUTFLOW= .1512E+02 BASIN STORAGE= .2099E-03 PERCENT ERROR=    .2

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
             R89E  MANE        1.98    140.22    261.16      4.79      2.00    140.10    262.00       4.79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1150E+02 EXCESS= .0000E+00 OUTFLOW= .1149E+02 BASIN STORAGE= .2050E-03 PERCENT ERROR=    .1

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
```

```
R89E  MANE        2.00     73.32    264.00      2.80      2.00     73.32    264.00        2.80

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6715E+01 EXCESS= .0000E+00 OUTFLOW= .6710E+01 BASIN STORAGE= .2137E-03 PERCENT ERROR=    .1

FOR STORM = 1  STORM AREA (SQ MI) =        .01
R87BP  MANE        2.00     22.75    230.00       .17      2.00     22.75    230.00         .17

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5326E+01 EXCESS= .0000E+00 OUTFLOW= .5326E+01 BASIN STORAGE= .1675E-03 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
R87BP  MANE        2.00     22.70    230.00       .17      2.00     22.70    230.00         .17

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5326E+01 EXCESS= .0000E+00 OUTFLOW= .5326E+01 BASIN STORAGE= .1742E-03 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
R87BP  MANE        2.00     22.41    226.00       .18      2.00     22.41    226.00         .18

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5592E+01 EXCESS= .0000E+00 OUTFLOW= .5592E+01 BASIN STORAGE= .1608E-03 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
R87BP  MANE        2.00     22.76    228.00       .19      2.00     22.76    228.00         .19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5832E+01 EXCESS= .0000E+00 OUTFLOW= .5832E+01 BASIN STORAGE= .1648E-03 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
R87BP  MANE        2.00     22.19    234.00       .19      2.00     22.19    234.00         .19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5954E+01 EXCESS= .0000E+00 OUTFLOW= .5954E+01 BASIN STORAGE= .1708E-03 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
R87BA  MANE        1.31    155.57    299.35      1.68      2.00    155.56    300.00        1.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5444E+02 EXCESS= .0000E+00 OUTFLOW= .5444E+02 BASIN STORAGE= .1375E-03 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
R87BA  MANE        1.31    154.60    299.73      1.66      2.00    154.60    300.00        1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5388E+02 EXCESS= .0000E+00 OUTFLOW= .5388E+02 BASIN STORAGE= .1377E-03 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
R87BA  MANE        1.34    136.67    303.19      1.37      2.00    136.66    304.00        1.37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4450E+02 EXCESS= .0000E+00 OUTFLOW= .4450E+02 BASIN STORAGE= .1362E-03 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
R87BA  MANE        1.39    114.18    303.16      1.00      2.00    114.17    304.00        1.00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3237E+02 EXCESS= .0000E+00 OUTFLOW= .3237E+02 BASIN STORAGE= .1354E-03 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
R87BA  MANE        1.50     77.19    303.79       .52      2.00     77.19    304.00         .52

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1697E+02 EXCESS= .0000E+00 OUTFLOW= .1697E+02 BASIN STORAGE= .1374E-03 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
R83SD  MANE         .43     78.29    260.72       .11      2.00     77.73    262.00         .11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4769E+01 EXCESS= .0000E+00 OUTFLOW= .4770E+01 BASIN STORAGE= .4980E-07 PERCENT ERROR=    .0
```

```
FOR STORM = 2  STORM AREA (SQ MI) =        .50
   R83SD  MANE          .44     76.59    260.77       .11      2.00     76.12    262.00          .11

NTINUITY SUMMARY (AC-FT) - INFLOW= .4696E+01 EXCESS= .0000E+00 OUTFLOW= .4697E+01 BASIN STORAGE= .4600E-07 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
   R83SD  MANE          .53     34.28    266.69       .08      2.00     34.22    266.00          .08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3256E+01 EXCESS= .0000E+00 OUTFLOW= .3257E+01 BASIN STORAGE= .4177E-07 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
   R83SD  MANE          .58     20.06    267.01       .05      2.00     20.03    266.00          .05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2337E+01 EXCESS= .0000E+00 OUTFLOW= .2337E+01 BASIN STORAGE= .4656E-07 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
   R83SD  MANE          .62     12.17    267.76       .03      2.00     12.17    268.00          .03

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1453E+01 EXCESS= .0000E+00 OUTFLOW= .1453E+01 BASIN STORAGE= .4703E-07 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
    R91  MANE         2.00     55.00    260.00       .44      2.00     55.00    260.00          .44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9794E+01 EXCESS= .0000E+00 OUTFLOW= .9782E+01 BASIN STORAGE= .3561E-03 PERCENT ERROR=    .1

FOR STORM = 2  STORM AREA (SQ MI) =        .50
    R91  MANE         2.00     55.00    262.00       .44      2.00     55.00    262.00          .44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9753E+01 EXCESS= .0000E+00 OUTFLOW= .9741E+01 BASIN STORAGE= .3542E-03 PERCENT ERROR=    .1

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
    R91  MANE         2.00     55.00    260.00       .44      2.00     55.00    260.00          .44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9606E+01 EXCESS= .0000E+00 OUTFLOW= .9595E+01 BASIN STORAGE= .3635E-03 PERCENT ERROR=    .1

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
    R91  MANE         2.00     55.00    264.00       .41      2.00     55.00    264.00          .41

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8939E+01 EXCESS= .0000E+00 OUTFLOW= .8930E+01 BASIN STORAGE= .3723E-03 PERCENT ERROR=    .1

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
    R91  MANE         2.00     55.00    272.00       .31      2.00     55.00    272.00          .31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6877E+01 EXCESS= .0000E+00 OUTFLOW= .6871E+01 BASIN STORAGE= .3612E-03 PERCENT ERROR=    .1

FOR STORM = 1  STORM AREA (SQ MI) =        .01
    R89S  MANE        2.00       .00       .00       .00      2.00       .00    272.00          .00

FOR STORM = 2  STORM AREA (SQ MI) =        .50
    R89S  MANE        2.00       .00       .00       .00      2.00       .00    272.00          .00

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
    R89S  MANE        2.00       .00       .00       .00      2.00       .00    272.00          .00

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
    R89S  MANE        2.00       .00       .00       .00      2.00       .00    272.00          .00
```

```
FOR STORM = 5  STORM AREA (SQ MI) =       90.00
    R89S  MANE          2.00       .00       .00       .00      2.00       .00    272.00       .00


FOR STORM = 1  STORM AREA (SQ MI) =        .01
  RN11L5  MANE          2.00     84.03    254.00      4.65      2.00     84.03    254.00      4.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1293E+02 EXCESS= .0000E+00 OUTFLOW= .1291E+02 BASIN STORAGE= .2992E-03 PERCENT ERROR=    .1

FOR STORM = 2  STORM AREA (SQ MI) =        .50
  RN11L5  MANE          2.00     84.03    254.00      4.64      2.00     84.03    254.00      4.64

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1287E+02 EXCESS= .0000E+00 OUTFLOW= .1286E+02 BASIN STORAGE= .2977E-03 PERCENT ERROR=    .1

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
  RN11L5  MANE          2.00     84.01    256.00      4.62      2.00     84.01    256.00      4.62

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1284E+02 EXCESS= .0000E+00 OUTFLOW= .1282E+02 BASIN STORAGE= .3032E-03 PERCENT ERROR=    .1

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
  RN11L5  MANE          2.00     84.00    260.00      4.30      2.00     84.00    260.00      4.30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1195E+02 EXCESS= .0000E+00 OUTFLOW= .1194E+02 BASIN STORAGE= .2791E-03 PERCENT ERROR=    .1

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
  RN11L5  MANE          2.00     75.20    266.00      3.24      2.00     75.20    266.00      3.24

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9003E+01 EXCESS= .0000E+00 OUTFLOW= .8996E+01 BASIN STORAGE= .3025E-03 PERCENT ERROR=    .1

FOR STORM = 1  STORM AREA (SQ MI) =        .01
   RPPSD  MANE           .96    306.98    282.69      7.92      2.00    306.97    282.00      7.92

INUITY SUMMARY (AC-FT) - INFLOW= .7773E+02 EXCESS= .0000E+00 OUTFLOW= .7773E+02 BASIN STORAGE= .1156E-05 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
   RPPSD  MANE          1.04    306.97    254.70      7.86      2.00    306.96    280.00      7.86

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7710E+02 EXCESS= .0000E+00 OUTFLOW= .7710E+02 BASIN STORAGE= .1156E-05 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
   RPPSD  MANE          1.02    296.76    268.78      6.84      2.00    296.70    268.00      6.84

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6716E+02 EXCESS= .0000E+00 OUTFLOW= .6716E+02 BASIN STORAGE= .1156E-05 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
   RPPSD  MANE          1.08    251.07    271.45      5.30      2.00    251.01    272.00      5.30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5205E+02 EXCESS= .0000E+00 OUTFLOW= .5205E+02 BASIN STORAGE= .1156E-05 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
   RPPSD  MANE          1.02    176.56    271.52      3.15      2.00    176.54    272.00      3.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3088E+02 EXCESS= .0000E+00 OUTFLOW= .3089E+02 BASIN STORAGE= .1156E-05 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
  RCPIPE  MANE          2.00     78.05    263.71       .44      2.00     78.05    264.00       .44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5406E+01 EXCESS= .0000E+00 OUTFLOW= .5409E+01 BASIN STORAGE= .3663E-06 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
```

```
RCPIPE  MANE        2.00     78.05    263.55       .44      2.00     78.05    264.00        .44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5370E+01 EXCESS= .0000E+00 OUTFLOW= .5370E+01 BASIN STORAGE= .3770E-06 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
RCPIPE  MANE        2.00     63.59    265.77       .39      2.00     63.54    266.00        .39

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4825E+01 EXCESS= .0000E+00 OUTFLOW= .4826E+01 BASIN STORAGE= .3392E-06 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
RCPIPE  MANE        1.91     49.40    268.25       .31      2.00     49.39    268.00        .31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3752E+01 EXCESS= .0000E+00 OUTFLOW= .3754E+01 BASIN STORAGE= .3795E-06 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
RCPIPE  MANE        2.00     24.12    273.76       .17      2.00     24.11    274.00        .17

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2069E+01 EXCESS= .0000E+00 OUTFLOW= .2070E+01 BASIN STORAGE= .3127E-06 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
OUTLET  MANE        2.00     92.60    271.32       .88      2.00     92.41    272.00        .88

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7087E+02 EXCESS= .0000E+00 OUTFLOW= .7072E+02 BASIN STORAGE= .1403E+00 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
OUTLET  MANE        2.00     91.74    272.10       .87      2.00     91.63    272.00        .87

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7026E+02 EXCESS= .0000E+00 OUTFLOW= .7016E+02 BASIN STORAGE= .1389E+00 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
OUTLET  MANE        2.00     66.80    275.55       .76      2.00     66.80    276.00        .76

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6115E+02 EXCESS= .0000E+00 OUTFLOW= .6107E+02 BASIN STORAGE= .1154E+00 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
OUTLET  MANE        1.92     50.16    284.36       .59      2.00     50.16    284.00        .59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4758E+02 EXCESS= .0000E+00 OUTFLOW= .4754E+02 BASIN STORAGE= .4426E-01 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
OUTLET  MANE        2.00     27.30    430.20       .31      2.00     27.30    430.00        .31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2467E+02 EXCESS= .0000E+00 OUTFLOW= .2465E+02 BASIN STORAGE= .2549E-01 PERCENT ERROR=    .0


*** NORMAL END OF HEC-1 ***
```

APPENDIX C

HEC-1 Model Input and Output Files for Future Conditions

```
1*****************************************
 *                                       *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
 *              JUN   1998               *
 *            VERSION 4.1                *
 *                                       *
 *  RUN DATE   09MAY07  TIME  17:20:59   *
 *                                       *
 *****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX          XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

   1          ID   Project ID: GP_NW ADMPU_F1 - Major Basin: 01 - Return Period: 100 Years
   2          ID                                                                          **
   3          ID   Glendale/Peoria ADMP Northwest Region Update                            **
   4          ID   Original HEC-1 Model: EC06BASE.DAT, Wood/Patel, March 2007              **
   5          ID                          100-Year 6-Hour HEC-1 Model for Existing Conditions **
   6          ID   Modified HEC-1 Model: FC06ADMP.DAT, Wood/Patel, SZ, May 2007             **
   7          ID                          100-Year 6-Hour HEC-1 Model for Future Conditions  **
   8          ID                          with CIP Improvements                              **
   9          ID   1) NOAA2 Rain fall Data                                                   **
  10          ID   2) DDMSW MCUHP1 V3.3.2 Used                                               **
  11          ID   3) Happy Valley Road Improvements Included                                **
  12          ID   4) Pinnacle Peak Road and Channel Improvements Included                   **
  13          ID   5) Camino A Lago North Included                                           **
  14          ID   6) Beardsley Road Channel Included                                        **
  15          ID                                                                             **
  16          ID   ***************************************************************************
              *
  17          ID   ****************************************************************************
  18          ID   **                                                                          **
  19          ID   ** CONCEPT REFINEMENT STUDY FOR ROSE GARDEN LANE DRAINAGE IMPROVEMENTS      **
  20          ID   ** ORIGINAL HEC-1 FILE FROM GLENDAL/PEORIA ADMP UPDATE STUDY                **
  21          ID   ** MODIFIED HEC-1 MODEL: LEVEL3R5.DAT, Wood/Patel & CVL, May 2005           **
  22          ID   ** THIS IS THE PREFERRED ALTERNATIVE MODEL                                  **
  23          ID   ** WPA REVISED APRIL 14, 2006 FOR DOVE VALLEY RANCH IMPROVEMENTS            **
  24          ID   ** USING LATEST SURVEY DATA.                                                **
  25          ID   ****************************************************************************
              *
  26          ID   ****************************************************************************
  27          ID   **                                                                          **
  28          ID   **                    Glendale/Peoria ADMP Update                           **
  29          ID   **                                                                          **
  30          ID   ****************************************************************************
  31          ID   ****************************************************************************
  32          ID   PROJECT:                Glendale Peoria ADMP Update
  33          ID   CLIENT:                 Flood Control District of Maricopa County
  34          ID   PREPARED BY:            Entellus, Inc.
  35          ID   PROJECT No:             FCD 99-44              Entellus 310.017
  36          ID   FILE NAME: LEVEL3.DAT            CREATED DATE: JUNE 6, 2001
  37          ID   STORM:                  100-year 6-hour Storm
  38          ID   DEVELOPMENT CONDITIONS: LEVEL 3 HYDROLOGY
  39          ID
              *
              * ***************************************************************************
  40          IT       2                    1000
  41          IO       5
```

```
 42          IN      15
             *
             *DIAGRAM
             *
 43          JD    3.20    0.01
 44          PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
 45          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
 46          PC   0.962   0.972   0.983   0.991   1.000
 47          JD   3.179    0.50
 48          PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
1                                          HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 49          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
 50          PC   0.962   0.972   0.983   0.991   1.000
 51          JD   3.120    2.80
 52          PC   0.000   0.009   0.016   0.025   0.034   0.042   0.051   0.059   0.067   0.076
 53          PC   0.087   0.100   0.120   0.163   0.252   0.451   0.694   0.837   0.900   0.938
 54          PC   0.950   0.963   0.975   0.988   1.000
 55          JD   2.950    16.0
 56          PC   0.000   0.015   0.020   0.030   0.048   0.063   0.076   0.090   0.105   0.119
 57          PC   0.135   0.152   0.175   0.222   0.304   0.472   0.670   0.796   0.868   0.912
 58          PC   0.946   0.960   0.973   0.987   1.000
 59          JD   2.598    90.0
 60          PC   0.000   0.021   0.035   0.051   0.071   0.087   0.105   0.125   0.143   0.160
 61          PC   0.179   0.201   0.232   0.281   0.364   0.500   0.658   0.773   0.841   0.888
 62          PC   0.927   0.945   0.964   0.982   1.000
             *
             * ******************************************************************************
             *
             * The Following Portion Came from the HEC-1 Model for the Tierra Del Rio
             * Development.  Model CREATED BY A. MERCIER, CMX, ON 01/16/04
             * FILE NAME: TDR6DC.DAT
             *
             * ******************************************************************************
             *

 63          KK     CBA   BASIN
 64          KM   SUB-BASIN CBA
 65          BA   0.007
 66          LG    0.25    0.17    6.80    0.15      39
 67          UC   0.168   0.199
 68          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 69          UA     100
             *

 70          KK    DCBA
 71          KM   NEW RETENTION OF 0.5 AC-FT IS ADDED FOR FUTURE LAND USE
 72          DT   DCBAQ      0.5
 73          DI       0     100    1000   10000
 74          DQ       0     100    1000   10000
             *

 75          KK    RCBA
 76          KM   CHANNEL ROUTING
 77          RD    1479   .0095    .030            TRAP       0       4
             *

 78          KK     P28   BASIN
 79          KM   SUB-BASIN P28
 80          BA   0.027
 81          LG    0.25    0.13   10.10    0.04      30
 82          UC   0.334   0.328
 83          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 84          UA     100
             *
1                                          HEC-1 INPUT                                          PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 85          KK    CP28
 86          KM
 87          HC       2
             *

 88          KK    DT28
 89          KM
 90          DT    DB28   1.230
 91          DI       0     100     500    1000    5000
 92          DQ       0     100     500    1000    5000
             *
```

```
 93          KK     CBB   BASIN
 94          KM  SUB-BASIN CBB
 95          BA   0.017
 96          LG    0.25    0.25    4.55    0.41      43
 97          UC   0.179   0.142
 98          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 99          UA     100
             *

100          KK    DCBB
101          KM   NEW RETENTION OF 1.1 AC-FT IS ADDED FOR FUTURE LAND USE
102          DT   DCBBQ     1.1
103          DI       0     100    1000   10000
104          DQ       0     100    1000   10000
             *

105          KK    RCBB
106          KM  CHANNEL ROUTING
107          RD    1231   .0244    .030            TRAP       0       4
             *

108          KK   CP28a
109          KM
110          HC       2
             *

111          KK    R28a
112          KM  CHANNEL ROUTING
113          RD    1642   .0018    .030            TRAP      10       4
             *

114          KK     P27   BASIN
115          KM  SUB-BASIN P27
116          BA   0.065
117          LG    0.25    0.15    8.00    0.10      30
118          UC   0.423   0.443
119          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
120          UA     100
             *
1                                          HEC-1 INPUT                                          PAGE  4

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

121          KK    DT27
122          KM
123          DT    DB27   1.360
124          DI       0     100     500    1000    5000
125          DQ       0     100     500    1000    5000
             *

126          KK    CP27
127          KM
128          HC       2
             *

129          KK    P27A   BASIN
130          KM  SUB-BASIN P27A
131          BA   0.008
132          LG    0.25    0.25    4.35    0.46      45
133          UC   0.233   0.292
134          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
135          UA     100
             *

136          KK   DT27a
137          KM
138          DT   DB27a   0.210
139          DI       0     100     500    1000    5000
140          DQ       0     100     500    1000    5000
             *

141          KK    P27B   BASIN
142          KM  SUB-BASIN P27B
143          BA   0.013
144          LG    0.25    0.25    5.00    0.32      39
145          UC   0.256   0.341
146          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
147          UA     100
             *

148          KK   DT27b
```

```
149          KM
150          DT   DB27b   0.250
151          DI       0     100     500    1000    5000
152          DQ       0     100     500    1000    5000
             *

153          KK     CBL   BASIN
154          KM  SUB-BASIN CBL
155          BA   0.028
156          LG    0.25    0.25    5.70    0.24      33
157          UC   0.264   0.286
158          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
159          UA     100
             *
1                                        HEC-1 INPUT                                          PAGE  5

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

160          KK    DCBL
161          KM   NEW RETENTION OF 0.6 AC-FT IS ADDED FOR FUTURE LAND USE
162          DT   DCBLQ      0.6
163          DI       0     100    1000   10000
164          DQ       0     100    1000   10000
             *

165          KK    CCBL
166          KM
167          HC       4
             *

168          KK    RCBL
169          KM  NATURAL WASH ROUTING
170          RC   0.035   0.035   0.035     840   .0227
171          RX       0     7.5      15      50      60      95   102.5     110
172          RY       5     2.5       0       0       0       0     2.5       5
             *

173          KK     CBK   BASIN
174          KM  SUB-BASIN CBK
175          BA   0.052
176          LG    0.25    0.25    4.65    0.38      34
177          UC   0.252   0.187
178          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
179          UA     100
             *

180          KK    DCBK
181          KM   NEW RETENTION OF 3.6 AC-FT IS ADDED FOR FUTURE LAND USE
182          DT   DCBKQ      3.6
183          DI       0     100    1000   10000
184          DQ       0     100    1000   10000
             *

185          KK    CCBK
186          KM
187          HC       2
             *

188          KK    RCBK
189          KM  CHANNEL ROUTING
190          RD     755   .0238    .030            TRAP      10       4
             *

191          KK     P14   BASIN
192          KM  SUB-BASIN P14
193          BA   0.008
194          LG    0.25    0.25    3.81    0.62      30
195          UC   0.207   0.160
196          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
197          UA     100
             *
1                                        HEC-1 INPUT                                          PAGE  6

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

198          KK    RT14
199          KM   ADDITIONAL LAND USE RETENTION ADDED 0.6 AC-FT
200          DT    RB14      1.7
201          DI       0     100     500    1000    5000
202          DQ       0     100     500    1000    5000
             *
```

```
203          KK    CP14
204          KM
205          HC       2
             *

206          KK     P15   BASIN
207          KM  SUB-BASIN P15
208          BA   0.006
209          LG    0.25    0.27    3.23    0.92      30
210          UC   0.382   0.487
211          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
212          UA     100
             *

213          KK    DT15
214          KM   ADDITIONAL LAND USE RETENTION ADDED 0.4 AC-FT
215          DT    DB15     0.7
216          DI       0     100     500    1000    5000
217          DQ       0     100     500    1000    5000
             *

218          KK     CBJ   BASIN
219          KM  SUB-BASIN CBJ
220          BA   0.015
221          LG    0.25    0.25    4.30    0.48      40
222          UC   0.205   0.216
223          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
224          UA     100
             *

225          KK    DCBJ
226          KM   NEW RETENTION OF 1.12 AC-FT IS ADDED FOR FUTURE LAND USE
227          DT   DCBJQ    1.12
228          DI       0     100    1000   10000
229          DQ       0     100    1000   10000
             *

230          KK    CP15
231          KM
232          HC       3
             *
                                    HEC-1 INPUT                                          PAGE  7

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

233          KK     R15
234          KM  CHANNEL ROUTING
235          RD     800   .0125    .030            TRAP      10       4
             *

236          KK     CBH   BASIN
237          KM  SUB-BASIN CBH
238          BA   0.012
239          LG    0.25    0.25    4.35    0.46      45
240          UC   0.142   0.090
241          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
242          UA     100
             *

243          KK    DCBH
244          KM   NEW RETENTION OF 0.9 AC-FT IS ADDED FOR FUTURE LAND USE
245          DT   DCBHQ     0.9
246          DI       0     100    1000   10000
247          DQ       0     100    1000   10000
             *
             * Route CBH to P25S
             *

248          KK    RCBH
249          RS       3    FLOW      -1
250          RC    0.02     .02     .02    1500   .0055
251          RX     280     320     340     350     360     370     390     430
252          RY       6       4       2       0       0       2       4       6
             *

253          KK    P25S   BASIN
254          KM  SUB-BASIN P25S
255          BA   0.028
256          LG    0.25    0.15    7.60    0.11      35
257          UC   0.424   0.361
258          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
```

```
 259          UA     100
              *

 260          KK   DP25S
 261          KM   NEW RETENTION OF 0.9 AC-FT IS ADDED FOR FUTURE LAND USE
 262          DT  DP25SQ     0.9
 263          DI       0     100    1000   10000
 264          DQ       0     100    1000   10000
              *

 265          KK   CP25S
 266          KM
 267          HC       2
              *
1                                        HEC-1 INPUT                                                    PAGE  8

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 268          KK    AFR0
 269          KM  Dummy Combination at Jomax Road and AFR
 270          HC       2
              *
              * ************************************************************************

 271          KK      E1   BASIN
 272          KM  SUB-BASIN E1
 273          BA   0.014
 274          LG    0.27    0.25    3.95    0.54      22
 275          UC   0.190   0.131
 276          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 277          UA     100
              *

 278          KK     DE1
 279          KM   NEW RETENTION OF 0.72 AC-FT IS ADDED FOR FUTURE LAND USE
 280          DT    DE1Q    0.72
 281          DI       0     100    1000   10000
 282          DQ       0     100    1000   10000
              *

 283          KK     RE1
 284          KM  CHANNEL ROUTING
 285          RD    1993   .0376    .030            TRAP      10       4
              *

 286          KK      E2   BASIN
 287          KM  SUB-BASIN E2
 288          BA   0.016
 289          LG    0.30    0.25    3.95    0.48       5
 290          UC   0.288   0.271
 291          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 292          UA     100
              *

 293          KK     RE2
 294          KM  CHANNEL ROUTING
 295          RD    1108   .0542    .030            TRAP      10       4
              *

 296          KK     P13   BASIN
 297          KM  SUB-BASIN P13
 298          BA   0.059
 299          LG    0.25    0.25    3.92    0.57      28
 300          UC   0.309   0.193
 301          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 302          UA     100
              *
1                                        HEC-1 INPUT                                                    PAGE  9

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 303          KK    DT13
 304          KM   ADDITIONAL LAND USE RETENTION ADDED 0.2 AC-FT
 305          DT    DB13     1.3
 306          DI       0     100     500    1000    5000
 307          DQ       0     100     500    1000    5000
              *

 308          KK    CP13
 309          KM
 310          HC       3
```

```
            *
311         KK     R13
312         KM  CHANNEL ROUTING
313         RD    1412   .0035    .025            TRAP      10       4
            *
314         KK     P12   BASIN
315         KM  SUB-BASIN P12
316         BA   0.044
317         LG    0.25    0.26    3.58    0.71      30
318         UC   0.426   0.316
319         UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
320         UA     100
            *
321         KK    DT12
322         KM
323         DT    DB12   1.140
324         DI       0     100     500    1000    5000
325         DQ       0     100     500    1000    5000
            *
326         KK    CP12
327         KM
328         HC       2
            *
329         KK      E3   BASIN
330         KM  SUB-BASIN E3
331         BA   0.082
332         LG    0.28    0.25    3.95    0.51      13
333         UC   0.565   0.565
334         UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
335         UA     100
            *
336         KK     DE3
337         KM   NEW RETENTION OF 1.7 AC-FT IS ADDED FOR FUTURE LAND USE
338         DT    DE3Q     1.7
339         DI       0     100    1000   10000
340         DQ       0     100    1000   10000
            *
                                    HEC-1 INPUT                                          PAGE 10

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

341         KK     RE3
342         KM  CHANNEL ROUTING
343         RD    1473   .0339    .030            TRAP      10       4
            *
344         KK     P10   BASIN
345         KM  SUB-BASIN P10
346         BA   0.055
347         LG    0.25    0.26    3.78    0.63      29
348         UC   0.409   0.251
349         UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
350         UA     100
            *
351         KK    DT10
352         KM
353         DT    DB10   1.080
354         DI       0     100     500    1000    5000
355         DQ       0     100     500    1000    5000
            *
356         KK    CP10
357         KM
358         HC       2
            *
359         KK     R10
360         KM  CHANNEL ROUTING
361         RD    1947   .0035    .025            TRAP      10       4
            *
362         KK     P11   BASIN
363         KM  SUB-BASIN P11
364         BA   0.042
365         LG    0.25    0.25    3.85    0.60      30
```

```
366          UC   0.671   0.682
367          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
368          UA     100
             *

369          KK    DT11
370          KM
371          DT    DB11   1.200
372          DI       0     100     500    1000    5000
373          DQ       0     100     500    1000    5000
             *

374          KK    CP11
375          KM
376          HC       2
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

377          KK      E4   BASIN
378          KM  SUB-BASIN E4
379          BA   0.040
380          LG    0.26    0.25    4.00    0.53      26
381          UC   0.483   0.593
382          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
383          UA     100
             *

384          KK     DE4
385          KM   NEW RETENTION OF 2.5 AC-FT IS ADDED FOR FUTURE LAND USE
386          DT    DE4Q     2.5
387          DI       0     100    1000   10000
388          DQ       0     100    1000   10000
             *

389          KK     RE4
390          KM  CHANNEL ROUTING
391          KM  SHAPE REPLECTS CURRENT SET OF PLANS FOR HAPPY VALLEY ROAD DITCH
392          KM   ROUTING METHOD CHANGED TO NORMAL DEPTH
393          RS       3    FLOW      -1
394          RC    .015    .015    .015    1287   .0250
395          RX       0       2       4    9.84   12.84   15.84   21.84   27.56
396          RY    2.46    1.96    1.46       0     0.5       1       2    2.95
             *

397          KK      P9   BASIN
398          KM  SUB-BASIN P9
399          BA   0.045
400          LG    0.25    0.25    3.92    0.57      30
401          UC   0.315   0.283
402          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
403          UA     100
             *

404          KK     DT9
405          KM
406          DT     DB9   0.920
407          DI       0     100     500    1000    5000
408          DQ       0     100     500    1000    5000
             *

409          KK     HV1   BASIN
410          KM  SUB-BASIN HV1
411          BA   0.007
412          LG    0.25    0.25    3.95    0.56      30
413          UC   0.398   0.859
414          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
415          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

416          KK    DHV1
417          KM   NEW RETENTION OF 0.2 AC-FT IS ADDED FOR FUTURE LAND USE
418          DT   DHV1Q     0.2
419          DI       0     100    1000   10000
420          DQ       0     100    1000   10000
             *
```

```
421          KK     CP9
422          KM
423          HC       3
             *

424          KK      R9
425          KM  CHANNEL ROUTING
426          KM  SHAPE REFLECTS CURRENT SET OF PLANS FOR HAPPY VALLEY ROAD DITCH
427          KM   ROUTING METHOD CHANGED TO NORMAL DEPTH
428          RS       1    FLOW      -1
429          RC    .015    .015    .015     940   .0250
430          RX       0       2       4    9.84   12.84   15.84   21.84   27.56
431          RY    2.46    1.96    1.46       0     0.5       1       2    2.95
             *

432          KK      P8   BASIN
433          KM  SUB-BASIN P8
434          BA   0.013
435          LG    0.25    0.25    4.15    0.52      30
436          UC   0.508   0.595
437          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
438          UA     100
             *

439          KK     DT8
440          KM
441          DT     DB8   0.300
442          DI       0     100     500    1000    5000
443          DQ       0     100     500    1000    5000
             *

444          KK      P7   BASIN
445          KM  SUB-BASIN P7
446          BA   0.014
447          LG    0.25    0.25    3.95    0.56      30
448          UC   0.458   0.528
449          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
450          UA     100
             *

451          KK     DT7
452          KM
453          DT     DB7   0.300
454          DI       0     100     500    1000    5000
455          DQ       0     100     500    1000    5000
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

456          KK     CP7
457          KM
458          HC       3
             *

459          KK      R7
460          KM  CHANNEL ROUTING
461          KM   ROUTING METHOD CHANGED TO NORMAL DEPTH
462          RS       1    FLOW      -1
463          RC    .015    .015    .015    1488   .0250
464          RX       0       2       4    9.84   12.84   15.84   21.84   27.56
465          RY    2.46    1.96    1.46       0     0.5       1       2    2.95
             *

466          KK      P6   BASIN
467          KM  SUB-BASIN P6
468          BA   0.070
469          LG    0.25    0.25    4.25    0.49      30
470          UC   0.899   1.126
471          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
472          UA     100
             *

473          KK     DT6
474          KM
475          DT     DB6   1.760
476          DI       0     100     500    1000    5000
477          DQ       0     100     500    1000    5000
             *

478          KK     CP6
479          KM
```

```
480          HC        2
             *

481          KK   HPVLY
482          KM
483          HC        3
             *
             *
             * ***********************************************************************
             *
             *

484          KK   A11MA   BASIN
485          KM  SUB-BASIN A11M North Portion
486          BA   0.073
487          LG    0.25    0.15    8.80    0.07      30
488          UC   0.241   0.108
489          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
490          UA     100
             *
             * On-site Retention Basin
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

491          KK  A11MAQ
492          KM   ADDITIONAL LAND USE RETENTION ADDED 3.8 AC-FT
493          DT  DA11MA      7.2
494          DI       0      100     1000     1000
495          DQ       0      100     1000     1000
             *
             *
             *

496          KK  SA11MA STORAGE
497          KM  Online Detention Basin,  6.2 ac-ft.
498          RS       1     STOR        0
499          SV       0      1.5      2.5      4.0      6.2     10.0
500          SE       0        2        3        4        5        6
501          SL       0     3.14     0.62      0.5
502          SS       5       50      2.7      1.5
             *
             * ROUTE RA11MA IS 2000 FT WITH A SLOPE OF .0092
             * CROSS SECTION IS A SMALL NATURAL CHANNEL
             *

503          KK  RA11MA
504          RS      10     FLOW        0
505          RC    0.05     0.06     0.05     2000    .0092
506          RX       0      350      450      480      482      510      610      910
507          RY       7        6        5        1        0        5        6        7
             *

508          KK   A11MB   BASIN
509          KM  SUB-BASIN A11M South Portion
510          BA   0.194
511          LG    0.25    0.15    8.80    0.07      30
512          UC   0.389   0.165
513          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
514          UA     100
             *
             * On-site Retention Basin
             *     GP

515          KK  A11MBQ
516          KM   ADDITIONAL LAND USE RETENTION ADDED 0.1 AC-FT
517          DT  DA11MB      3.7
518          DI       0      100     1000     1000
519          DQ       0      100     1000     1000
             *

520          KK  SA11MB STORAGE
521          KM  Online Detention Basin, 11.2 ac-ft.
522          RS       1     STOR        0
523          SV       0      3.0      5.5      8.0     11.2     15.0
524          SE       0        2        3        4        5        6
525          SL       0     3.14     0.62      0.5
526          SS       5      200      2.7      1.5
             *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 527          KK   A11NA   BASIN
 528          KM  SUB-BASIN A11N - Revised
 529          BA   0.076
 530          LG    0.19    0.30    5.40    0.24      26
 531          UC   0.212   0.118
 532          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 533          UA     100
              *

 534          KK  DA11NA
 535          KM   NEW RETENTION OF 1.44 AC-FT IS ADDED FOR FUTURE LAND USE
 536          DT  A11NAQ    1.44
 537          DI       0     100    1000   10000
 538          DQ       0     100    1000   10000
              *

 539          KK  SA11NA STORAGE
 540          KM  Online Detention Basin,  7.3 ac-ft.
 541          RS       1    STOR       0
 542          SV       0     1.0     3.0     5.0     7.3    11.0
 543          SE       0       2       3       4       5       6
 544          SL       0    3.14    0.62     0.5
 545          SS       5     100     2.7     1.5
              *

 546          KK  RA11NA
 547          RS       9    FLOW      -1
 548          RC    0.05    0.06    0.05    2400  0.0090
 549          RX       0     350     450     480     482     510     610     910
 550          RY       7       6       5       1       0       5       6       7
              *
              * COMBINE Flows of A11NA, A11MA AND A11MB
              *

 551          KK  CA11MB
 552          HC       3
              *
              * Route Flow to A11J
              *

 553          KK  RA11MB
 554          RS       8    FLOW      -1
 555          RC    0.05    0.06    0.05    3000   .0085
 556          RX       0     350     450     480     482     510     610     910
 557          RY       7       6       5       1       0       5       6       7
              *

 558          KK    A11O   BASIN
 559          KM  SUBASIN A11O
 560          BA   0.056
 561          LG    0.21    0.27    6.20    0.18      23
 562          UC   0.257   0.228
 563          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 564          UA     100
              *
1                                        HEC-1 INPUT                                          PAGE 16

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 565          KK   DA11O
 566          KM   NEW RETENTION OF 0.8 AC-FT IS ADDED FOR FUTURE LAND USE
 567          DT  DA11OQ     0.8
 568          DI       0     100    1000   10000
 569          DQ       0     100    1000   10000
              *

 570          KK   SA11O STORAGE
 571          KM  Online Detention Basin,  3.1 ac-ft.
 572          RS       1    STOR       0
 573          SV       0     0.5     1.0     2.0     3.1     5.0
 574          SE       0       2       3       4       5       6
 575          SL       0    3.14    0.62     0.5
 576          SS       5      50     2.7     1.5
              *
              * ROUTE A11O to A11KB
              *

 577          KK   RA11O
 578          RS       8    FLOW      -1
```

```
579          RC    0.05     .06     .05    2500   .0085
580          RX       0     350     450     480     482     510     610     910
581          RY       7       6       5       1       0       5       6       7
             *

582          KK   A11KB   BASIN
583          KM  SUB-BASIN A11K North Portion
584          BA   0.107
585          LG    0.25    0.25    4.70    0.36      30
586          UC   0.390   0.206
587          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
588          UA     100
             *

589          KK  SA11KB STORAGE
590          KM  Online Detention Basin, 10.7 ac-ft.
591          RS       1    STOR       0
592          SV       0     3.0     5.0     7.0    10.7    15.0
593          SE       0       2       3       4       5       6
594          SL       0    3.14    0.62     0.5
595          SS       5     100     2.7     1.5
             *

596          KK   A11KA   BASIN
597          KM  SUB-BASIN A11K East Portion
598          BA   0.081
599          LG    0.22    0.27    4.45    0.41      42
600          UC   0.257   0.178
601          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
602          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

603          KK  DA11KA
604          KM   NEW RETENTION OF 0.7 AC-FT IS ADDED FOR FUTURE LAND USE
605          DT  A11KAQ     0.7
606          DI       0     100    1000   10000
607          DQ       0     100    1000   10000
             *

608          KK  SA11KA STORAGE
609          KM  Online Detention Basin,  9.6 ac-ft.
610          RS       1    STOR       0
611          SV       0     2.0     4.0     6.0     9.6    14.0
612          SE       0       2       3       4       5       6
613          SL       0    3.14    0.62     0.5
614          SS       5      50     2.7     1.5
             *
             * ROUTE A11KA to A11KB
             *

615          KK  RA11KA
616          RS       7    FLOW      -1
617          RC    0.05     .06     .05    2000   .0075
618          RX       0     350     450     480     482     510     610     910
619          RY       7       6       5       1       0       5       6       7
             *
             * COMBINE A11KB,A11KA AND A11O
             *

620          KK  CA11KB
621          HC       3
             *
             * ROUTE Flow of CA11KB to A11KC
             *

622          KK  RA11KB
623          RS       7    FLOW      -1
624          RC    0.05    0.06    0.05    1600  0.0055
625          RX       0      50     250     350     360     420     620     720
626          RY      10       8       6       2       0       6       8      10
             *

627          KK    A11G   BASIN
628          KM  SUB-BASIN A11G
629          BA   0.060
630          LG    0.30    0.25    4.55    0.35      26
631          UC   0.411   0.355
632          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
633          UA     100
```

```
                *
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 634            KK   DA11G
 635            KM   NEW RETENTION OF 0.96 AC-FT IS ADDED FOR FUTURE LAND USE
 636            DT  DA11GQ     0.96
 637            DI       0      100     1000    10000
 638            DQ       0      100     1000    10000
                *
                * ROUTE A11G to A11KC
                *

 639            KK  RA11GN
 640            RS       6     FLOW       -1
 641            RC    0.05      .06      .05     2300    0.010
 642            RX       0      350      450      480      482      510      610      910
 643            RY       7        6        5        1        0        5        6        7
                *

 644            KK   A11KC   BASIN
 645            KM  SUB-BASIN A11K West Portion
 646            BA   0.132
 647            LG    0.26     0.25     4.15     0.51       30
 648            UC   0.371    0.180
 649            UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
 650            UA     100
                *

 651            KK  DA11KC
 652            KM   NEW RETENTION OF 1.8 AC-FT IS ADDED FOR FUTURE LAND USE
 653            DT  A11KCQ      1.8
 654            DI       0      100     1000    10000
 655            DQ       0      100     1000    10000
                *

 656            KK  SA11KC STORAGE
 657            KM  Online Detention Basin,  6.4 ac-ft.
 658            RS       1     STOR        0
 659            SV       0      1.5      2.5      4.0      6.4     10.0
 660            SE       0        2        3        4        5        6
 661            SL       0     3.14     0.62      0.5
 662            SS       5       50      2.7      1.5
                *
                * COMBINE RA11KB, RA11G, AND A11KC
                *

 663            KK  CA11KC
 664            HC       3
                *
                * ROUTE CA11KC to A11J
                * CROSS SECTION IS A MEDIUM NATURAL CHANNEL
                *
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 665            KK  RA11KC
 666            RS       3     FLOW       -1
 667            RC    0.05      .06      .05     1000   .0055
 668            RX       0       50      250      350      360      420      620      720
 669            RY      10        8        6        2        0        6        8       10
                *

 670            KK    A11J   BASIN
 671            KM  SUB-BASIN A11J
 672            BA   0.112
 673            LG    0.25     0.15     7.30     0.13       29
 674            UC   0.549    0.422
 675            UA       0      4.5     12.6     23.2     35.8     50.0     64.2     76.8     87.4     95.5
 676            UA     100
                *

 677            KK   DA11J
 678            KM   NEW RETENTION OF 3.0 AC-FT IS ADDED FOR FUTURE LAND USE
 679            DT  DA11JQ      3.0
 680            DI       0      100     1000    10000
 681            DQ       0      100     1000    10000
                *
```

```
682          KK   SA11J STORAGE
683          KM  Online Detention Basin,  4.4 ac-ft.
684          RS       1     STOR       0
685          SV       0      1.0      2.0      3.0      4.4      7.0
686          SE       0        2        3        4        5        6
687          SL       0     3.14     0.62      0.5
688          SS       5       50      2.7      1.5
             *
             * COMBINE Flows of RA11MB, A11J, AND RA11KC
             *

689          KK   CA11J
690          HC       3
             *

691          KK    A11L   BASIN
692          KM  SUB-BASIN A11L
693          BA   0.264
694          LG    0.25     0.10    11.20     0.03       30
695          UC   0.679    0.494
696          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
697          UA     100
             *
             * On-site Retention Basin
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

698          KK  DA11LQ
699          KM   ADDITIONAL LAND USE RETENTION ADDED 2.8 AC-FT
700          DT   DA11L     10.4
701          DI       0      100     1000     1000
702          DQ       0      100     1000     1000
             *
             * ROUTE FLOW TO A11I FROM A11L
             *

703          KK   RA11L
704          RS       9     FLOW       -1
705          RC    0.05     0.06     0.05     2600    .0069
706          RX       0      350      450      480      482      510      610      910
707          RY       7        6        5        1        0        5        6        7
             *

708          KK    A11I   BASIN
709          KM  SUB-BASIN A11I
710          BA   0.153
711          LG    0.25     0.10    11.20     0.03       29
712          UC   0.516    0.325
713          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
714          UA     100
             *
             * On-site Retention Basin
             *

715          KK  DA11IQ
716          KM   ADDITIONAL LAND USE RETENTION ADDED 0.32 AC-FT
717          DT   DA11I     12.0
718          DI       0      100     1000     1000
719          DQ       0      100     1000     1000
             *
             * COMBINE Flows of CA11J, A11I, and RA11L
             *

720          KK   CA11I
721          HC       3
             *
             * ROUTE FLOW TO A11EB FROM CA11I
             *

722          KK   RA11I
723          RS       9     FLOW       -1
724          RC    0.05      .06      .05     4000    .0075
725          RX       0       50      100      150      180      230      280      330
726          RY      10        8        6        0        0        6        8       10
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
727          KK   A11EA   BASIN
728          KM  SUB-BASIN A11E East Portion
729          BA   0.144
730          LG    0.30    0.25    4.30    0.44      19
731          UC   0.576   0.517
732          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
733          UA     100
             *

734          KK   D11EA
735          KM   NEW RETENTION OF 4.6 AC-FT IS ADDED FOR FUTURE LAND USE
736          DT  D11EAQ     4.6
737          DI       0     100    1000   10000
738          DQ       0     100    1000   10000
             *
             * ROUTE FLOW TO A11EB FROM A11EA
             *

739          KK  RA11EA
740          RS       9    FLOW      -1
741          RC    0.05     .06     .05    1500   .0065
742          RX       0      50     250     320     360     420     620     720
743          RY      10       8       6       0       0       6       8      10
             *

744          KK   A11EB   BASIN
745          KM  SUB-BASIN A11E West Portion
746          BA   0.190
747          LG    0.26    0.25    4.45    0.45      28
748          UC   0.768   0.762
749          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
750          UA     100
             *

751          KK   D11EB
752          KM   NEW RETENTION OF 11.2 AC-FT IS ADDED FOR FUTURE LAND USE
753          DT  D11EBQ    11.2
754          DI       0     100    1000   10000
755          DQ       0     100    1000   10000
             *
             * COMBINE Flows of A11EA, A11EB, and RA11I
             *

756          KK  CA11EB
757          HC       3
             *

758          KK      41   BASIN
759          KM  SUB-BASIN 41
760          BA   0.054
761          LG    0.14    0.33    4.40    0.34      22
762          UC   0.193   0.126
763          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
764          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

765          KK     D41
766          KM   NEW RETENTION OF 2.48 AC-FT IS ADDED FOR FUTURE LAND USE
767          DT    D41Q    2.48
768          DI       0     100    1000   10000
769          DQ       0     100    1000   10000
             *

770          KK     B41
771          KM  Storage Route Runoff through Detention Basin @41
772          KM  Outlet Structure:  1-48" PIPE
773          RS       1    STOR       0
774          SA     .09     .18     .27      .4
775          SE    1433    1435    1437    1440
776          SQ       0      23      71     132
             *

777          KK      42   BASIN
778          KM  SUB-BASIN 42
779          BA   0.075
780          LG    0.24    0.28    4.25    0.40      47
781          UC   0.240   0.166
782          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
783          UA     100
```

```
                *
 784            KK     D42
 785            KM   NEW RETENTION OF 3.92 AC-FT IS ADDED FOR FUTURE LAND USE
 786            DT    D42Q     3.92
 787            DI       0      100     1000    10000
 788            DQ       0      100     1000    10000
                *

 789            KK     B42
 790            KM  Storage Route Runoff through Detention Basin @42
 791            KM  Outlet Structure:  48" PIPE
 792            RS       1     STOR        0
 793            SA     .07      .13      .21      .31       .4
 794            SE    1427     1429     1431     1433     1435
 795            SQ       0       23       71      112      147
                *
                * COMBINE Flows of 41 and 42
                *

 796            KK     C41
 797            HC       2
                *
                * ROUTE FLOW TO A11F FROM C41
                *
1                                   HEC-1 INPUT                                          PAGE 23

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 798            KK    RC41
 799            RS      15     FLOW       -1
 800            RC    0.05      .06      .05     5200    .0075
 801            RX       0       50       70       90      110      130      150      200
 802            RY       6        5        3        0        0        3        5        6
                *

 803            KK    A11F   BASIN
 804            KM  SUB-BASIN A11F
 805            BA   0.334
 806            LG    0.29     0.25     4.35     0.43       19
 807            UC   0.591    0.395
 808            UA       0      4.5     12.6     23.2     35.8     50.0     64.2     76.8     87.4     95.5
 809            UA     100
                *

 810            KK   DA11F
 811            KM   NEW RETENTION OF 11.4 AC-FT IS ADDED FOR FUTURE LAND USE
 812            DT  DA11FQ     11.4
 813            DI       0      100     1000    10000
 814            DQ       0      100     1000    10000
                *
                * COMBINE Flows of A11F and RC41
                *

 815            KK   CA11F
 816            HC       2
                *
                * COMBINE Flows of CA11F and CA11EB
                *

 817            KK   CA11E
 818            HC       2
                *
                * ROUTE FLOW TO A11A FROM CA11E
                *

 819            KK   RA11E
 820            RS       3     FLOW       -1
 821            RC    0.05      .06      .05     1700    .0070
 822            RX       0       50       70       90      110      130      150      200
 823            RY       6        5        3        0        0        3        5        6
                *

 824            KK    A09U   BASIN
 825            KM  SUB-BASIN A09U
 826            BA   0.175
 827            LG    0.25     0.28     4.20     0.41       23
 828            UC   0.314    0.203
 829            UA       0      4.5     12.6     23.2     35.8     50.0     64.2     76.8     87.4     95.5
 830            UA     100
                *
                                    HEC-1 INPUT                                          PAGE 24
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 831          KK   DA09U
 832          KM   NEW RETENTION OF 4.2 AC-FT IS ADDED FOR FUTURE LAND USE
 833          DT  DA09UQ     4.2
 834          DI       0     100    1000   10000
 835          DQ       0     100    1000   10000
              *
              * Happy Valley RD. Improvements
              * 0 % FLOW GOES DOWN to South,100% WEST along HAPPY VALLEY
              *

 836          KK   DA09U
 837          DT   A09UI
 838          DI       0      10     100    1000    5000
 839          DQ       0       0       0       0       0
              *
              * ROUTE FLOW TO CA09T FROM A09U
              *

 840          KK  RA09UW
 841          RS      15    FLOW      -1
 842          RC    0.05    0.03     .05    4000   .0075
 843          RX       0     200     210     220     240     270     295     595
 844          RY     4.5       2       0       2       3       3     3.5     4.5
              *

 845          KK    A09T   BASIN
 846          KM  SUB-BASIN A09T
 847          BA   0.182
 848          LG    0.23    0.25    4.30    0.49      35
 849          UC   0.460   0.317
 850          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 851          UA     100
              *

 852          KK   DA09T
 853          KM   NEW RETENTION OF 9.5 AC-FT IS ADDED FOR FUTURE LAND USE
 854          DT  DA09TQ     9.5
 855          DI       0     100    1000   10000
 856          DQ       0     100    1000   10000
              *
              * COMBINE  CA09U AND A09T
              *

 857          KK   CA09T
 858          HC       2
              *
              * HAPPY VALLEY ROAD Improvements, 100% Flow TO THE WEST
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 859          KK   DA09T
 860          DT   A09TI
 861          DI       0      10     100    1000   10000
 862          DQ       0       0       0       0       0
              *
              * ROUTE FLOW TO CX22 FROM CA09T
              *

 863          KK  RA09TW
 864          RS       5    FLOW      -1
 865          RC    0.05    0.03    0.05    1500   .0025
 866          RX       0     200     210     220     230     270     295     595
 867          RY       6       4       0       0       4       4     5.5       7
              *

 868          KK    A11A   BASIN
 869          KM  SUB-BASIN A11A
 870          BA   0.298
 871          LG    0.20    0.25    6.00    0.22      44
 872          UC   0.543   0.344
 873          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 874          UA     100
              *
              * On-site Retention Basin
              *
```

```
875          KK  DA11AQ
876          KM   ADDITIONAL LAND USE RETENTION ADDED 6.1 AC-FT
877          DT   DA11A    13.8
878          DI       0     100    1000    1000
879          DQ       0     100    1000    1000
             *
             * Combine Flows of RA09TW, CA11E,and A11A
             *

880          KK    CX23
881          HC       3
             *
             * ROUTE FLOW TO CS1 FROM CX23
             *

882          KK    RX23
883          RS       7    FLOW      -1
884          RC    0.05     .06     .05    4000   .0074
885          RX       0      50     150     175     275     300     400     500
886          RY      12       8       6       0       0       6       8      12
             *

887          KK      S1   BASIN
888          KM  SUB-BASIN S1
889          BA   0.124
890          LG    0.28    0.25    4.25    0.50      21
891          UC   0.559   0.491
892          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1                                         HEC-1 INPUT                                          PAGE 26

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

893          UA     100
             *

894          KK     DS1
895          KM   NEW RETENTION OF 1.9 AC-FT IS ADDED FOR FUTURE LAND USE
896          DT    DS1Q     1.9
897          DI       0     100    1000   10000
898          DQ       0     100    1000   10000
             *

899          KK      P2   BASIN
900          KM  SUB-BASIN P2
901          BA   0.051
902          LG    0.25    0.25    4.45    0.43      29
903          UC   0.316   0.203
904          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
905          UA     100
             *

906          KK     RT2
907          KM
908          DT     RB2   4.740
909          DI       0     100     500    1000    5000
910          DQ       0     100     500    1000    5000
             *

911          KK     CS1
912          KM
913          HC       3
             *

914          KK     RS1
915          KM  CHANNEL ROUTING
916          RD     924   .0108    .035            TRAP     200       6
             *

917          KK      S2   BASIN
918          KM  SUB-BASIN S2
919          BA   0.012
920          LG    0.30    0.25    4.70    0.32       7
921          UC   0.189   0.105
922          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
923          UA     100
             *

924          KK     DS2
925          KM   NEW RETENTION OF 0.6 AC-FT IS ADDED FOR FUTURE LAND USE
926          DT    DS2Q     0.6
927          DI       0     100    1000   10000
928          DQ       0     100    1000   10000
             *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  929         KK      S3   BASIN
  930         KM  SUB-BASIN S3
  931         BA   0.006
  932         LG    0.30    0.25    4.65    0.32       5
  933         UC   0.154   0.090
  934         UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
  935         UA     100
              *

  936         KK     CS2
  937         KM
  938         HC       3
              *

  939         KK     RS2
  940         KM  CHANNEL ROUTING
  941         RD     665   .0075    .020            TRAP      20       4
              *

  942         KK      P3   BASIN
  943         KM  SUB-BASIN P3
  944         BA   0.054
  945         LG    0.25    0.25    4.50    0.42      30
  946         UC   0.431   0.361
  947         UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
  948         UA     100
              *

  949         KK     RT3
  950         KM
  951         DT     RB3   5.230
  952         DI       0     100     500    1000    5000
  953         DQ       0     100     500    1000    5000
              *

  954         KK     CP3
  955         KM
  956         HC       2
              *

  957         KK     P4b   BASIN
  958         KM  SUB-BASIN P4b
  959         BA   0.017
  960         LG    0.25    0.25    4.45    0.43      30
  961         UC   0.225   0.132
  962         UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
  963         UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  964         KK    RT4b
  965         KM
  966         DT    RB4b   0.320
  967         DI       0     100     500    1000    5000
  968         DQ       0     100     500    1000    5000
              *

  969         KK      S4   BASIN
  970         KM  SUB-BASIN S4
  971         BA   0.014
  972         LG    0.30    0.25    4.80    0.32       8
  973         UC   0.351   0.530
  974         UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
  975         UA     100
              *

  976         KK     DS4
  977         KM   NEW RETENTION OF 0.4 AC-FT IS ADDED FOR FUTURE LAND USE
  978         DT    DS4Q     0.4
  979         DI       0     100    1000   10000
  980         DQ       0     100    1000   10000
              *

  981         KK      P1   BASIN
  982         KM  SUB-BASIN P1
```

```
 983          BA   0.029
 984          LG    0.30    0.25    6.00    0.18       5
 985          UC   0.345   0.369
 986          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
 987          UA     100
              *

 988          KK     DT1
 989          KM   ADDITIONAL LAND USE RETENTION ADDED 1.4 AC-FT
 990          DT     DB1     1.9
 991          DI       0     100     500    1000    5000
 992          DQ       0     100     500    1000    5000
              *

 993          KK     CP1
 994          KM
 995          HC       2
              *

 996          KK     HV2   BASIN
 997          KM  SUB-BASIN HV2
 998          BA   0.031
 999          LG    0.25    0.25    4.45    0.43      29
1000          UC   1.500   4.221
1001          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1002          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1003          KK    RHV2
1004          KM  CHANNEL ROUTING
1005          RD     910   .0033    .015            TRAP      10       4
              *

1006          KK   DTHV2
1007          KM
1008          KM   ADDITIONAL LAND USE RETENTION ADDED 0.1 AC-FT
1009          DT   DBHV2     0.8
1010          DI       0     100     500    1000    5000
1011          DQ       0     100     500    1000    5000
              *

1012          KK     P4a   BASIN
1013          KM  SUB-BASIN P4a
1014          BA   0.039
1015          LG    0.25    0.25    4.00    0.54      31
1016          UC   0.497   0.446
1017          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1018          UA     100
              *

1019          KK    DT4a
1020          KM
1021          DT    DB4a   0.740
1022          DI       0     100     500    1000    5000
1023          DQ       0     100     500    1000    5000
              *

1024          KK   SOUTH
1025          KM  Combined at South HVR
1026          HC       5
              *

1027          KK    N11O   BASIN
1028          KM  SUB-BASIN N11O
1029          BA   0.054
1030          LG    0.30    0.25    4.50    0.42      15
1031          UC   0.431   0.316
1032          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1033          UA     100
              *

1034          KK   DN11O
1035          KM   NEW RETENTION OF 2.9 AC-FT IS ADDED FOR FUTURE LAND USE
1036          DT  DN11OQ     2.9
1037          DI       0     100    1000   10000
1038          DQ       0     100    1000   10000
              *
              * A DITCH TO THE WEST THAT CARRIES A MAX. FLOW OF 47 CFS.
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1039          KK   DN11O
1040          DT   N11OI
1041          DI       0      30      60     100     300     600    1200    2200
1042          DQ       0      27      54      90     270     553    1153    2153
              *
              * ROUTE RN11OW IS 2752 FT WITH A SLOPE OF .0025
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              *

1043          KK  RN11OW
1044          RS      15    FLOW      -1
1045          RC    0.05     .06     .05    2752   .0025
1046          RX       0      50     250     350     360     420     620     720
1047          RY      10       8       6       2       0       6       8      10
              *
              * RECOVER DIVERTED FLOW FROM CA09T
              *

1048          KK  DRA09T
1049          DR   A09TI
              *
              * ROUTE RA09TS IS 2824 FT WITH A SLOPE OF .0057
              * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
              * ROUTE FLOW TO CA09R FROM CA09T
              *

1050          KK  RA09TS
1051          RS       1    FLOW      -1
1052          RC    0.05     .06     .05    2824   .0057
1053          RX       0     400     800    1200    1600    2000    2400    2800
1054          RY       3       1      .5       0       0      .5       1       3
              *

1055          KK    A09R   BASIN
1056          KM  SUB-BASIN A09R
1057          BA   0.144
1058          LG    0.22    0.25    4.25    0.53      42
1059          UC   0.623   0.508
1060          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1061          UA     100
              *

1062          KK   DA09R
1063          KM   NEW RETENTION OF 10.5 AC-FT IS ADDED FOR FUTURE LAND USE
1064          DT  DA09RQ    10.5
1065          DI       0     100    1000   10000
1066          DQ       0     100    1000   10000
              *
              * COMBINE  CN11O,  CA09T, AND A09R
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1067          KK   CA09R
1068          HC       3
              *
              * EXISTING CONDITIONS FLOW DOWN LAKE PLEASANT RD
              *

1069          KK   DA09R
1070          DT   A09RI
1071          DI       0      10      50     100     300     500     800    1000    2000
1072          DQ       0     9.9    49.3    99.4   299.5     499     799     999    1999
              *
              * ROUTE RA09RW IS 1609 FT WITH A SLOPE OF .0012
              * *** ROUTE FLOW TO CA09S FROM CA09R  **************************
              *

1073          KK  RA09RW
1074          RS      15    FLOW      -1
1075          RC    0.05    0.04     .05    1609  0.0012
1076          RX       0     200     300     325     340     360     380     880
1077          RY       5       4       3       2       3       3       2     3.5
              *

1078          KK    A09S   BASIN
```

```
1079        KM  SUB-BASIN A09S
1080        BA   0.072
1081        LG    0.13    0.25    4.90    0.40      72
1082        UC   0.506   0.433
1083        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1084        UA     100
            *
            * On-site Retention Basin
            *     GP

1085        KK  DA09SQ
1086        DT   DA09S     7.0
1087        DI       0     100    1000    1000
1088        DQ       0     100    1000    1000
            *
            * *** COMBINE  RA09RW AND A09S ***********************************************
            *

1089        KK   CA09S
1090        HC       2
            *

1091        KK  RA09SW
1092        RS       6    FLOW      -1
1093        RC    0.03    0.03    0.03    1600  0.0085
1094        RX       0      50     100     120     140     160     210     260
1095        RY       6       4       3       0       0       3       4       6
            *
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1096        KK   A09QA   BASIN
1097        KM  SUB-BASIN A09Q North Portion
1098        BA   0.092
1099        LG    0.30    0.25    4.20    0.50      15
1100        UC   0.499   0.307
1101        UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1102        UA     100
            *

1103        KK  DA09QA
1104        KM   NEW RETENTION OF 4.5 AC-FT IS ADDED FOR FUTURE LAND USE
1105        DT  A09QAQ     4.5
1106        DI       0     100    1000   10000
1107        DQ       0     100    1000   10000
            *
            * *** COMBINE  Flows of RA09SW and A09QA ***************************************
            *

1108        KK  CA09QA
1109        HC       2
            *
            * *** DIVERTED  MAIN (SOUTH), DIVERTED (WEST)  ****************************
            * FUTURE SPLIT: ALL EXISTING FLOW TO THE SOUTH
            *

1110        KK  DA09QA
1111        DT  A09QAI
1112        DI       0      10      30      50     100     500    1000    2000
1113        DQ       0     9.2    29.3    49.4    99.5     499     999    1999
            *
            * *** ROUTE CA09QA TO CA99YA ***********************************************
            *

1114        KK  RA09QW
1115        RS       4    FLOW      -1
1116        RC    0.03    0.03    0.03    2400  0.0085
1117        RX       0      50     100     120     140     160     210     260
1118        RY       6       4       3       0       0       3       4       6
            *

1119        KK   A99YA   BASIN
1120        KM  SUB-BASIN A99Y East Portion
1121        BA   0.103
1122        LG    0.30    0.25    4.90    0.33      14
1123        UC   0.397   0.279
1124        UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1125        UA     100
            *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1126          KK  DA99YA
1127          KM   NEW RETENTION OF 5.3 AC-FT IS ADDED FOR FUTURE LAND USE
1128          DT  A99YAQ     5.3
1129          DI       0     100    1000   10000
1130          DQ       0     100    1000   10000
              *
              * *** COMBINE  RA09QW AND A99YA ***********************************************
              *

1131          KK  CA99YA
1132          HC       2
              *

1133          KK  RA99YA
1134          RS       6    FLOW      -1
1135          RC    0.03    0.03    0.03    2000  0.0085
1136          RX       0      50     100     120     140     160     210     260
1137          RY       6       4       3       0       0       3       4       6
              *

1138          KK   A99YB   BASIN
1139          KM  SUB-BASIN A99Y West Portion
1140          BA   0.171
1141          LG    0.13    0.24    3.78    0.51      32
1142          UC   0.414   0.215
1143          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1144          UA     100
              *

1145          KK  DA99YB
1146          KM   NEW RETENTION OF 10.6 AC-FT IS ADDED FOR FUTURE LAND USE
1147          DT  A99YBQ    10.6
1148          DI       0     100    1000   10000
1149          DQ       0     100    1000   10000
              *
              * *** COMBINE  RA99YA,SOUTH AND A99YB ****************************************
              *

1150          KK  CA99YB
1151          HC       3
              *
              *
              * Dummy Combining at AFR and South of Happy Valley Rd.
              *

1152          KK    AFR1
1153          HC       3
              *
              * North Portion of N11N
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1154          KK   N11NA   BASIN
1155          KM  UPPER PART OF SUBBASIN N11N
1156          BA   0.022
1157          LG    0.12    0.34    4.00    0.40      29
1158          UC   0.130   0.078
1159          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1160          UA     100
              *

1161          KK  DN11NA
1162          KM   NEW RETENTION OF 1.2 AC-FT IS ADDED FOR FUTURE LAND USE
1163          DT  N11NAQ     1.2
1164          DI       0     100    1000   10000
1165          DQ       0     100    1000   10000
              *

1166          KK  RN11NA
1167          RS      15    FLOW      -1
1168          RC    0.05    0.04     .05    3500  0.0083
1169          RX       0       1      51      52      82      83     108     608
1170          RY    9.25    1.25    0.25       0       0    0.25    1.25    3.75
              *

1171          KK   N11NC   BASIN
1172          KM  East PART OF SUBBASIN N11N
```

```
1173          BA   0.171
1174          LG    0.29    0.25    4.20    0.46       9
1175          UC   0.431   0.261
1176          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1177          UA     100
              *

1178          KK  DN11NC
1179          KM   NEW RETENTION OF 3.7 AC-FT IS ADDED FOR FUTURE LAND USE
1180          DT  N11NCQ     3.7
1181          DI       0     100    1000   10000
1182          DQ       0     100    1000   10000
              *

1183          KK  CN11NC
1184          HC       2
              *

1185          KK  DN11NC
1186          KM  DIVERT FLOW 10-YEAR RUNOFF (149 cfs) to East
1187          DT   N11NP
1188          DI       0     149    2000
1189          DQ       0     149     149
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1190          KK  RN11NC
1191          KM  ROUTE N11NC to South
1192          RS       4    FLOW      -1
1193          RC     .04    0.04     .04    1600   .0089
1194          RX       0      10      20      30      70      80      90     100
1195          RY       3       2       1       0       0       1       2       3
              *

1196          KK   N11ND   BASIN
1197          KM  LOWER PART OF SUBBASIN N11N
1198          BA   0.053
1199          LG    0.29    0.25    4.60    0.36      12
1200          UC   0.564   0.502
1201          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1202          UA     100
              *

1203          KK    N11K   BASIN
1204          KM  SUB-BASIN N11K
1205          BA   0.167
1206          LG    0.30    0.25    4.20    0.46       9
1207          UC   0.772   0.599
1208          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1209          UA     100
              *

1210          KK   CN11K
1211          KM  COMBINE N11K, RN11NC AND N11ND AT 91ST AVENUE AND PINNACLE PEAK
1212          KM   Near Concentration point "243"
1213          HC       3
              *
              * 83rd Ave Study Divert 10-Year Flow (55 cfs) into SD to East
              * Based on FCD's review comments on 3-28-07 (Steve T.)
              * 100% flow to west along Pinnacle Peak Road
              *

1214          KK   DN11K
1215          DT   N11KP
1216          DI       0     100    1000    5000
1217          DQ       0       0       0       0
              *

1218          KK  DN11KW
1219          DT  DN11KS
1220          DI       0     100    1000    5000
1221          DQ       0       0       0       0
              *
              * ROUTE FLOW TO CN11J FROM CN11K
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
1222          KK  RN11KW
1223          RS       8    FLOW      -1
1224          RC     .04    0.04     .04    2600   .0019
1225          RX       0     100     140     160     200     300     400     500
1226          RY      10       9       0       0       9      10      11      12
              *
              * RECOVER DIVERTED FLOW FROM A09U
              *

1227          KK  BA09UI
1228          DR   A09UI
              *
              * ROUTE RA09US IS 3000 FT WITH A SLOPE OF 0.0076
              * CROSS SECTION IS A SMALL ROAD WITH HOMES ON THE WEST SIDE
              * ALONG local STREETS
              * *** ROUTE FLOW TO N11NB FROM Happy Valley RD (CA09U)
              *

1229          KK  RA09US
1230          RS       1    FLOW      -1
1231          RC    0.04    0.03    0.04    3000  0.0076
1232          RX       0       1      54      55      95      96     124     624
1233          RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
              *
              *

1234          KK   N11NB   BASIN
1235          KM  SUB-BASIN N11NBN
1236          BA   0.140
1237          LG    0.30    0.25    4.70    0.32       7
1238          UC   0.562   0.475
1239          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1240          UA     100
              *

1241          KK  DN11NB
1242          KM   NEW RETENTION OF 1.3 AC-FT IS ADDED FOR FUTURE LAND USE
1243          DT  N11NBQ     1.3
1244          DI       0     100    1000   10000
1245          DQ       0     100    1000   10000
              *
              * Combining Flows
              *

1246          KK  CN11NB
1247          HC       2
              *
              * ROUTE RN11NW IS 2521 FT WITH A SLOPE OF 0.0016
              * CROSS SECTION IS A SMALL ROAD WITH HOMES TO BOTH SIDES
              * ALONG Mariposa GrANDe
              *
1                                        HEC-1 INPUT                                                PAGE 37

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1248          KK  RN11NW
1249          RS      14    FLOW      -1
1250          RC    0.04    0.03    0.04    2521  0.0016
1251          RX       0       1      70      71      96      97     182     183
1252          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              * RECOVER DIVERTED FLOW FROM N11OI

1253          KK  BN11OI
1254          DR   N11OI
              *
              * ROUTE RN11OS IS 1184 FT WITH A SLOPE OF 0.0068
              * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
              * ALONG natural pathways
              * ROUTE FLOW TO Mariposa GrANDe (CN11M) FROM CN11O
              *

1255          KK  RN11OS
1256          RS      15    FLOW      -1
1257          RC    0.05     .06     .05    1184  0.0068
1258          RX       0     400     800    1200    1600    2000    2400    2800
1259          RY       3       1      .5       0       0      .5       1       3
              *

1260          KK    N11M   BASIN
1261          KM  SUB-BASIN N11M
1262          BA   0.100
```

```
1263          LG    0.30    0.25    4.15    0.52      15
1264          UC   0.446   0.242
1265          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1266          UA     100
              *

1267          KK   DN11M
1268          KM   NEW RETENTION OF 5.3 AC-FT IS ADDED FOR FUTURE LAND USE
1269          DT  DN11MQ     5.3
1270          DI       0     100    1000   10000
1271          DQ       0     100    1000   10000
              *
              * *** COMBINE  CN11M ******************************************************
              * COMBINE BASIN N11M, RN11OS, and RN11NW
              * Mariposa GrANDe AND 95st AVE
              *

1272          KK   CN11M
1273          HC       3
              *
              * *** DIVERSION DN11M ******************************************************
              * DIVERSION MAIN 95th AVE(SOUTH), SPLIT (WEST)
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1274          KK   DN11M
1275          DT   N11MI
1276          DI       0       1      40      80     100     300     600    1200    2200
1277          DQ       0     .25      10      20      25      75     150     184     184
              *
              * ROUTE RN11MS IS 2689 FT WITH A SLOPE OF 0.0071
              * CROSS SECTION IS A SMALL ROAD WITH HOMES TO ONE SIDE
              * ALONG 95st AVE
              * ROUTE FLOW TO PINNACLE PEAK (CN11J) FROM Mariposa GrANDe (CN11M)
              *

1278          KK  RN11MS
1279          RS       9    FLOW      -1
1280          RC    0.05    0.03    0.05    2689  0.0071
1281          RX       0       1      50      51      73      74     124     524
1282          RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
              *

1283          KK    N11J   BASIN
1284          KM  SUB-BASIN N11J
1285          BA   0.244
1286          LG    0.30    0.25    4.10    0.52      13
1287          UC   0.853   0.603
1288          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1289          UA     100
              *
              * *** STORAGE ROUTING LN11J ***********************************************
              * *** SMALL SUBDIVISION STORAGE (ACCOUNTED) ********************************
              *

1290          KK   LN11J
1291          KM   ADDITIONAL LAND USE RETENTION ADDED 0.24 AC-FT
1292          DT  LN11JD     2.1
1293          DI       0     100    1000   10000
1294          DQ       0     100    1000   10000
              *
              * COMBINE N11J, RN11MS AND RN11KW
              * Pinnacle Peak AND 95st AVE
              *

1295          KK   CN11J
1296          HC       3
              *
              * Pinnacle Peak Road Improvement: 100% flow to west
              *

1297          KK   DN11J
1298          DT   N11JI
1299          DI       0     100    1000   10000
1300          DQ       0       0       0       0
              *
              * ROUTE RN11JW IS 1080 FT WITH A SLOPE OF .0019
              * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
              * ROUTE FLOW TO CX4 FROM CN11J
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1301          KK  RN11JW
1302          RS       3    FLOW      -1
1303          RC     .04    0.04     .04    1080   .0019
1304          RX       0     100     140     160     200     300     400     500
1305          RY      10       9       0       0       9      10      11      12
              *
              * RECOVER DIVERTED FLOW FROM CN11M
              *

1306          KK  DRN11M
1307          DR   N11MI
              *
              * ROUTE RN11MW IS 3871 FT WITH A SLOPE OF .0046
              * CROSS SECTION IS A ROAD WITH HOMES TO THE WEST SIDE
              * ROUTE FLOW TO CX4 FROM CN11M
              *

1308          KK  RN11MW
1309          RS      15    FLOW      -1
1310          RC    0.05    0.04     .05    3871   .0046
1311          RX       0       1      50      51      76      77     102     602
1312          RY      10       2       1    0.75    0.75       1       2     3.5
              *
              * *** COMBINE  CN11J AND CN11M ***************************************************
              *

1313          KK     CX4
1314          HC       2
              *
              * ROUTE RX4 IS 2164 FT WITH A SLOPE OF .0023
              * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
              * *** ROUTE FLOW TO CA09O FROM CX4  ****************************
              *

1315          KK     RX4
1316          RS       6    FLOW      -1
1317          RC     .04    0.04     .04    2164  0.0023
1318          RX       0     100     140     160     200     300     400     500
1319          RY      10       9       0       0       9      10      11      12
              *

1320          KK    A09O   BASIN
1321          KM  SUB-BASIN A09O
1322          BA   0.194
1323          LG    0.30    0.25    4.40    0.43      13
1324          UC   0.893   0.891
1325          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1326          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1327          KK   DA09O
1328          KM   NEW RETENTION OF 4.6 AC-FT IS ADDED FOR FUTURE LAND USE
1329          DT  DA09OQ     4.6
1330          DI       0     100    1000   10000
1331          DQ       0     100    1000   10000
              *

1332          KK   SA09O STORAGE
1333          KM  Online Detention Basin, 28.5 ac-ft.
1334          RS       1    STOR       0
1335          SV       0     9.0    15.0    21.0    28.5    38.0
1336          SE       0       2       3       4       5       6
1337          SL       0   7.065    0.62     0.5
1338          SS       5     100     2.7     1.5
              *
              * RECOVER DIVERTED FLOW FROM A09RI
              *

1339          KK  BA09RI
1340          DR   A09RI
              *
              * ROUTE RA09RS IS 3928 FT WITH A SLOPE OF .0074
              * CROSS SECTION IS A HIGHWAY
              * ROUTE FLOW TO CA09O FROM CA09R
```

```
                *
1341            KK  RA09RS
1342            RS      15    FLOW      -1
1343            RC    0.05    0.04    0.05    3928   .0074
1344            RX       0     100     200     225     250     275     375     475
1345            RY       6       5       4       3       3       4       5       6
                *
                * *** COMBINE  CX4, RA09RS, AND A09O ******************************************
                *

1346            KK   CA09O
1347            HC       3
                *
                * Pinnacle Peak Road Improvement:100% FLOW to WEST ALONG PINNACLE PEAK RD
                *

1348            KK   DA09O
1349            DT   A09OI
1350            DI       0     100    1000    5000
1351            DQ       0       0       0       0
                *
                *
                * ROUTE RA09OW IS 1076 FT WITH A SLOPE OF .0019
                * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
                * *** ROUTE FLOW TO CA09P FROM CA09O  *************************
                *
1                                   HEC-1 INPUT                                          PAGE 41

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1352            KK  RA09OW
1353            RS       2    FLOW      -1
1354            RC     .04     .04     .04    1076  0.0019
1355            RX       0     100     140     160     200     300     400     500
1356            RY      10       9       0       0       9      10      11      12
                *

1357            KK    A09P   BASIN
1358            KM  SUB-BASIN A09P
1359            BA   0.187
1360            LG    0.30    0.25    4.65    0.36      11
1361            UC   0.693   0.487
1362            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1363            UA     100
                *

1364            KK   DA09P
1365            KM   NEW RETENTION OF 4.5 AC-FT IS ADDED FOR FUTURE LAND USE
1366            DT  DA09PQ     4.5
1367            DI       0     100    1000   10000
1368            DQ       0     100    1000   10000
                *

1369            KK   SA09P STORAGE
1370            KM  Online Detention Basin, 25.2 ac-ft.
1371            RS       1    STOR       0
1372            SV       0     7.0    13.0    19.0    25.2    33.0
1373            SE       0       2       3       4       5       6
1374            SL       0   7.065    0.62     0.5
1375            SS       5     100     2.7     1.5
                *
                * *** COMBINE  CA09O AND A09P ***************************************************
                *

1376            KK   CA09P
1377            HC       2
                *
                * ROUTE RA09P IS 884 FT WITH A SLOPE OF .0136
                * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
                * *** ROUTE FLOW TO CA09Q FROM CA09P  *************************
                *

1378            KK   RA09P
1379            RS       1    FLOW      -1
1380            RC     .04     .04     .04     884  0.0136
1381            RX       0     100     140     160     200     300     400     500
1382            RY      10       9       0       0       9      10      11      12
                *
                * Retrieve Diverted Flow of A09QAI
                *
                                    HEC-1 INPUT                                          PAGE 42
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1383          KK  BA09QA
1384          DR  A09QAI
              *
              * *** ROUTE FLOW TO CA09QB FROM CA09QA *************************
              *

1385          KK  RA09QB
1386          RS      12    FLOW      -1
1387          RC    0.05     .06     .05    2700  0.0095
1388          RX       0     100     300     360     380     420     620     720
1389          RY      10       8       6       2       0       6       8      10
              *

1390          KK   A09QB   BASIN
1391          KM  SUB-BASIN A09Q South Portion
1392          BA   0.144
1393          LG    0.30    0.25    4.15    0.45       5
1394          UC   0.638   0.450
1395          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1396          UA     100
              *

1397          KK  DA09QB
1398          KM   NEW RETENTION OF 0.16 AC-FT IS ADDED FOR FUTURE LAND USE
1399          DT  A09QBQ    0.16
1400          DI       0     100    1000   10000
1401          DQ       0     100    1000   10000
              *
              * *** COMBINE Flows of A09QA,A09QB  and RA09P  ********************************
              *

1402          KK   CA09Q
1403          HC       3
              *
              * Pinnacle Peak Road Improvement: 100% FLOW to WEST ALONG PINNACLE PEAK RD
              *

1404          KK   DA09Q
1405          DT   A09QI
1406          DI       0     100    1000    5000
1407          DQ       0       0       0       0
              *
              * ROUTE RA09QW IS 2468 FT WITH A SLOPE OF 0.0158
              * CROSS SECTION IS A MEDIUM CHANNEL
              * *** ROUTE CA09Q TO CA10A ********************************************
              *

1408          KK  RA09QW
1409          RS       2    FLOW      -1
1410          RC     .05     .05     .05    2468  0.0158
1411          RX       0     100     140     160     200     300     400     500
1412          RY      10       9       0       0       9      10      11      12
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1413          KK    A10A   BASIN
1414          KM  SUB-BASIN A10A
1415          BA   0.189
1416          LG    0.30    0.25    5.30    0.24       5
1417          UC   0.490   0.307
1418          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1419          UA     100
              *

1420          KK   DA10A
1421          KM   NEW RETENTION OF 6.24 AC-FT IS ADDED FOR FUTURE LAND USE
1422          DT  DA10AQ    6.24
1423          DI       0     100    1000   10000
1424          DQ       0     100    1000   10000
              *

1425          KK   CA10A
1426          HC       2
              *
              * ROUTE RA10A IS 2831 FT WITH A SLOPE OF 0.0148
              * CROSS SECTION IS THE NEW CHANNEL ALONG PINNACLE PEAK ROAD
```

```
            *

1427        KK   RA10A
1428        RS       2    FLOW      -1
1429        RC    0.05    0.05    0.05    1553     .03
1430        RX       0     100     140     170     210     310     410     510
1431        RY      10       9       0       0       9      10      11      12
            *

1432        KK    A99X   BASIN
1433        KM  SUB-BASIN A99X
1434        BA   0.264
1435        LG    0.12    0.23    4.20    0.51      54
1436        UC   0.357   0.169
1437        UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1438        UA     100
            *

1439        KK   DA99X
1440        KM   NEW RETENTION OF 6.5 AC-FT IS ADDED FOR FUTURE LAND USE
1441        DT  DA99XQ     6.5
1442        DI       0     100    1000   10000
1443        DQ       0     100    1000   10000
            *

1444        KK   CA99X
1445        HC       2
            *
            * Dummy Combination at AFR and Pinnacle Peak Rd.
            *
1                                   HEC-1 INPUT                                          PAGE 44

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1446        KK    AFR2
1447        HC       2
            *
            *
            *      ************BEGIN CAMINO A LAGO NORTH  ****************
            *
            * Retrieve Diverted Flow of DN11KS
            *

1448        KK  BN11KS
1449        DR  DN11KS
            *
            * The following basin is not needed anymore for future conditions
            * after Pinnacle Peak Road Improvements
            *
            * KK    B1     DAM
            * KM      ROUTE DN11KS THROUGH PROPOSED DETENTION BASIN ON THE SOUTH SIDE OF
            * KM      PINNACLE PEAK ROAD, BETWEEN 91st & 94th AVENUE
            * RS     1    ELEV       0
            * SV     0    5.86   12.09   18.17   25.70
            * SE     0       1       2       3       4
            * SQ     0      56   126.4   192.0   259.2   354.6   405.9
            * SE     0    1.25       2    2.75    3.25    3.75       4
            * SS     3       0     2.9     1.5
            * ST     4       0     2.9     1.5
            *

1450        KK     3.1      RT
1451        KM        ROUTE THROUGH SUB 3 - changed to normal depth method
1452        RS       1    FLOW      -1
1453        RC   0.035   0.035   0.035    2250  0.0067
1454        RX      80      88      96     100     120     124     132     140
1455        RY       5       3       1       0       0       1       3       5
            *

1456        KK      M3   BASIN
1457        KM   SUB-BASIN 3
1458        BA   0.121
1459        LG    0.30    0.25    4.20    0.50      15
1460        UC   0.780   0.647
1461        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1462        UA     100
            *

1463        KK      3S     DIV
1464        KM        ROUTE SUB 3 THROUGH RETENTION BASIN
1465        DT      3R    8.29
1466        DI       0    1000
```

```
1467          DQ       0      999
              *
1                                        HEC-1 INPUT                                                    PAGE 45

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1468          KK     3.2     COMB
1469          KM        COMBINE 3.1 & 3S
1470          HC       2
              *

1471          KK     4.1       RT
1472          KM        ROUTE 3.2 THROUGH SUB 4
1473          RK    2930    .0060     .035            TRAP        8        4
              *

1474          KK      M4    BASIN
1475          KM   SUB-BASIN 4
1476          BA   0.132
1477          LG    0.29     0.25     4.55     0.41       17
1478          UC   0.722    0.657
1479          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
1480          UA     100
              *

1481          KK      4S      DIV
1482          KM        ROUTE SUB 4 THROUGH RETENTION BASIN
1483          DT      4R     9.04
1484          DI       0     1000
1485          DQ       0      999
              *

1486          KK     4.2     COMB
1487          KM        COMBINE 4.1 & 4S
1488          HC       2
              *

1489          KK      M1    BASIN
1490          KM   SUB-BASIN 1
1491          BA   0.106
1492          LG    0.30     0.25     4.25     0.49       1S
1493          UC   0.694    0.605
1494          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
1495          UA     100
              *

1496          KK      1S      DIV
1497          KM        ROUTE SUB 1 THROUGH RETENTION BASIN
1498          DT      1R     7.24
1499          DI       0     1000
1500          DQ       0      999
              *

1501          KK     2.1       RT
1502          KM        ROUTE 1S THROUGH SUB 2
1503          RK    2600    .0065     .035            TRAP        8        4
              *
1                                        HEC-1 INPUT                                                    PAGE 46

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1504          KK      M2    BASIN
1505          KM   SUB-BASIN 2
1506          BA   0.159
1507          LG    0.30     0.25     4.70     0.36       1S
1508          UC   0.734    0.582
1509          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
1510          UA     100
              *

1511          KK      2S      DIV
1512          KM        ROUTE SUB 2 THROUGH RETENTION BASIN
1513          DT      2R    10.26
1514          DI       0     1000
1515          DQ       0      999
              *

1516          KK     2.3     COMB
1517          KM        COMBINE 2S & 2.1
1518          HC       2
              *
```

```
                * Initial Flow Goes to West, Excess Flow Splits to Southeast
                * DIVERSION HAS BEEN MODIFIED FROM ORIGINAL ENTELLUS STUDY
                * PER CITY OF PEORIA COMMENTS (1/18/05)
                *
1519            KK     DX5
1520            DT     X5I
1521            DI       0      10     100     200     300     400     500    1000    2000
1522            DQ       0       0       0      94     154     249     344     844    1844
                *

1523            KK     2.2      RT
1524            KM        ROUTE 2.1 ALONG DEER VALLEY ROAD TO 2.2
1525            RK    1420   .0013    .035            TRAP       8       4
                *

1526            KK     4.3    COMB
1527            KM        COMBINE 2.2 & 4.2
1528            HC       2
                *

1529            KK    10.1      RT
1530            KM        ROUTE 4.3 ALONG DEER VALLEY ROAD TO SUB 10
1531            RK    2425   .0010    .035            TRAP      20       4
                *

1532            KK     M10   BASIN
1533            KM   SUB-BASIN 10
1534            BA   0.087
1535            LG    0.10    0.25    4.55    0.52      75
1536            UC   0.439   0.397
1537            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1538            UA     100
                *
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1539            KK     10S     DIV
1540            KM        DIVERT SUB 10 THROUGH RETENTION BASIN
1541            DT     10R    6.03
1542            DI       0    1000
1543            DQ       0     999
                *

1544            KK    10.2    COMB
1545            KM        COMBINE 10.1 & 10S
1546            HC       2
                *

1547            KK   11A.1      RT
1548            KM        ROUTE 10.2 ALONG DEER VALLEY ROAD TO SUB 11A
1549            RK    1020   .0010    .035            TRAP      20       4
                *

1550            KK    M11A   BASIN
1551            KM   SUB-BASIN 11A
1552            BA   0.069
1553            LG    0.25    0.25    4.25    0.49      31
1554            UC   0.720   0.741
1555            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1556            UA     100
                *

1557            KK    11AS     DIV
1558            KM        ROUTE SUB 11A THROUGH RETENTION BASIN
1559            DT    11AR    5.66
1560            DI       0    1000
1561            DQ       0     999
                *

1562            KK   11A.2    COMB
1563            KM        COMBINE 11AS & 11A.1 (Near CN11G)
1564            HC       2
                *

1565            KK   RN11G
1566            KM  ROUTE FLOW SOUTH TO CN11FB FROM CN11G
1567            KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1568            KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1569            KM  ADJACENT TO 98TH AVE ON THE WEST SIDE
1570            RS      15    FLOW      -1
```

```
1571          RC      .03      .03      .03     2500     .002
1572          RX        0       12       24       36       62       68       72       80
1573          RY        6        4        2        0        0        2        4        6
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1574          KK   N11DA   BASIN
1575          KM  SUB-BASIN N11DA CREATED BY CVL 7/04
1576          BA   0.256
1577          LG    0.25     0.25     4.60     0.39       30
1578          UC   0.781    0.511
1579          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
1580          UA     100
              *
              * DOVE VALLEY RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              * STORAGE MODIFIED PER CITY OF PEORIA TO DISCHARGE UP TO 200CFS WEST
              * TOTAL DETENTION/RETENTION VOLUME = 18 AC-FT, 10 AC-FT MODELED AS RETENTION
              * 8 AC-FT MODELED AS ON-LINE DETENTION BASIN ON NEC OF RGL & 95TH
              *

1581          KK  LN11DA
1582          DT  LDAOUT      8.0
1583          DI       0      100     1000    10000
1584          DQ       0      100     1000    10000
              *

1585          KK  SN11DA
1586          KM  2-8'x3' BOX CULVERTS TO TAKE FLOW TO WEST
1587          KM  THE WEST + EAST DETENTION BASIN WERE COMBINED WITH 1-18"RCP TO SOUTH
1588          RS       1     STOR        0
1589          SV     0.0      .06     0.16     0.35     1.91     5.62    10.58    16.46
1590          SE    1257     1258     1259     1260     1261     1262     1263     1264
1591          SQ       0        5        9       50       84      113      140      205
              *

1592          KK  N11DAW
1593          KM  SPLIT THE FLOW BETWEEN BOX AND PIPE - Pipe Flow to South
1594          DT  D11DAS
1595          DI       0        5        9       50       84      113      140      205
1596          DQ       0        5        9       15       18       20       22       23
              *

1597          KK  RN11DA
1598          KM  ROUTE FLOW WEST TO CN11FB FROM N11DA
1599          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1600          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1601          KM  ADJACENT TO LAKE PLEASANT PARKWAY ON THE NORTH SIDE
1602          RS       5    FLOW       -1
1603          RC     .03      .03      .03     2000     .001
1604          RX       0        6       18       30       35       41       47       50
1605          RY       5        4        2        0        0        2        4        5
              *

1606          KK   N11FB   BASIN
1607          KM  SUB-BASIN N11FB
1608          BA   0.121
1609          LG    0.24     0.26     4.40     0.45       30
1610          UC   0.740    0.694
1611          UA       0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
1612          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1613          KK  LN11FB
1614          KM  STORAGE ROUTING LN11FB
1615          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1616          DT  LN1FBD     10.6
1617          DI       0      100     1000    10000
1618          DQ       0      100     1000    10000
              *

1619          KK  CN11FB
1620          KM  COMBINE LN11FB and RN11DA
1621          HC       2
              *

1622          KK  C98RGL
```

```
1623          KM  COMBINE CN11FB AND RN11G AT WEST 98TH AVE AND RGL
1624          HC       2
              *

1625          KK  RN11FB
1626          KM  ROUTE FLOW WEST TO CN11FA FROM CN11FB
1627          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1628          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1629          KM  ADJACENT TO LAKE PLEASANT PARKWAY ON THE NORTH SIDE
1630          RS       4    FLOW      -1
1631          RC     .03      .03      .03     1100     .001
1632          RX       0       12       24       36       62       68       72       80
1633          RY       8        4        2        0        0        2        4        8
              *

1634          KK  DN11JI     RET
1635          KM        RETRIEVE FLOW FROM PINNACLE PEAK ROAD
1636          KM        Near concentration point "266"
1637          DR   N11JI
              *

1638          KK     6.1      RT
1639          KM        ROUTE N11JI ( near 266) SOUTH ON 95th AVENUE TO WILLIAMS ROAD
1640          KM        Routing method changed to Normal Depth
1641          RS       1    FLOW      -1
1642          RC    .035    .035     .035     2000    .0063
1643          RX      68      84       92      100      108      116      124      140
1644          RY       8       4        2        0        0        2        4        8
              *

1645          KK     6.2      RT
1646          KM        ROUTE 6.1 WEST ALONG WILLIAMS ROAD TO SUB 6 OUTLET
1647          KM        Routing method changed to Normal Depth
1648          RS       1    FLOW      -1
1649          RC    .035    .035     .035      800    .0020
1650          RX      68      84       92      100      108      116      124      140
1651          RY       8       4        2        0        0        2        4        8
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1652          KK      M5   BASIN
1653          KM   SUB-BASIN 5
1654          BA   0.016
1655          LG    0.10    0.35    4.10    0.38       0
1656          UC   0.478   0.513
1657          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1658          UA     100
              *

1659          KK      5S     DIV
1660          KM        ROUTE SUB 5 THROUGH RETENTION BASIN
1661          DT      5R     .36
1662          DI       0    1000
1663          DQ       0     999
              *

1664          KK     6.3      RT
1665          KM        ROUTE 5S SOUTH TO WILLIAMS ROAD
1666          RK     850   .0073    .035            TRAP       8       4
              *

1667          KK      M6   BASIN
1668          KM   SUB-BASIN 6
1669          BA   0.022
1670          LG    0.10    0.25    4.15    0.67      75
1671          UC   0.349   0.345
1672          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1673          UA     100
              *

1674          KK      6S     DIV
1675          KM        ROUTE SUB 6 THROUGH RETENTION BASIN
1676          DT      6R    1.58
1677          DI       0    1000
1678          DQ       0    1000
              *

1679          KK     6.4    COMB
1680          KM        COMBINE 6.2, 6.3, 6S
1681          HC       3
```

```
                *
1682            KK     8.1      RT
1683            KM        ROUTE 6.4 WEST ALONG WILLIAMS ROAD TO SUB 8
1684            RK    1872   .0073    .035            TRAP       8       4
                *

1685            KK      M7   BASIN
1686            KM   SUB-BASIN 7
1687            BA   0.113
1688            LG    0.30    0.25    4.20    0.50      15
1689            UC   0.885   0.852
1690            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1691            UA     100
                *
1                                          HEC-1 INPUT                                          PAGE 51

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1692            KK      7S     DIV
1693            KM        ROUTE SUB 7 THROUGH RETENTION BASIN
1694            DT      7R    7.74
1695            DI       0    1000
1696            DQ       0     999
                *

1697            KK     8.2      RT
1698            KM        ROUTE 7.2 THROUGH SUB 8 TO WILLIAMS ROAD
1699            RK    1280   .0080    .035            TRAP       8       4
                *

1700            KK      M8   BASIN
1701            KM   SUB-BASIN 8
1702            BA   0.066
1703            LG    0.30    0.25    4.35    0.46      15
1704            UC   0.680   0.610
1705            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1706            UA     100
                *

1707            KK      8S     DIV
1708            KM        ROUTE SUB 8 THROUGH RETENTION BASIN
1709            DT      8R    5.14
1710            DI       0    1000
1711            DQ       0     999
                *

1712            KK     8.3    COMB
1713            KM        COMBINE 8.1, 8.2, 8S
1714            HC       3
                *

1715            KK     9.1      RT
1716            KM        ROUTE 8.3 SOUTH TO SUB 9
1717            RK    1500   .0060    .035            TRAP       8       4
                *

1718            KK      M9   BASIN
1719            KM   SUB-BASIN 9
1720            BA   0.121
1721            LG    0.29    0.25    4.35    0.47      17
1722            UC   0.614   0.385
1723            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1724            UA     100
                *

1725            KK      9S     DIV
1726            KM        ROUTE SUB 9 THROUGH RETENTION BASIN
1727            DT      9R    8.15
1728            DI       0    1000
1729            DQ       0     999
                *
1                                          HEC-1 INPUT                                          PAGE 52

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1730            KK     9.2    COMB
1731            KM        COMBINE 9.1 & 9S
1732            HC       2
                *
```

```
1733          KK   12A.1       RT
1734          KM        ROUTE 9.2 TO SUB 12A OUTLET
1735          RK     860   .0052    .035            TRAP       8       4
              *

1736          KK    M12A   BASIN
1737          KM   SUB-BASIN 12A
1738          BA   0.112
1739          LG    0.25    0.25    4.40    0.45      30
1740          UC   0.486   0.278
1741          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1742          UA     100
              *

1743          KK    12AS     DIV
1744          KM        ROUTE SUB 12A THROUGH RETENTION BASIN
1745          DT    12AR    7.65
1746          DI       0    1000
1747          DQ       0     999
              *

1748          KK   12A.2    COMB
1749          KM        COMBINE 12A.1 & 12AS
1750          HC       2
              *

1751          KK   11B.1       RT
1752          KM        ROUTE 12A.2 THROUGH SUB 11B
1753          RK     775   .0056    .035            TRAP       8       4
              *

1754          KK    M11B   BASIN
1755          KM   SUB-BASIN 11B
1756          BA   0.018
1757          LG    0.25    0.25    4.30    0.48      30
1758          UC   0.431   0.427
1759          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1760          UA     100
              *

1761          KK    11BS     DIV
1762          KM        ROUTE SUB 11B THROUGH RETENTION BASIN
1763          DT    11BR    1.11
1764          DI       0    1000
1765          DQ       0     999
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1766          KK     MA1   BASIN
1767          KM   SUB-BASIN A1
1768          BA   0.012
1769          LG    0.10    0.25    4.20    0.61      80
1770          UC   0.364   0.447
1771          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1772          UA     100
              *

1773          KK     A1S     DIV
1774          KM        ROUTE SUB A1 THROUGH RETENTION BASIN
1775          DT     A1R    1.19
1776          DI       0    1000
1777          DQ       0     999
              *

1778          KK   11B.2    COMB
1779          KM        COMBINE 11B.1, 11BS, A1S (Near A09KI)
1780          HC       3
              *

1781          KK  RA09KS
1782          KM  ROUTE FLOW SOUTH TO CN11FA
1783          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1784          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1785          KM  ADJACENT TO THE COMMERCIAL PROPERTY ON THE EAST SIDE
1786          RS      15    FLOW      -1
1787          RC     .03     .03     .03    2700    .002
1788          RX       0      12      24      26      52      58      64      70
1789          RY       6       4       2       0       0       2       4       6
              *
              *
```

```
1790          KK   N11FA   BASIN
1791          BA   0.180
1792          LG    0.22    0.25    4.40    0.46      34
1793          UC   0.728   0.579
1794          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1795          UA     100
              *

1796          KK  LN11FA
1797          KM  STORAGE ROUTING LN11FA
1798          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1799          DT  LN1FAD     7.7
1800          DI       0     100    1000   10000
1801          DQ       0     100    1000   10000
              *
1                                        HEC-1 INPUT                                          PAGE 54

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1802          KK   A09GA   BASIN
1803          BA   0.074
1804          LG    0.10    0.25    4.35    0.56      80
1805          UC   0.287   0.164
1806          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1807          UA     100
              *

1808          KK  LA09GA
1809          KM  STORAGE ROUTING LA09GA
1810          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1811          DT  L09GAD     5.9
1812          DI       0     100    1000   10000
1813          DQ       0     100    1000   10000
              *

1814          KK  CN11FA
1815          KM  COMBINE RA09KS,LN11FA,LA09GA AND RN11FB
1816          HC       4
              *

1817          KK  RN11FA
1818          KM  ROUTE FLOW WEST TO CA09G FROM CN11FA
1819          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1820          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1821          KM  ADJACENT TO ROSE GARDEN LANE ON THE NORTH SIDE
1822          RS       3    FLOW      -1
1823          RC     .03     .03     .03     800    .001
1824          RX       0       6      12      18      52      58      64      70
1825          RY       8       4       2       0       0       2       4       8
              *

1826          KK   A09GB   BASIN
1827          KM  SUB-BASIN A09GB
1828          BA   0.051
1829          LG    0.23    0.25    4.30    0.49      35
1830          UC   1.183   1.508
1831          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1832          UA     100
              *

1833          KK  LA09GB
1834          KM  STORAGE ROUTING LA09GB
1835          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1836          DT  L09GBD     2.8
1837          DI       0     100    1000   10000
1838          DQ       0     100    1000   10000
              *
1                                        HEC-1 INPUT                                          PAGE 55

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1839          KK   CA09G
1840          KM  COMBINE CA09GA and A09GB
1841          HC       2
              *
              * DIVERSION TO SOUTH ALONG 101ST AVE, MAXIMUM 150 CFS PER CITY

1842          KK   DA09G
1843          DT   A09GI
1844          DI       0      50     100     300     750    1200    2000
```

```
1845        DQ       0      10      20      60     150     150     150
            *

1846        KK  RA09GW
1847        KM  ROUTE FLOW WEST TO CX8 FROM CA09G
1848        KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1849        KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1850        KM  ADJACENT TO ROSE GARDEN LANE ON THE NORTH SIDE
1851        RS       3    FLOW      -1
1852        RC     .03     .03     .03     900    .001
1853        RX       0       6      12      18      52      58      64      70
1854        RY       8       4       2       0       0       2       4       8
            *

1855        KK  DA09oI     RET
1856        KM        RETRIEVE FLOW FROM SUB A09O (Old name: 300) AT PINNACLE PEAK ROAD
1857        DR   A09OI
            *

1858        KK     371      RT
1859        KM        ROUTE 306 ALONG LAKE PLEASANT ROAD TO SUB 370
1860        KM        Routing method changed to Normal Depth
1861        RS       1    FLOW      -1
1862        RC    .035    .035    .035    3000   .0047
1863        RX      68      84      92     100     108     116     124     140
1864        RY       8       4       2       0       0       2       4       8
            *

1865        KK    M370   BASIN
1866        KM   SUB-BASIN 370
1867        BA   0.131
1868        LG    0.29    0.25    4.60    0.39      18
1869        UC   0.699   0.575
1870        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1871        UA     100
            *

1872        KK   DM370
1873        KM   NEW RETENTION OF 5.7 AC-FT IS ADDED FOR FUTURE LAND USE
1874        DT  DM370Q     5.7
1875        DI       0     100    1000   10000
1876        DQ       0     100    1000   10000
            *
                                    HEC-1 INPUT                                          PAGE 56

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1877        KK     372    COMB
1878        KM        COMBINE 370 & 371
1879        KO       3
1880        HC       2
            *

1881        KK      B4     DAM
1882        KM        ROUTE 372 THROUGH PROPOSED DETENTION BASIN ON THE NORTH SIDE OF
1883        KM        PARCEL 12.
1884        RS       1    ELEV       0
1885        SV       0    8.92   18.14   27.66   37.49
1886        SE       0       1       2       3       4
1887        SQ       0      28    63.2    96.0   146.0   226.6   273.9
1888        SE       0    1.25       2    2.75    3.25    3.75       4
1889        SS       3       0     2.9     1.5
1890        ST       4       0     2.9     1.5
            *

1891        KK   12B.1      RT
1892        KM        ROUTE B4 ALONG LAKE PLEASANT ROAD TO SUB 12B
1893        KM        Routing method changed to Normal Depth
1894        RS      10    FLOW      -1
1895        RC    .035    .035    .035    1900   .0071
1896        RX      68      84      92     100     108     116     124     140
1897        RY       8       4       2       0       0       2       4       8
            *

1898        KK    M12B   BASIN
1899        KM   SUB-BASIN 12B
1900        BA   0.044
1901        LG    0.25    0.25    4.20    0.50      30
1902        UC   0.546   0.560
1903        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1904        UA     100
            *
```

```
1905          KK    12BS     DIV
1906          KM        ROUTE SUB 12B THROUGH RETENTION BASIN
1907          DT    12BR     3.12
1908          DI       0     1000
1909          DQ       0      999
              *

1910          KK   12B.2    COMB
1911          KM        COMBINE 12B.1 & 12BS
1912          HC       2
              *

1913          KK    A2.1      RT
1914          KM        ROUTE 12B.2 ALONG LAKE PLEASANT ROAD TO SUB A2
1915          KM        Routing method changed to Normal Depth
1916          RS       3    FLOW      -1
1917          RC    .035    .035    .035     750    .0087
1918          RX      68      84      92     100     108     116     124     140
1                                          HEC-1 INPUT                                                    PAGE 57

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1919          RY       8       4       2       0       0       2       4       8
              *

1920          KK     MA2   BASIN
1921          KM   SUB-BASIN A2
1922          BA   0.026
1923          LG    0.10    0.25    4.30    0.58      80
1924          UC   0.315   0.314
1925          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1926          UA     100
              *

1927          KK     A2S     DIV
1928          KM        ROUTE SUB A2 THROUGH RETENTION BASIN
1929          DT     A2R    2.68
1930          DI       0    1000
1931          DQ       0     999
              *

1932          KK    A2.2    COMB
1933          KM        COMBINE A2.1 & A2S (near CX7)
1934          HC       2
              *

1935          KK    RX7S
1936          KM  ROUTE FLOW SOUTH TO CX8 FROM CX7
1937          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1938          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1939          KM  ADJACENT TO LAKE PLEASANT PARKWAY ON THE WEST SIDE
1940          RS      15    FLOW      -1
1941          RC     .03     .03     .03    2800    .002
1942          RX       0       3       9      15      35      41      47      50
1943          RY       5       4       2       0       0       2       4       5
              *
              * *** COMBINE  RX7S AND RA09GW ********************************************
              *

1944          KK     CX8
1945          HC       2
              *
              * ROUTE RX8W IS 2300 FT WITH A SLOPE OF .001
              * CROSS SECTION IS THE NEW CHANNEL ALONG ROSE GARDEN LANE
              *

1946          KK    RX8W
1947          KM  ROUTE FLOW WEST TO CA09H1 FROM CX8
1948          KM  CROSS SECTION IS A PROPOSED TRAPEZOIDAL CHANNEL DESIGNED WITH
1949          KM  6:1 SIDE SLOPES ON THE LEFT BANK AND 3:1 SIDE SLOPES ON THE RIGHT BANK
1950          KM  ADJACENT TO ROSE GARDEN LANE ON THE NORTH SIDE
1951          RS       8    FLOW      -1
1952          RC     .03     .03     .03    2300    .001
1953          RX       0      12      24      36      62      68      74      80
1954          RY       8       4       2       0       0       2       4       8
              *
1                                          HEC-1 INPUT                                                    PAGE 58

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1955          KK    A09H   BASIN
```

```
1956          KM  SUB-BASIN A09H
1957          BA   0.237
1958          LG    0.25    0.25    4.55    0.41      31
1959          UC   0.938   0.802
1960          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1961          UA     100
              *

1962          KK   LA09H
1963          KM  STORAGE ROUTING LA09H
1964          KM  PROPOSED RETENTION BASED ON THE 100-YEAR, 2-HOUR STORM VOLUME
1965          KM   ADDITIONAL LAND USE RETENTION ADDED 0.3 AC-FT
1966          DT  LA09HD    12.9
1967          DI       0     100    1000   10000
1968          DQ       0     100    1000   10000
              *

1969          KK  CA09H1
1970          KM  Combine flows from CX8 and A09H
1971          HC       2
              *

1972          KK    A09J   BASIN
1973          KM  SUB-BASIN A09J
1974          BA   0.168
1975          LG    0.25    0.25    4.35    0.46      30
1976          UC   0.749   0.639
1977          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1978          UA     100
              *
              * *** STORAGE ROUTING LA09J ***********************************************
              * *** FUTURE DEVELOPMENT STORAGE (ACCOUNTED) ****************************
              *

1979          KK   LA09J
1980          DT  LA09JD     7.7
1981          DI       0     100    1000   10000
1982          DQ       0     100    1000   10000
              *
              * *** DIVERSION DA09J ******************************************************
              * *** DIVERTED  MAIN (SOUTH), DIVERTED (WEST)  ***************************
              * 100% Flows to South based on the report

1983          KK   DA09J
1984          DT   A09JI
1985          DI       0      10      30      50     100     500    1000    2000
1986          DQ       0       0       0       0       0       0       0       0
              *
              * *** ROUTE FLOW TO CA09H   **************************
              *
1                                   HEC-1 INPUT                                          PAGE 59

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1987          KK  RA09JS
1988          RS      11    FLOW      -1
1989          RC     .04     .04     .04    2800  .00350
1990          RX       0     100     200     225     245     270     370     470
1991          RY       8       7       6       0       0       6       7       8
              *

1992          KK   CA09H
1993          KM  COMBINE CA09H1 and RA09JS
1994          HC       2
              *
              * ROUTE FLOW TO CX10 FROM CA09H
              *

1995          KK   RA09H
1996          RS       3    FLOW      -1
1997          RC     .03     .03     .03     850    .005
1998          RX     100     118     126     150     200     224     232     250
1999          RY      10       8       6       0       0       6       8      10
              *
              * *** RECOVER DIVERTED FLOW FROM A09QI*****************************************
              *

2000          KK  BA09QI
2001          DR   A09QI
              *
              * *** ROUTE RA09QS ************************************************************
              *
```

```
                * ROUTE RA09QS IS 1655 FT WITH A SLOPE OF .0073
                * CROSS SECTION IS A MEDIUM NATURAL WASH
                * *** ROUTE FLOW TO CA09M FROM CA09Q  *************************
                *
2002            KK  RA09QS
2003            RS       1    FLOW      -1
2004            RC    0.05     .06     .05    1655  0.0073
2005            RX       0      50     250     350     360     420     620     720
2006            RY      10       8       6       2       0       6       8      10
                *

2007            KK    A09M   BASIN
2008            KM  SUB-BASIN A09M
2009            BA   0.249
2010            LG    0.25    0.25    4.45    0.43      28
2011            UC   0.712   0.538
2012            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2013            UA     100
                *
                * *** STORAGE ROUTING LA09M ***********************************************
                * *** IRONWOOD RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ****************
                *
1                                          HEC-1 INPUT                                          PAGE 60

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2014            KK   LA09M
2015            KM   ADDITIONAL LAND USE RETENTION ADDED 4.8 AC-FT
2016            DT  LA09MD    11.7
2017            DI       0     100    1000   10000
2018            DQ       0     100    1000   10000
                *
                * *** COMBINE  CA09Q AND A09M ***************************************************
                *

2019            KK   CA09M
2020            HC       2
                *
                * ROUTE RA09M IS 1102 FT WITH A SLOPE OF .0064
                * CROSS SECTION IS A CHANNEL (MEASURED)
                * *** ROUTE FLOW TO CA09N FROM CA09M  *************************
                *

2021            KK   RA09M
2022            RS       4    FLOW      -1
2023            RC    0.05    0.04     .05    1102  0.0064
2024            RX       0       1      21      41      51      71     101     102
2025            RY      10       4       0       4       5       6       6      10
                *

2026            KK    A09N   BASIN
2027            KM  SUB-BASIN A09N
2028            BA   0.110
2029            LG    0.26    0.25    5.80    0.22      26
2030            UC   0.643   0.509
2031            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2032            UA     100
                *

2033            KK   DA09N
2034            KM   NEW RETENTION OF 0.96 AC-FT IS ADDED FOR FUTURE LAND USE
2035            DT  DA09NQ    0.96
2036            DI       0     100    1000   10000
2037            DQ       0     100    1000   10000
                *
                * *** COMBINE BASIN A09N AND ROUTE RA09M  *********************************
                *

2038            KK   CA09N
2039            HC       2
                *
                * *** STORAGE ROUTING LA09N ***********************************************
                * *** ALTA VISTA RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) **************
                *
1                                          HEC-1 INPUT                                          PAGE 61

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2040            KK   LA09N
2041            RS       1    STOR       0
```

```
2042          SV     0.0    2.30    4.67    7.11    9.63   12.23   14.90   17.65   20.48
2043          SE  1250.0  1250.5  1251.0  1251.5  1252.0  1252.5  1253.0  1253.5  1254.0
2044          SQ       0     9.3    31.4    66.0   114.1   160.1   226.2   208.5   475.0
              *
              * CROSS SECTION IS A CHANNEL (MEASURED)
              * *** ROUTE FLOW TO CA09L FROM CA09N  *************************
              *

2045          KK   RA09N
2046          RS       2    FLOW      -1
2047          RC   0.025    0.02   0.025    2382  0.0040
2048          RX       0       1       7      11      17      21      29     100
2049          RY       5       4       2       0       0       2     3.0       5
              *
              * *** RECOVER DIVERTED FLOW FROM CA09J ****************************************
              *

2050          KK  DRA09J
2051          DR   A09JI
              *
              * ROUTE RA09JW IS 1749 FT WITH A SLOPE OF .0063
              * CROSS SECTION IS A CHANNEL ON THE WEST SIDE OF A ROAD
              * *** ROUTE FLOW TO CA09L FROM CA09J  *************************
              *

2052          KK  RA09JW
2053          RS       1    FLOW      -1
2054          RC    0.04    0.03    0.04    1749  0.0063
2055          RX       0       1      21      31      41      51      81     281
2056          RY      14       6       6       0       0       6       6       8
              *

2057          KK    A09L   BASIN
2058          KM  SUB-BASIN A09L
2059          BA   0.136
2060          LG    0.23    0.26    4.90    0.32      26
2061          UC   0.760   0.625
2062          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2063          UA     100
              *
              * *** COMBINE BASIN A09L, RA09N, AND RA09JW   **********************************
              *

2064          KK   CA09L
2065          HC       3
              *
              * LAO9L is an Onlin Detention Basin, NOT Retention Basin
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2066          KK   LA09L
2067          RS       1    STOR       0
2068          SV     0.0    0.57    1.17    1.82    2.50    3.22    3.98    4.78    5.63    6.52
2069          SE     0.0     0.5     1.0     1.5     2.0     2.5     3.0     3.5     4.0     5.5
2070          SQ       0    10.0    30.0    52.0    80.0   110.0   140.0   155.0   180.0     600
              *
              * ROUTE RA09LS IS 2615 FT WITH A SLOPE OF .0019
              * CROSS SECTION IS A NEW CHANNEL ALONG THE EAST SIDE OF THE ROAD
              * *** ROUTE FLOW TO CA99W FROM CA09L  *************************
              *

2071          KK  RA09LS
2072          RS       3    FLOW      -1
2073          RC   0.025     .02   0.025    2615  0.0040
2074          RX       0       1       6      12      19      25      29     100
2075          RY       6       5       4       0       0       4       5       6
              *

2076          KK   A09IH   BASIN
2077          KM   Subbasin for Rose Garden and Desert Star Areas
2078          KM  SUB-BASIN A09IH
2079          BA   0.091
2080          LG    0.26    0.25    4.60    0.39      27
2081          UC   0.609   0.578
2082          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2083          UA     100
              *

2084          KK  DA09IH
2085          KM   NEW RETENTION OF 0.24 AC-FT IS ADDED FOR FUTURE LAND USE
```

```
2086          DT  A09IHQ    0.24
2087          DI       0     100    1000   10000
2088          DQ       0     100    1000   10000
              *
              * *** COMBINE BASIN A09N AND ROUTE RA09M  ********************************
              *

2089          KK  CA09IH
2090          HC       2
              *
              * Onlin Detention Basin (Box Culvert Outlet)
              *

2091          KK  LA09IH
2092          RS       1    STOR       0
2093          SV     0.0    1.12    2.29    3.52    4.79    6.12    7.51    8.95   10.45   12.01
2094          SE  1237.0  1237.5  1238.0  1238.5  1239.0  1239.5  1240.0  1240.5  1241.0  1242.5
2095          SQ       0    10.0    30.0    52.0    80.0   112.0   145.0   183.0   220.0   600.0
              *
1                                          HEC-1 INPUT                                          PAGE 63

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2096          KK    A09I   BASIN
2097          KM  SUB-BASIN A09I
2098          BA   0.126
2099          LG    0.25    0.20    6.60    0.17      29
2100          UC   0.772   0.703
2101          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2102          UA     100
              *
              * *** ROSE GARDEN RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED)  ************
              *

2103          KK   LA09I
2104          DT  LA09ID     5.4
2105          DI       0     100    1000   10000
2106          DQ       0     100    1000   10000
              *
              * *** COMBINE  RA09IW AND RA09LS ***********************************************
              *

2107          KK    CX10
2108          HC       3
              *
              * ROUTE FLOW TO CA09F FROM CA09G
              *

2109          KK    RX10
2110          RS       8    FLOW      -1
2111          RC    0.03    0.03    0.03    4470    .005
2112          RX     100     118     126     150     200     224     232     250
2113          RY      10       8       6       0       0       6       8      10
              *

2114          KK    A99V   BASIN
2115          KM  SUB-BASIN A99V
2116          BA   0.207
2117          LG    0.09    0.35    6.00    0.15      12
2118          UC   0.416   0.281
2119          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2120          UA     100
              *

2121          KK   DA99V
2122          KM   NEW RETENTION OF 11.8 AC-FT IS ADDED FOR FUTURE LAND USE
2123          DT  DA99VQ    11.8
2124          DI       0     100    1000   10000
2125          DQ       0     100    1000   10000
              *
              * *** COMBINE BASIN A99V AND RX11W  ************************************
              *
1                                          HEC-1 INPUT                                          PAGE 64

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2126          KK   CA99V
2127          HC       2
              *

2128          KK     A10   BASIN
```

```
2129          KM  SUB-BASIN A10
2130          BA   0.214
2131          LG    0.07    0.16    4.65    0.28      53
2132          UC   0.309   0.139
2133          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2134          UA     100
              *

2135          KK    DA10
2136          KM   NEW RETENTION OF 16.6 AC-FT IS ADDED FOR FUTURE LAND USE
2137          DT   DA10Q    16.6
2138          DI       0     100    1000   10000
2139          DQ       0     100    1000   10000
              *

2140          KK    A99W   BASIN
2141          KM  SUB-BASIN A99W
2142          BA   0.215
2143          LG    0.16    0.24    6.40    0.16      33
2144          UC   0.734   0.436
2145          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2146          UA     100
              *
              * *** STORAGE ROUTING LA99W ***********************************************
              * *** DEER VALLEY RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              *

2147          KK   LA99W
2148          KM   ADDITIONAL LAND USE RETENTION ADDED 6.2 AC-FT
2149          DT  LA99WD    13.0
2150          DI       0     100    1000   10000
2151          DQ       0     100    1000   10000
              *
              * Dummy Combination at AFR and Rose Garden Lane.
              *

2152          KK    AFR3
2153          HC       4
              *
              * *** RECOVER DIVERTED FLOW FROM CA09G ****************************************
              *

2154          KK  DRA09G
2155          DR   A09GI
              *
              * ROUTE RA09GS IS 3990 FT WITH A SLOPE OF .0015
              * CROSS SECTION IS A MEDIUM ROADSIDE CHANNEL
              * ROUTE FLOW TO CA09F FROM CA09G
              *
1                                    HEC-1 INPUT                                          PAGE 65

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2156          KK  RA09GS
2157          RS      15    FLOW      -1
2158          RC    0.04    0.04    0.04    3990   .0015
2159          RX       0     200     220     240     260     280     320     520
2160          RY       6       4       0       0       3       4       4       6
              *

2161          KK    A09F   BASIN
2162          KM  SUB-BASIN A09F
2163          BA   0.365
2164          LG    0.22    0.26    5.30    0.28      36
2165          UC   0.824   0.487
2166          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2167          UA     100
              *
              * *** STORAGE ROUTING LA09F ***********************************************
              * *** PARKRIDGE ESTATES RESIDENTIAL DEVELOPMENT (ACCOUNTED) ***************
              *

2168          KK   LA09F
2169          KM   ADDITIONAL LAND USE RETENTION ADDED 1.9 AC-FT
2170          DT  LA09FD    15.5
2171          DI       0     100    1000   10000
2172          DQ       0     100    1000   10000
              *
              * *** COMBINE  CA09G, CA09H, AND A09F *****************************************
              *

2173          KK   CA09F
```

```
2174          HC       2
              *
              * ****************************************************************************
              * ********************   BEARDSLEY RD DRAINAGE    ******************************
              * ****************************************************************************
              *
              * ROUTE RA09FW IS 3030 FT WITH A SLOPE OF .002
              * *** ROUTE FLOW TO CA09E FROM CA09F  **************************
              *

2175          KK  RA09FW
2176          RS       7    FLOW      -1
2177          RC     .03    .025     .03    3030   0.002
2178          RX       0       1      16      36      51     123     148     648
2179          RY      16       8       0       0       8       8       9      11
              *

2180          KK    A09E   BASIN
2181          KM  SUB-BASIN A09E
2182          BA   0.147
2183          LG    0.23    0.24    4.70    0.36      36
2184          UC   0.769   0.704
2185          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2186          UA     100
              *
              * *** STORAGE ROUTING LA09E ***********************************************
              * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) *******************
              *
1                                          HEC-1 INPUT                                          PAGE 66

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2187          KK   LA09E
2188          KM   ADDITIONAL LAND USE RETENTION ADDED 0.7 AC-FT
2189          DT  LA09ED     8.9
2190          DI       0     100    1000   10000
2191          DQ       0     100    1000   10000
              *
              * *** COMBINE LA09E AND A99E ****************************************
              *

2192          KK   CA09E
2193          HC       2
              *
              * ROUTE RA09E IS 2700 FT WITH A SLOPE OF .0041
              * ROUTE FLOW TO CA09C FROM CA09E
              *

2194          KK   RA09E
2195          RS       4    FLOW      -1
2196          RC    0.04    0.03    0.04    2700   .0041
2197          RX       0       1      16      36      51     123     148     648
2198          RY      16       8       0       0       8       8       9      11
              *

2199          KK    A09D   BASIN
2200          KM  SUB-BASIN A09D
2201          BA   0.254
2202          LG    0.23    0.18    6.60    0.16      34
2203          UC   0.471   0.182
2204          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2205          UA     100
              *
              * *** STORAGE ROUTING LA09D ***********************************************
              * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) *******************
              *

2206          KK   LA09D
2207          KM   ADDITIONAL LAND USE RETENTION ADDED 1.8 AC-FT
2208          DT  LA09DD    17.1
2209          DI       0     100    1000   10000
2210          DQ       0     100    1000   10000
              *
              * *** COMBINE LA09D, AND RA09EW *************************
              *

2211          KK  CA09C*
2212          HC       2
              *
              * ROUTE RA09C* IS 850 FT WITH A SLOPE OF .0083
              * *** ROUTE FLOW TO CA09C FROM CA09C*   **************************
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2213          KK  RA09C*
2214          RS       1    FLOW      -1
2215          RC    0.04    0.03    0.04     850   .0083
2216          RX       0      51      61      71      81     111     151     651
2217          RY       9       8       0       0       8       9       9      10
              *

2218          KK    A09C   BASIN
2219          KM  SUB-BASIN A09C
2220          BA   0.073
2221          LG    0.26    0.23    4.50    0.44      31
2222          UC   0.530   0.482
2223          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2224          UA     100
              *

2225          KK   DA09C
2226          KM   NEW RETENTION OF 4.64 AC-FT IS ADDED FOR FUTURE LAND USE
2227          DT  DA09CQ    4.64
2228          DI       0     100    1000   10000
2229          DQ       0     100    1000   10000
              *
              * *** COMBINE BASIN A09C AND RA09C*   ***********************************
              *

2230          KK   CA09C
2231          HC       2
              *
              * ROUTE RA09C IS 2000 FT WITH A SLOPE OF .0056
              *

2232          KK   RA09C
2233          RS       3    FLOW      -1
2234          RC    0.04    0.04    0.04    2000  0.0056
2235          RX       0     100     120     130     150     180     205     705
2236          RY      14       8       0       0       8       8       9      10
              *

2237          KK    A09B   BASIN
2238          KM  SUB-BASIN A09B
2239          BA   0.041
2240          LG    0.11    0.25    4.10    0.68      72
2241          UC   0.221   0.141
2242          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2243          UA     100
              *

2244          KK   DA09B
2245          KM   NEW RETENTION OF 0.08 AC-FT IS ADDED FOR FUTURE LAND USE
2246          DT  DA09BQ    0.08
2247          DI       0     100    1000   10000
2248          DQ       0     100    1000   10000
              *
              * ROUTE RA09B IS 2500 FT WITH A SLOPE OF .0012
              * *** ROUTE FLOW TO CA09A FROM CA09B  **************************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2249          KK   RA09B
2250          RS      14    FLOW      -1
2251          RC    0.05     .06     .05    2500   .0012
2252          RX       0     350     450     480     482     510     610     910
2253          RY       7       6       5       1       0       5       6       7
              *

2254          KK    A09A   BASIN
2255          KM  SUB-BASIN A09A
2256          BA   0.084
2257          LG    0.29    0.14    3.74    0.80      39
2258          UC   0.820   0.733
2259          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2260          UA     100
              *
              * *** Combine  CA09C, A09B, AND A09A ******************************************
              *
```

```
2261          KK   CA09A
2262          HC       3
              *
              * ROUTE RA09AW IS 5900 FT WITH A SLOPE OF .0017
              * CROSS SECTION IS A LARGE NATURAL WASH
              *

2263          KK  RA09AW
2264          RS      15    FLOW      -1
2265          RC    0.05     .06     .05    5900  0.0017
2266          RX       0      50     250     310     360     420     620     720
2267          RY      10       8       6       0       0       6       8      10
              *

2268          KK    A99T   BASIN
2269          KM  SUB-BASIN A99T
2270          BA   0.030
2271          LG    0.17    0.30    2.79    1.37      42
2272          UC   0.197   0.054
2273          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2274          UA     100
              *
              * *** STORAGE ROUTING LA99T ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              *

2275          KK   LA99T
2276          KM   ADDITIONAL LAND USE RETENTION ADDED 0.2 AC-FT
2277          DT  LA99TD     0.8
2278          DI       0     100    1000   10000
2279          DQ       0     100    1000   10000
              *
              * ROUTE RA99T IS 886 FT WITH A SLOPE OF .0023
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * *** ROUTE FLOW TO CA09 FROM CA99T   **************************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2280          KK   RA99T
2281          RS       5    FLOW      -1
2282          RC    0.05     .06     .05     886  0.0023
2283          RX       0      50     250     350     360     420     620     720
2284          RY      10       8       6       2       0       6       8      10
              *

2285          KK     A09   BASIN
2286          KM  SUB-BASIN A09
2287          BA   0.176
2288          LG    0.13    0.31    3.58    0.64      23
2289          UC   0.477   0.194
2290          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2291          UA     100
              *

2292          KK    DA09
2293          KM   NEW RETENTION OF 3.68 AC-FT IS ADDED FOR FUTURE LAND USE
2294          DT   DA09Q    3.68
2295          DI       0     100    1000   10000
2296          DQ       0     100    1000   10000
              *
              * COMBINE RA99T, CA09, AND RA09AW
              *

2297          KK    CA09
2298          HC       3
              *

2299          KK    A99U   BASIN
2300          KM  SUB-BASIN A99U
2301          BA   0.070
2302          LG    0.20    0.26    3.71    0.71      43
2303          UC   0.451   0.444
2304          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2305          UA     100
              *

2306          KK   DA99U
2307          KM   NEW RETENTION OF 2.5 AC-FT IS ADDED FOR FUTURE LAND USE
2308          DT  DA99UQ     2.5
```

```
2309          DI        0      100     1000    10000
2310          DQ        0      100     1000    10000
              *
              * COMBINE CA09, A99U, AND AFR3 at AFR & South of Beardsley Rd.
              *

2311          KK    AFR4
2312          HC       3
              *
1                                   HEC-1 INPUT                                                    PAGE 70

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2313          KK    A07G   BASIN
2314          KM  SUB-BASIN A07G
2315          BA   0.258
2316          LG    0.22    0.14    7.60    0.11      38
2317          UC   0.615   0.406
2318          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2319          UA     100
              *
              * *** STORAGE ROUTING LA07G ***********************************************
              * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) ******************
              *

2320          KK   LA07G
2321          KM   ADDITIONAL LAND USE RETENTION ADDED 2.4 AC-FT
2322          DT  LA07GD    15.3
2323          DI        0      100     1000    10000
2324          DQ        0      100     1000    10000
              *
              * ROUTE RA07G IS 2439 FT WITH A SLOPE OF .0012
              * CROSS SECTION IS 111TH AVE (MEASURED)
              * *** ROUTE FLOW FROM CA07G TO CA07E ************************************
              *

2325          KK   RA07G
2326          RS       7    FLOW      -1
2327          RC    0.04     .02    0.04    2439  0.0012
2328          RX       0       1      26      41      71      86     126     576
2329          RY      12       7       5       1       1       5       6       7
              *

2330          KK    A07F   BASIN
2331          KM  SUB-BASIN A07F
2332          BA   0.233
2333          LG    0.21    0.27    4.90    0.32      26
2334          UC   0.949   0.902
2335          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2336          UA     100
              *
              * ROUTE RA07F IS 2619 FT WITH A SLOPE OF .0042
              * CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
              * *** ROUTE FLOW FROM CA07F TO CA07E ************************************
              *

2337          KK   RA07F
2338          RS       3    FLOW      -1
2339          RC    0.03    0.02    0.03    2619  0.0042
2340          RX       0       1      13      23      53      83     108     109
2341          RY      14       6       0       0       6       6       7      15
              *
1                                   HEC-1 INPUT                                                    PAGE 71

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2342          KK    A07E   BASIN
2343          KM  SUB-BASIN A07E
2344          BA   0.227
2345          LG    0.23    0.15    7.60    0.11      49
2346          UC   0.567   0.345
2347          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2348          UA     100
              *
              * *** COMBINE BASIN A07E, RA07F, AND RA07G  ****************************
              *

2349          KK   CA07E
2350          HC       3
              *
              * ROUTE RA07E IS 1771 FT WITH A SLOPE OF .004
```

```
              * CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
              * *** ROUTE FLOW FROM CA07E TO CA07C ***********************************
              *

2351          KK   RA07E
2352          RS       2    FLOW      -1
2353          RC    0.03    0.03    0.03    1771   0.004
2354          RX       0     100     112     122     134     154     189     689
2355          RY       8       6       0       0       6       7       7       9
              *

2356          KK    A07C   BASIN
2357          KM  SUB-BASIN A07C
2358          BA   0.175
2359          LG    0.26    0.24    4.90    0.34      28
2360          UC   0.625   0.421
2361          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2362          UA     100
              *

2363          KK   DA07C
2364          KM   NEW RETENTION OF 9.68 AC-FT IS ADDED FOR FUTURE LAND USE
2365          DT  DA07CQ    9.68
2366          DI       0     100    1000   10000
2367          DQ       0     100    1000   10000
              *
              * *** COMBINE BASIN A07C AND RA07E ***********************************
              *

2368          KK   CA07C
2369          HC       2
              *
              * ROUTE RA07C IS 1051 FT WITH A SLOPE OF .0067
              * CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
              * *** ROUTE FLOW FROM CA07C TO CA07D ***********************************
              *
1                                        HEC-1 INPUT                                          PAGE 72

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2370          KK   RA07C
2371          RS       1    FLOW      -1
2372          RC    0.03    0.03    0.03    1051  0.0067
2373          RX       0      50      62      72      84     104     139     640
2374          RY       9       6       0       0       6       7       7       9
              *

2375          KK    A07H   BASIN
2376          KM  SUB-BASIN A07H
2377          BA   0.093
2378          LG    0.21    0.20    4.70    0.45      52
2379          UC   0.336   0.163
2380          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2381          UA     100
              *

2382          KK   DA07H
2383          KM   NEW RETENTION OF 1.04 AC-FT IS ADDED FOR FUTURE LAND USE
2384          DT  DA07HQ    1.04
2385          DI       0     100    1000   10000
2386          DQ       0     100    1000   10000
              *
              * ROUTE RA07H IS 2386 FT WITH A SLOPE OF .0461
              * CROSS SECTION IS THE FARM FIELDS IN THE AGUA FRIA RIVER (MEASURED)
              * *** ROUTE FLOW FROM CA07H TO CA07D ***********************************
              *

2387          KK   RA07H
2388          RS       3    FLOW      -1
2389          RC    0.03    0.03    0.03    2386  0.0461
2390          RX       0      14     125     250     500     800    1000    1014
2391          RY       7       0       0       0       0       0       0       7
              *

2392          KK    A08B   BASIN
2393          KM  SUB-BASIN A08B
2394          BA   0.099
2395          LG    0.19    0.27    3.74    0.66      34
2396          UC   0.610   0.414
2397          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2398          UA     100
              *
```

```
                 * ROUTE RA08B IS 2925 FT WITH A SLOPE OF .001
                 * CROSS SECTION IS 115TH AVE (MEASURED)
                 * *** ROUTE FLOW FROM CA08B TO CA07D ***********************************
                 *
2399             KK   RA08B
2400             RS      12    FLOW      -1
2401             RC    0.03    0.03    0.03    2925   0.001
2402             RX       0      50     100     150     200     250     300     500
2403             RY       7       6       5       5       0       0       5       6
                 *
1                                                HEC-1 INPUT                                                    PAGE 73

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2404             KK    A07D   BASIN
2405             KM  SUB-BASIN A07D
2406             BA   0.229
2407             LG    0.48    0.02    4.10    0.67       2
2408             UC   1.323   1.244
2409             UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2410             UA     100
                 *

2411             KK   DA07D
2412             KM   NEW RETENTION OF 0.56 AC-FT IS ADDED FOR FUTURE LAND USE
2413             DT  DA07DQ    0.56
2414             DI       0     100    1000   10000
2415             DQ       0     100    1000   10000
                 *
                 * *** COMBINE BASIN A07D, RA08B, RA07H, AND RA07C **********************
                 *

2416             KK   CA07D
2417             HC       4
                 *
                 * ROUTE RA07D IS 4828 FT WITH A SLOPE OF .0017
                 * CROSS SECTION IS A CHANNEL AND 115TH AVE (MEASURED)
                 *

2418             KK   RA07D
2419             RS       7    FLOW      -1
2420             RC    0.03    0.03    0.03    4828  0.0017
2421             RX       0     100     112     147     159     179     214     580
2422             RY       8       6       0       0       6       7       7       9
                 *

2423             KK    A99S   BASIN
2424             KM  SUB-BASIN A99S
2425             BA   0.077
2426             LG    0.10    0.35    3.64    0.49       0
2427             UC   0.571   0.539
2428             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2429             UA     100
                 *

2430             KK   DA99S
2431             KM   NEW RETENTION OF 3.9 AC-FT IS ADDED FOR FUTURE LAND USE
2432             DT  DA99SQ     3.9
2433             DI       0     100    1000   10000
2434             DQ       0     100    1000   10000
                 *

2435             KK    A08A   BASIN
2436             KM  SUB-BASIN A08A
2437             BA   0.138
2438             LG    0.19    0.30    3.31    0.77      18
2439             UC   1.042   1.120
2440             UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
1                                                HEC-1 INPUT                                                    PAGE 74

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2441             UA     100
                 *

2442             KK   DA08A
2443             KM   NEW RETENTION OF 0.16 AC-FT IS ADDED FOR FUTURE LAND USE
2444             DT  DA08AQ    0.16
2445             DI       0     100    1000   10000
2446             DQ       0     100    1000   10000
                 *
```

```
                 * ROUTE RA08A IS 1747 FT WITH A SLOPE OF .0057
                 * CROSS SECTION IS A SMALL NATURAL WASH
                 * *** ROUTE FLOW TO CA08 FROM CA08A  ***************************
                 *

2447             KK   RA08A
2448             RS       5    FLOW      -1
2449             RC    0.05    0.05    0.05    1747  0.0057
2450             RX       0     350     450     480     482     510     610     910
2451             RY       7       6       5       1       0       5       6       7
                 *

2452             KK    A99R   BASIN
2453             KM  SUB-BASIN A99R
2454             BA   0.037
2455             LG    0.16    0.31    3.55    0.60      12
2456             UC   0.332   0.189
2457             UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2458             UA     100
                 *

2459             KK   DA99R
2460             KM   NEW RETENTION OF 1.1 AC-FT IS ADDED FOR FUTURE LAND USE
2461             DT  DA99RQ     1.1
2462             DI       0     100    1000   10000
2463             DQ       0     100    1000   10000
                 *
                 * ROUTE RA99R IS 2159 FT WITH A SLOPE OF .0032
                 * CROSS SECTION IS A SMALL NATURAL WASH
                 * *** ROUTE FLOW TO CA08 FROM CA99R  ***************************
                 *

2464             KK   RA99R
2465             RS      12    FLOW      -1
2466             RC    0.05    0.05    0.05    2159   .0032
2467             RX       0     350     450     480     482     510     610     910
2468             RY       7       6       5       1       0       5       6       7
                 *

2469             KK     A08   BASIN
2470             KM  SUB-BASIN A08
2471             BA   0.077
2472             LG    0.30    0.31    3.19    0.88      14
2473             UC   0.308   0.074
2474             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2475             UA     100
                 *
                 * *** COMBINE RA07D, A99S, A08, RA99R AND RA08A   ******************
                 *
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2476             KK    CA08
2477             HC       5
                 *
                 * *** COMBINE HYDROGRAPHS OF CA08 AND AFR4 at AFR and South of Union Hills Dr.
                 *

2478             KK    AFR5
2479             HC       2
                 *
                 *
                 * The Following Portion Came from Deer Valley Road HEC-1 Model with minor
                 * Revisions, May 2006
                 * This Model was Provided by Premier Engineering Corp.
                 *
                 * PREMIER ENGINEERING CORPORATION ADOPTED JACOBS MODEL FOR N. OF PINNACLE PEAK
                 * MODEL RUN WITH DRAINAGE IMPROVEMENTS NORTH & ALONG PINNACLE PEAK IN PLACE
                 * OPTION 2-83RD/PPEAK PROJECT WITH 7 FT DEPTH RET BASIN ON CORNER PROPERTY
                 * AT 89TH AVE AND WILLIAMS RD OUTFLOW AT ELEV 1295.0 WITH 24" BLED OFF PIPE
                 * MODEL ASSUMTPION: 10YR FLOW INTERCEPTED ALONG PINNACLE PEAK
                 * EAST OF 86TH AVE IS 84" SD WITH MAX. DISCHARGE CAPACITY OF 307 CFS
                 * ***************************************************************************
                 * BYPASS2.DAT COVERS AREA N. OF PINNACLE PEAK SUPPLIED BY J.P. FYIE OF JACOBS
                 * AREA SOUTH (SECTION 15) HEC-1 DATA ADDED TO THE BYPASS2.DAT
                 * FOR DEER VALLEY ROAD WIDENING AND DRAINAGE IMPROVEMENT PROJECT WITH CITY OF
                 * PERORIA,  MARCH 21, 2006
                 * ***************************************************************************
                 * FOLLOWING NOTES ARE ORIGINAL MODEL DEVELOPMENT DATA - Same as LEVEL3.DAT
                 * ***************************************************************************
                 *
```

```
* ***BYPASS2.DAT- SUPPLIED BY J.P. FYIE OF JACOBS-EMAIL TO J.HUBBARD 03-14-2006
* ***REVISED 9/19/05 BY AJR (J2): MODIFIED SUBBASINS AND ROUTING OPERATIONS
* WITHIN SUBBASINS S91A, S91B, N11L5A, N11L5, N11L3A, N11L3, 87
* AND N21I1
* ***REVISED 8/23/05 BY AJR (J2): MODIFIED 87TH AVE BASIN AND PINNACLE PEAK
* BASIN STAGE-STORAGE-DISCHARGE INFORMATION PER CURRENT DESIGN;
* MODIFIED STORM DRAIN ROUTING DATA PER CURRENT DESIGN
* ***REVISED 8/4/05 BY AJR (J2): MODIFIED DIVERT OPERATION AT D11L5 TO DIVERT
* FLOW IN EXCESS OF THE 10-YEAR FLOW OUT OF MODEL; ADDED DIVERT
* OPERATION AFTER R91 TO DIVERT FLOW IN EXCESS OF 10 YEAR FLOW OUT OF
*  MODEL
* ***REVISED 7/29/05 BY AJR (J2): CHANGED 87TH AVENUE BASIN AND PINNACLE PEAK
* BASIN STAGE-STORAGE-DISCHARGE PER JACOBS 7/28/05 REVISIONS
* ***REVISED 4/19/05 BY AJR (J2): ADDED DIVERT OPERATIONS TO MODEL 10-YEAR
* STORM DRAIN IN AVENIDA DEL SOL TO 91ST AVENUE; EMAIL PER EMILI
* ***REVISED 4/5/05 BY AJR (J2): DELETED CALLE LEJOS BASIN; ADDED NEW 87TH
* AVENUE BASIN; MODIFIED MODEL STRUCTURE NEAR CALLE LEJOS BASIN;
* SUBDIVIDED SUBBASIN S91, DIVERTED UPPER PART OF S91 TO NEW 87TH
* AVENUE BASIN.
* ***REVISED 3/3/05 BY AJR (J2): PINNACLE PEAK BASIN STAGE-STORAGE-DISCHARGE
* RELATIONSHIP BASED ON DATA FROM JACOBS (ALTERNATIVE 2)
* ***REVISED 3/3/05 BY AJR (J2) TO CHANGE TC AND R FOR BASIN S91 TO 100-YEAR
* VALUES
* ***REVISED 2/21/05 BY AJR (J2) TO ADD JP AND JR RECORDS TO MODEL 10, 25, 50
* AND 100-YEAR STORM EVENTS
* ***REVISED 2/15/05 BY AJR (J2) TO ADD SUBBASIN S91 AND ROUTING OPERATIONS
* ALONG PINNACLE PEAK ROAD BETWEEN 91ST AVENUE AND CP PPSD;
* ***REVISED 12/27/04 BY DES TO REFLECT CHANGES IN LINEWORK TO REMOVE
* ANY BASIN EXCAVATION FROM THE TRACT B AREA.
* THE RBSN STAGE STORAGE RECORD WAS ADJUSTED FOR THE NEW VOLUMES.
* ***REVISED 12/08/04 BY DES TO REMOVE OVRLND DIVERSION STEP AND
* SPLIT UP ROUTING STEPS R11P4S, R11P7S, RTCA1, & SUMMIT
* TO ADD IN WITH CLPIPE (ROUTED OUTFLOW FROM RBSN).
* ***REVISED 12/07/04 BY DES TO CHANGE LEJOS DETEN BASIN
* STAGE STORAGE INPUT RECORD, BOTTOM AT 1337.
* INCLUDES A 10-FOOT O&M ROAD WITH 4:1 BACKSLOPES
* INCLUDES CHANGES BY J2 SUBMITTED 12-07-04.
* ***REVISED 11/16/04 BY JPF TO REMOVE DIVERSIONS NPIPE, WPIPE AND PPKES
* ***REVISED 11/15/04 BY JPF FOR PINNACLE PEAK BASIN MODIFICATIONS
* ***REVISED 11/4/04 BY JPF FOR CHANGES IN FAX TO JEFF H 11/2/04
* ***83RD AVENUE AND PINNACLE PEAK DRAINAGE IMPROVEMENTS
* ***THIS FILE MODELS THE HYDRYOLOGY FOR THE PROPOSED
* ***DRAINAGE IMPROVEMENTS FROM THE SUNRISE MOUNTAINS SOUTH TO
* ***TO PINNACLE PEAK ROAD AND FROM 89TH AVE WEST TO 81ST AVE
*
* ***J2 MODIFIED THE ENTELLUS GLENDALE/PEORIA ADMP UPDATE
* ***LEVEL3.DAT
* ***J2 UPDATED THE HYDROLOGY MODEL AND REDUCED THE LIMITS TO AREAS PERTINENT
* ***TO THIS PROJECT.
*
* ***PREPARED BY: KBD
* ***DATE: SEPTEMBER 2004
* ***REVISED OCTOBER 2004
* ***UPDATED FOR FCD PREDESIGN COMMENTS FROM STEVE TUCKER
*
* ******************************************************************************
* **********************      83RD AVENUE TO 91ST AVE NORTH OF PINNACLE PEAK****
* ******************************************************************************
*
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2480          KK   N11P5   BASIN
2481          BA   0.027
2482          LG    0.10    0.35    4.00    0.39      15
2483          UC   0.144   0.101
2484          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2485          UA     100
              *

2486          KK  DN11P5
2487          KM   NEW RETENTION OF 1.4 AC-FT IS ADDED FOR FUTURE LAND USE
2488          DT  N11P5Q     1.4
2489          DI       0     100    1000   10000
2490          DQ       0     100    1000   10000
              *

2491          KK  R11P5S
2492          KM  ROUTE N11P5 FLOWS South to N11P1
2493          RS       8    FLOW      -1
2494          RC    0.04     .03    0.04    3000   .0162
```

```
2495          RX       0     200     210     220     240     250     260     460
2496          RY       4       2       0     1.5     1.5       0       2       4
              *

2497          KK   N11P1   BASIN
2498          BA   0.064
2499          LG    0.30    0.25    4.10    0.46       5
2500          UC   0.392   0.354
2501          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2502          UA     100
              *

2503          KK  DN11P1
2504          KM   NEW RETENTION OF 3.4 AC-FT IS ADDED FOR FUTURE LAND USE
2505          DT  N11P1Q     3.4
2506          DI       0     100    1000   10000
2507          DQ       0     100    1000   10000
              *

2508          KK  CN11P1
2509          KM  COMBINE N11P5 AND N11P1
2510          HC       2
              *

2511          KK  R11P1E
2512          KM  ROUTE N11P1 FLOWS EAST IN CALLE LEJOS PROPOSED CHANNEL
2513          KM  THEN THRU BOX AT 88TH AVE
2514          RS       5    FLOW      -1
2515          RC    0.02     .02    0.02    1450   .0020
2516          RX     160     192     196     200     210     214     218     250
2517          RY      10       2       1     0.0     0.0       1       2      10
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2518          KK   N11P6   BASIN
2519          BA   0.159
2520          LG    0.10    0.35    4.00    0.39      40
2521          UC   0.188   0.095
2522          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2523          UA     100
              *

2524          KK  DN11P6
2525          KM   NEW RETENTION OF 8.1 AC-FT IS ADDED FOR FUTURE LAND USE
2526          DT  N11P6Q     8.1
2527          DI       0     100    1000   10000
2528          DQ       0     100    1000   10000
              *

2529          KK  R11P6S
2530          KM  ROUTE N11P6 FLOWS South to N11P9
2531          RS       2    FLOW      -1
2532          RC    0.04     .03    0.04    1500   .0162
2533          RX       0     200     210     220     240     250     260     460
2534          RY       4       2       0     1.5     1.5       0       2       4
              *

2535          KK   N11P9   BASIN
2536          BA   0.043
2537          LG    0.30    0.25    4.10    0.46       5
2538          UC   0.233   0.122
2539          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2540          UA     100
              *

2541          KK  DN11P9
2542          KM   NEW RETENTION OF 2.3 AC-FT IS ADDED FOR FUTURE LAND USE
2543          DT  N11P9Q     2.3
2544          DI       0     100    1000   10000
2545          DQ       0     100    1000   10000
              *

2546          KK  CN11P9
2547          KM  COMBINE N11P6 AND N11P9
2548          HC       2
              *

2549          KK  R11P9S
2550          KM  ROUTE THRU N11P2 TO JUST NORTH OF THE PROPOSED CALLE LEJOS BASIN
2551          KM  ROUTE R11P6S IS 1620 FT WITH A SLOPE OF 0.0222
```

```
2552          KM  CROSS SECTION IS A MEDIUM WASH
2553          RS       3    FLOW      -1
2554          RC     .05     .05     .05    1620  0.0222
2555          RX       0     100     300     360     380     420     620     720
2556          RY      10       8       6       2       0       6       8      10
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2557          KK   N11P2   BASIN
2558          BA   0.063
2559          LG    0.30    0.25    4.10    0.46       5
2560          UC   0.315   0.174
2561          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2562          UA     100
              *

2563          KK  CN11P2
2564          KM  COMBINE N11P6 AND BASIN N11P2
2565          KM  BASICALLY THESE BASIN FLOWS OUTFALL TO THE NORTH SIDE OF THE PROPOSED CALLE
2566          KM  LEJOS BASIN
2567          HC       2
              *

2568          KK   LEJOS
2569          KM  COMBINE INFLOWS FROM N11P1 AND COMBINED FLOWS FROM N11P6 AND N11P2
2570          HC       2
              *

2571          KK   VPDIV
2572          KM  DIVERT 6.67 ACRE-FEET OUT OF MODEL FOR VENTANA PICACHOS RETENTION
2573          KM   ADDITIONAL LAND USE RETENTION ADDED 3.3 AC-FT
2574          DT   VPRET    10.0
2575          DI       0   10000
2576          DQ       0   10000
              *

2577          KK   N11P4   BASIN
2578          KM  SUBDIVIDE BASIN N11P4 INTO 3 SUBBASINS. EAST BASIN - CALL N11P4
2579          KM  LACAI- THE LA CAILLE DEVELOPMENT
2580          KM  SUMMIT - SUMMIT AT SUNRISE MOUTAIN DEVELOPMENT
2581          BA   0.050
2582          LG    0.30    0.25    4.15    0.44       5
2583          UC   0.394   0.349
2584          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2585          UA     100
              *

2586          KK  DN11P4
2587          KM   NEW RETENTION OF 0.5 AC-FT IS ADDED FOR FUTURE LAND USE
2588          DT  N11P4Q     0.5
2589          DI       0     100    1000   10000
2590          DQ       0     100    1000   10000
              *

2591          KK  R11P4S
2592          KM  ROUTE R11P4 IS 1570 WITH A SLOPE OF 0.002 FT/FT
2593          RS       4    FLOW      -1
2594          RC    .016   0.020   0.035    1570   0.002
2595          RX     0.0      10      20      30      40      50      60      70
2596          RY       6       4       2       0       0       2       4       6
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2597          KK  DN11P4
2598          KM  ADDED BY DES
2599          KM  N11P4E IS APPROXIMATELY HALF THE RUNOFF THAT IS ROUTED TO
2600          KM  BE RECALLED AT RDP4E.
2601          KM  REMAINDER GOES INTO HEADWALL AND LATERAL AT 13+80.
2602          DT  N11P4E
2603          DI       0      10      50      80     120     200     300     400
2604          DQ       0       5      25      40      60     100     150     200
              *

2605          KK  SDLEJ1
2606          HC       2
              *
```

```
2607          KK   N11P8   BASIN
2608          KM  SUBBASIN NORTH OF LA CAILLE DEV.
2609          BA   0.043
2610          LG    0.16    0.32    4.15    0.39      22
2611          UC   0.169   0.096
2612          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2613          UA     100
              *

2614          KK  DN11P8
2615          KM   NEW RETENTION OF 2.24 AC-FT IS ADDED FOR FUTURE LAND USE
2616          DT  N11P8Q    2.24
2617          DI       0     100    1000   10000
2618          DQ       0     100    1000   10000
              *

2619          KK  R11P8S
2620          KM  Route Flow from N11P8 to N11P7
2621          RS       3    FLOW      -1
2622          RC    0.05    0.05    0.05    1000   0.016       8
2623          RX       0     200     250     260     270     280     330     530
2624          RY       3       2       1       0       0       1       2       8
              *

2625          KK   N11P7   BASIN
2626          KM  SUBBASIN NORTH OF LA CAILLE DEV.
2627          BA   0.060
2628          LG    0.30    0.25    4.25    0.42       5
2629          UC   0.182   0.064
2630          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2631          UA     100
              *

2632          KK  DN11P7
2633          KM   NEW RETENTION OF 3.2 AC-FT IS ADDED FOR FUTURE LAND USE
2634          DT  N11P7Q     3.2
2635          DI       0     100    1000   10000
2636          DQ       0     100    1000   10000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2637          KK  CN11P7
2638          KM  TOTAL Flow at N11P7
2639          HC       2
              *

2640          KK  DN11P7
2641          KM  DES SWITCHED REMAINDER FLOW FROM N11P7S TO CONTINUE SOUTH
2642          KM  DIVERSION N11P7E SPLITS FLOWS EAST ALONG HATFIELD THEN SOUTH ALONG
2643          KM  83RD AVE TO 83RD AND CALLE LEJOS INTERSECTION
2644          KM  (RECALL N11P7E JUST AFTER SUMMIT).
2645          DT  N11P7E
2646          DI       0      10      50      80     125     200     300     400
2647          DQ       0       2      10      16      25      40      60      80
              *

2648          KK  R11P7S
2649          KM  ROUTE R11P7S
2650          KM  ROUTE R11P7S IS 2707 FT WITH A SLOPE OF 0.0111
2651          KM  ROUTE IS LENGTH IS TO
2652          KM  CROSS SECTION IS SHALLOW CONCENTRATED FLOW
2653          RS       4    FLOW      -1
2654          RC    0.05    0.05    0.05    1465   0.016       8
2655          RX       0     200     250     260     270     280     330     530
2656          RY       3       2       1       0       0       1       2       8
              *

2657          KK   RDP4E
2658          KM  DIVERSION RECOVER N11P4E
2659          KM  RECOVER FLOWS FROM DN11P4 (EASTERN DIVERT)
2660          DR  N11P4E
              *

2661          KK  SUMP7S
2662          KM  TOTAL INFLOW AT INLET HEADWALL FOR R11P7S AT STA 17+00
2663          HC       2
              *

2664          KK  SDLEJ2
2665          HC       2
```

```
                *
2666            KK   RSDL2
2667            KM  ROUTE SCLEJ2 TO NEW BASIN AT 87TH AVENUE IN 78 IN DIA STORM DRAIN
2668            RD    1320    .0080     .013            CIRC       6
                *

2669            KK  BN11NP
2670            KM  DIVERSION RECOVER N11NP
2671            KM  RECOVER FLOWS FROM N11NP (EASTERN DIVERT of N11NC)
2672            DR   N11NP
                *
1                                          HEC-1 INPUT                                                    PAGE 81

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2673            KK  RN11NP
2674            KM  ROUTE from East of 91st Ave to New 87th Ave Detentnion Basin
2675            KM   ROUTING METHOD CHANGED TO NORMAL DEPTH
2676            RS       8    FLOW      -1
2677            RC    .035   0.035   0.035    1730   0.009
2678            RX     0.0      10      20      30      40      50      60      70
2679            RY       6       4       2       0       0       2       4       6
                *
                *

2680            KK  N11L5A   BASIN
2681            KM  UPPER PART OF SUBBASIN N11L5
2682            BA   0.045
2683            LG    0.30    0.25    4.55    0.35       7
2684            UC   0.473   0.398
2685            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2686            UA     100
                *

2687            KK     C89
2688            KM  COMBINE RS91A AND N11L5A AT AVENIDA DEL SOL AND 89TH AVENUE
2689            HC       2
                *

2690            KK     D89
2691            KM  DIVERT FLOW IN EXCESS OF THE 10-YEAR RUNOFF SOUTH THROUGH N11L5
2692            DT    ED89
2693            DI       0     218   10000
2694            DQ       0       0    9782
                *

2695            KK    R89E
2696            KM  ROUTE D89 TO EAST TO CP C87
2697            RD     996    .002    .013            CIRC       6
                *

2698            KK  N11L3A   BASIN
2699            KM  RUNOFF FROM UPPER PART OF SUBBASIN N11L3
2700            BA   0.025
2701            LG    0.29    0.25    4.65    0.33       9
2702            UC   0.343   0.295
2703            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2704            UA     100
                *

2705            KK     C87
2706            KM  COMBINE R89E AND N11L3A AT 87TH AVENUE AND AVENIDA DEL SOL
2707            HC       2
                *
1                                          HEC-1 INPUT                                                    PAGE 82

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2708            KK     D87
2709            KM  DIVERT FLOW IN EXCESS OF 10-YEAR FLOW SOUTH TO PPSD
2710            DT     SOL
2711            DI       0     246   10000
2712            DQ       0       0    9754
                *

2713            KK   C87BA
2714            KM  COMBINE RSDL2 AND C87 AT 87TH AVENUE AND AVENIDA DEL SOL
2715            HC       2
                *
```

```
2716          KK    87BP
2717          KM  DIVERT FLOW IN EXCESS OF BYPASS PIPE CAPACITY INTO 87TH AVE BASIN
2718          DT   87BAS
2719          DI       0      22     683   10000
2720          DQ       0       0     661    9978
              *

2721          KK   R87BP
2722          KM  ROUTE 87BP THROUGH 87TH AVE DET BASIN BYPASS PIPE
2723          RD    1320   .0093    .013            CIRC     3.5
              *

2724          KK      87   BASIN
2725          KM  RUNOFF DIRECTLY ENTERING 87TH AVENUE BASIN
2726          BA   0.028
2727          LG    0.29    0.25    4.70    0.34      15
2728          UC   0.393   0.374
2729          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2730          UA     100
              *

2731          KK     D87
2732          KM   NEW RETENTION OF 0.64 AC-FT IS ADDED FOR FUTURE LAND USE
2733          DT    D87Q    0.64
2734          DI       0     100    1000   10000
2735          DQ       0     100    1000   10000
              *

2736          KK    R87B
2737          KM  RETRIEVE DIVERTED FLOW 87BAS
2738          DR   87BAS
              *

2739          KK    C87B
2740          KM  COMBINE 87 AND R87B (TOTAL INFLOW INTO 87TH AVE BASIN)
2741          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2742          KK    87BA
2743          KM  ROUTE C87B THROUGH NEW BASIN AT 87TH AVENUE (LAST UPDATED 12/22/05)
2744          RS       1    STOR       0
2745          SV       0    0.81    3.43    7.18   11.20   15.45   19.87   24.47   29.24
2746          SE    1313    1314    1315    1316    1317    1318    1319    1320    1321
2747          SQ       0       0   34.13   53.39   68.62   81.63   93.17  103.66  113.33
              *

2748          KK  87BOUT
2749          KM  COMBINE 87BA AND BYPASS PIPE FLOW
2750          HC       2
              *

2751          KK   R87BA
2752          KM  ROUTE TOTAL OUTFLOW FROM 87TH AVE BAS & BYPASS TO PINNACLE PEAK ROAD
2753          RD    1155   .0093    .013            CIRC     3.5
              *

2754          KK   D87BA
2755          KM  DIVERT ALL OF R87BA OUT OF MODEL FOR LATER RETRIEVAL
2756          DT   87OUT
2757          DI       0    5000
2758          DQ       0    5000
              *

2759          KK   LACAI   BASIN
2760          KM  SUB-BASIN CAILLE
2761          KM  LA CAILLE DEVELOPMENT
2762          KM  OFFSITE CONVEYANCE SYSTEM IS A PASS THRU SYSTEM
2763          KM  REFER TO "DRAINAGE REPORT FOR LA CAILLE" DEC. 22, 1994
2764          KM  BY CMX - MICHAEL M. LLOYD, PE
2765          KM  IMPERVIOUS AREA BASED ON 1 ACRE LOTS OF SIMILAR AND TYPICAL SUBDIVISION TYPE
2766          KM  3,000 SQUARE FOOT HOUSE, DRIVEWAY AND 1/2 STREETS USED AS IMPERVIOUS
2767          KM  AREA OUT OF TOTAL 43,560 SQUARE FT
2768          BA   0.035
2769          LG    0.30    0.25    4.20    0.43       5      12
2770          UC   0.404   0.349
2771          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2772          UA     100
              *
```

```
2773          KK  DLACAI
2774          KM   NEW RETENTION OF 0.4 AC-FT IS ADDED FOR FUTURE LAND USE
2775          DT  LACAIQ      0.4
2776          DI       0      100     1000    10000
2777          DQ       0      100     1000    10000
              *

2778          KK   RTCAI
2779          KM  ROUTE LA CAILLE FLOWS SOUTH THROUGH SUMMIT AT SUNRISE
2780          KM  CALLE LEJOS ROAD
2781          RS       1     FLOW      -1
2782          RC    .035    0.020   0.016     572   0.009  100.17
2783          RX     0.0      8.8    17.5    32.4    32.9      33      49      65
1                                            HEC-1 INPUT                                                          PAGE 84

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2784          RY     100   97.08   98.54  100.03  100.03   99.53   99.85  100.17
              *

2785          KK  DNLECH
2786          KM  REMAINDER FLOW DRAINS ACROSS CALLE LEJOS INTO NEW CATCH BASINS
2787          KM  DIVERSION LECHE CARRIES CHANNEL FLOW EAST.
2788          KM  LECHE IS RECALLED PRIOR TO STEP 83CL
2789          DT   LECHE
2790          DI       0      10      20      40     120     200     300     400
2791          DQ       0      10      20      20      20      20      20      20
              *

2792          KK  SDLEJ3
2793          KM  TOTAL Q IN CALLE LEJOS STORM DRAIN AT STA 22+00
2794          KM  INTERCEPT STREET OVERFLOW WITH DOUBLE MEDIAN DIKE CATCH BASINS
2795          HC       2
              *

2796          KK  SUMMIT   BASIN
2797          KM  SUMMIT AT SUNRISE MOUNTAIN DEVELOPMENT
2798          KM  REFER TO "PRELIMINARY DRAINAGE REPORT FOR SUMMIT AT SUNRISE MOUNTAIN"
2799          KM  JAN 25, 1999, REV. OCTOBER 30, 1999
2800          KM  SCOTT M. LARSON, P.E. & ROY B. MCDANIEL
2801          KM  IMPERVIOUS AREA BASED ON 1 ACRE LOTS OF SIMILAR AND TYPICAL SUBDIVISION TYPE
2802          KM  3,000 SQUARE FOOT HOUSE, DRIVEWAY AND 1/2 STREETS USED AS IMPERVIOUS
2803          KM  AREA OUT OF TOTAL 43,560 SQUARE FT
2804          BA   0.026
2805          LG    0.30    0.25    4.35    0.40       5      12
2806          UC   0.449   0.389
2807          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2808          UA     100
              *

2809          KK  RDLECH
2810          KM  DIVERSION RECOVER LECHE
2811          KM  FLOWS ALONG NORTH SIDE OF CALLE LEJOS
2812          DR   LECHE
              *

2813          KK  LEJCHL
2814          KM  TOTAL FLOW INTO EXIST CHL ON N. SIDE OF CALLE LEJOS
2815          HC       2
              *

2816          KK   RDP7E
2817          KM  DIVERSION RECOVER N11P7E
2818          KM  RECOVER FLOWS FROM DN11P7 (EASTERN DIVERT)
2819          DR  N11P7E
              *
1                                            HEC-1 INPUT                                                          PAGE 85

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2820          KK  R11P7E
2821          KM  ROUTE R11P7E IS 2356 FT WITH A SLOPE OF 0.0144
2822          KM  ROUTE EAST TO NORTHWEST CORNER OF 83RD AVE AND CALLE LEJOS RD - VIA
2823          KM  HATFIELD ROAD AND RIPRAP SWALE ON WEST SIDE OF 83RD AVE
2824          RS       9     FLOW      -1
2825          RC    0.05     0.05    0.05    2356  0.0144
2826          RX       0      200     250     260     270     280     330     530
2827          RY       3        2       1       0       0       1       2       8
              *

2828          KK   D2-18
2829          KM  DIVERT FLOWS VIA 2-18" PIPE AT SE CORNER OF LA CAILLE DEV.
```

```
2830          KM  SUMMIT AT SUNRISE MOUTAIN REPORT INDICATED 34 CFS BEING
2831          KM  PASSED DURING THE 100-YEAR STORM. J2 ESTIMATED 20 CFS.
2832          DT  EAST83
2833          DI       0       6      12      18    1000    2000
2834          DQ       0       6      12      18      20      20
              *

2835          KK   83CL
2836          KM  COMBINE RDLECH FROM WEST AND D2-18 FROM NORTH
2837          KM  LOCATION IS NW CORNER OF 83RD AVE AND CALLE LEJOS
2838          KM  CONC POINT IS LOCATED JUST BEFORE THE ENTRANCE TO THE 3-24 INCH CROSS PIPES
2839          KM  USED TO BE CALLED CNP11P4 IN ADMP UPDATE MODEL
2840          HC       2
              *

2841          KK  24PIPE
2842          KM  DIVERT FLOWS THAT PASS THRU EXISTING 3-24" CMPS (PASSED TO EAGLE CANYON
2843          KM  RETENTION BASIN)
2844          KM  CULVERT CAPACITY FOR 3-24 INCH PIPES WAS CALCUALTED TO BE ABOUT 60 CFS.
2845          KM  OUTFALL IS AT THE EAGLE CANYON DEVLOPMENT DETENTION BASIN ON THE SE CORNER
2846          KM  OF 83RD AND CALLE LEJOS
2847          KM  FLOWS UP TO 60 CFS DIVERTED TO EAGLE CANYON ESTATES - OVERFLOWS TO SOUTH
2848          KM
2849          DT   EAGLE
2850          DI       0      30      60     100    1000    2000
2851          DQ       0      30      60      60      60      60
              *

2852          KK  SDLEJ4
2853          KM  TOTAL Q IN CALLE LEJOS STORM DRAIN AT STA 27+00
2854          KM  OVERFLOW FROM 24PIPE INTERCEPTED WITH DOUBLE MEDIAN DIKE CATCH BASINS
2855          HC       2
              *

2856          KK  RT83CL
2857          KM  ROUTE LEJOS STORM DRAIN FLOWS SOUTH ALONG WEST SIDE OF 83RD AVE
2858          KM  8-FT BOT WIDTH UNLINED ROADSIDE CHANNEL, 4:1 SS
2859          RS       4    FLOW      -1
2860          RC    .035   0.025   0.016    1177   0.002
2861          RX     0.0      50      70      94     102     126     146     200
2862          RY     100      99      98      92      92      98      99     100
              *
                                          HEC-1 INPUT                                          PAGE 86

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2863          KK   N11P3   BASIN
2864          BA   0.041
2865          LG    0.30    0.25    4.80    0.30       5
2866          UC   0.611   0.711
2867          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2868          UA     100
              *

2869          KK    83SD
2870          KM  FLOWS AT BEGINNING OF PROPOSED 83RD AVE RCBC
2871          KM  INCLUDES FLOWS FROM N11P3, FLOWS FROM RT83CL
2872          HC       2
              *

2873          KK   R83SD
2874          KM  ROUTE THRU PROPOSED 10x4 RCBC
2875          RK     771   .0089    .013            DEEP      10    0.01
              *

2876          KK  BN11KP
2877          KM  RETRIEVE DIVERTED FLOW N11KP
2878          DR   N11KP
              *

2879          KK     R91
2880          KM  ROUTE N11KP TO PPSD ALONG PINNACLE PEAK ROAD
2881          RD    1700    .002    .013            CIRC       5
              *

2882          KK   N11L5   BASIN
2883          KM  SUBBASIN CONTRIBUTING TO 89TH AND PINNACLE PEAK ROAD
2884          KM  FLOWS TO BE COLLECTED BY INLETS ALONG 89TH AVE.
2885          KM  AND ENTER PROPOSED STORMDRAIN (RCBC) ALONG PINNACLE PEAK DIRECTLY.
2886          BA   0.042
2887          LG    0.30    0.25    4.80    0.34      13
2888          UC   0.434   0.331
```

```
2889          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2890          UA     100
              *

2891          KK   RED89
2892          KM  RETRIEVE DIVERTED FLOW ED89
2893          DR    ED89
              *

2894          KK    R89S
2895          KM  ROUTE ED89 THROUGH SUBBASIN N11L5 TO PINNACLE PEAK RD
2896          RS       6    FLOW      -1
2897          RC    .035    .035    .035    1350  0.0110
2898          RX       0      50     100     120     180     200     210     260
2899          RY       6       4       3       0       0       3       4       6
              *
1                                          HEC-1 INPUT                                          PAGE 87

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2900          KK   N11L2   BASIN
2901          KM  ASSUMED THAT FLOWS GENERATED ARE COLLECTED BY INLETS
2902          KM  AND ENTER PROPOSED STORMDRAIN ALONG PINNACLE PEAK DIRECTLY.
2903          BA   0.010
2904          LG    0.30    0.25    4.80    0.35      15
2905          UC   0.332   0.294
2906          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2907          UA     100
              *

2908          KK  CN11L5
2909          KM  COMBINE 91R, N11L5, N11L2, AND R89S
2910          HC       4
              *

2911          KK   D11L5
2912          KM  DIVERT FLOW IN EXCESS OF 10-YEAR FLOW FROM RN11L5 OUT OF MODEL (8/4/05)
              * KM DIVERT RN11L5 OUT OF MODEL (4/19/05, MODIFIED ALT 3A)
2913          DT  DIVS89
2914          DI       0      84   10000
2915          DQ       0       0    9910
              *

2916          KK  RN11L5
2917          KM  ROUTE D11L5 TO PPSD ALONG PINNACLE PEAK ROAD
2918          RD    1335    .002    .013            CIRC       5
              *

2919          KK   N11L3   BASIN
2920          KM  SUBBASIN RUNOFF
2921          BA   0.039
2922          LG    0.30    0.25    4.80    0.35      15
2923          UC   0.412   0.317
2924          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2925          UA     100
              *

2926          KK  DN11L3
2927          KM   NEW RETENTION OF 1.0 AC-FT IS ADDED FOR FUTURE LAND USE
2928          DT  N11L3Q     1.0
2929          DI       0     100    1000   10000
2930          DQ       0     100    1000   10000
              *

2931          KK    RSOL
2932          KM  RETRIEVE DIVERTED FLOW FROM AVENIDA DEL SOL WEST OF 87TH AVENUE
2933          DR     SOL
              *
1                                          HEC-1 INPUT                                          PAGE 88

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2934          KK   RTSOL
2935          KM  ROUTE SOL THROUGH N11L3 TO PPSD
2936          RS       1    FLOW      -1
2937          RC   0.035   0.035   0.035    1470  0.0100
2938          RX       0      50     100     120     150     170     220     270
2939          RY       3       2       1       0       0       1       2       8
              *

2940          KK   PPSD1
```

```
2941          KM  COMBINE RN11L5, N11L3, AND RTSOL AT PINNACLE PEAK ROAD
2942          HC       3
              *

2943          KK   PPDIV
2944          KM  DIVERT FLOW IN EXCESS OF 10-YEAR FLOW OUT OF MODEL
2945          DT  DIVS87
2946          DI       0     122   10000
2947          DQ       0       0    9878
              *

2948          KK   N11L4   BASIN
2949          KM  FLOWS COLLECTED BY INLETS AND
2950          KM  ENTER PROPOSED STORMDRAIN ALONG PINNACLE PEAK DIRECTLY.
2951          BA   0.010
2952          LG    0.30    0.25    4.80    0.35      15
2953          UC   0.390   0.554
2954          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
2955          UA     100
              *

2956          KK  DN11L4
2957          KM   NEW RETENTION OF 0.2 AC-FT IS ADDED FOR FUTURE LAND USE
2958          DT  N11L4Q     0.2
2959          DI       0     100    1000   10000
2960          DQ       0     100    1000   10000
              *

2961          KK   N21I1   BASIN
2962          KM  CONTRIBUTES TO PROPOSED STORMDRAIN AT 85TH AVE.
2963          BA   0.083
2964          LG    0.30    0.25    4.70    0.32       7
2965          UC   0.558   0.496
2966          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2967          UA     100
              *
              *

2968          KK  DN21I1
2969          KM   NEW RETENTION OF 0.2 AC-FT IS ADDED FOR FUTURE LAND USE
2970          DT  N21I1Q     0.2
2971          DI       0     100    1000   10000
2972          DQ       0     100    1000   10000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2973          KK   87OUT
2974          KM  RETRIEVE DIVERTED FLOW FROM 87TH AVE BASIN
2975          DR   87OUT
              *

2976          KK    PPSD
2977          KM  COMBINE 87OUT,PPDIV, N11L4, AND N21I1 AT PINNACLE PEAK ROAD
2978          HC       4
              *

2979          KK   DIVS3
2980          KM  DIVERT EXCESS FLOW INTO 86TH AVE,CHANNEL CAPACITY OF 122 CFS PER MODEL (4/
2981          KM  PROPOSED 84" SD HAS 307 CFS MAXIMUM DISCHARGE CAPACITY
2982          DT  DIVS86
2983          DI       0     307   10000
2984          DQ       0       0    9737
              *

2985          KK   RPPSD
2986          KM  ROUTE IN PROPOSED 84 INCH PIPE TO PINNACLE PEAK BASIN
2987          RK    1870    .002    .013             CIRC       7
              *

2988          KK   N21I2   BASIN
2989          KM  ASSUME THE FLOWS FROM N21I2 ENTER THE PINNACLE PEAK DETENTION BASIN DIRECTLY
2990          BA   0.057
2991          LG    0.30    0.25    4.70    0.31       5
2992          UC   0.626   0.749
2993          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2994          UA     100
              *

2995          KK   N21I4   BASIN
2996          KM  ADMP UPDATE BASIN N21I4 RE-DELINEATED (old name = N21I3)
```

```
2997          KM  ORIGINAL BASIN SIZE WAS 0.115 SQ MILES
2998          BA   0.027
2999          LG    0.30    0.25    4.80    0.30       5
3000          UC   0.455   0.486
3001          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3002          UA     100
              *

3003          KK   TEMP0
3004          KM  COMBINE R83Sp, RPPSD, N21I2, and N21I4 to Reduce the Hydrograph Path
3005          HC       4
              *
              * ==========================================================================
              * ADMP FLOWS FROM EAST FACE OF SUNRISE MOUNTAINS AND DEVLOPMENTS EAST OF
              * 83RD AVE
              * RUNOFF GENERATED ON EAST FACE OF SUNRISE MOUNTAINS FLOWS SOUTHEAST TO
              * 83RD AVE.  FLOWS ARE ROUTED EAST UNDER 83RD VIA 48" CMPS.
              * FLOWS IS ROUTED AROUND CALLE LEJOS ESTATES TO 81ST AVE WHERE FLOWS ROUTE
              * SOUTH AND EAST.
              * ==========================================================================
              *
              * ADMP UPDATE SUBBASIN N21J NOT INCLUDED AS PART OF THE CONTRIBUTING AREA
              * TO THE PROJECT SITE
              * PORTION OF SUBBASIN ABOVE HATFIELD ROAD IS CUT OFF BY A CONCRETE
              * TRAPEZOIDAL CHANNEL THAT RUNS WEST TO EAST FROM 83RD AVENUE TO THE OUTFALL
              * AT NEW RIVER (APPROXIMATELY 79TH AVE)
              * THE CHANNEL WAS BUILT AS PART OF THE CALLE LEJOS ESTATES AND SILVER CREST AT
              * TREASURE CANYON DEVLOPMENTS
              * CALLE LEJOS ROAD FROM 83RD AVENUE TO END OF STREET (79TH AVE - NEW RIVER) ACTS
              * AS A COLLECTOR OF FLOWS GNERATED BETWEEN HATFIELD ROADS AND CALLE LEJOS BETWEE
              * 83RD AVENUE AND 79TH AVE.
              *
1                                        HEC-1 INPUT                                        PAGE 90

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3006          KK    N21Z   BASIN
3007          KM  APPEARS THAT FLOWS FROM N21J ARE DIVERTED BY WALL AROUND
3008          KM  CALLE LEJOS ESTATES TO WASH ON WEST
3009          KM  CALLE LEJOS PICKS UP REST OF FLOWS GENERATED NORTH AND DIVERTS EAST
3010          KM  THEREFORE N21J HAS BEEN ELIMINATED FROM THE PROJECT WATERSHED
3011          KM  THIS SUB-BASIN INCLUDES EAGLE DEV
3012          BA   0.110
3013          LG    0.30    0.21    6.40    0.18      13
3014          UC   0.579   0.421
3015          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3016          UA     100
              *

3017          KK   LN21Z
3018          KM  EAST SIDE OF EAGLE STORAGE ACCOUNTED FOR
3019          KM  EAGLE WEST OF 81ST AVE AVAILABLE RETENTION = 3.42 ACRE-FT
3020          KM   ADDITIONAL LAND USE RETENTION ADDED 3.9 AC-FT
3021          DT   N21ZI     6.7
3022          DI       0     100    1000   10000
3023          DQ       0     100    1000   10000
              *

3024          KK  DN21ZO
3025          KM  DIVERSION DN21Z
3026          KM  SPLIT EAST TO NEW RIVER ALONG PINNACLE PEAK
3027          KM  ORIGINAL ADMP COMMENT INDICATED FLOWS WENT WEST
3028          KM  THIS WAS VERIFIED AS A TYPOGRAPHICAL ERROR AND HAS BEEN CORRECTED HERE
3029          KM  KBD PER PAW 9-2004
3030          DT  DN21ZI
3031          DI       0       1     100     200     300     400     450     500
3032          DQ       0     .05      .1      .2      .3       5      27      35
              *

3033          KK  DN21Z*
3034          KM  FLOW SPLIT AT 81ST AVENUE AND PINNACLE PEAK ROAD
3035          KM  FLOW SPLIT ESTIMATED IN THE FIELD WITH FCD (ST) 10-26-2004
3036          KM  MAIN FLOWS WEST ALONG PINNACLE PEAK TO 83RD, SPLIT CONTINUES SOUTH
3037          DT  N21ZI*
3038          DI       0       1     300     500
3039          DQ       0      .5     150     250
              *

3040          KK  RN21ZW
3041          KM  ROUTE RN21ZW
3042          KM  ROUTE RN21ZW IS 871 FT WITH A SLOPE OF 0.0011
3043          KM  CROSS SECTION IS MEDIUM ROAD WITH FENCE ON WEST SIDE
```

```
3044          KM  ALONG PINNACLE PEAK RD
3045          KM  ROUTE FLOW FROM 81ST AVE (CN21Z) TO 83RD AVE, (CN21I)
3046          RS       8    FLOW      -1
3047          RC    .035    .035    .035     871   .0011
3048          RX       0       1      15      16      56      57      82     582
3049          RY    9.25    1.25    0.25       0       0    0.25    1.25    4.25
              *
1                                        HEC-1 INPUT                                                    PAGE 91

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3050          KK   1/2ST
3051          KM  DIVERT 1/2 STREET FLOW (NORTH SIDE PINNACLE PEAK)
3052          KM  TO CLEARVIEW BASIN
3053          DT  D1/2ST
3054          DI       0       1      12      50     100     500    1000
3055          DQ       0       1      12      12      12      12      12
              *

3056          KK  R1/2ST
3057          KM  RECALL DIVERT 1/2 STREET INTERCEPT
3058          DR  D1/2ST
              *

3059          KK  18PIPE
3060          KM  RECALL DIVERT FROM 2-18" PIPES PASSING FLOW FROM LA CAILLE
3061          KM  WEST SIDE 83RD AVE SWALE TO EAST SIDE SWALE
3062          DR  EAST83
              *

3063          KK   CLDIV
3064          KM  RECALL DIVERT FROM 3-24" PIPES PASSING FLOW FROM NW CORNER OF
3065          KM  CALLE LEJOS ROAD AND 83RD AVE
3066          DR   EAGLE
              *

3067          KK   CPIPE
3068          KM  COMBINE EAST83 AND EAGLE FLOWS
3069          HC       2    0.23
              *

3070          KK  RCPIPE
3071          KM  ROUTE CPIPE TO CN21I3
3072          RK    2640    .003    .035            DEEP     200
              *

3073          KK   N21I3   BASIN
3074          KM  BASIN INCLUDES THE WEST HALF OF EAGLE AND CLEARVIEW DEV
3075          BA   0.087
3076          LG    0.28    0.27    5.70    0.23      12
3077          UC   0.570   0.480
3078          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3079          UA     100
              *

3080          KK  CN21I3
3081          KM  COMBINE N21I3, RCPIPE AND R1/2ST
3082          HC       3
              *
1                                        HEC-1 INPUT                                                    PAGE 92

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3083          KK   R21I3
3084          KM  WEST SIDE OF EAGLE AND CLEARVIEW RETENTION ACCOUNTED FOR
3085          KM  EAGLE WEST SIDE TRACTS ARE F AND L COMBINED IS 2.2 AND E = 9.8
3086          KM  CLEARVIEW WEST OF 81ST AVE AVAILABLE RETETNION = 5.19
3087          KM   ADDITIONAL LAND USE RETENTION ADDED 3.5 AC-FT
3088          DT  N21I3O   17.30
3089          DI       0     100    1000   10000
3090          DQ       0     100    1000   10000
              *
              * ==========================================================================
              *

3091          KK   PPK_E
3092          KM  COMBINE FLOWS TRAVELING ALONG PINNACLE PEAK FROM THE EAST
3093          KM  INTERCEPT ENTIRETY VIA CULVERT AND CONVEY PART TO 48" STORM DRAIN
3094          HC       2
              *
```

```
3095          KK  PPKEW2
3096          KM  DIVERSION PPKEW2 AT PINNACLE PEAK RD AND 83RD AVE
3097          DT  PPKEW3
3098          DI       0      10      20      30      40      50      70     100
3099          DQ       0      10      20      30      40      50      70     100
              *

3100          KK  US_BSN
3101          KM  COMBINE INLFOWS JUST AS THEY ENTER PROPOSED 83RD
3102          KM  SEE OUTPUT FOR VOLUME AND PEAK FLOW ENTERING BASIN
3103          HC       2
              *

3104          KK    PPBP
3105          KM  DIVERT BYPASS FLOWS
3106          DT   PPBAS
3107          DI       0      10     100    1000
3108          DQ       0      10      10      10
              *

3109          KK  R83BSN
3110          KM  STORAGE ROUTING REGIONAL BASIN ON 83RD AVENUE AND PINNACLE PEAK (LAST UPDATED
3111          RS       1    STOR       0
3112          SV    0.41    1.96    4.32    6.86    9.60   12.51   15.62   18.93   22.43   26.13
3113          SV   30.04   34.15   38.47   43.00   47.74   52.69
3114          SE    1298    1299    1300    1301    1302    1303    1304    1305    1306    1307
3115          SE    1308    1309    1310    1311    1312    1313
3116          SQ       0       0       0       0    1.03    2.10   11.31   13.59   15.65   17.54
3117          SQ   19.29   20.95   22.51   24.00   25.43   26.79
3118          SE    1298    1299    1300    1301    1302    1303    1304    1305    1306    1307
3119          SE    1308    1309    1310    1311    1312    1313
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3120          KK    RPPB
3121          KM  RETREIVE DIVERTED BYPASS FLOWS
3122          DR   PPBAS
              *

3123          KK    JCT1
3124          KM  COMBINE DIVERTED BYPASS FLOWS WITH BASIN DISCHARGE
3125          HC       2
              *

3126          KK    RESD
3127          KM  RETRIEVE FLOWS DIVERTED IN EAST PIPE
3128          DR  PPKEW3
              *

3129          KK     JCT
3130          KM  COMBINE DIVERTED PIPE FLOWS FROM THE NORTH, EAST AND WEST WITH BASIN ROUTE FL
3131          HC       2
              *

3132          KK  OUTLET
3133          KM  ROUTE FLOWS IN PROPOSED PIPE
3134          KM  ROUTE RN21I IS 3117 FT WITH A SLOPE OF 0.004
3135          KM  ALONG 83RD AVE. ROADWAY TO JUST SOUTH OF WILLIAMS DRIVE
3136          RK    3117   .0019    .013            CIRC       4
              *
              * ***************************************************************************
              * FROM THE LEVEL.DAT HEC-1 MODEL
              * ***************************************************************************
              *
              *

3137          KK    N21F   BASIN
3138          KM  SUB-BASIN N21F
3139          BA   0.125
3140          LG    0.29    0.10   11.20    0.03      17
3141          UC   0.748   0.637
3142          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3143          UA     100
              *

3144          KK   DN21F
3145          KM   NEW RETENTION OF 0.8 AC-FT IS ADDED FOR FUTURE LAND USE
3146          DT  DN21FQ     0.8
3147          DI       0     100    1000   10000
3148          DQ       0     100    1000   10000
```

```
                *
3149            KK   CN21F
3150            KM  COMBINE N21F and Outlet
3151            KM  INTERSECTION OF 83RD AVE. AND WILLIAMS RD.
3152            HC       2
                *
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3153            KK    N21G   BASIN
3154            KM  SUB-BASIN N21G
3155            BA   0.063
3156            LG    0.30    0.10   11.20    0.03      15
3157            UC   0.556   0.544
3158            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3159            UA     100
                *
                * *** DIVERSION RECOVER DR21Z*  ***********************************************
                * RECOVERS FLOWS FROM THE NORTH (CN21Z)
                *

3160            KK  DR21Z*
3161            DR  N21ZI*
                *
                * ROUTE RN21ZS IS 2677 FT WITH A SLOPE OF 0.0052
                * CROSS SECTION IS A ROAD WITH HOMES ON THE RIGHT SIDE
                * ROUTE FLOW FROM PINNACLE PEAK RD. (CN11Z) TO WILLIAMS RD (CN21G)
                *

3162            KK  RN21ZS
3163            RS      15    FLOW      -1
3164            RC    0.05     .06     .05    2677   .0052
3165            RX       0     500     525     526     561     562     587     588
3166            RY       5       2       1    0.75    0.75       1       2      10
                *
                * *** COMBINE  CN21G ***********************************************************
                * COMBINE  RN21ZS, N21G
                * INTERSECTION OF 81ST AVE. AND PINNACLE PEAK
                *

3167            KK   CN21G
3168            HC       2
                *
                * *** DIVERSION DN21G ***********************************************************
                * MAIN SOUTHWEST TO 83RD AVE SPLIT EAST TO NEW RIVER ALONG WILLIAMS
                *

3169            KK  DN21GO
3170            DT   N21GI
3171            DI       0       1      50      90     300     400     500
3172            DQ       0      .1      .2       1     210     310     410
                *
                * ROUTE RN21GS IS 2795 FT WITH A SLOPE OF 0.0064
                * CROSS SECTION IS A MEDIUM ROAD (MEASURED)
                * ALONG CHANNEL ON WILLIAMS DR AND CHANNEL ON 83RD AVE.
                * ROUTE FLOW FROM 81ST & WILLIAMS (CN21G) TO VIA MONTOYA & 83RD AVE(CN21E)
                *
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3173            KK  RN21GS
3174            RS       9    FLOW      -1
3175            RC    0.05    0.04    0.05    2795   .0064
3176            RX       0       1      91     106     136     158     182     183
3177            RY      10       3       3       2       0       0    1.25      10
                *
                * *** BASIN N21E ***************************************************************
                *

3178            KK    N21E   BASIN
3179            KM  SUB-BASIN N21E
3180            BA   0.063
3181            LG    0.26    0.10   11.20    0.03      28
3182            UC   0.551   0.479
3183            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3184            UA     100
                *
                * COMBINE BASIN N21E, RN21GS, AND RN21F
```

```
                * INTERSECTION OF 83RD AVE AND VIA MONTOYA
                *

3185            KK   CN21E
3186            HC       3
                *
                *
                * *** ROUTE RN21E ***********************************************************
                * ROUTE RN21E IS 1379 FT WITH A SLOPE OF 0.0051
                * CROSS SECTION IS A SMALL ROAD
                * ALONG 83RD AVE. ROADWAY AND Channel
                * ROUTE FLOW TO DEER VALLEY RD (CN21D) FROM VIA MONTOYA (CN21E)
                *

3187            KK   RN21E
3188            RS       7    FLOW      -1
3189            RC    0.05    0.04    0.05    1379  0.0051
3190            RX       0     500     525     526     546     547     572    1072
3191            RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
                *
                * *** BASIN N21D ************************************************************
                *

3192            KK    N21D   BASIN
3193            KM  SUB-BASIN N21D
3194            BA   0.053
3195            LG    0.25    0.15    9.70    0.06      30
3196            UC   0.566   0.515
3197            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3198            UA     100
                *
                * *** STORAGE ROUTING LN21D ***********************************************
                * *** FLETCHER HEIGHTS RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ********
                *
1                                          HEC-1 INPUT                                          PAGE 96

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3199            KK   LN21D
3200            DT  LN21DD    3.84
3201            DI       0     100    1000   10000
3202            DQ       0     100    1000   10000
                *
                * COMBINE RN21E AND BASIN N21D
                * INTERSECTION OF DEER VALLEY RD AND 83RD AVE.
                *

3203            KK   CN21D
3204            HC       2
                *
                * *** DIVERSION DN21D ********************************************************
                * MAIN ALONG 83RD AVENUE SPLIT EAST
                *

3205            KK   DN21D
3206            DT   N21DI
3207            DI       0       1      10      50     100     150     200
3208            DQ       0       1      10      42      85     125     170
                *
                * ROUTE RN21DE IS 4696 FT WITH A SLOPE OF 0.0013
                * CROSS SECTION IS A SMALL ROAD WITH AN ORCHARD ON THE WEST SIDE (MEASURED)
                * ALONG DEER VALLEY RD.
                * *** ROUTE FLOW TO WEST OF 75 AVE (CN23) FROM 83RD AVE. (CN21D)
                *

3209            KK  RN21DE
3210            RS      15    FLOW      -1
3211            RC    0.06    0.03    0.04    4696  0.0013
3212            RX       0     200     262     274     275     300     301     327
3213            RY    4.25    2.25    1.25    0.25       0       0    0.25    4.25
                *
                *
                * West Wing Mountain Ranch
                * The Following Portion of the HEC-1 Model is from Wood/Patel Model of
                * WWPH1100.DAT, Dated Jan. 25, 2005
                *
                * REVISED MODEL REFLECTING PONDING BEHIND NORTH LOOP ROAD
                * REMOVAL OF BASIN 36, & BREAKUP OF SUB-BASINS 26 & 28 TO YIELD
                * 26R, 28R, AND 100
                * REVISED SUB-BASIN AREAS IN PARCEL 1A
                * REVISED BASIN 51 VOLUME
                * REVISED BASIN 52 VOLUME (3-1-1)
```

```
                * FILE: WWPH1100.DAT
                *
                * ***************************************************
                * ***************************************************
                * WestWing Mountain - CONCEPTUAL MASTER DRAINAGE PLAN
                * 100-yr Proposed Condition Hydrology
                * By:  Wood, Patel & Associates, Inc.
                * Project No. 96561.03
                *
                *
1                                   HEC-1 INPUT                                                    PAGE 97

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3214            KK      20   BASIN
3215            KM  SUB-BASIN 20
3216            BA   0.040
3217            LG    0.20    0.19    8.80    0.06      23
3218            UC   0.242   0.240
3219            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3220            UA     100
                *

3221            KK     D20
3222            KM   NEW RETENTION OF 0.72 AC-FT IS ADDED FOR FUTURE LAND USE
3223            DT    D20Q    0.72
3224            DI       0     100    1000   10000
3225            DQ       0     100    1000   10000
                *

3226            KK     R20
3227            KM  ROUTE HYDROGRAPH FROM 20 TO 19
3228            KM  USE STREET SECTION: BC TO BC=49 FT
3229            RS       1    FLOW      -1
3230            RC    .025    .016    .025     900     .02
3231            RX     100   100.5     110   110.5   158.5     159   169.5     170
3232            RY     5.8      .8      .5       0       0      .5      .8     5.8
                *

3233            KK      19   BASIN
3234            KM  SUB-BASIN 19
3235            BA   0.045
3236            LG    0.23    0.25    6.20    0.19      27
3237            UC   0.295   0.219
3238            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3239            UA     100
                *

3240            KK     D19
3241            KM   NEW RETENTION OF 0.32 AC-FT IS ADDED FOR FUTURE LAND USE
3242            DT    D19Q    0.32
3243            DI       0     100    1000   10000
3244            DQ       0     100    1000   10000
                *

3245            KK     HC6
3246            KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 19 AND 20
3247            HC       2
                *

3248            KK     B19
3249            KM  Storage Route Runoff through Detention Basin @HC6
3250            KM  Outlet Structure: 1-12" PIPE @ INVERT 1399
3251            KM  40' WEIR AT ELEVATION 1402
3252            RS       1    STOR       0
3253            SA    1.41    1.52    1.75    1.86    1.97
3254            SE    1399    1400    1402    1403    1404
3255            SQ       0     2.2       6   115.1   313.7
                *
1                                   HEC-1 INPUT                                                    PAGE 98

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3256            KK    RHC6
3257            KM  ROUTE HYDROGRAPH FROM 19 TO 21
3258            KM  USE CONCRETE CHANNEL:B=8', Z=1
3259            RS       1    FLOW      -1
3260            RC    .013    .013    .013    1000    .005
3261            RX     100     101     104     105     113     114     117     118
3262            RY       5       4       1       0       0       1       4       5
                *
```

```
KK      21   BASIN
KM  SUB-BASIN 21
BA   0.029
LG    0.25    0.25    6.00    0.21      30
UC   0.328   0.317
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*

KK     HC7
KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 19, 20 AND 21
HC       2
*

KK    RHC7
KM  ROUTE HYDROGRAPH FROM HC7 TO 35
KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
RS       5    FLOW      -1
RC    .055    .045    .055    1400     .01
RX     100     110     120     130     205     215     225     235
RY       3       2       1       0       0       1       2       3
*

KK      33   BASIN
KM  SUB-BASIN 33
BA   0.042
LG    0.25    0.25    4.25    0.49      38
UC   0.314   0.317
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*

KK     D33
KM   NEW RETENTION OF 0.08 AC-FT IS ADDED FOR FUTURE LAND USE
DT    D33Q    0.08
DI       0     100    1000   10000
DQ       0     100    1000   10000
*

KK     B33
KM  Storage Route Runoff through Detention Basin @33
KM  Outlet Structure: 12" PIPE
RS       1    STOR       0
SA    1.27    1.51    1.76
SE    1396    1398    1400
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

SQ       0     4.5     7.1
*

KK     R33
KM  ROUTE HYDROGRAPH FROM 33 TO 35
KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
RS      15    FLOW      -1
RC    .055    .045    .055    1850   .0081
RX     100     110     120     130     205     215     225     235
RY       3       2       1       0       0       1       2       3
*

KK      34   BASIN
KM  SUB-BASIN 34
BA   0.028
LG    0.22    0.27    4.35    0.43      39
UC   0.180   0.107
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*

KK     D34
KM   NEW RETENTION OF 0.32 AC-FT IS ADDED FOR FUTURE LAND USE
DT    D34Q    0.32
DI       0     100    1000   10000
DQ       0     100    1000   10000
*

KK     B34
KM  Storage Route Runoff through Detention Basin @34
KM  Outlet Structure: 12" PIPE
RS       1    STOR       0
SA    1.15    1.36    1.56
```

```
3323          SE    1387    1389    1391
3324          SQ       0     4.5     7.1
              *

3325          KK     R34
3326          KM  ROUTE HYDROGRAPH FROM 34 TO 35
3327          KM  USE TRAPEZIDAL SECTION: B=75', Z=1
3328          RS      15    FLOW      -1
3329          RC    .055    .045    .055    1400   .0086
3330          RX     100     110     120     130     205     215     225     235
3331          RY       3       2       1       0       0       1       2       3
              *

3332          KK      35   BASIN
3333          KM  SUB-BASIN 35
3334          BA   0.044
3335          LG    0.25    0.25    4.25    0.49      33
3336          UC   0.577   0.706
3337          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3338          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3339          KK    HC8A
3340          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS HC7, 33, 34, AND 35
3341          HC       4
              *

3342          KK      22   BASIN
3343          KM  SUB-BASIN 22
3344          BA   0.041
3345          LG    0.18    0.22    8.40    0.07      18
3346          UC   0.202   0.152
3347          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3348          UA     100
              *

3349          KK     D22
3350          KM   NEW RETENTION OF 1.04 AC-FT IS ADDED FOR FUTURE LAND USE
3351          DT    D22Q    1.04
3352          DI       0     100    1000   10000
3353          DQ       0     100    1000   10000
              *

3354          KK     R22
3355          KM  ROUTE HYDROGRAPH FROM 22 TO 23
3356          KM  USE TRAPEZOIDAL SECTION: B=8',Z=3
3357          RS       2    FLOW      -1
3358          RC    .055    .045    .055    1450    .026
3359          RX     100     110     120     132     140     152     162     172
3360          RY       6       5       4       0       0       4       5       6
              *

3361          KK      23   BASIN
3362          KM  SUB-BASIN 23
3363          BA   0.031
3364          LG    0.25    0.21    6.40    0.18      30
3365          UC   0.294   0.270
3366          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3367          UA     100
              *

3368          KK     HC8
3369          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 22 AND 23
3370          HC       2
              *

3371          KK     B23
3372          KM  Storage Route Runoff through Detention Basin @23
3373          KM  40' WEIR AT ELEVATION 1393
3374          RS       1    STOR       0
3375          SA    0.59    0.65    0.78    0.87    0.94
3376          SE    1390    1391    1393    1394    1395
3377          SQ       0       0       0     108     305
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
3378          KK      25   BASIN
3379          KM  SUB-BASIN 25
3380          BA   0.015
3381          LG    0.25    0.21    6.40    0.18      30
3382          UC   0.323   0.453
3383          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3384          UA     100
              *

3385          KK     HC9
3386          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 25, HC8, AND HC8A
3387          HC       3
              *

3388          KK    RHC9
3389          KM  ROUTE HYDROGRAPH FROM HC9 TO 37W
3390          KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
3391          RS       2    FLOW      -1
3392          RC    .055    .045    .055     835   .0091
3393          RX     100     110     120     130     205     215     225     235
3394          RY       3       2       1       0       0       1       2       3
              *

3395          KK      27   BASIN
3396          KM  SUB-BASIN 27
3397          BA   0.039
3398          LG    0.25    0.23    6.20    0.20      30
3399          UC   0.317   0.271
3400          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3401          UA     100
              *

3402          KK      36   BASIN
3403          KM  SUB-BASIN 36
3404          BA   0.045
3405          LG    0.21    0.27    4.35    0.43      38
3406          UC   0.266   0.239
3407          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3408          UA     100
              *

3409          KK     D36
3410          KM   NEW RETENTION OF 0.56 AC-FT IS ADDED FOR FUTURE LAND USE
3411          DT    D36Q    0.56
3412          DI       0     100    1000   10000
3413          DQ       0     100    1000   10000
              *

3414          KK     R36
3415          KM  ROUTE HYDROGRAPH FROM 36 TO 37
3416          KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
3417          RS       2    FLOW      -1
3418          RC    .055    .045    .055     500   .0078
3419          RX     100     110     120     130     205     215     225     235
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3420          RY       3       2       1       0       0       1       2       3
              *

3421          KK     37w   BASIN
3422          KM  SUB-BASIN 37w
3423          BA   0.009
3424          LG    0.25    0.25    4.10    0.53      33
3425          UC   0.573   0.640
3426          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3427          UA     100
              *

3428          KK    C37W
3429          KM  COMBINE HYDROGRAPHS AT 37W
3430          HC       4
              *

3431          KK    B37W
3432          KM  DETENTION BASIN AT CONCENTRATION POINT OF 37W
3433          KM  18" PIPE AT STAGE 1382 & WEIR FLOW AT STAGE 1384
3434          RS       1    STOR      -1
3435          SA       0    0.25    0.73    1.50    2.63    3.76
3436          SE    1382    1383    1384    1385    1386    1387
3437          SQ       0      10      27     120     277     475
              *
```

```
3438          KK   RB37W
3439          KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
3440          KM
3441          RS       3    FLOW      -1
3442          RC    .055    .045    .055    1213  0.0058
3443          RX     100     110     120     130     205     215     225     235
3444          RY       3       2       1       0       0       1       2       3
              *

3445          KK     37e   BASIN
3446          KM  SUB-BASIN 37e
3447          BA   0.012
3448          LG    0.19    0.19    4.25    0.46      46
3449          UC   0.317   0.355
3450          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3451          UA     100
              *

3452          KK      24   BASIN
3453          KM  SUB-BASIN 24
3454          BA   0.020
3455          LG    0.18    0.22    8.00    0.08      19
3456          UC   0.225   0.291
3457          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3458          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE103

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3459          KK     D24
3460          KM   NEW RETENTION OF 0.48 AC-FT IS ADDED FOR FUTURE LAND USE
3461          DT    D24Q    0.48
3462          DI       0     100    1000   10000
3463          DQ       0     100    1000   10000
              *

3464          KK     R24
3465          KM  ROUTE HYDROGRAPH FROM 24 TO 100
3466          KM  USE CIRC 36" CROSS SECTION
3467          RS       1    FLOW      -1
3468          RC   0.012   0.012   0.012     600   0.039
3469          RX       0    0.15    0.56    1.17    1.83    2.44    2.85       3
3470          RY     1.5    0.85    0.33    0.04    0.04    0.33    0.85     1.5
              *

3471          KK     100   BASIN
3472          KM  SUB-BASIN 100
3473          BA   0.039
3474          LG    0.16    0.27    7.00    0.12      18
3475          UC   0.230   0.243
3476          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3477          UA     100
              *

3478          KK    D100
3479          KM   NEW RETENTION OF 1.20 AC-FT IS ADDED FOR FUTURE LAND USE
3480          DT   D100Q    1.20
3481          DI       0     100    1000   10000
3482          DQ       0     100    1000   10000
              *

3483          KK   HC100
3484          KM
3485          HC       2
              *

3486          KK    R100
3487          KM  ROUTE HYDROGRAPH FROM 100 TO 28
3488          KM  USE 48" CIRC CROSS SECTION
3489          RS       1    FLOW      -1
3490          RC   0.012   0.012   0.012     901   0.015
3491          RX       0    0.01    0.38    1.38    2.62    3.62       4    4.01
3492          RY       4       2    0.82    0.10    0.10    0.82       2       4
              *

3493          KK     28R   BASIN
3494          KM  SUB-BASIN 28R
3495          BA   0.013
3496          LG    0.25    0.23    6.20    0.20      30
3497          UC   0.283   0.311
```

```
3498          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3499          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE104

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3500          KK   HC28R
3501          KM  COMBINE HYDROGRAPHS 24, 100, AND 28R
3502          HC       2
              *

3503          KK    R28R
3504          KM  ROUTE HYDROGRAPH FROM HC10 TO 37
3505          KM  USE TRAPEZOIDAL SECTION: B=75', Z=10
3506          RS       4    FLOW      -1
3507          RC    .055    .045    .055     900   .0078
3508          RX     100     110     120     130     205     215     225     235
3509          RY       3       2       1       0       0       1       2       3
              *

3510          KK     26R   BASIN
3511          KM  SUB-BASIN 26R
3512          BA   0.062
3513          LG    0.17    0.32    5.70    0.20      19
3514          UC   0.232   0.178
3515          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3516          UA     100
              *

3517          KK    D26R
3518          KM   NEW RETENTION OF 1.68 AC-FT IS ADDED FOR FUTURE LAND USE
3519          DT   D26RQ    1.68
3520          DI       0     100    1000   10000
3521          DQ       0     100    1000   10000
              *

3522          KK    R26R
3523          KM  ROUTE HYDROGRAPH FROM 26 TO 29
3524          KM  USE TRAPEZOIDAL SECTION: B=8',Z=3
3525          RS       2    FLOW      -1
3526          RC    .055    .045    .055    1475     .02
3527          RX     100     110     120     132     140     152     162     172
3528          RY       6       5       4       0       0       4       5       6
              *

3529          KK      29   BASIN
3530          KM  SUB-BASIN 29
3531          BA   0.034
3532          LG    0.25    0.21    6.40    0.18      30
3533          UC   0.307   0.261
3534          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3535          UA     100
              *

3536          KK    HC11
3537          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 26 AND 29
3538          HC       2
              *
1                                          HEC-1 INPUT                                          PAGE105

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3539          KK     B29
3540          KM  Storage Route Runoff through Detention Basin @29
3541          KM  Outlet Structure: 12" PIPE @ INVERT 1375.5
3542          KM  80' WEIR @ ELEVATION 1378.5
3543          RS       1    STOR       0
3544          SA    1.02    1.25    1.71    1.85    1.98
3545          SE  1375.5  1376.5  1378.5  1379.5  1380.5
3546          SQ       0     2.2       6   223.1   619.1
              *

3547          KK      48   BASIN
3548          KM  SUB-BASIN 48
3549          BA   0.025
3550          LG    0.25    0.25    3.92    0.57      31
3551          UC   0.419   0.440
3552          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3553          UA     100
              *
```

```
3554          KK    HC12
3555          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 36, 48, 37, HC11, 28, HC10 AND HC9
3556          HC       5
              *

3557          KK      49   BASIN
3558          KM  SUB-BASIN 49
3559          BA   0.024
3560          LG    0.25    0.25    4.10    0.53      30
3561          UC   0.452   0.397
3562          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3563          UA     100
              *

3564          KK     B49
3565          KM  Basin B49 to retain 100-year, 2-hour retention volume
3566          KM  Outlet Structure: Weir overflow along property line
3567          RS       1    STOR       0
3568          SA    0.63    0.70    0.78    0.85    0.92
3569          SE    1375    1376    1377    1378    1379
3570          SQ       0       0       0       0     945
              *

3571          KK  C-N24M
3572          KM  Combined Flow to N24M
3573          HC       2
              *

3574          KK    RB49
3575          RS      13    FLOW      -1
3576          RC    0.05     .06     .05    2000   .0085
3577          RX       0     400     800    1200    1600    2000    2400    2800
3578          RY       3       1      .5       0       0      .5       1       3
              *
              * *** BASIN N24V ***********************************************************
              *
1                                          HEC-1 INPUT                                          PAGE106

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3579          KK    N24V   BASIN
3580          KM  SUB-BASIN N24V
3581          BA   0.045
3582          LG    0.10    0.35    4.15    0.37      12
3583          UC   0.196   0.171
3584          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3585          UA     100
              *
              *

3586          KK   DN24V
3587          KM   NEW RETENTION OF 2.24 AC-FT IS ADDED FOR FUTURE LAND USE
3588          DT  DN24VQ    2.24
3589          DI       0     100    1000   10000
3590          DQ       0     100    1000   10000
              *
              * ROUTE RN24V IS 2650 FT WITH A SLOPE OF 0.0121
              * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
              * SOUTH ALONG NATURAL Washes
              *

3591          KK   RN24V
3592          RS      15    FLOW      -1
3593          RC    0.05     .06     .05    2650   .0121
3594          RX       0     400     800    1200    1600    2000    2400    2800
3595          RY       3       1      .5       0       0      .5       1       3
              *

3596          KK    N24M   BASIN
3597          KM  SUB-BASIN N24M
3598          BA   0.169
3599          LG    0.23    0.24    4.60    0.38      34
3600          UC   0.456   0.252
3601          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3602          UA     100
              *

3603          KK   DN24M
3604          KM   NEW RETENTION OF  5.7 AC-FT IS ADDED FOR FUTURE LAND USE
3605          DT  DN24MQ    13.6
3606          DI       0     100    1000   10000
```

```
3607          DQ       0     100    1000   10000
              *
              * COMBINE Flows of N24M, C-N24M, AND RN24V
              * At ROCK SPRINGS CREEK
              *

3608          KK   CN24M
3609          HC       3
              *
              * ROUTE RN24M IS 5500 FT WITH A SLOPE OF 0.0059
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * ALONG ROCK SPRINGS CREEK
              *
1                                   HEC-1 INPUT                                                    PAGE107

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3610          KK   RN24M
3611          RS      15    FLOW      -1
3612          RC     .05     .06     .05    5500   .0059
3613          RX       0     100     300     360     380     420     620     720
3614          RY      10       8       6       2       0       6       8      10
              *

3615          KK      45   BASIN
3616          KM  SUB-BASIN 45
3617          BA   0.062
3618          LG    0.20    0.28    4.45    0.39      34
3619          UC   0.230   0.149
3620          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3621          UA     100
              *

3622          KK     D45
3623          KM   NEW RETENTION OF 1.04 AC-FT IS ADDED FOR FUTURE LAND USE
3624          DT    D45Q    1.04
3625          DI       0     100    1000   10000
3626          DQ       0     100    1000   10000
              *

3627          KK     R45
3628          KM  ROUTE HYDROGRAPH FROM 45 TO 47
3629          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
3630          RS       2    FLOW      -1
3631          RC    .055    .045    .055    1550    .014
3632          RX     100     104     108     120     128     140     144     148
3633          RY       5       4       3       0       0       3       4       5
              *

3634          KK      47   BASIN
3635          KM  SUB-BASIN 47
3636          BA   0.039
3637          LG    0.25    0.25    4.50    0.42      36
3638          UC   0.313   0.241
3639          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3640          UA     100
              *

3641          KK    HC14
3642          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 45 AND 47
3643          HC       2
              *

3644          KK   RHC14
3645          KM  ROUTE HYDROGRAPH FROM 47 TO 51
3646          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
3647          RS       1    FLOW      -1
3648          RC    .055    .045    .055    1075    .014
3649          RX     100     104     108     120     128     140     144     148
3650          RY       5       4       3       0       0       3       4       5
              *
1                                   HEC-1 INPUT                                                    PAGE108

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3651          KK      50   BASIN
3652          KM  SUB-BASIN 50
3653          BA   0.028
3654          LG    0.25    0.25    6.00    0.21      30
3655          UC   0.358   0.383
3656          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
```

```
3657          UA      100
              *

3658          KK      R50
3659          KM  ROUTE HYDROGRAPH FROM 50 TO 51
3660          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
3661          RS        1     FLOW       -1
3662          RC     .055     .045     .055      800    .0088
3663          RX      100      104      108      120      128      140      144      148
3664          RY        5        4        3        0        0        3        4        5
              *

3665          KK       51   BASIN
3666          KM  SUB-BASIN 51
3667          BA   0.012
3668          LG    0.25     0.25     5.00     0.32       30
3669          UC   0.354    0.448
3670          UA        0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
3671          UA      100
              *

3672          KK    HC15
3673          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 45, 47, 50 AND 51
3674          HC        3
              *

3675          KK      B51
3676          KM  Storage Route Runoff through Detention Basin @51
3677          KM  Outlet Structure: 1-18" PIPE @ ELEVATION 1378.84
3678          KM  70'WEIR AT ELEVATION 1382
3679          RS        1     STOR        0
3680          SA     0.25     1.04     1.19    1.355    1.522    1.698    1.862    2.075
3681          SE     1378  1378.84     1379     1380     1381     1382     1383     1384
3682          SQ      0.0      0.0     0.15     4.50     9.70     13.3    205.1    553.5
              *

3683          KK       46   BASIN
3684          KM  SUB-BASIN 46
3685          BA    0.061
3686          LG     0.15     0.32     4.20     0.41       41
3687          UC    0.209    0.138
3688          UA        0      4.5     12.6     23.2     35.8     50.0     64.2     76.8     87.4     95.5
3689          UA      100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3690          KK      D46
3691          KM   NEW RETENTION OF 2.00 AC-FT IS ADDED FOR FUTURE LAND USE
3692          DT    D46Q     2.00
3693          DI        0      100     1000    10000
3694          DQ        0      100     1000    10000
              *

3695          KK      R46
3696          KM  ROUTE HYDROGRAPH FROM 46 TO 52
3697          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
3698          RS        5     FLOW       -1
3699          RC     .055     .045     .055     2225     .018
3700          RX      100      104      108      120      128      140      144      148
3701          RY        5        4        3        0        0        3        4        5
              *

3702          KK       52   BASIN
3703          KM  SUB-BASIN 52
3704          BA   0.043
3705          LG    0.25     0.25     5.70     0.24       30
3706          UC   0.364    0.355
3707          UA        0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
3708          UA      100
              *

3709          KK    HC16
3710          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 46, 50  AND 52
3711          HC        2
              *

3712          KK      53R   BASIN
3713          KM  SUB-BASIN 53R
3714          BA   0.068
3715          LG    0.20     0.28     4.40     0.41       41
```

```
3716          UC   0.254   0.204
3717          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3718          UA     100
              *

3719          KK    D53R
3720          KM   NEW RETENTION OF 1.12 AC-FT IS ADDED FOR FUTURE LAND USE
3721          DT   D53RQ    1.12
3722          DI       0     100    1000   10000
3723          DQ       0     100    1000   10000
              *

3724          KK     R53
3725          KM  ROUTE HYDROGRAPH FROM 53 TO 54
3726          KM  USE TRAPEZOIDAL CHANNEL: B=8, Z=4
3727          RS       1    FLOW      -1
3728          RC    .055    .045    .055    1100    .015
3729          RX     100     104     108     120     128     140     144     148
3730          RY       5       4       3       0       0       3       4       5
              *
1                                          HEC-1 INPUT                                          PAGE110

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3731          KK     54R   BASIN
3732          KM  SUB-BASIN 54R
3733          BA   0.021
3734          LG    0.25    0.25    6.00    0.21      32
3735          UC   0.313   0.361
3736          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3737          UA     100
              *

3738          KK    HC17
3739          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 53 AND 54
3740          HC       2
              *

3741          KK   HC17A
3742          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS HC16 AND HC17
3743          HC       2
              *

3744          KK     B52
3745          KM  Storage Route Runoff through Detention Basin @52
3746          KM  Basin bottom at 1377.1 per asbuilt data
3747          KM  Outfall consists of 1-12" pipe and 30' weir at el=1380
3748          RS       1    STOR       0
3749          SA   2.023   3.115   3.535   3.992   4.498
3750          SE  1377.1    1379    1380    1381    1382
3751          SQ       0     4.5       6    88.1   237.2
              *

3752          KK     56R   BASIN
3753          KM  SUB-BASIN 56R
3754          BA   0.012
3755          LG    0.25    0.23    6.20    0.20      30
3756          UC   0.189   0.141
3757          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3758          UA     100
              *

3759          KK     B56
3760          KM  Storage Route Runoff through Detention Basin @56
3761          KM  Outlet Structucture: 1 - 4' weir @ elevation 1380.14
3762          KM  Retained volume below outfall to be drained by drywell (s)
3763          RS       1    STOR       0
3764          SA   0.134   0.166   0.280   0.366   0.413
3765          SE  1377.7    1378 1380.14    1381    1382
3766          SQ       0       0       0     8.6    27.4
              *

3767          KK  C-N24I
3768          KM  COMBINED HYDROGRAPH to N24I
3769          HC       3
              *
1                                          HEC-1 INPUT                                          PAGE111

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3770          KK  R-N24I
```

```
3771          RS      10    FLOW      -1
3772          RC     .05     .06     .05    3500   .0080
3773          RX       0     350     450     480     482     510     610     910
3774          RY       7       6       5       1       0       5       6       7
              *

3775          KK      55   BASIN
3776          KM  SUB-BASIN 55
3777          BA   0.055
3778          LG    0.12    0.34    3.95    0.42      65
3779          UC   0.188   0.139
3780          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3781          UA     100
              *

3782          KK     D55
3783          KM   NEW RETENTION OF 2.48 AC-FT IS ADDED FOR FUTURE LAND USE
3784          DT    D55Q    2.48
3785          DI       0     100    1000   10000
3786          DQ       0     100    1000   10000
              *

3787          KK     R55
3788          KM  ROUTE HYDROGRAPH FROM 55 TO 57
3789          KM  USE STREET SECTION: BC TO BC=30 FT
3790          RS       1    FLOW      -1
3791          RC    .025    .016    .025     925    .041
3792          RX     100   100.5     105   105.5   134.5     135   139.5     140
3793          RY     5.8      .8      .5       0       0      .5      .8     5.8
              *

3794          KK     57R   BASIN
3795          KM  SUB-BASIN 57R
3796          BA   0.008
3797          LG    0.25    0.23    6.20    0.20      30
3798          UC   0.201   0.203
3799          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3800          UA     100
              *

3801          KK    HC18
3802          KM  COMBINE HYDROGRAPHS FROM SUB-BASINS 55 AND 57
3803          HC       2
              *

3804          KK    B57R
3805          KM  Storage Route Runoff through Detention Basin @57
3806          KM  Outlet Structure:
3807          KM  25'WEIR @ ELEVATION 1382.16
3808          RS       1    STOR       0
3809          SA   0.486   0.560   0.647   0.747   0.849   0.903   0.952
3810          SE  1378.6  1379.5  1380.5  1381.5  1382.5  1383.0  1383.5
3811          SQ       0       0       0       0    67.5     124     191
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3812          KK   RB57R
3813          KM  ROUTE HYDROGRAPH FROM 57R TO N24H
3814          RS       3    FLOW      -1
3815          RC    .025    .016    .025    2600    .011
3816          RX     100   100.5     105   105.5   134.5     135   139.5     140
3817          RY     5.8      .8      .5       0       0      .5      .8     5.8
              *
              * *** BASIN N24I ***************************************************************
              *

3818          KK    N24I   BASIN
3819          KM  SUB-BASIN N24I
3820          BA   0.300
3821          LG    0.20    0.21    4.15    0.49      48
3822          UC   0.812   0.697
3823          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3824          UA     100
              *

3825          KK   DN24I
3826          KM   NEW RETENTION OF 6.3 AC-FT IS ADDED FOR FUTURE LAND USE
3827          DT  DN24IQ     6.3
3828          DI       0     100    1000   10000
3829          DQ       0     100    1000   10000
```

```
                *
3830            KK   CP57R
3831            KM   COMBINE HYDROGRAPHS
3832            HC       4
                *
                * *** BASIN N24H ***************************************************************
                *

3833            KK    N24H   BASIN
3834            KM  SUB-BASIN N24H
3835            BA   0.229
3836            LG    0.22    0.28    4.10    0.49      48
3837            UC   0.521   0.323
3838            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3839            UA     100
                *

3840            KK   DN24H
3841            KM   NEW RETENTION OF 3.9 AC-FT IS ADDED FOR FUTURE LAND USE
3842            DT  DN24HQ     3.9
3843            DI       0     100    1000   10000
3844            DQ       0     100    1000   10000
                *
                * *** BASIN N24N ***************************************************************
                *
1                                          HEC-1 INPUT                                          PAGE113

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3845            KK    N24N   BASIN
3846            KM  SUB-BASIN N24N
3847            BA   0.130
3848            LG    0.19    0.29    3.95    0.49      23
3849            UC   0.469   0.440
3850            UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3851            UA     100
                *
                *

3852            KK   DN24N
3853            KM   NEW RETENTION OF 2.8 AC-FT IS ADDED FOR FUTURE LAND USE
3854            DT  DN24NQ     5.5
3855            DI       0     100    1000   10000
3856            DQ       0     100    1000   10000
                *
                * ROUTE RN24N IS 4720 FT WITH A SLOPE OF 0.0064
                * CROSS SECTION IS A MEDIUM NATURAL WASH
                * ALONG NATURAL WASH
                * ROUTE FLOW TO CN24J FROM CN24N
                *

3857            KK   RN24N
3858            RS      15    FLOW      -1
3859            RC    0.05     .06     .05    4720   .0064
3860            RX       0     100     300     360     380     420     620     720
3861            RY      10       8       6       2       0       6       8      10
                *
                * *** BASIN N24J ***************************************************************
                *

3862            KK    N24J   BASIN
3863            KM  SUB-BASIN N24J
3864            BA   0.121
3865            LG    0.23    0.25    3.95    0.55      39
3866            UC   0.771   0.842
3867            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3868            UA     100
                *

3869            KK   DN24J
3870            KM   NEW RETENTION OF 0.5 AC-FT IS ADDED FOR FUTURE LAND USE
3871            DT  DN24JQ     0.5
3872            DI       0     100    1000   10000
3873            DQ       0     100    1000   10000
                *
                * COMBINE BASINS N24J AND RN24N
                * Near Happy Valley RD. AND ROCK SPRINGS CREEK
                *
                                           HEC-1 INPUT                                          PAGE114

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
3874          KK   CN24J
3875          HC       2
              *
              * ROUTE RN24J IS 688 FT WITH A SLOPE OF 0.0058
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * ALONG NATURAL WASH
              * ROUTE FLOW TO CN24I FROM CN24J
              *

3876          KK   RN24J
3877          RS       3    FLOW      -1
3878          RC    0.05     .06     .05     688   .0058
3879          RX       0     100     300     360     380     420     620     720
3880          RY      10       8       6       2       0       6       8      10
              *

3881          KK    N24K   BASIN
3882          KM  SUB-BASIN N24K
3883          BA   0.212
3884          LG    0.23    0.24    4.15    0.51      42
3885          UC   0.918   1.023
3886          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3887          UA     100
              *

3888          KK   DN24K
3889          KM   NEW RETENTION OF 2.24 AC-FT IS ADDED FOR FUTURE LAND USE
3890          DT  DN24KQ    2.24
3891          DI       0     100    1000   10000
3892          DQ       0     100    1000   10000
              *
              * ROCK SPRINGS CREEK AT HAPPY VALLEY RD. ALIGNMENT
              *

3893          KK   CN24I
3894          HC       4
              *
              * ROUTE RN24I IS 2747 FT WITH A SLOPE OF 0.006
              * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
              * ALONG ROCK SPRINGS CREEK
              * ROUTE FLOW TO CN24G* FROM CN24I
              *

3895          KK   RN24I
3896          RS       4    FLOW      -1
3897          RC    0.05     .06     .05    2747   0.006
3898          RX       0     480     500     518     544     609     900    1121
3899          RY      11      10       0     0.2      10      11      12      13
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3900          KK   N21JA   BASIN
3901          KM  SUB-BASIN N21JA
3902          BA   0.080
3903          LG    0.19    0.30    4.15    0.43      35
3904          UC   0.266   0.219
3905          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3906          UA     100
              *

3907          KK  DN21JA
3908          KM   NEW RETENTION OF 3.6 AC-FT IS ADDED FOR FUTURE LAND USE
3909          DT  N21JAQ     3.6
3910          DI       0     100    1000   10000
3911          DQ       0     100    1000   10000
              *
              * ROUTE FLOW FROM N21JA to N21JB (south of Happy Valley Rd)
              *

3912          KK  RN21JS
3913          RS      10    FLOW      -1
3914          RC    0.05     .06     .05    2600  0.0054
3915          RX       0     350     460     480     490     510     610     910
3916          RY       7       6       5       0       0       5       6       7
              *

3917          KK   N21JB   BASIN
3918          KM  SUB-BASIN N21J
```

```
3919          BA   0.166
3920          LG    0.30    0.25    4.55    0.38      10
3921          UC   0.483   0.309
3922          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3923          UA     100
              *
              *

3924          KK  DN21JB
3925          KM   NEW RETENTION OF 3.1 AC-FT IS ADDED FOR FUTURE LAND USE
3926          DT  N21JBQ     3.1
3927          DI       0     100    1000   10000
3928          DQ       0     100    1000   10000
              *
              * Combining flows of N21JA and N21JB

3929          KK   CN21J
3930          HC       2
              *
              * ROUTE RN21JE IS 1741 FT WITH A SLOPE OF 0.0029
              * CROSS SECTION IS A DIRT ROAD
              * ALONG CALLES LEJOS
              * ROUTE FLOW FROM 83RD AVE. (CN21J) TO ROCK SPRINGS CREEK (CN24G*)
              *
1                                   HEC-1 INPUT                                          PAGE116

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3931          KK  RN21JE
3932          RS      11    FLOW      -1
3933          RC    0.05     .06     .05    1741  0.0029
3934          RX       0     500     525     526     556     557     572    1072
3935          RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
              *
              * COMBINE DIVERTED FLOW FROM RN21JE AND RN24I
              * AT ROCK SPRINGS CREEK AND THE ALIGNMENT OF CALLES LEJOS
              *

3936          KK  CN24G*
3937          HC       2
              *
              * ROUTE RN24G* IS 2913 FT WITH A SLOPE OF 0.0053
              * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
              * ALONG ROCK SPRINGS CREEK
              * ROUTE DIVERTED FLOW TO CN24G FROM CN21G*
              *

3938          KK  RN24G*
3939          RS       4    FLOW      -1
3940          RC    0.05     .06     .05    2913  0.0053
3941          RX       0     480     500     518     544     609     900    1121
3942          RY      11      10       0       0      10      11      12      13
              *
              * *** BASIN N24G ***************************************************************
              *

3943          KK    N24G   BASIN
3944          KM  SUB-BASIN N24G
3945          BA   0.430
3946          LG    0.28    0.24    4.20    0.49      18
3947          UC   0.849   0.523
3948          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3949          UA     100
              *
              * *** CLEARVIEW ESTATES RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              *

3950          KK   LN24G
3951          KM   ADDITIONAL LAND USE RETENTION ADDED 14.6 AC-FT
3952          DT  LN24GD    15.1
3953          DI       0     100    1000   10000
3954          DQ       0     100    1000   10000
              *
              * COMBINE DIVERTED FLOW FROM RN24G*, AND BASIN N24G
              * ROCK SPRINGS CREEK @ PINNACLE PEAK RD Alignment (FLOW IN THE CREEK)

3955          KK   CN24G
3956          HC       2
              *
              * RECOVER DIVERTED FLOW FROM N21Z (PINNACLE PEAK & 81ST AVE.)
              * THE AREA FROM CN21N WAS ADDED TO GET THE CORRECT AREA REDUCTION
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3957          KK  DRN21Z
3958          DR  DN21ZI
              *
              * ROUTE RN21ZE IS 2413 FT WITH A SLOPE OF 0.0025
              * CROSS SECTION IS A ROAD WITH A DITCH ON RIGHT
              * ROUTE DIVERTED FLOW FROM 81ST AVE (CN21Z) TO ROCK SPRINGS CREEK (CN24G)
              *

3959          KK  RN21ZE
3960          RS      15    FLOW      -1
3961          RC    0.05     .06     .05    2413   .0025
3962          RX       0     500     525     555     570     585     610     910
3963          RY       5       3       2       2       0       2       3       5
              *
              * COMBINE DIVERTED FLOW FROM RN21ZE, (RN24G*, AND BASIN N21G)
              * ADD DIVERTED FLOW FROM 81ST AVE. TO ROCK SPRINGS CREEK (PINNACLE PEAK)
              * AREA OF CN21Z (0.35) WAS TO N24G (2.69) TOTAL AREA 3.04
              *

3964          KK  CN24G+
3965          HC       2
              *
              * ROUTE RN24G IS 1400 FT WITH A SLOPE OF 0.01
              * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
              * ALONG ROCK SPRINGS CREEK
              * ROUTE DIVERTED FLOW FROM PINNACLE PEAK (CN24G) TO Patrick lane (CN24F)
              *

3966          KK   RN24G
3967          RS       1    FLOW      -1
3968          RC    0.05     .06     .05    1400    0.01
3969          RX       0     256     372     397     407     419     464     800
3970          RY      12      10       8       0       0       6       8      12
              *
              * *** BASIN N24F ***************************************************************
              *

3971          KK    N24F   BASIN
3972          KM  SUB-BASIN N24F
3973          BA   0.106
3974          LG    0.29    0.24    5.00    0.32      18
3975          UC   0.564   0.398
3976          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
3977          UA     100
              *

3978          KK   DN24F
3979          KM   NEW RETENTION OF 2.4 AC-FT IS ADDED FOR FUTURE LAND USE
3980          DT  DN24FQ     2.4
3981          DI       0     100    1000   10000
3982          DQ       0     100    1000   10000
              *
              * COMBINE FLOW FROM BASIN N24F AND RN24G
              * At ROCK SPRINGS CREEK AND Patrick lane Alignment
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3983          KK   CN24F
3984          HC       2
              *
              * *** BASIN N24D ***************************************************************
              *

3985          KK    N24D   BASIN
3986          KM  SUB-BASIN N24D
3987          BA   0.088
3988          LG    0.10    0.11    4.25    0.42      71
3989          UC   0.428   0.299
3990          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3991          UA     100
              *

3992          KK    DN24D
3993          KM   NEW RETENTION OF 0.5 AC-FT IS ADDED FOR FUTURE LAND USE
3994          DT  DN24DQ     0.5
```

```
3995        DI        0      100     1000    10000
3996        DQ        0      100     1000    10000
            *
            * *** COMBINE  CN24D ***********************************************************
            * COMBINE FLOW FROM BASIN N24D, RN24F
            *

3997        KK   CN24D
3998        HC        2
            *
            * RETENTION at existing sAND AND gravel operation
            * it was assumed that most OF THE FLOW is sTOre at this location
            * sTOrage VOLUME AND stages were assumed TO be large enough  TO sTOre all VOLUME
            *

3999        KK   LN24D
4000        RS        1     STOR       0
4001        SQ        0       10      10       20       30       40       50       60
4002        SE     1321     1325    1328   1328.5     1329   1329.5     1330   1330.5
4003        SV        0       80     180      200      220      240      260      270
4004        SE     1321     1325    1328   1328.5     1329   1329.5     1330   1330.5
            *
            * *** BASIN N21H ****************************************************************
            *

4005        KK    N21H   BASIN
4006        KM  SUB-BASIN N21H
4007        BA    0.033
4008        LG     0.30     0.25     5.10     0.31       15
4009        UC    0.453    0.365
4010        UA        0      5.0     16.0     30.0     65.0     77.0     84.0     90.0     94.0     97.0
4011        UA      100
            *
            * RECOVER DIVERTED FLOW FROM N21G (WILLIAMS Dr.)
            *
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4012        KK  DRN21G
4013        DR   N21GI
            *
            * ROUTE RN21GE IS 1254 FT WITH A SLOPE OF 0.0048
            * CROSS SECTION IS A SMALL ROAD WITH FENCE ON THE RIGHT SIDE
            * ALONG WILLIAMS Dr.
            * ROUTE DIVERTED FLOW FROM 81ST AVE. (CN21G) TO 79th AVE (CN21H)
            *

4014        KK  RN21GE
4015        RS       13     FLOW      -1
4016        RC     0.05      .06     .05     1254    .0048
4017        RX        0      500     525      526      541      542      634      635
4018        RY     3.75     1.25    0.25        0        0     0.25     1.25     9.25
            *
            * *** COMBINE FLOW FROM RN21GE AND BASIN N21H ***********************************
            *

4019        KK   CN21H
4020        HC        2
            *
            * ROUTE RN21H IS 1812 FT WITH A SLOPE OF 0.0011
            * CROSS SECTION IS THE GRAVEL PIT (MEASURED)
            * ALONG SOUTH boundary OF existing SAND AND gravel operation
            * ROUTE FLOW FROM 87th AVE (CN21H) TO ROCK SPRINGS CREEK (CN24D)
            *

4021        KK   RN21H
4022        RS       15     FLOW      -1
4023        RC     0.05      .06     .05     1812  0.0011
4024        RX        0      242     292      400      600      809      840     1010
4025        RY       11       10       0        0        0        0       10       11
            *

4026        KK    N24E   BASIN
4027        KM  SUB-BASIN N24E
4028        BA    0.021
4029        LG     0.30     0.25     3.95     0.56       15
4030        UC    0.611    0.759
4031        UA        0      3.0      5.0      8.0     12.0     20.0     43.0     75.0     90.0     96.0
4032        UA      100
            *
```

```
4033          KK   DN24E
4034          KM   NEW RETENTION OF 1.1 AC-FT IS ADDED FOR FUTURE LAND USE
4035          DT  DN24EQ     1.1
4036          DI       0     100    1000   10000
4037          DQ       0     100    1000   10000
              *
              * ROUTE RN24E IS 1585 FT WITH A SLOPE OF 0.0076
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * EAST TO ROCK SPRINGS CREEK AND SOUTH ON ROCK SPRINGS CREEK
              * ROUTE DIVERTED FLOW FROM 79th AVE AND Patrick (CN24E) TO Rock Springs (CN24D)
              *
1                                   HEC-1 INPUT                                          PAGE120

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4038          KK   RN24E
4039          RS      13    FLOW      -1
4040          RC    0.05     .06     .05    1585   .0076
4041          RX       0     100     300     360     380     420     620     720
4042          RY      10       8       6       2       0       6       8      10
              *
              * COMBINE FLOW FROM BASIN (N24D, RN24F), RN21H, AND RN24E
              *

4043          KK  CN24D*
4044          HC       3
              *

4045          KK     N27   BASIN
4046          KM  SUB-BASIN N27
4047          BA   0.282
4048          LG    0.09    0.25    3.33    0.68      36
4049          UC   0.590   0.678
4050          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
4051          UA     100
              *
              *

4052          KK    DN27
4053          KM   NEW RETENTION OF 14.9 AC-FT IS ADDED FOR FUTURE LAND USE
4054          DT   DN27Q    14.9
4055          DI       0     100    1000   10000
4056          DQ       0     100    1000   10000
              *
              * ROUTE RN27 IS 1501 FT WITH A SLOPE OF 0.0027
              * CROSS SECTION IS NEW RIVER (MEASURED)
              * ALONG NEW RIVER
              * ROUTE FLOW TO Happy Valley RD. (CN27) FROM (CN26*)
              *

4057          KK    RN27
4058          RS      15    FLOW      -1
4059          RC    0.05     .06     .05    1501  0.0027
4060          RX       0     281     386     436     672     828    1093    1300
4061          RY      17      13       1       0       1      11      12      13
              *

4062          KK     N26   BASIN
4063          KM  SUB-BASIN N26
4064          BA   0.040
4065          LG    0.07    0.21    3.88    0.43      41
4066          UC   0.305   0.256
4067          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4068          UA     100
              *
              *
1                                   HEC-1 INPUT                                          PAGE121

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4069          KK    DN26
4070          KM   NEW RETENTION OF 2.9 AC-FT IS ADDED FOR FUTURE LAND USE
4071          DT   DN26Q     2.9
4072          DI       0     100    1000   10000
4073          DQ       0     100    1000   10000
              *
              * COMBINE (N26,N26A, RN27) AND RX3W
              * NEW RIVER at Happy Valley RD.
              *

4074          KK    CN26
```

```
4075        HC       2
            *
            * ROUTE RN26 IS 1667 FT WITH A SLOPE OF 0.006
            * CROSS SECTION IS NEW RIVER (MEASURED)
            * ALONG NEW RIVER
            * ROUTE FLOW TO CN25J(Hatfield RD.) FROM CN26 (happy Valley RD.)
            *

4076        KK    RN26
4077        RS      13    FLOW      -1
4078        RC    0.05     .06     .05    1667   0.006
4079        RX       0     281     386     436     672     828    1093    1300
4080        RY      17      13       1       0       1      11      12      13
            *

4081        KK     N25   BASIN
4082        KM  SUB-BASIN N25
4083        BA   0.243
4084        LG    0.16    0.18    3.53    0.63      44
4085        UC   0.710   0.603
4086        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4087        UA     100
            *
            *

4088        KK    DN25
4089        KM   NEW RETENTION OF 18.2 AC-FT IS ADDED FOR FUTURE LAND USE
4090        DT   DN25Q    18.2
4091        DI       0     100    1000   10000
4092        DQ       0     100    1000   10000
            *
            * COMBINE BASINS N25, N25H, CN25A, AND RN25I
            * NEW RIVER at PINNACLE PEAK Alignment
            * AREA hardcoded TO prevent doubling OF some areas
            *

4093        KK    CN25
4094        HC       2
            *
            * ROUTE RN25 IS 2939 FT WITH A SLOPE OF 0.0065
            * CROSS SECTION IS NEW RIVER (MEASURED)
            * ALONG NEW RIVER
            * ROUTE FLOW TO CN24 (WILLIAMS) FROM CN25 (PINNACLE PEAK)
            *
                                    HEC-1 INPUT                                          PAGE122

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4095        KK    RN25
4096        RS      15    FLOW      -1
4097        RC    0.05     .06     .05    2939  0.0065
4098        RX       0     225     330     386     408     600     890    1110
4099        RY       8       8       4       2       1       4       2       8
            *

4100        KK     N24   BASIN
4101        KM  SUB-BASIN N24
4102        BA   0.108
4103        LG    0.16    0.17    3.43    0.69      50
4104        UC   0.488   0.368
4105        UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
4106        UA     100
            *

4107        KK    DN24
4108        KM   NEW RETENTION OF 6.7 AC-FT IS ADDED FOR FUTURE LAND USE
4109        DT   DN24Q     6.7
4110        DI       0     100    1000   10000
4111        DQ       0     100    1000   10000
            *
            * COMBINE CN25,N24, AND CN24D
            * NEW RIVER at WILLIAMS RD Alignment
            * AREA hard-coded TO prevent doubling
            *

4112        KK    CN24
4113        HC       3
            *
            * ROUTE RN24 IS 2795 FT WITH A SLOPE OF 0.0043
            * CROSS SECTION IS NEW RIVER (MEASURED)
            * ALONG NEW RIVER
            * ROUTE FLOW TO CN23 (DEER VALLEY RD) FROM CN24 (WILLIAMS)
```

```
                *

4114            KK   RCN24
4115            RS      15    FLOW      -1
4116            RC    0.05    0.05     .05    2795  0.0043
4117            RX       0     271     355     500     700     712     776     873
4118            RY      11       8       0       0       0       6       6       8
                *

4119            KK     N23   BASIN
4120            KM  SUB-BASIN N23
4121            BA   0.389
4122            LG    0.20    0.24    4.30    0.45      36
4123            UC   0.862   0.555
4124            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4125            UA     100
                *
1                                          HEC-1 INPUT                                          PAGE123

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4126            KK    DN23
4127            KM   NEW RETENTION OF 5.5 AC-FT IS ADDED FOR FUTURE LAND USE
4128            DT   DN23Q     5.5
4129            DI       0     100    1000   10000
4130            DQ       0     100    1000   10000
                *
                * COMBINE BASIN N23, RN21DE, and RCN24
                * DEER VALLEY RD WEST OF 75th AVE.
                *

4131            KK    CN23
4132            HC       3
                *
                * ROUTE RN23 IS 6182 FT WITH A SLOPE OF 0.0055
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO BEARDSLEY RD (CN21) FROM DEER VALLEY (CN23)
                *

4133            KK    RN23
4134            RS      15    FLOW      -1
4135            RC    0.05    0.04    0.05    6182  0.0055
4136            RX       0     318     358     443     649     699     817     843
4137            RY      22      20       6       0       0       8      10      18
                *
                * RECOVER DIVERTED FLOW FROM N21D (Deer Valley )
                *

4138            KK  BN21DI
4139            DR   N21DI
                *
                * ROUTE RN21DS IS 7844 FT WITH A SLOPE OF 0.0046
                * CROSS SECTION IS A DITCH ON WEST SIDE WITH TWO WALLS
                * SOUTH ALONG 83RD AVE. ROADWAY AND CHANNEL
                * ROUTE FLOW TO BEARDSLEY THEN NEW RIVER(CN21C) FROM DEER VALLEY(CN21D)
                *

4140            KK  RN21DS
4141            RS      14    FLOW      -1
4142            RC    0.05    0.04    0.05    7844  0.0046
4143            RX       0       1     121     151     186     211     236     237
4144            RY      13       5       3       0       0       3       4      13
                *

4145            KK    N21C   BASIN
4146            KM  SUB-BASIN N21C
4147            BA   0.394
4148            LG    0.24    0.15    8.00    0.10      32
4149            UC   0.894   0.711
4150            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4151            UA     100
                *
                * *** FLETCHER HEIGHTS RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ********
                *
1                                          HEC-1 INPUT                                          PAGE124

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4152            KK   LN21C
4153            KM   ADDITIONAL LAND USE RETENTION ADDED 0.4 AC-FT
```

```
4154          DT  LN21CD     2.8
4155          DI       0     100    1000   10000
4156          DQ       0     100    1000   10000
              *
              * COMBINE RN21DS AND BASIN N21C
              * NEAR BEARDSLEY RD. AND NEW RIVER (END OF 83RD AVE. CHANNEL)
              *

4157          KK   CN21C
4158          HC       2
              *
              *

4159          KK     N21   BASIN
4160          KM  SUB-BASIN N21
4161          BA   0.622
4162          LG    0.18    0.17    4.60    0.43      55
4163          UC   0.944   0.619
4164          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
4165          UA     100
              *

4166          KK    DN21
4167          KM   NEW RETENTION OF 6.0 AC-FT IS ADDED FOR FUTURE LAND USE
4168          DT   DN21Q     6.0
4169          DI       0     100    1000   10000
4170          DQ       0     100    1000   10000
              *
              * COMBINE  CN21C, RN23, AND N21
              * NEW RIVER AND BEARDSLEY RD Alignment
              *

4171          KK    CN21
4172          HC       3
              *
              * ROUTE RN21 IS 5633 FT WITH A SLOPE OF 0.0039
              * CROSS SECTION IS NEW RIVER (MEASURED)
              * ALONG NEW RIVER
              * ROUTE FLOW TO Union Hills (CN20) FROM Beardsley RD. (CN21)
              *

4173          KK    RN21
4174          RS      12    FLOW      -1
4175          RC    0.05    0.04    0.05    5633  0.0039
4176          RX       0     100     652     722     800     900    1006    1400
4177          RY      16       4       8       0       0       0      10      16
              *
              * A Dummy Diversion to Avoid Change to the Westbrook Village Schematic
              *
1                                   HEC-1 INPUT                                          PAGE125

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4178          KK  N21-20
4179          DT   N20DI
4180          DI       0     100    1000   10000
4181          DQ       0     100    1000   10000
              *

4182          KK   N11DB   BASIN
4183          KM  SUB-BASIN N11DB CREATED BY CVL 7/04
4184          BA   0.254
4185          LG    0.25    0.25    4.60    0.39      30
4186          UC   0.736   0.447
4187          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4188          UA     100
              *
              * *** RECOVER DIVERTED FLOW FROM N11DA ****************************************
              *

4189          KK  B11DAS
4190          DR  D11DAS
              *
              * ROUTE FLOW TO N11DB
              *

4191          KK  R11DAS
4192          RS      15    FLOW      -1
4193          RC    0.04    0.04    0.04    3000   .0015
4194          RX       0     200     220     240     260     280     320     520
4195          RY       6       4       0       0       3       4       4       6
              *
```

```
4196          KK  C11DAB
4197          KM  THIS COMBINES N11DAS AND N11DB
4198          HC       2
              *
              * *** STORAGE ROUTING LN11D ***********************************************
              * *** DOVE VALLEY RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              *

4199          KK  LN11DB
4200          DT  LNBOUT    14.4
4201          DI       0     100    1000   10000
4202          DQ       0     100    1000   10000
              *
              * *** DIVERSION DN11D ******************************************************
              *
              * A PORTION OF THE SUBDIVISION TO THE NORTH SPILLS OVER 91ST AVENUE TO THE
              * DETENTION BASIN ON THE EAST SIDE.  (ABOUT 10%)
              *
1                                   HEC-1 INPUT                                          PAGE126

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4203          KK   DN11D
4204          DT   N11DI
4205          DI       0       1     100     200     300     500    1000    1500    2000
4206          DQ       0      .9      90     180     270     450     900    1350    1800
              *
              * ROUTE RN11DE IS 2500 FT WITH A SLOPE OF 0.002
              *

4207          KK  RN11DE
4208          RS      15    FLOW      -1
4209          RC    0.04    0.04    0.04    2500    .002
4210          RX       0       1      16      40      50      65     100     200
4211          RY      15       8       7       0       0       7       8      12
              *
              * *** DIVERSION RECALL DR5S  ***********************************************
              * RECALL THE DIVERTED FLOW FROM CX5
              *

4212          KK    DRX5
4213          DR     X5I
              *
              * ROUTE RX5S IS 5270 FT WITH A SLOPE OF 0.0059
              * CROSS SECTION IS SMALL ROAD WITH HOMES ON BOTH SIDES
              * ALONG 91st AVE
              * ROUTE FLOW TO BEARDSLEY RD. (CX5) FROM DEER VALLEY RD (CX51)
              *

4214          KK    RX5S
4215          RS       1    FLOW      -1
4216          RC    0.04    0.04    0.04    5270  0.0059
4217          RX       0       1      20      21      51      52     272     273
4218          RY      11       3    0.25       0       0    0.25    3.25      10
              *
              * COMBINE DN11D, DX5
              *

4219          KK     CX1
4220          HC       2
              *
              * SOME FLOW WILL TRAVEL DOWN 91ST AVENUE
              *

4221          KK     DX1
4222          DT     X1I
4223          DI       0      30      60     100     300     500     600    1000    2000
4224          DQ       0       0       0       0       0      50      60     100     130
              *
              * ROUTE RX1E IS 1254 FT WITH A SLOPE OF 0.0048
              * CROSS SECTION IS A LARGE DITCH (MEASURED)
              *
1                                   HEC-1 INPUT                                          PAGE127

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4225          KK    RX1E
4226          RS       6    FLOW      -1
4227          RC    0.04    0.04    0.04    1254   .0048
4228          RX       0       1      16      40      50      65     100     200
```

```
4229          RY      15       8       7       0       0       7       8      12
              *
              * DEER VALLEY ROAD WIDENING AND DRAINAGE IMPROVEMENTS
              * PREMIER ENGINEERING CORP. PROJECT 2006002
              * FLOW IN EXCESS OF 10-YEAR Q DIVERTED THROUGH 89TH, 87TH AND 86TH AVENUE
              *

4230          KK   DIVS1
4231          KM  RETRIEVE DIVERTED INTO 89 AVE FROM NORTH, EXCESS FLOW
4232          DR  DIVS89
              *

4233          KK  RNDV89
4234          KM  ROUTE THROUGH 89TH AVENUE TO WILLIAMS ROAD
4235          RS       1    FLOW      -1
4236          RC    0.02    0.02    0.02    2400   .0050
4237          RX       0      10      13      25      37      40      50      52
4238          RY    1.00     .80    0.00     .24       0     .80    1.00    1.05
              *

4239          KK     DV1   BASIN
4240          KM  SUB-BASIN DV1
4241          BA   0.091
4242          LG    0.25    0.25    4.65    0.38      30
4243          UC   0.628   0.544
4244          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4245          UA     100
              *

4246          KK    DDV1
4247          KM   NEW RETENTION OF 0.24 AC-FT IS ADDED FOR FUTURE LAND USE
4248          DT   DDV1Q    0.24
4249          DI       0     100    1000   10000
4250          DQ       0     100    1000   10000
              *

4251          KK    CPD1
4252          KM  COMBINE FFLOW FROM DV1 AND ROUTED FLOW ALONG 89TH
4253          HC       2
              *

4254          KK   RNCP1
4255          RS       1    FLOW      -1
4256          RC    0.02    0.02    0.02     200   .0050
4257          RX       0      10      13      25      37      40      50      52
4258          RY    2.00     .80    0.00     .24       0     .80    1.00    2.00
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4259          KK     DV2   BASIN
4260          KM  SUB-BASIN DV2
4261          BA   0.032
4262          LG    0.25    0.25    4.80    0.35      30
4263          UC   0.650   0.893
4264          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4265          UA     100
              *

4266          KK    CPD2
4267          KM  COMBINE DV2 AND ROUTED
4268          HC       2
              *

4269          KK   89WRB
4270          KM  RETENTION BASIN ON CORNER PROPERTY 155' X 300' OR 1.07 ACRES
4271          KM  ROUTE CP2 THROUGH RETENTION BASIN AT NE OF 89TH AVE & WILLIAMS RD INTERSECTIO
4272          KM  BLED OFF 20 CFS THROUGH 24" SD ALONG 89TH AVENUE
4273          KM  DIVERT THE STORAGE VOLUME OF 5.59 AC-FT ABD THE 18 CFS BLED OFF
4274          DT    DVRB    4.48
4275          DI       0      20      53     100     200
4276          DQ       0       0       0      53      53
              *

4277          KK  RNRDV2
4278          RS       1    FLOW      -1
4279          RC    0.02    0.02    0.02    1350   .0050
4280          RX       0      10      13      25      37      40      50      52
4281          RY    1.00     .80    0.00     .24       0     .80    1.00    1.05
              *
```

```
4282        KK     DV3   BASIN
4283        KM  SUB-BASIN DV3
4284        BA   0.050
4285        LG    0.25    0.25    4.80    0.35      30
4286        UC   0.574   0.529
4287        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4288        UA     100
            *

4289        KK    CPD3
4290        KM  COMBINE DV3 AND ROUTRED
4291        HC       2
            *

4292        KK  RNRDV3
4293        RS       2    FLOW      -1
4294        RC    0.02    0.02    0.02    1300   .0050
4295        RX       0      10      13      25      37      40      50      52
4296        RY    2.00     .80    0.00     .24       0     .80    1.00    2.00
            *
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4297        KK     DV4   BASIN
4298        KM  SUB-BASIN DV4
4299        BA   0.060
4300        LG    0.25    0.25    4.80    0.35      30
4301        UC   0.676   0.833
4302        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4303        UA     100
            *

4304        KK     DV5   BASIN
4305        KM  SUB-BASIN DV5
4306        BA   0.029
4307        LG    0.25    0.25    4.80    0.35      30
4308        UC   0.445   0.398
4309        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4310        UA     100
            *

4311        KK    CPD5
4312        KM  COMBINE FLOW FROM DV5, ROUTED DV4 OUT, ROUTED CP3
4313        HC       3
            *

4314        KK     DV6   BASIN
4315        KM  SUB-BASIN DV6
4316        BA   0.090
4317        LG    0.25    0.25    4.80    0.35      30
4318        UC   0.627   0.578
4319        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4320        UA     100
            *

4321        KK   CPDV6
4322        HC       2
            *
            * ROUTE RN11IS IS 2600 FT WITH A SLOPE OF 0.0051
            * CROSS SECTION IS A LARGE DITCH ON THE EAST SIDE (MEASURED)
            *

4323        KK  RN11IS
4324        RS       4    FLOW      -1
4325        RC    0.04    0.04    0.04    2600  0.0051
4326        RX       0      20      50      60      70      80      90     250
4327        RY      10       8       8       7       0       0       7      10
            *

4328        KK   N11EA   BASIN
4329        KM  SUB-BASIN N11E North portion
4330        BA   0.259
4331        LG    0.23    0.26    5.60    0.25      31
4332        UC   0.928   0.700
4333        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4334        UA     100
            *
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
4335          KK  CN11EA
4336          HC       2
              *
              * ROUTE RN11ES IS 2600 FT WITH A SLOPE OF 0.0051
              * CROSS SECTION IS A LARGE DITCH ON THE EAST SIDE (MEASURED)
              *

4337          KK  RN11ES
4338          RS       4    FLOW      -1
4339          RC    0.04    0.04    0.04    2600  0.0051
4340          RX       0      20      50      60      70      80      90     250
4341          RY      10       8       8       7       0       0       7      10
              *
              * *** Route flows entering into a retention basin at the south end of
              * *** the Deer Village development which combines with a retention basin
              * *** that collects flow from RN11IS. The information for the stage-storage
              * *** of the retention basin was obtained from the Deer Village Final Drainage
              * *** Report (#34 in Data Collection Log) and the Westbrook Village East
              * *** Drainage Study (#85 in Data Collection Log).
              *

4342          KK    LX50
4343          RS       1    STOR       0
4344          SQ     144    1900    2956
4345          SE  1253.4  1259.9  1263.9
4346          SV       0   22.73    53.9
4347          SE  1253.4  1259.9  1263.9
              *
              * DIVERSION MAIN (EAST PATH), SPLIT (WEST PATH)
              * THE TWO OUTLETS OF THE LAKE PLEASANT PARK DETENTION BASIN
              *

4348          KK    DX50
4349          DT   DX50I
4350          DI       0       1     127    1856    2932
4351          DQ       0       1     127    1296    1180
              *
              * ROUTE RX50E IS 2549 FT WITH A SLOPE OF 0.0031
              * CROSS SECTION IS A LARGE DITCH (MEASURED)
              *

4352          KK   RX50E
4353          RS       8    FLOW      -1
4354          RC    0.04    0.04    0.04    2549  0.0031
4355          RX       0     200     300     325     345     395     500     700
4356          RY      10       9     7.3       0       0     7.3       9      10
              *

4357          KK   DIVS2
4358          KM  RETRIEVE DIVERTED INTO 87 AVE FROM NORTH, EXCESS FLOW
4359          DR  DIVS87
              *
1                                        HEC-1 INPUT                                          PAGE131

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4360          KK  RNDV87
4361          KM  ROUTE CN11L5 TO PPSD ALONG PINNACLE PEAK ROAD
4362          RS       1    FLOW      -1
4363          RC   0.015   0.015   0.015    5250  0.0050
4364          RX     280     290     295     300     330     335     340     350
4365          RY       4       2     1.0       0       0     1.0       2       4
              *

4366          KK     DV7   BASIN
4367          KM  SUB-BASIN DV7
4368          BA   0.131
4369          LG    0.26    0.21    6.40    0.18      26
4370          UC   0.646   0.520
4371          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
4372          UA     100
              *

4373          KK    DDV7
4374          KM   NEW RETENTION OF 2.4 AC-FT IS ADDED FOR FUTURE LAND USE
4375          DT   DDV7Q     2.4
4376          DI       0     100    1000   10000
4377          DQ       0     100    1000   10000
              *

4378          KK    CPD7
```

```
4379          HC       2
              *

4380          KK  RNRDV7
4381          RS       8    FLOW      -1
4382          RC    0.02    0.02    0.02    2650   .0049
4383          RX       0      10      12      42      72      74      84      90
4384          RY    1.25     .50    0.51       0       0     .51     .50    1.25
              *

4385          KK     DV8   BASIN
4386          KM  SUB-BASIN DV8
4387          BA   0.093
4388          LG    0.26    0.15    8.40    0.08      24
4389          UC   0.669   0.634
4390          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4391          UA     100
              *

4392          KK    CPD8
4393          KM  COMBINE DV8 WITH ROUTED DV7
4394          HC       2
              *
1                                   HEC-1 INPUT                                          PAGE132

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4395          KK     DV9   BASIN
4396          KM  SUB-BASIN DV9
4397          BA   0.042
4398          LG    0.30    0.15    8.80    0.06       5
4399          UC   0.346   0.214
4400          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4401          UA     100
              *

4402          KK   DVCP9
4403          HC       2
              *

4404          KK  DIVS13
4405          KM  RETRIEVE DIVERTED INTO 86TH AVE FROM NORTH, EXCESS FLOW
4406          DR  DIVS86
              *

4407          KK  RNRS86
4408          RS       1    FLOW      -1
4409          RC    0.02    0.02    0.02    2650   .0049
4410          RX       0      10      13      25      37      40      50      52
4411          RY    1.00     .80    0.00     .24       0     .80    1.00    1.05
              *

4412          KK    DV10   BASIN
4413          KM  SUB-BASIN DV10
4414          BA   0.211
4415          LG    0.29    0.15    7.00    0.12       9
4416          UC   0.647   0.383
4417          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4418          UA     100
              *

4419          KK   DDV10
4420          KM   NEW RETENTION OF 1.1 AC-FT IS ADDED FOR FUTURE LAND USE
4421          DT  DDV10Q     1.1
4422          DI       0     100    1000   10000
4423          DQ       0     100    1000   10000
              *

4424          KK   CPD10
4425          KM  COMBINE DV10 WITH RETRIEVE FLOW
4426          HC       2
              *

4427          KK  RNRD10
4428          KM  ROUTE COMBINE FLOW THROYFH 86TH AVE
4429          RS       3    FLOW      -1
4430          RC    0.02    0.02    0.02    2650   .0053
4431          RX       0      10      13      25      37      40      50      52
4432          RY    2.00     .80    0.00     .24       0     .80    1.00    2.00
              *
                                    HEC-1 INPUT                                          PAGE133
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4433          KK    DV11   BASIN
4434          KM  SUB-BASIN DV11
4435          BA   0.144
4436          LG    0.22    0.10   11.20    0.03      42
4437          UC   0.590   0.435
4438          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4439          UA     100
              *

4440          KK   CPD11
4441          KM  COMBINE FLOW FROM SUBB11 WITH ROUTED DV10
4442          HC       3
              *
              * ROUTE RN11IS IS 3000 FT WITH A SLOPE OF 0.0051
              *

4443          KK  RCP11S
4444          RS       4    FLOW      -1
4445          RC    0.04    0.04    0.04    3000  0.0051
4446          RX       0      20      50      60      70      80      90     250
4447          RY      10       8       8       7       0       0       7      10
              *

4448          KK    N22A   BASIN
4449          KM  SUB-BASIN N22 north portion
4450          BA   0.299
4451          LG    0.19    0.14   10.10    0.04      40
4452          UC   0.815   0.563
4453          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4454          UA     100
              *

4455          KK   CN22A
4456          HC       2
              *
              * *** STORAGE ROUTING LN22A (22 = 60% of 37 Ac-Ft) ************************
              * *** SILVERTON RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ***************
              *

4457          KK   LN22A
4458          KM   ADDITIONAL LAND USE RETENTION ADDED 1.1 AC-FT
4459          DT  LN22DA    18.7
4460          DI       0     100    1000   10000
4461          DQ       0     100    1000   10000
              *
              * Route flow to south to N22B
              *

4462          KK   R22AS
4463          RS       3    FLOW      -1
4464          RC    0.04    0.04    0.04    2500  0.0051
4465          RX       0      20      50      60      70      80      90     250
4466          RY      10       8       8       7       0       0       7      10
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4467          KK    N22B   BASIN
4468          KM  SUB-BASIN N22 south portion
4469          BA   0.175
4470          LG    0.25    0.15    9.70    0.06      30
4471          UC   0.652   0.483
4472          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4473          UA     100
              *
              * *** STORAGE ROUTING LN22 (15 = 40% of 37 Ac-Ft)  ************************
              * *** SILVERTON RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ***************
              *

4474          KK   LN22B
4475          DT  LN22DB    12.0
4476          DI       0     100    1000   10000
4477          DQ       0     100    1000   10000
              *
              * COMBINE  BASINs N22A, N22B, and RX50E
              * WETBROOK VILLAGE EAST - EAST INLET
              *
```

```
4478          KK    CN22
4479          HC       3
              *
              * DIVERSION MAIN BEARDSLEY RD(WEST), SPLIT (TO DETEN. BASIN)
              * WESTBROOK VILLAGE EAST - EAST INLET CAN TAKE ONLY 500 CFS ADDITIONAL FLOW
              * IS DIRECTED TO THE WEST INLET IN AN EQUALIZATION CHANNEL
              *

4480          KK    DN22
4481          DT    N22I
4482          DI       0      30      60     100     300     500     600    1000    2000
4483          DQ       0      30      60     100     300     500     500     500     500
              *
              * ROUTE RN22W IS 1764 FT WITH A SLOPE OF 0.0023
              * CROSS SECTION IS A ROAD WITH A WALL TO THE WEST SIDE ORCHARD TO THE RIGHT
              * ON EQUALIZATION CHANNEL ALONG BEARDSLEY RD
              * ROUTE FLOW TO WESTBROOK VILLAGE EAST WEST INLET (CN11E) FROM EAST INLET (CN22)
              *

4484          KK   RN22W
4485          RS       8    FLOW      -1
4486          RC    0.04    0.03    0.06    1764  0.0023
4487          RX       0       1      34      69     119     144     244     544
4488          RY      10     2.5       0     2.5     2.5     3.5     4.5     5.5
              *
              * RECOVER diverted FLOW FROM LAKE PLEASANT DETENTION BASIN
              *
1                                        HEC-1 INPUT                                          PAGE135

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4489          KK  DRX50I
4490          DR   DX50I
              *
              * ROUTE RX50W IS 2586 FT WITH A SLOPE OF 0.0046
              * CROSS SECTION IS A LARGE DITCH (MEASURED)
              * ROUTE FLOW TO WESTBROOK VILLAGE EAST WEST INLET (CN11E) FROM EAST INLET (CN22)
              *

4491          KK   RX50W
4492          RS       6    FLOW      -1
4493          RC    0.04    0.04    0.04    2586  0.0046
4494          RX       0     200     300     330     390     420     620     820
4495          RY      10       8       5       0       0       5       8      10
              *

4496          KK   N11EB   BASIN
4497          KM  SUB-BASIN N11E south portion
4498          BA   0.231
4499          LG    0.25    0.23    6.20    0.20      30
4500          UC   0.684   0.416
4501          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4502          UA     100
              *
              * COMBINE BASIN N11EA, N11EB, RX1E, AND RN22W
              *

4503          KK   CN11E
4504          HC       4
              *
              * *** DEER VILLAGE RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ************
              *

4505          KK   LN11E
4506          DT  LN11ED    31.4
4507          DI       0     100    1000   10000
4508          DQ       0     100    1000   10000
              *
              * ***************************************************************************
              * *** THIS PORTION OF THE MODEL WAS COPIED FROM THE                        ***
              * *** HEC-1 MODEL FROM THE DESERT AMETHYST DRAINAGE PROJECT                ***
              * *** BY WOOD, PATEL & INC. 5/4/99 FOR THE 60% DESIGN LEVEL.               ***
              * *** ORIGINAL MODEL WAS DEVELOPED BY THE FCDMC, 1991                      ***
              * ***************************************************************************
              * ************************* EAST WESTBROOK VILLAGE GOLF COURSE ******************
              * ***************************************************************************
              * ROUTE FLOW TO CPWB1 FROM WBE1 (EAST INLET TO W.B. VILLAGE)
              *

4509          KK  R-WBE1
4510          RS       1    FLOW      -1
4511          RC     .03     .02     .03     260  .00192
```

```
4512          RX       0      12    17.5    22.5    33.5    37.5      43      55
4513          RY      48      42      40      40      40      40      42      48
              *
              * RUN OFF FROM WESTBROOK PARCELS 9,10A,11,12, AND R-3(GC)
              *
                                          HEC-1 INPUT                                                    PAGE136

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4514          KK     WB1   BASIN
4515          BA   0.115
4516          LG    0.23    0.18    7.30    0.12      26
4517          UC   0.703   0.570
4518          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4519          UA     100
              *
              * COMBINE PARCELS WB1 AND R-WBE1
              *

4520          KK   CPWB1
4521          HC       2
              *
              * ROUTE FLOW TO CPWB2 FROM CPWB1 (THRU G.C.)
              *

4522          KK    R-R3
4523          RS       1    STOR      -1       0
4524          SV       0     .19    1.23    3.71    7.87    12.1    12.5      13
4525          SE      32      33      34      35      36      37    38.0      39
4526          SQ       0       2      12      19     195     811  1200.0    1500
              *
              * ************** BASIN IDENTIFICATION ******************************************
              * RUN OFF FROM WESTBROOK PARCELS 18B,19, AND R-4&5(GC)
              *

4527          KK     WB2   BASIN
4528          BA   0.090
4529          LG    0.19    0.20    8.80    0.06      18
4530          UC   0.584   0.484
4531          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4532          UA     100
              *
              * COMBINE PARCELS WB2 AND R-R3
              *

4533          KK   CPWB2
4534          HC       2
              *
              * ROUTE FLOW TO CPWB3 FROM CPWB2 (THRU G.C.)
              *

4535          KK   R-4-5
4536          RS       1    STOR      -1       0
4537          SV       0    2.57    7.19   13.71    22.4      32      37      42      47      52
4538          SE      27      28      29      30      31      33      34      35      36      37
4539          SQ       0       2      12      19      21      21      21      21     386    1401
              *
              * RUN OFF FROM WESTBROOK GOLF COURSE R-6
              *
1                                         HEC-1 INPUT                                                    PAGE137

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4540          KK     WB3   BASIN
4541          BA   0.010
4542          LG    0.12    0.26    8.80    0.05       3
4543          UC   0.181   0.131
4544          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4545          UA     100
              *
              * COMBINE PARCELS WB3 AND R-4-5
              *

4546          KK   CPWB3
4547          HC       2
              *
              * ROUTE FLOW TO CPR6 FROM CPWB3 (INTO G.C.)
              *

4548          KK     R-6
4549          RS       1    STOR      -1       0
```

```
4550          SV       0       2       4       6       8     8.2
4551          SE      33      34      35      36      37      38
4552          SQ       0       0     227     811    1200    2000
              *
              * ***************************************************************************
              * *** DIVERSION RECOVER DRN22  ***********************************************
              * RECOVER diverted FLOW AT EAST INLET OF EAST WESTBROOK VILLAGE (CN22)
              *

4553          KK   DRN22
4554          DR    N22I
              *
              * RUN OFF FROM WESTBROOK PARCELS 13,14, AND R-1(GC)
              *

4555          KK     WB4   BASIN
4556          BA   0.109
4557          LG    0.22    0.17    8.80    0.07      25
4558          UC   0.521   0.364
4559          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4560          UA     100
              *
              * COMBINE PARCELS WB4 AND DRN22
              *

4561          KK   CPWB4
4562          HC       2
              *
              * ROUTE FLOW TO CPWB5 FROM CPWB4 (THRU W.B. GOLF COURSE)
              *
1                                    HEC-1 INPUT                                          PAGE138

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4563          KK    R-R1
4564          RS       1    STOR      -1       0
4565          SV       0   .1138   .6342  1.4316     3.3     5.5    6.46    6.94     7.5    10.5
4566          SE      36      37      38      39      40      41      42      43      44    45.5
4567          SQ       0       2      12      19    21.8    23.1    24.1      25     750    1350
              *
              * *** BASIN WB5 ***********************************************************
              * RUN OFF FROM WESTBROOK PARCELS 15-17,18A,23A, AND R-2(GC)
              *

4568          KK     WB5   BASIN
4569          BA   0.114
4570          LG    0.20    0.19    8.80    0.06      19
4571          UC   0.452   0.244
4572          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4573          UA     100
              *
              * COMBINE PARCELS WB5 AND R-R1
              *

4574          KK   CPWB5
4575          HC       2
              *
              * ROUTE FLOW TO CPR6 FROM CPWB5 (THRU G.C.)
              *

4576          KK    R-R2
4577          RS       1    STOR      -1       0
4578          SV       0    1.97    4.86    9.02   14.99      20      25      30      34      38
4579          SE      26      27      28      29      30      31      32      33      34      35
4580          SQ       0       2      12      19      21      21      21      21     930    1400
              *
              * COMBINE FLOWS FROM R-R2 AND R-R6
              *

4581          KK    CPR6
4582          HC       2
              *
              * ROUTE FLOW TO CR6W7 FROM CPR6
              *

4583          KK   RCR26
4584          RS       3    FLOW      -1
4585          RC     .04     .03     .04    1420   .0018
4586          RX       0      30      60      90     120     150     180     210
4587          RY     104     102     100     100     100     100     102     104
              *
              * *** BASIN WB7 ***********************************************************
```

```
                 * RUN OFF FROM WESTBROOK PARCELS 23B,21A, AND R-7(GC)
                 *
1                                        HEC-1 INPUT                                                    PAGE139

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4588             KK     WB7   BASIN
4589             BA   0.045
4590             LG    0.14    0.20    8.80    0.07      34
4591             UC   0.401   0.340
4592             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4593             UA     100
                 *
                 * COMBINE PARCELS WB7 AND RCR26
                 *

4594             KK   CR6W7
4595             HC       2
                 *
                 * ROUTE FLOW TO C7R8 FROM CR6W7 (THRU W.B. GOLF COURSE)
                 *

4596             KK    R-R7
4597             RS       1    STOR      -1       0
4598             SV       0     .15     .85    2.26    4.71     6.0     7.0     9.0
4599             SE      27      28      29      30      31      32      33      34
4600             SQ       0      11      23      35      46     526    1391    2500
                 *
                 * *** BASIN WB6 ***************************************************************
                 * RUN OFF FROM WESTBROOK PARCELS 24,25,26A,27A, AND R-8(GC)
                 *

4601             KK     WB6   BASIN
4602             BA   0.115
4603             LG    0.22    0.18    8.80    0.07      24
4604             UC   0.723   0.674
4605             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4606             UA     100
                 *
                 * ROUTE FLOW TO C7R8 FROM WB6 (THRU G.C.)
                 *

4607             KK    R-R8
4608             RS       1    STOR      -1       0
4609             SV       0     .36    2.13    5.54   10.63   15.29    16.0
4610             SE      27      28      29      30      31      32      33
4611             SQ       0       2      12      19      22      30     100
                 *
                 * COMBINE PARCELS R-R7 AND R-R8
                 *

4612             KK    C7R8
4613             HC       2
                 *
                 * ROUTE FLOW TO CP-678 FROM C7R8 (ALONG MAIN STREET)
                 *
1                                        HEC-1 INPUT                                                    PAGE140

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4614             KK    RC78
4615             RS       2    FLOW      -1
4616             RC     .03     .02     .03    1120   .0032
4617             RX       0      15      30      60      80     105     120     135
4618             RY     104     102     100     100     100     100     102     104
                 *
                 * RUN OFF FROM WESTBROOK PARCELS 1B,26B, AND R/C
                 *

4619             KK     WB8   BASIN
4620             BA   0.067
4621             LG    0.21    0.15    8.80    0.07      44
4622             UC   1.270   1.847
4623             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4624             UA     100
                 *
                 * COMBINE PARCELS WB8 AND RC78
                 *

4625             KK  CP-678
4626             HC       2
```

```
                *
                * RUN OFF FROM WESTBROOK PARCELS 1A,2A,3A,20,21B, AND R-9A&9B(GC)
                *

4627            KK    WB10   BASIN
4628            BA   0.095
4629            LG    0.20    0.19    8.00    0.09      24
4630            UC   0.607   0.541
4631            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4632            UA     100
                *
                * ROUTE FLOW TO WBEOT FROM WB10 (THRU G.C.)
                *

4633            KK    R-R9
4634            RS       1    STOR      -1       0
4635            SV       0     .03    .376   1.698   4.517   9.114  12.000
4636            SE      25      26      27      28      29      30      31
4637            SQ       0       2      11      18      24     128     200
                *
                * COMBINE FLOWS FROM R-R9 AND CP-678
                * AT INTERSECTION OF OUTLET WITH UNION HILLS RD, W.B. MAIN ENTRANCE
                *

4638            KK   WBEOT
4639            HC       2
                *
                * DIVERSION AT UNION HILLS RD
                * MAIN WEST ALONG UNION HILLS DIVERSION EAST TO NEW RIVER
                * DIVERT 100CFS TO NEW RIVER: 50 CFS THRU 42"CMP AND 50 CFS OVERLAND
                * third DQ was change by Entellus from 100 to 50
                *
1                                          HEC-1 INPUT                                          PAGE141

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4640            KK    DVNR
4641            DT   TONRI
4642            DI       0      50     100     150     300     600     900
4643            DQ       0     .01     .02      50     100     100     100
                *
                * DIVERT THRU COUNTRY CLUB ROAD AND EVENTUALLY LOSS TO NEW RIVER
                * RATING AS PER ERIE'S REPORT, ASSUMES OVERFLOW PROPORTIONAL TO WEIR LENGTH
                *

4644            KK   CCLUB
4645            DT   DCLUB
4646            DI       0      50      80     982    2670    7461   13454
4647            DQ       0       0       0     214     607    1716    3152
                *
                * ROUTE REMAINING TO INTERSECTION OF UNION HILLS & 87TH AVE
                *

4648            KK   RR287
4649            RS       1    FLOW      -1
4650            RC     .02   0.015     .02     660   .0015
4651            RX       0       1       5      35      40      70      74      75
4652            RY     104     102     100     101     101     100     102     104
                *
                * DIVERT SOUTH THRU 87TH AVE, PART  GO TO 91ST AVENUE AT UNION HILLS
                * USING RATING CURVE DEVELOPED BY ERIE & ASSOCIATES
                * INFLOW IS ASSUMED SUM OF RATED Q AT RD INTERSECTION
                * THIS APPLIES TO SUCCEEDING DIVERSIONS USING ERIE'S DATA
                *

4653            KK   DV87S
4654            DT  DV87SI
4655            DI       0      50      80     762    2067    5745
4656            DQ       0     .01     .02     221     625    1768
                *
                * ROUTE REMAINING FLOW TO 89TH AVE THRU NORTH SIDE OF UNION HILLS RD.
                *

4657            KK   RR289
4658            RS       1    FLOW      -1
4659            RC   0.015   0.015   0.015    1320   .0037
4660            RX       0       1       5      35      40      70      74      75
4661            RY     104     102     100     101     101     100     102     104
                *
                * ASSUME SPLIT OCCURS WHEN DEPTH IS 0.5 FT ABOVE 91ST AVE CROWN AT INTERSECTION
                * PER ERIE'S RATING Q=145 CFS ABOVE WHICH FLOW WILL HAVE 50-50 SPLIT
                * FLOW LESS OR EQ TO 145 CFS WILL SIMPLY CONTINUE WESTWARD TO 91ST AVENUE
```

```
                * ******** LTM:  Diversion was prev. modeled incorrectly to split flow 50/50
                * starting at Q=0.  Corrected so 50/50 begins AFTER Q=145 ******
                *
1                                        HEC-1 INPUT                                                    PAGE142

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4662            KK    DS89
4663            DT   DV89I
4664            DI       0      80     145     155     305     505     805    1205
4665            DQ       0     .01     .02       5      80     180     330     530
                *
                * Hydrograph remaining after 125 cfs flows to 91st Ave.
                * Route short distance to eliminate diversion error messages
                *

4666            KK   TODET
4667            RS       2    FLOW      -1
4668            RC     .02   0.015     .02    1000   .0015
4669            RX       0     101     105     135     140     170     174     275
4670            RY     104     102     100     101     101     100     102     104
                *
                * Allow max 125 cfs to continue to 91st Ave.
                * ENTELLUS CHANGED THE SWITCHED MAIN/SPLIT HYDROGRAPHS AND ALSO MODIFIED
                * THE THIRD DQ RECORD
                *

4671            KK    DV91
4672            DT   DV91I
4673            DI       0     100     345     350     500     800    1200
4674            DQ       0     .01     220     230     475     675    1075
                *
                * ******************************************************************************
                * **************** EAST WESTBROOK VILLAGE GOLF COURSE TO 91ST AVE ***************
                * ******************************************************************************
                * ******************************************************************************
                *

4675            KK     WB9   BASIN
4676            KM  COMBINE PARCELS 8A,10B,7,6,5,G10,2B,3B
4677            BA   0.217
4678            LG    0.22    0.26    5.10    0.31      32
4679            UC   0.986   0.911
4680            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4681            UA     100
                *

4682            KK   R-R10
4683            KM  ROUTE FLOWS THROUGH RESERVOIR 10, WESTBROOK VILLAGE EAST
4684            KM  THE RESERVOIR BLEEDS INTO 91ST AVENUE
4685            RS       1    STOR      -1       0
4686            SV       0     .35    2.28     6.4   12.82    24.0    24.0
4687            SE    27.5    28.5    29.5    30.5    31.5    32.5    33.5
4688            SQ       0       2      12      19      22    44.0     100
                *
                * RECOVER DIVERTED FLOW FROM CX1
                *
1                                        HEC-1 INPUT                                                    PAGE143

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4689            KK   DRX1I
4690            DR     X1I
                *
                * ROUTE RX1S IS 5321 FT WITH A SLOPE OF 0.0048
                *

4691            KK    RX1S
4692            RS       1    FLOW      -1
4693            RC    0.04     .03    0.04    5321   .0048
4694            RX       0     100     300     340     380     420     620     720
4695            RY      10       8       6       0       0       6       8      10
                *
                * COMBINE WEST-WESTBROOK VILLAGE RX1S AND DV91 R-R10
                * INTERSECTION OF UNION HILLS AND 91ST AVE.
                *

4696            KK  CN11B1
4697            HC       3
                *
```

```
4698        KK    N11C   BASIN
4699        KM  SUB-BASIN N11C
4700        BA   0.255
4701        LG    0.22    0.27    4.45    0.41      24
4702        UC   0.741   0.493
4703        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4704        UA     100
            *
            * *** STORAGE ROUTING LN11C ***********************************************
            * *** PARKRIDGE ESTATES RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
            *

4705        KK   LN11C
4706        DT  LN11CD    12.5
4707        DI       0     100    1000   10000
4708        DQ       0     100    1000   10000
            *
            * DIVERSION FROM MAIN CHANNEL TO WEST BASIN MAIN (CHANNEL), SPLIT (BASIN)
            * FROM SUBDIVISION report (Parkridge report No. 40)
            *

4709        KK  DN11CW
4710        DT  N11CWI
4711        DI       0     175     400     600     750     900     986    2000
4712        DQ       0       0     2.5      26      64    93.4   110.7     120
            *
            * *** DIVERSION DN11CE ***********************************************************
            * DIVERSION FROM MAIN CHANNEL TO EAST BASIN. MAIN (CHANNEL), SPLIT (BASIN)
            * FROM SUBDIVISION report (Parkridge report No. 40)
            *
1                                   HEC-1 INPUT                                          PAGE144

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4713        KK  DN11CE
4714        DT  N11CEI
4715        DI       0       7      50     175   397.5     574     686   806.6     875     200
4716        DQ       0       7       8    12.7    16.6    20.3    23.3    28.6    32.5      35
            *
            * RECALL THE DIVERTED FLOW FROM WEST RETENTION BASIN (DN11CW)
            *

4717        KK  DRN11C
4718        DR  N11CWI
            *
            * WEST BASIN Storage from Subdivision report (Parkridge report no. 40)
            *

4719        KK  LN11CW
4720        RS       1    STOR      -1
4721        SA    2.55    2.77    2.98     3.2    3.45     3.5
4722        SE       0       1       2       3       4       5
4723        SQ       0       2     3.3       5       5    5000
            *
            * *** DIVERSION RECOVER DR11C* ****************************************************
            * RECALL THE DIVERTED FLOW FROM EAST RETENTION BASIN (DN11CE)
            *

4724        KK  DR11C*
4725        DR  N11CEI
            *
            * *** STORAGE LN11CE ***************************************************************
            * EAST BASIN sTOrage FROM SUBDIVISION report (Parkridge report no. 40)
            *

4726        KK  LN11CE
4727        RS       1    STOR      -1
4728        SA       0   .7657    3.91    4.61    4.86    5.11     5.2
4729        SE       0     0.5       1       2       3       4       5
4730        SQ       0       2     3.3       5       5       5    5000
            *
            * Downstream FROM DETENTION BASIN, Includes overFLOW FROM both basins
            *

4731        KK  CN11C1
4732        HC       3
            *
            * RECALL THE DIVERTED FLOW FROM N11DB
            *

4733        KK  BN11DI
4734        DR   N11DI
```

```
                 *
                 * COMBINE CN11C1 AND N11DB
                 *
1                                    HEC-1 INPUT                                                    PAGE145

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4735             KK   CN11D
4736             HC       2
                 *
                 * ****************************************************************************
                 * *** THIS PORTION OF THE MODEL WAS COPIED FROM THE                          ***
                 * *** HEC-1 MODEL FROM THE DESERT AMETHYST DRAINAGE PROJECT                  ***
                 * *** BY WOOD, PATEL & INC. 5/4/99 FOR THE 60% DESIGN LEVEL.                 ***
                 * *** ORIGINAL MODEL WAS DEVELOPED BY THE FCDMC, 1991                        ***
                 * ****************************************************************************
                 * ************************ WEST WESTBROOK VILLAGE GOLF COURSE ******************
                 * ****************************************************************************
                 *
                 * ROUTE FLOW TO N11A (WBW) FROM CN11D (THRU WESTBROOK VILLAGE GC)
                 *

4737             KK   RWBW1
4738             RS      15    FLOW      -1
4739             RC     .03     .02     .03    5280   .0050
4740             RX       0      30      60      90     190     300     330     360
4741             RY     104     103     101     100     100     101     103     104
                 *
                 * RUN OFF FROM WESTBROOK GC PARCELS 1-28 ( 23% OF AREA)
                 * Old Subbasin Name was WBW
                 *

4742             KK    N11A   BASIN
4743             BA   0.929
4744             LG    0.21    0.27    4.80    0.33      29
4745             UC   1.367   0.966
4746             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4747             UA     100
                 *
                 * COMBINE PARCELS N11A AND RWBW1
                 *

4748             KK    CWBW
4749             HC       2
                 *
                 * STORAGE ROUTING TO GOLF COURSE FROM CWBW
                 * STORAGE CAPACITY OF 472 AC-FT ASSUMED MAXIMUM 350 AC-FT (UDC REPORT 1983)
                 *

4750             KK    RBWB
4751             RS       1    STOR       0
4752             SV       0      50     100     150     200     300     350     400     500     501
4753             SE      26      27      28      29      30      32      34      36      38    38.2
4754             SQ       0      25      25      25      25      25      25     300     400    2000
                 *
                 * ROUTE FLOW TO CN11B (91ST AVE) FROM CWBW (WEST WESTBROOK VILLAGE)
                 * ALONG UNION HILLS RD
                 *
1                                    HEC-1 INPUT                                                    PAGE146

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4755             KK   RWBW2
4756             RS      15    FLOW      -1
4757             RC     .03     .02     .03    5280   .0050
4758             RX       0      30      60      90     190     300     330     360
4759             RY     104     103     101     100     100     101     103     104
                 *
                 * COMBINE WEST-WESTBROOK VILLAGE CN11B1 AND RBWB2
                 * INTERSECTION OF UNION HILLS AND 91ST AVE.
                 *

4760             KK   CN11B
4761             HC       2
                 *
                 * ****************************************************************************
                 * *** END OF COPIED CODE FROM WOOD, PATEL & INC.'S DESERT AMATHYST MODEL     ***
                 * ****************************************************************************
                 *

4762             KK    S30D   BASIN
```

```
4763          KM  SUB-BASIN S30D
4764          BA   0.131
4765          LG    0.25    0.17    6.80    0.15      30
4766          UC   0.638   0.385
4767          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4768          UA     100
              *
              * ROUTE RS30D IS 6176 FT WITH A SLOPE OF .0023
              * CROSS SECTION IS 99TH AVENUE
              * *** ROUTE S30D THROUGH S30C ****************************************
              *

4769          KK   RS30D
4770          RS      10    FLOW      -1
4771          RC     .02     .02     .02    6176  0.0023
4772          RX       0       1      85      95     109     134     239     240
4773          RY      12       6       5       0       0       5       6      12
              *

4774          KK    S30C   BASIN
4775          KM  SUB-BASIN S30C
4776          BA   0.454
4777          LG    0.23    0.15    7.30    0.13      36
4778          UC   0.892   0.703
4779          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4780          UA     100
              *

4781          KK     XX1
4782          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4783          KK    S30B   BASIN
4784          KM  SUB-BASIN S30B
4785          BA   0.399
4786          LG    0.19    0.29    5.80    0.21      24
4787          UC   0.995   0.918
4788          UA       0     4.5    12.6    23.2    35.8    50.0    64.2    76.8    87.4    95.5
4789          UA     100
              *
              * *** COMBINE BASIN S30C, S30B, AND RS30D ******************************
              *

4790          KK   CS30B
4791          HC       2
              *
              * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  ***********************
              * THERE IS A DIVERSION AT THIS LOCATION. THE DEL WEBB CHANNEL CAN CARRY
              * 550 CFS, THE REST OF THE FLOW OVERFLOWS TO THE SOUTH.
              *

4792          KK  DS30BO
4793          DT  DS30BI
4794          DI       1     250     550     750    1000    1500    1750    2000
4795          DQ      .1      .2      .3     200     450     950    1200    1450
              *
              * ROUTE RS30BW IS 5060 FT WITH A SLOPE OF .0008
              * CROSS SECTION IS DEL WEBB BLVD
              * *** ROUTED S30BO THROUGH S30A ****************************************
              *

4796          KK  RS30BW
4797          RS      11    FLOW      -1
4798          RC     .02    0.02     .02    5060  0.0008
4799          RX       0       1     100     120     140     155     239     240
4800          RY      12       6       5       0       0       5       6      12
              *

4801          KK    S30A   BASIN
4802          KM  SUB-BASIN S30A
4803          BA   0.531
4804          LG    0.22    0.21    6.40    0.21      28
4805          UC   1.005   0.674
4806          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4807          UA     100
              *
              * *** COMBINE BASIN S30A AND RS30B ****************************************
              *
```

```
4808          KK   CS30A
4809          HC       2
              *
              * RECOVER DIVERTED FLOW FROM TONRI
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4810          KK  DRTONR
4811          DR   TONRI
              *
              * RECOVER DIVERTED FLOW FROM N20DI
              *

4812          KK  BN20DI
4813          DR   N20DI
              *
              *

4814          KK     N20   BASIN
4815          KM  SUB-BASIN N20
4816          BA   0.355
4817          LG    0.13    0.19    4.70    0.34      62
4818          UC   0.466   0.180
4819          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4820          UA     100
              *

4821          KK    DN20
4822          KM   NEW RETENTION OF 3.5 AC-FT IS ADDED FOR FUTURE LAND USE
4823          DT   DN20Q     3.5
4824          DI       0     100    1000   10000
4825          DQ       0     100    1000   10000
              *
              * *** COMBINE BASIN N20, TONRI, RN21 at New River
              *

4826          KK    CN20
4827          HC       3     8.0
              *
              *
4828          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  63        CBA
              .
              .
  72          .-------->   DCBAQ
  70      DCBA
             V
             V
  75      RCBA
              .
              .
  78          .         P28
              .           .
              .           .
  85      CP28............
              .
              .
  90          .-------->    DB28
  88      DT28
              .
              .
  93          .         CBB
              .           .
              .           .
 102          .           .-------->   DCBBQ
 100          .        DCBB
              .           V
              .           V
 105          .        RCBB
              .           .
              .           .
 108     CP28a............
             V
```

```
                V
111          R28a
                .
                .
14              .          P27
                .            .
                .            .
123             .            .-------->    DB27
121             .         DT27
                .            .
                .            .
126          CP27............
                .
                .
129             .         P27A
                .            .
                .            .
138             .            .-------->   DB27a
136             .        DT27a
                .            .
                .            .
141             .            .         P27B
                .            .            .
                .            .            .
150             .            .            .-------->   DB27b
148             .            .        DT27b
                .            .            .
                .            .            .
153             .            .            .          CBL
                .            .            .            .
                .            .            .            .
162             .            .            .            .-------->   DCBLQ
160             .            .            .        DCBL
                .            .            .            .
                .            .            .            .
165          CCBL.................................
                V
                V
168          RCBL
                .
                .
173             .          CBK
                .            .
                .            .
82              .            .-------->   DCBKQ
180             .         DCBK
                .            .
                .            .
185          CCBK............
                V
                V
188          RCBK
                .
                .
191             .          P14
                .            .
                .            .
200             .            .-------->    RB14
198             .         RT14
                .            .
                .            .
203          CP14............
                .
                .
206             .          P15
                .            .
                .            .
215             .            .-------->    DB15
213             .         DT15
                .            .
                .            .
218             .            .          CBJ
                .            .            .
                .            .            .
227             .            .            .-------->   DCBJQ
225             .            .         DCBJ
                .            .            .
                .            .            .
230          CP15........................
                V
                V
3            R15
                .
```

```
236          .        CBH
             .          .
             .          .
245          .          .-------->   DCBHQ
243          .      DCBH
             .        V
             .        V
248          .      RCBH
             .          .
             .          .
253          .          .        P25S
             .          .          .
             .          .          .
262          .          .          .-------->  DP25SQ
260          .          .      DP25S
             .          .          .
             .          .          .
265          .     CP25S............
             .          .
             .          .
268      AFR0............
             .
             .
271          .        E1
             .          .
             .          .
280          .          .-------->    DE1Q
278          .      DE1
             .        V
             .        V
283          .      RE1
             .          .
             .          .
286          .          .          E2
             .          .          V
             .          .          V
293          .          .         RE2
             .          .          .
             .          .          .
296          .          .          .         P13
             .          .          .          .
             .          .          .          .
305          .          .          .          .-------->    DB13
303          .          .          .        DT13
             .          .          .          .
             .          .          .          .
308          .      CP13........................
             .        V
             .        V
311          .      R13
             .          .
             .          .
314          .          .         P12
             .          .          .
             .          .          .
323          .          .          .-------->    DB12
321          .          .        DT12
             .          .          .
             .          .          .
326          .      CP12............
             .          .
             .          .
329          .          .          E3
             .          .          .
             .          .          .
338          .          .          .-------->    DE3Q
336          .          .         DE3
             .          .          V
             .          .          V
341          .          .         RE3
             .          .          .
             .          .          .
344          .          .          .         P10
             .          .          .          .
             .          .          .          .
353          .          .          .          .-------->    DB10
351          .          .          .        DT10
             .          .          .          .
             .          .          .          .
356          .          .        CP10............
             .          .          V
             .          .          V
```

```
359                R10
                    .
                    .
362                 .          P11
                    .           .
                    .           .
371                 .           .-------->    DB11
369                 .        DT11
                    .           .
                    .           .
374              CP11............
                    .
                    .
377                 .           E4
                    .           .
                    .           .
386                 .           .-------->    DE4Q
384                 .          DE4
                    .           V
                    .           V
389                 .          RE4
                    .           .
                    .           .
397                 .           .          P9
                    .           .           .
                    .           .           .
406                 .           .           .-------->     DB9
404                 .           .         DT9
                    .           .           .
                    .           .           .
409                 .           .           .         HV1
                    .           .           .           .
                    .           .           .           .
418                 .           .           .           .-------->   DHV1Q
416                 .           .           .        DHV1
                    .           .           .           .
                    .           .           .           .
421                 .          CP9.......................
                    .           V
                    .           V
424                 .           R9
                    .           .
                    .           .
432                 .           .          P8
                    .           .           .
                    .           .           .
441                 .           .           .-------->     DB8
439                 .           .         DT8
                    .           .           .
                    .           .           .
444                 .           .           .          P7
                    .           .           .           .
                    .           .           .           .
453                 .           .           .           .-------->     DB7
451                 .           .           .         DT7
                    .           .           .           .
                    .           .           .           .
456                 .          CP7.......................
                    .           V
                    .           V
459                 .           R7
                    .           .
                    .           .
466                 .           .          P6
                    .           .           .
                    .           .           .
475                 .           .           .-------->     DB6
473                 .           .         DT6
                    .           .           .
                    .           .           .
478                 .          CP6............
                    .           .
                    .           .
481          HPVLY........................
                    .
                    .
484                 .       A11MA
                    .         .
                    .         .
493                 .         .-------->  DA11MA
491                 .      A11MAQ
                    .         V
                    .         V
```

```
496          .          .     SA11MA
             .          .          V
             .          .          V
503          .          .     RA11MA
             .          .          .
             .          .          .
508          .          .          .       A11MB
             .          .          .          .
             .          .          .          .
517          .          .          .          .-------> DA11MB
515          .          .          .     A11MBQ
             .          .          .          V
             .          .          .          V
520          .          .          .     SA11MB
             .          .          .          .
             .          .          .          .
527          .          .          .          .      A11NA
             .          .          .          .          .
             .          .          .          .          .
536          .          .          .          .          .-------> A11NAQ
534          .          .          .          .     DA11NA
             .          .          .          .          V
             .          .          .          .          V
539          .          .          .          .     SA11NA
             .          .          .          .          V
             .          .          .          .          V
546          .          .          .          .     RA11NA
             .          .          .          .          .
             .          .          .          .          .
551          .          .     CA11MB.......................
             .          .          V
             .          .          V
553          .          .     RA11MB
             .          .          .
             .          .          .
558          .          .          .       A11O
             .          .          .          .
             .          .          .          .
567          .          .          .          .-------> DA11OQ
565          .          .          .      DA11O
             .          .          .          V
             .          .          .          V
570          .          .          .      SA11O
             .          .          .          V
             .          .          .          V
577          .          .          .      RA11O
             .          .          .          .
             .          .          .          .
582          .          .          .          .      A11KB
             .          .          .          .          V
             .          .          .          .          V
589          .          .          .          .     SA11KB
             .          .          .          .          .
             .          .          .          .          .
596          .          .          .          .          .      A11KA
             .          .          .          .          .          .
             .          .          .          .          .          .
605          .          .          .          .          .          .-------> A11KAQ
603          .          .          .          .          .     DA11KA
             .          .          .          .          .          V
             .          .          .          .          .          V
608          .          .          .          .          .     SA11KA
             .          .          .          .          .          V
             .          .          .          .          .          V
615          .          .          .          .          .     RA11KA
             .          .          .          .          .          .
             .          .          .          .          .          .
620          .          .          .     CA11KB.......................
             .          .          .          V
             .          .          .          V
622          .          .          .     RA11KB
             .          .          .          .
             .          .          .          .
627          .          .          .          .      A11G
             .          .          .          .          .
             .          .          .          .          .
636          .          .          .          .          .-------> DA11GQ
634          .          .          .          .     DA11G
             .          .          .          .          V
             .          .          .          .          V
639          .          .          .          .     RA11GN
             .          .          .          .          .
             .          .          .          .          .
```

```
644                                                A11KC
                                                     .
                                                     .
653                                                  .-------> A11KCQ
651                                            DA11KC
                                                     V
                                                     V
656                                            SA11KC
                                                     .
                                                     .
663                                CA11KC.......................
                                       V
                                       V
665                                RA11KC
                                       .
                                       .
670                                       A11J
                                          .
                                          .
679                                       .-------> DA11JQ
677                                    DA11J
                                          V
                                          V
682                                    SA11J
                                          .
                                          .
689                            CA11J........................
                                   .
                                   .
691                                A11L
                                   .
                                   .
700                                .-------> DA11L
698                                DA11LQ
                                       V
                                       V
703                                RA11L
                                       .
                                       .
708                                       A11I
                                          .
                                          .
717                                       .-------> DA11I
715                                    DA11IQ
                                          .
                                          .
720                            CA11I........................
                                   V
                                   V
722                            RA11I
                                   .
                                   .
727                                A11EA
                                       .
                                       .
736                                .-------> D11EAQ
734                                D11EA
                                       V
                                       V
739                                RA11EA
                                       .
                                       .
744                                    A11EB
                                          .
                                          .
753                                       .-------> D11EBQ
751                                    D11EB
                                          .
                                          .
756                            CA11EB.......................
                                   .
                                   .
758                                   41
                                       .
                                       .
767                                   .-------> D41Q
765                                 D41
                                       V
                                       V
770                                 B41
                                       .
                                       .
77                                     .      42
```

```
786                                                  .-------->    D42Q
784                                              D42
                                                   V
                                                   V
789                                              B42
                                                   .
                                                   .
796                                       C41............
                                            V
                                            V
798                                      RC41
                                            .
                                            .
803                                            A11F
                                                   .
                                                   .
812                                                .-------->  DA11FQ
810                                           DA11F
                                                   .
                                                   .
815                                      CA11F............
                                            .
                                            .
817                                 CA11E............
                                        V
                                        V
819                                 RA11E
                                        .
                                        .
824                                      A09U
                                            .
                                            .
833                                         .-------->  DA09UQ
831                                      DA09U
                                            .
                                            .
837                                         .-------->   A09UI
836                                      DA09U
                                            V
                                            V
840                                     RA09UW
                                            .
                                            .
845                                            A09T
                                                   .
                                                   .
854                                                .-------->  DA09TQ
852                                           DA09T
                                                   .
                                                   .
857                                      CA09T............
                                            .
                                            .
860                                         .-------->   A09TI
859                                      DA09T
                                            V
                                            V
863                                     RA09TW
                                            .
                                            .
868                                            A11A
                                                   .
                                                   .
877                                                .-------->   DA11A
875                                          DA11AQ
                                                   .
                                                   .
880                                 CX23........................
                                        V
                                        V
882                                 RX23
                                        .
                                        .
887                                       S1
                                            .
                                            .
896                                         .-------->    DS1Q
894                                      DS1
                                            .
                                            .
9                                           .           P2
```

```
908                                                  .-------->     RB2
906                                            RT2
911                  CS1.......................
                      V
                      V
914                  RS1
917                                 S2
926                                 .-------->    DS2Q
924                             DS2
929                                            S3
936                  CS2.......................
                      V
                      V
939                  RS2
942                                 P3
951                                 .-------->     RB3
949                             RT3
954                  CP3............
957                             P4b
966                                 .-------->    RB4b
964                            RT4b
969                                            S4
978                                            .-------->    DS4Q
976                                        DS4
981                                                   P1
990                                                   .-------->     DB1
988                                                 DT1
993                                        CP1............
996                                                 HV2
                                                     V
                                                     V
1003                                               RHV2
1009                                                  .-------->   DBHV2
1006                                             DTHV2
1012                                                          P4a
1021                                                          .-------->    DB4a
1019                                                      DT4a
1024                 SOUTH.............................................
                            N110
```

```
                 .
                 .
1036             .-------->  DN11OQ
1034        DN11O
                 .
                 .
1040             .-------->   N11OI
1039        DN11O
                 V
                 V
1043        RN11OW
                 .
                 .
1049             .<--------   A09TI
1048             .      DRA09T
                 .           V
                 .           V
1050             .      RA09TS
                 .           .
                 .           .
1055             .           .        A09R
                 .           .           .
                 .           .           .
1064             .           .           .-------->  DA09RQ
1062             .           .       DA09R
                 .           .           .
                 .           .           .
1067        CA09R.......................
                 .
                 .
1070             .-------->   A09RI
1069        DA09R
                 V
                 V
1073        RA09RW
                 .
                 .
1078             .        A09S
                 .           .
                 .           .
1086             .           .-------->   DA09S
1085             .      DA09SQ
                 .           .
                 .           .
1089        CA09S............
                 V
                 V
1091        RA09SW
                 .
                 .
1096             .       A09QA
                 .           .
                 .           .
1105             .           .-------->  A09QAQ
1103             .      DA09QA
                 .           .
                 .           .
1108        CA09QA............
                 .
                 .
1111             .-------->  A09QAI
1110        DA09QA
                 V
                 V
1114        RA09QW
                 .
                 .
1119             .       A99YA
                 .           .
                 .           .
1128             .           .-------->  A99YAQ
1126             .      DA99YA
                 .           .
                 .           .
1131        CA99YA............
                 V
                 V
1133        RA99YA
                 .
                 .
1138             .       A99YB
                 .           .
                 .           .
```

```
1147          .           .           .           .           .-------> A99YBQ
1145          .           .           .           .      DA99YB
              .           .           .           .           .
              .           .           .           .           .
1150          .           .      CA99YB.......................
              .           .           .
              .           .           .
1152       AFR1.......................
              .
              .
1154          .       N11NA
              .           .
              .           .
1163          .           .-------> N11NAQ
1161          .      DN11NA
              .           V
              .           V
1166          .      RN11NA
              .           .
              .           .
1171          .           .       N11NC
              .           .           .
              .           .           .
1180          .           .           .-------> N11NCQ
1178          .           .      DN11NC
              .           .           .
              .           .           .
1183          .      CN11NC............
              .           .
              .           .
1187          .           .-------> N11NP
1185          .      DN11NC
              .           V
              .           V
1190          .      RN11NC
              .           .
              .           .
1196          .           .       N11ND
              .           .           .
              .           .           .
1203          .           .           .        N11K
              .           .           .           .
              .           .           .           .
1210          .       CN11K........................
              .           .
              .           .
1215          .           .-------> N11KP
1214          .       DN11K
              .           .
              .           .
1219          .           .-------> DN11KS
1218          .      DN11KW
              .           V
              .           V
1222          .      RN11KW
              .           .
              .           .
1228          .           .           .<-------   A09UI
1227          .           .      BA09UI
              .           .           V
              .           .           V
1229          .           .      RA09US
              .           .           .
              .           .           .
1234          .           .           .       N11NB
              .           .           .           .
              .           .           .           .
1243          .           .           .           .-------> N11NBQ
1241          .           .           .      DN11NB
              .           .           .           .
              .           .           .           .
1246          .           .      CN11NB............
              .           .           V
              .           .           V
1248          .           .      RN11NW
              .           .           .
              .           .           .
1254          .           .           .           .<-------   N11OI
1253          .           .           .      BN11OI
              .           .           .           V
              .           .           .           V
1255          .           .           .      RN11OS
              .           .           .           .
```

```
1260                                          N11M
                                                .
                                                .
1269                                            .-------> DN11MQ
1267                                        DN11M
                                                .
                                                .
1272                    CN11M.......................
                            .
                            .
1275                        .-------> N11MI
1274                    DN11M
                            V
                            V
1278                   RN11MS
                            .
                            .
1283                        .       N11J
                                        .
                                        .
1292                        .           .-------> LN11JD
1290                        .      LN11J
                                        .
                                        .
1295                CN11J.......................
                            .
                            .
1298                        .-------> N11JI
1297                DN11J
                        V
                        V
1301               RN11JW
                            .
                            .
1307                        .<-------   N11MI
1306                   DRN11M
                            V
                            V
1308                   RN11MW
                            .
                            .
1313                  CX4............
                        V
                        V
1315                  RX4
                            .
                            .
1320                    A09O
                            .
                            .
1329                        .-------> DA09OQ
1327                    DA09O
                            V
                            V
1332                    SA09O
                            .
                            .
1340                        .           .<-------   A09RI
1339                        .      BA09RI
                                        V
                                        V
1341                        .      RA09RS
                                        .
                                        .
1346                CA09O.......................
                            .
                            .
1349                        .-------> A09OI
1348                DA09O
                        V
                        V
1352               RA09OW
                            .
                            .
1357                    A09P
                            .
                            .
1366                        .-------> DA09PQ
1364                    DA09P
                            V
                            V
1369                    SA09P
```

```
                .          .
                .          .
1376            .     CA09P............
                .        V
                .        V
1378            .     RA09P
                .          .
                .          .
1384            .          .          .<-------  A09QAI
1383            .          .     BA09QA
                .          .          V
                .          .          V
1385            .          .     RA09QB
                .          .          .
                .          .          .
1390            .          .          .       A09QB
                .          .          .           .
                .          .          .           .
1399            .          .          .           .-------->  A09QBQ
1397            .          .          .      DA09QB
                .          .          .           .
                .          .          .           .
1402            .     CA09Q........................
                .          .
                .          .
1405            .          .-------->   A09QI
1404            .     DA09Q
                .        V
                .        V
1408            .    RA09QW
                .          .
                .          .
1413            .          .        A10A
                .          .          .
                .          .          .
1422            .          .          .-------->  DA10AQ
1420            .          .       DA10A
                .          .          .
                .          .          .
1425            .     CA10A............
                .        V
                .        V
1427            .     RA10A
                .          .
                .          .
1432            .          .        A99X
                .          .          .
                .          .          .
1441            .          .          .-------->  DA99XQ
1439            .          .       DA99X
                .          .          .
                .          .          .
1444            .     CA99X............
                .          .
                .          .
1446       AFR2............
                .
                .
1449            .          .<-------  DN11KS
1448            .    BN11KS
                .        V
                .        V
1450            .       3.1
                .          .
                .          .
1456            .          .          M3
                .          .          .
                .          .          .
1465            .          .          .-------->      3R
1463            .          .          3S
                .          .          .
                .          .          .
1468            .       3.2............
                .        V
                .        V
1471            .       4.1
                .          .
                .          .
1474            .          .          M4
                .          .          .
                .          .          .
1483            .          .          .-------->      4R
1481            .          .          4S
```

```
1486          4.2............
9                M1
1498                .-------->      1R
1496             1S
                 V
                 V
1501            2.1
1504                          M2
                                .
1513                            .-------->      2R
1511                          2S
                                .
1516            2.3............
1520                .-------->     X5I
1519            DX5
                 V
                 V
1523            2.2
1526          4.3............
                V
                V
1529         10.1
1532            M10
1541                .-------->     10R
1539            10S
1544         10.2............
                V
                V
1547        11A.1
1550           M11A
1559                .-------->    11AR
1557           11AS
1562        11A.2............
                V
                V
1565        RN11G
1574          N11DA
1582                .-------->  LDAOUT
1581        LN11DA
                 V
                 V
1585        SN11DA
1594                .-------->  D11DAS
1592        N11DAW
                 V
                 V
1597        RN11DA
96                            N11FB
```

```
1616                                                  .-------->  LN1FBD
1613                                        LN11FB
                                                        .
                                                        .
19                                  CN11FB............
                                                        .
                                                        .
1622                        C98RGL............
                                  V
                                  V
1625                        RN11FB
                                  .
                                  .
1637                                    .<-------   N11JI
1634                                CN11JI
                                        V
                                        V
1638                                  6.1
                                        V
                                        V
1645                                  6.2
                                        .
                                        .
1652                                    .          M5
                                        .           .
                                        .           .
1661                                    .           .-------->      5R
1659                                    .          5S
                                        .           V
                                        .           V
1664                                    .         6.3
                                        .           .
                                        .           .
1667                                    .           .          M6
                                        .           .           .
                                        .           .           .
1676                                    .           .           .-------->      6R
1674                                    .           .          6S
                                        .           .           .
                                        .           .           .
1679                                  6.4........................
                                        V
                                        V
82                                    8.1
                                        .
                                        .
1685                                    .          M7
                                        .           .
                                        .           .
1694                                    .           .-------->      7R
1692                                    .          7S
                                        .           V
                                        .           V
1697                                    .         8.2
                                        .           .
                                        .           .
1700                                    .           .          M8
                                        .           .           .
                                        .           .           .
1709                                    .           .           .-------->      8R
1707                                    .           .          8S
                                        .           .           .
                                        .           .           .
1712                                  8.3........................
                                        V
                                        V
1715                                  9.1
                                        .
                                        .
1718                                    .          M9
                                        .           .
                                        .           .
1727                                    .           .-------->      9R
1725                                    .          9S
                                        .           .
                                        .           .
1730                                  9.2............
                                        V
                                        V
1733                                12A.1
                                        .
                                        .
```

```
1736          .           .           .        M12A
              .           .           .           .
              .           .           .           .
1745          .           .           .           .-------->    12AR
1743          .           .           .        12AS
              .           .           .           .
              .           .           .           .
1748          .           .       12A.2...........
              .           .           V
              .           .           V
1751          .           .       11B.1
              .           .           .
              .           .           .
1754          .           .           .        M11B
              .           .           .           .
              .           .           .           .
1763          .           .           .           .-------->    11BR
1761          .           .           .        11BS
              .           .           .           .
              .           .           .           .
1766          .           .           .           .         MA1
              .           .           .           .           .
              .           .           .           .           .
1775          .           .           .           .           .-------->     A1R
1773          .           .           .           .         A1S
              .           .           .           .           .
              .           .           .           .           .
1778          .           .       11B.2........................
              .           .           V
              .           .           V
1781          .           .      RA09KS
              .           .           .
              .           .           .
1790          .           .           .       N11FA
              .           .           .           .
              .           .           .           .
1799          .           .           .           .-------->  LN1FAD
1796          .           .           .      LN11FA
              .           .           .           .
              .           .           .           .
1802          .           .           .           .       A09GA
              .           .           .           .           .
              .           .           .           .           .
1811          .           .           .           .           .-------->  L09GAD
1808          .           .           .           .      LA09GA
              .           .           .           .           .
              .           .           .           .           .
1814          .      CN11FA...................................
              .           V
              .           V
1817          .      RN11FA
              .           .
              .           .
1826          .           .       A09GB
              .           .           .
              .           .           .
1836          .           .           .-------->  L09GBD
1833          .           .      LA09GB
              .           .           .
              .           .           .
1839          .       CA09G............
              .           .
              .           .
1843          .           .-------->   A09GI
1842          .       DA09G
              .           V
              .           V
1846          .      RA09GW
              .           .
              .           .
1857          .           .           .<--------   A09OI
1855          .           .      DA09oI
              .           .           V
              .           .           V
1858          .           .         371
              .           .           .
              .           .           .
1865          .           .           .        M370
              .           .           .           .
              .           .           .           .
1874          .           .           .           .-------->  DM370Q
1872          .           .           .       DM370
              .           .           .           .
```

```
1877          .          .          .          .
              .          .        372............
              .          .          V
              .          .          V
[illegible]81 .          .         B4
              .          .          V
              .          .          V
1891          .          .      12B.1
              .          .          .
              .          .          .
1898          .          .          .       M12B
              .          .          .          .
              .          .          .          .
1907          .          .          .          .-------->    12BR
1905          .          .          .       12BS
              .          .          .          .
              .          .          .          .
1910          .          .      12B.2............
              .          .          V
              .          .          V
1913          .          .       A2.1
              .          .          .
              .          .          .
1920          .          .          .        MA2
              .          .          .          .
              .          .          .          .
1929          .          .          .          .-------->     A2R
1927          .          .          .        A2S
              .          .          .          .
              .          .          .          .
1932          .          .       A2.2............
              .          .          V
              .          .          V
1935          .          .       RX7S
              .          .          .
              .          .          .
1944          .        CX8............
              .          V
              .          V
1946          .       RX8W
              .          .
              .          .
[illegible]55 .          .       A09H
              .          .          .
              .          .          .
1966          .          .          .-------->  LA09HD
1962          .          .      LA09H
              .          .          .
              .          .          .
1969          .     CA09H1...........
              .          .
              .          .
1972          .          .       A09J
              .          .          .
              .          .          .
1980          .          .          .-------->  LA09JD
1979          .          .      LA09J
              .          .          .
              .          .          .
1984          .          .          .-------->   A09JI
1983          .          .     DA09J
              .          .          V
              .          .          V
1987          .          .     RA09JS
              .          .          .
              .          .          .
1992          .      CA09H............
              .          V
              .          V
1995          .      RA09H
              .          .
              .          .
2001          .          .          .<--------   A09QI
2000          .          .     BA09QI
              .          .          V
              .          .          V
2002          .          .     RA09QS
              .          .          .
              .          .          .
2007          .          .          .       A09M
              .          .          .          .
              .          .          .          .
[illegible]6  .          .          .          .-------->  LA09MD
```

```
2014   .        .        .      LA09M
       .        .        .        .
       .        .        .        .
2019   .        .     CA09M............
       .        .        V
       .        .        V
2021   .        .     RA09M
       .        .        .
       .        .        .
2026   .        .        .       A09N
       .        .        .        .
       .        .        .        .
2035   .        .        .        .-------->  DA09NQ
2033   .        .        .      DA09N
       .        .        .        .
       .        .        .        .
2038   .        .     CA09N............
       .        .        V
       .        .        V
2040   .        .     LA09N
       .        .        V
       .        .        V
2045   .        .     RA09N
       .        .        .
       .        .        .
2051   .        .        .        .<--------   A09JI
2050   .        .        .     DRA09J
       .        .        .        V
       .        .        .        V
2052   .        .        .     RA09JW
       .        .        .        .
       .        .        .        .
2057   .        .        .        .        A09L
       .        .        .        .          .
       .        .        .        .          .
2064   .        .     CA09L........................
       .        .        V
       .        .        V
2066   .        .     LA09L
       .        .        V
       .        .        V
2071   .        .    RA09LS
       .        .        .
       .        .        .
2076   .        .        .      A09IH
       .        .        .        .
       .        .        .        .
2086   .        .        .        .-------->  A09IHQ
2084   .        .        .     DA09IH
       .        .        .        .
       .        .        .        .
2089   .        .    CA09IH............
       .        .        V
       .        .        V
2091   .        .    LA09IH
       .        .        .
       .        .        .
2096   .        .        .       A09I
       .        .        .        .
       .        .        .        .
2104   .        .        .        .-------->  LA09ID
2103   .        .        .      LA09I
       .        .        .        .
       .        .        .        .
2107   .     CX10........................
       .        V
       .        V
2109   .     RX10
       .        .
       .        .
2114   .        .      A99V
       .        .        .
       .        .        .
2123   .        .        .-------->  DA99VQ
2121   .        .     DA99V
       .        .        .
       .        .        .
2126   .    CA99V............
       .        .
       .        .
2128   .        .       A10
       .        .        .
       .        .        .
```

```
2137          .           .           .-------->   DA10Q
2135          .           .        DA10
              .           .           .
              .           .           .
140           .           .           .        A99W
              .           .           .           .
              .           .           .           .
2149          .           .           .           .-------->  LA99WD
2147          .           .           .       LA99W
              .           .           .           .
              .           .           .           .
2152       AFR3.................................
              .
              .
2155          .           .<--------   A09GI
2154          .      DRA09G
              .           V
              .           V
2156          .      RA09GS
              .           .
              .           .
2161          .           .        A09F
              .           .           .
              .           .           .
2170          .           .           .-------->  LA09FD
2168          .           .       LA09F
              .           .           .
              .           .           .
2173          .       CA09F............
              .           V
              .           V
2175          .      RA09FW
              .           .
              .           .
2180          .           .        A09E
              .           .           .
              .           .           .
2189          .           .           .-------->  LA09ED
2187          .           .       LA09E
              .           .           .
              .           .           .
2192          .       CA09E............
              .           V
              .           V
94            .       RA09E
              .           .
              .           .
2199          .           .        A09D
              .           .           .
              .           .           .
2208          .           .           .-------->  LA09DD
2206          .           .       LA09D
              .           .           .
              .           .           .
2211          .      CA09C*............
              .           V
              .           V
2213          .      RA09C*
              .           .
              .           .
2218          .           .        A09C
              .           .           .
              .           .           .
2227          .           .           .-------->  DA09CQ
2225          .           .       DA09C
              .           .           .
              .           .           .
2230          .       CA09C............
              .           V
              .           V
2232          .       RA09C
              .           .
              .           .
2237          .           .        A09B
              .           .           .
              .           .           .
2246          .           .           .-------->  DA09BQ
2244          .           .       DA09B
              .           .           V
              .           .           V
2249          .           .       RA09B
              .           .           .
              .           .           .
```

```
2254          .            .            .        A09A
              .            .            .          .
              .            .            .          .
2261          .       CA09A.......................
              .           V
              .           V
2263          .      RA09AW
              .           .
              .           .
2268          .           .        A99T
              .           .           .
              .           .           .
2277          .           .           .-------> LA99TD
2275          .           .       LA99T
              .           .          V
              .           .          V
2280          .           .       RA99T
              .           .           .
              .           .           .
2285          .           .           .         A09
              .           .           .          .
              .           .           .          .
2294          .           .           .          .-------> DA09Q
2292          .           .           .       DA09
              .           .           .          .
              .           .           .          .
2297          .        CA09.......................
              .           .
              .           .
2299          .           .        A99U
              .           .           .
              .           .           .
2308          .           .           .-------> DA99UQ
2306          .           .       DA99U
              .           .           .
              .           .           .
2311       AFR4........................
              .
              .
2313          .        A07G
              .           .
              .           .
2322          .           .-------> LA07GD
2320          .       LA07G
              .           V
              .           V
2325          .       RA07G
              .           .
              .           .
2330          .           .        A07F
              .           .           V
              .           .           V
2337          .           .       RA07F
              .           .           .
              .           .           .
2342          .           .           .       A07E
              .           .           .          .
              .           .           .          .
2349          .       CA07E.......................
              .           V
              .           V
2351          .       RA07E
              .           .
              .           .
2356          .           .        A07C
              .           .           .
              .           .           .
2365          .           .           .-------> DA07CQ
2363          .           .       DA07C
              .           .           .
              .           .           .
2368          .       CA07C............
              .           V
              .           V
2370          .       RA07C
              .           .
              .           .
2375          .           .        A07H
              .           .           .
              .           .           .
2384          .           .           .-------> DA07HQ
2382          .           .       DA07H
              .           .           V
```

```
                 .          .          V
2387             .          .      RA07H
                 .          .          .
                 .          .          .
[illegible]92    .          .          .      A08B
                 .          .          .         V
                 .          .          .         V
2399             .          .          .     RA08B
                 .          .          .         .
                 .          .          .         .
2404             .          .          .         .       A07D
                 .          .          .         .          .
                 .          .          .         .          .
2413             .          .          .         .          .-------> DA07DQ
2411             .          .          .         .     DA07D
                 .          .          .         .          .
                 .          .          .         .          .
2416             .     CA07D.......................................
                 .         V
                 .         V
2418             .     RA07D
                 .          .
                 .          .
2423             .          .      A99S
                 .          .          .
                 .          .          .
2432             .          .          .-------> DA99SQ
2430             .          .      DA99S
                 .          .          .
                 .          .          .
2435             .          .          .      A08A
                 .          .          .         .
                 .          .          .         .
2444             .          .          .         .-------> DA08AQ
2442             .          .          .     DA08A
                 .          .          .         V
                 .          .          .         V
2447             .          .          .     RA08A
                 .          .          .         .
                 .          .          .         .
2452             .          .          .         .       A99R
                 .          .          .         .          .
                 .          .          .         .          .
[illegible]1     .          .          .         .          .-------> DA99RQ
[illegible]59    .          .          .         .     DA99R
                 .          .          .         .         V
                 .          .          .         .         V
2464             .          .          .         .     RA99R
                 .          .          .         .          .
                 .          .          .         .          .
2469             .          .          .         .          .       A08
                 .          .          .         .          .         .
                 .          .          .         .          .         .
2476             .     CA08.............................................
                 .          .
                 .          .
2478         AFR5............
                 .
                 .
2480             .     N11P5
                 .          .
                 .          .
2488             .          .-------> N11P5Q
2486             .    DN11P5
                 .         V
                 .         V
2491             .    R11P5S
                 .          .
                 .          .
2497             .          .      N11P1
                 .          .          .
                 .          .          .
2505             .          .          .-------> N11P1Q
2503             .          .     DN11P1
                 .          .          .
                 .          .          .
2508             .    CN11P1............
                 .         V
                 .         V
2511             .    R11P1E
                 .          .
                 .          .
[illegible]8     .          .      N11P6
```

```
                .           .           .
                .           .           .
2526            .           .           .-------> N11P6Q
2524            .           .      DN11P6
                .           .           V
                .           .           V
2529            .           .      R11P6S
                .           .           .
                .           .           .
2535            .           .           .       N11P9
                .           .           .           .
                .           .           .           .
2543            .           .           .           .-------> N11P9Q
2541            .           .           .      DN11P9
                .           .           .           .
                .           .           .           .
2546            .           .      CN11P9............
                .           .           V
                .           .           V
2549            .           .      R11P9S
                .           .           .
                .           .           .
2557            .           .           .       N11P2
                .           .           .           .
                .           .           .           .
2563            .           .      CN11P2............
                .           .           .
                .           .           .
2568            .       LEJOS............
                .           .
                .           .
2574            .           .-------> VPRET
2571            .       VPDIV
                .           .
                .           .
2577            .           .       N11P4
                .           .           .
                .           .           .
2588            .           .           .-------> N11P4Q
2586            .           .      DN11P4
                .           .           V
                .           .           V
2591            .           .      R11P4S
                .           .           .
                .           .           .
2602            .           .           .-------> N11P4E
2597            .           .      DN11P4
                .           .           .
                .           .           .
2605            .      SDLEJ1............
                .           .
                .           .
2607            .           .       N11P8
                .           .           .
                .           .           .
2616            .           .           .-------> N11P8Q
2614            .           .      DN11P8
                .           .           V
                .           .           V
2619            .           .      R11P8S
                .           .           .
                .           .           .
2625            .           .           .       N11P7
                .           .           .           .
                .           .           .           .
2634            .           .           .           .-------> N11P7Q
2632            .           .           .      DN11P7
                .           .           .           .
                .           .           .           .
2637            .           .      CN11P7............
                .           .           .
                .           .           .
2645            .           .           .-------> N11P7E
2640            .           .      DN11P7
                .           .           V
                .           .           V
2648            .           .      R11P7S
                .           .           .
                .           .           .
2660            .           .           .           .<------- N11P4E
2657            .           .           .      RDP4E
                .           .           .           .
                .           .           .           .
```

```
2661          .           .      SUMP7S............
              .           .           .
              .           .           .
2664          .      SDLEJ2............
              .           V
              .           V
2666          .       RSDL2
              .           .
              .           .
2672          .           .           .<-------   N11NP
2669          .           .      BN11NP
              .           .           V
              .           .           V
2673          .           .      RN11NP
              .           .           .
              .           .           .
2680          .           .           .      N11L5A
              .           .           .           .
              .           .           .           .
2687          .           .         C89............
              .           .           .
              .           .           .
2692          .           .           .-------->    ED89
2690          .           .         D89
              .           .           V
              .           .           V
2695          .           .        R89E
              .           .           .
              .           .           .
2698          .           .           .      N11L3A
              .           .           .           .
              .           .           .           .
2705          .           .         C87............
              .           .           .
              .           .           .
2710          .           .           .-------->     SOL
2708          .           .         D87
              .           .           .
              .           .           .
2713          .       C87BA............
              .           .
              .           .
2718          .           .-------->   87BAS
2716          .        87BP
              .           V
              .           V
2721          .       R87BP
              .           .
              .           .
2724          .           .          87
              .           .           .
              .           .           .
2733          .           .           .-------->    D87Q
2731          .           .         D87
              .           .           .
              .           .           .
2738          .           .           .           .<-------   87BAS
2736          .           .           .        R87B
              .           .           .           .
              .           .           .           .
2739          .           .        C87B............
              .           .           V
              .           .           V
2742          .           .        87BA
              .           .           .
              .           .           .
2748          .      87BOUT............
              .           V
              .           V
2751          .       R87BA
              .           .
              .           .
2756          .           .-------->   87OUT
2754          .       D87BA
              .           .
              .           .
2759          .           .      LACAI
              .           .           .
              .           .           .
2775          .           .           .-------->  LACAIQ
2773          .           .     DLACAI
              .           .           V
              .           .           V
```

```
2778          .           .       RTCAI
              .           .           .
              .           .           .
2789          .           .           .-------->   LECHE
2785          .           .      DNLECH
              .           .           .
              .           .           .
2792          .      SDLEJ3............
              .           .
              .           .
2796          .           .      SUMMIT
              .           .           .
              .           .           .
2812          .           .           .           .<--------   LECHE
2809          .           .           .      RDLECH
              .           .           .           .
              .           .           .           .
2813          .           .      LEJCHL............
              .           .           .
              .           .           .
2819          .           .           .           .<--------  N11P7E
2816          .           .           .       RDP7E
              .           .           .           V
              .           .           .           V
2820          .           .           .      R11P7E
              .           .           .           .
              .           .           .           .
2832          .           .           .           .-------->  EAST83
2828          .           .           .       D2-18
              .           .           .           .
              .           .           .           .
2835          .           .        83CL............
              .           .           .
              .           .           .
2849          .           .           .-------->   EAGLE
2841          .           .      24PIPE
              .           .           .
              .           .           .
2852          .      SDLEJ4............
              .           V
              .           V
2856          .      RT83CL
              .           .
              .           .
63            .           .       N11P3
              .           .           .
              .           .           .
2869          .        83SD............
              .           V
              .           V
2873          .       R83SD
              .           .
              .           .
2878          .           .           .<--------   N11KP
2876          .           .      BN11KP
              .           .           V
              .           .           V
2879          .           .         R91
              .           .           .
              .           .           .
2882          .           .           .       N11L5
              .           .           .           .
              .           .           .           .
2893          .           .           .           .           .<--------    ED89
2891          .           .           .           .       RED89
              .           .           .           .           V
              .           .           .           .           V
2894          .           .           .           .        R89S
              .           .           .           .           .
              .           .           .           .           .
2900          .           .           .           .           .       N11L2
              .           .           .           .           .           .
              .           .           .           .           .           .
2908          .           .      CN11LS.................................
              .           .           .
              .           .           .
2913          .           .           .-------->  DIVS89
2911          .           .       D11L5
              .           .           V
              .           .           V
2916          .           .      RN11L5
              .           .           .
              .           .           .
```

```
2919          .           .           .       N11L3
              .           .           .           .
              .           .           .           .
2928          .           .           .           .-------> N11L3Q
2926          .           .           .      DN11L3
              .           .           .           .
              .           .           .           .
2933          .           .           .           .          .<-------     SOL
2931          .           .           .           .       RSOL
              .           .           .           .          V
              .           .           .           .          V
2934          .           .           .           .      RTSOL
              .           .           .           .          .
              .           .           .           .          .
2940          .           .       PPSD1.......................
              .           .           .
              .           .           .
2945          .           .           .-------> DIVS87
2943          .           .       PPDIV
              .           .           .
              .           .           .
2948          .           .           .       N11L4
              .           .           .           .
              .           .           .           .
2958          .           .           .           .-------> N11L4Q
2956          .           .           .      DN11L4
              .           .           .           .
              .           .           .           .
2961          .           .           .           .      N21I1
              .           .           .           .          .
              .           .           .           .          .
2970          .           .           .           .          .-------> N21I1Q
2968          .           .           .           .     DN21I1
              .           .           .           .          .
              .           .           .           .          .
2975          .           .           .           .          .          .<-------   87OUT
2973          .           .           .           .          .       87OUT
              .           .           .           .          .          .
              .           .           .           .          .          .
2976          .           .        PPSD...................................
              .           .           .
              .           .           .
2982          .           .           .-------> DIVS86
2979          .           .       DIVS3
              .           .           V
              .           .           V
2985          .           .       RPPSD
              .           .           .
              .           .           .
2988          .           .           .      N21I2
              .           .           .           .
              .           .           .           .
2995          .           .           .           .      N21I4
              .           .           .           .          .
              .           .           .           .          .
3003          .       TEMP0...................................
              .           .
              .           .
3006          .           .        N21Z
              .           .           .
              .           .           .
3021          .           .           .------->   N21ZI
3017          .           .       LN21Z
              .           .           .
              .           .           .
3030          .           .           .-------> DN21ZI
3024          .           .      DN21ZO
              .           .           .
              .           .           .
3037          .           .           .-------> N21ZI*
3033          .           .      DN21Z*
              .           .           V
              .           .           V
3040          .           .      RN21ZW
              .           .           .
              .           .           .
3053          .           .           .-------> D1/2ST
3050          .           .       1/2ST
              .           .           .
              .           .           .
3058          .           .           .          .<-------  D1/2ST
3056          .           .           .      R1/2ST
              .           .           .           .
```

```
3062                                                  .<-------  EAST83
3059                                          18PIPE
                                                  .
                                                  .
3066                                              .           .<-------   EAGLE
3063                                              .       CLDIV
                                                  .           .
                                                  .           .
3067                                           CPIPE............
                                                  V
                                                  V
3070                                          RCPIPE
                                                  .
                                                  .
3073                                              .       N21I3
                                                  .           .
                                                  .           .
3080                                     CN21I3......................
                                                  .
                                                  .
3088                                              .-------> N21I3O
3083                                      R21I3
                                                  .
                                                  .
3091                                 PPK_E............
                                                  .
                                                  .
3097                                              .-------> PPKEW3
3095                                 PPKEW2
                                                  .
                                                  .
3100                            US_BSN............
                                     .
                                     .
3106                                 .------->   PPBAS
3104                              PPBP
                                     V
                                     V
3109                            R83BSN
                                     .
                                     .
3122                                 .           .<-------   PPBAS
3120                                 .        RPPB
                                     .           .
                                     .           .
3123                              JCT1............
                                     .
                                     .
3128                                 .           .<-------  PPKEW3
3126                                 .        RESD
                                     .           .
                                     .           .
3129                               JCT............
                                     V
                                     V
3132                            OUTLET
                                     .
                                     .
3137                                 .        N21F
                                     .           .
                                     .           .
3146                                 .           .-------> DN21FQ
3144                                 .       DN21F
                                     .           .
                                     .           .
3149                             CN21F............
                                     .
                                     .
3153                                 .        N21G
                                     .           .
                                     .           .
3161                                 .           .           .<-------  N21ZI*
3160                                 .           .     DR21Z*
                                     .           .           V
                                     .           .           V
3162                                 .           .     RN21ZS
                                     .           .           .
                                     .           .           .
3167                                 .       CN21G............
                                     .           .
                                     .           .
3170                                 .           .------->   N21GI
```

```
3169          .           .      DN21GO
              .           .          V
              .           .          V
3173          .           .      RN21GS
              .           .          .
              .           .          .
3178          .           .          .        N21E
              .           .          .          .
              .           .          .          .
3185          .       CN21E.......................
              .           V
              .           V
3187          .       RN21E
              .           .
              .           .
3192          .           .        N21D
              .           .          .
              .           .          .
3200          .           .          .-------->  LN21DD
3199          .           .      LN21D
              .           .          .
              .           .          .
3203          .       CN21D............
              .           .
              .           .
3206          .           .-------->   N21DI
3205          .       DN21D
              .           V
              .           V
3209          .      RN21DE
              .           .
              .           .
3214          .           .          20
              .           .          .
              .           .          .
3223          .           .          .-------->    D20Q
3221          .           .        D20
              .           .          V
              .           .          V
3226          .           .        R20
              .           .          .
              .           .          .
3233          .           .          .          19
              .           .          .           .
              .           .          .           .
3242          .           .          .           .-------->    D19Q
3240          .           .          .        D19
              .           .          .           .
              .           .          .           .
3245          .           .        HC6............
              .           .          V
              .           .          V
3248          .           .        B19
              .           .          V
              .           .          V
3256          .           .       RHC6
              .           .          .
              .           .          .
3263          .           .          .          21
              .           .          .           .
              .           .          .           .
3270          .           .        HC7............
              .           .          V
              .           .          V
3273          .           .       RHC7
              .           .          .
              .           .          .
3280          .           .          .          33
              .           .          .           .
              .           .          .           .
3289          .           .          .           .-------->    D33Q
3287          .           .          .        D33
              .           .          .          V
              .           .          .          V
3292          .           .          .        B33
              .           .          .          V
              .           .          .          V
3299          .           .          .        R33
              .           .          .          .
              .           .          .          .
3306          .           .          .          .          34
              .           .          .          .           .
              .           .          .          .           .
```

```
3315                                                  .-------->    D34Q
3313                                            D34
                                                  V
                                                  V
18                                              B34
                                                  V
                                                  V
3325                                            R34
                                                  .
                                                  .
3332                                                .           35
                                                    .             .
                                                    .             .
3339                        HC8A.................................
                                 .
                                 .
3342                                   22
                                        .
                                        .
3351                                    .-------->    D22Q
3349                                 D22
                                      V
                                      V
3354                                 R22
                                        .
                                        .
3361                                    .           23
                                        .             .
                                        .             .
3368                                 HC8............
                                      V
                                      V
3371                                 B23
                                        .
                                        .
3378                                    .           25
                                        .             .
                                        .             .
3385                           HC9.......................
                                  V
                                  V
3388                           RHC9
                                  .
                                  .
95                                     27
                                        .
                                        .
3402                                    .           36
                                        .             .
                                        .             .
3411                                    .           .-------->    D36Q
3409                                    .         D36
                                        .           V
                                        .           V
3414                                    .         R36
                                        .             .
                                        .             .
3421                                    .             .         37w
                                        .             .           .
                                        .             .           .
3428                           C37W.....................................
                                  V
                                  V
3431                           B37W
                                  V
                                  V
3438                           RB37W
                                  .
                                  .
3445                                 .         37e
                                        .
                                        .
3452                                    .           24
                                        .             .
                                        .             .
3461                                    .           .-------->    D24Q
3459                                    .         D24
                                        .           V
                                        .           V
3464                                    .         R24
                                        .             .
                                        .             .
1                                       .             .         100
```

```
3480                                                  .-------> D100Q
3478                                            D100
                                                  .
                                                  .
3483                                     HC100............
                                             V
                                             V
3486                                      R100
                                             .
                                             .
3493                                             .        28R
                                             .           .
                                             .           .
3500                                     HC28R............
                                             V
                                             V
3503                                      R28R
                                             .
                                             .
3510                                             .        26R
                                             .           .
                                             .           .
3519                                             .       .-------> D26RQ
3517                                             .      D26R
                                             .           V
                                             .           V
3522                                             .      R26R
                                             .           .
                                             .           .
3529                                             .       .          29
                                             .           .           .
                                             .           .           .
3536                                             .      HC11............
                                             .           V
                                             .           V
3539                                             .       B29
                                             .           .
                                             .           .
3547                                             .       .          48
                                             .           .           .
                                             .           .           .
3564                                 HC12.......................................
                                             .
                                             .
3557                                             .  49
                                             .   V
                                             .   V
3564                                             .  B49
                                             .   .
                                             .   .
3571                                 C-N24M............
                                             V
                                             V
3574                                      RB49
                                             .
                                             .
3579                                             .     N24V
                                             .   .
                                             .   .
3588                                             .   .-------> DN24VQ
3586                                             .  DN24V
                                             .   V
                                             .   V
3591                                             .  RN24V
                                             .   .
                                             .   .
3596                                             .   .     N24M
                                             .   .       .
                                             .   .       .
3605                                             .   .       .-------> DN24MQ
3603                                             .   .    DN24M
                                             .   .       .
                                             .   .       .
3608                                 CN24M........................
                                             V
                                             V
3610                                      RN24M
                                             .
                                             .
3615                                             .  45
                                             .   .
```

```
3624                    .-------->    D45Q
3622                 D45
                      V
                      V
27                   R45
                      .
                      .
3634                  .          47
                      .           .
                      .           .
3641                 HC14............
                      V
                      V
3644                RHC14
                      .
                      .
3651                  .          50
                      .           V
                      .           V
3658                  .         R50
                      .           .
                      .           .
3665                  .           .          51
                      .           .           .
                      .           .           .
3672                 HC15........................
                      V
                      V
3675                 B51
                      .
                      .
3683                  .          46
                      .           .
                      .           .
3692                  .           .-------->    D46Q
3690                  .         D46
                      .           V
                      .           V
3695                  .         R46
                      .           .
                      .           .
702                   .           .          52
                      .           .           .
                      .           .           .
3709                  .        HC16............
                      .           .
                      .           .
3712                  .           .         53R
                      .           .           .
                      .           .           .
3721                  .           .           .-------->   D53RQ
3719                  .           .        D53R
                      .           .           V
                      .           .           V
3724                  .           .         R53
                      .           .           .
                      .           .           .
3731                  .           .           .         54R
                      .           .           .           .
                      .           .           .           .
3738                  .           .        HC17............
                      .           .           .
                      .           .           .
3741                  .       HC17A............
                      .           V
                      .           V
3744                  .         B52
                      .           .
                      .           .
3752                  .           .         56R
                      .           .           V
                      .           .           V
3759                  .           .         B56
                      .           .           .
                      .           .           .
3767                C-N24I........................
                      V
                      V
3770                R-N24I
                      .
                      .
75                    .          55
```

```
3784                                                  .-------->    D55Q
3782                                            D55
                                                  V
                                                  V
3787                                            R55
                                                  .
                                                  .
3794                                                .         57R
                                                  .           .
                                                  .           .
3801                                            HC18............
                                                  V
                                                  V
3804                                            B57R
                                                  V
                                                  V
3812                                           RB57R
                                                  .
                                                  .
3818                                                .        N24I
                                                  .           .
                                                  .           .
3827                                                .           .-------->  DN24IQ
3825                                                .       DN24I
                                                  .           .
                                                  .           .
3830                  CP57R...................................
                          .
                          .
3833                  .       N24H
                          .
                          .
3842                  .           .-------->  DN24HQ
3840                  .      DN24H
                          .
                          .
3845                  .           .        N24N
                          .
                          .
3854                  .           .           .-------->  DN24NQ
3852                  .           .       DN24N
                          .
                          .
3857                  .           .       RN24N
                          .
                          .
3862                  .           .           .        N24J
                          .
                          .
3871                  .           .           .           .-------->  DN24JQ
3869                  .           .           .       DN24J
                          .
                          .
3874                  .           .       CN24J............
                          .
                          .
3876                  .           .       RN24J
                          .
                          .
3881                  .           .           .        N24K
                          .
                          .
3890                  .           .           .           .-------->  DN24KQ
3888                  .           .           .       DN24K
                          .
                          .
3893                  CN24I...................................
                          V
                          V
3895                  RN24I
                          .
                          .
3900                  .       N21JA
                          .
                          .
3909                  .           .-------->  N21JAQ
3907                  .      DN21JA
                          V
                          V
3902                  .      RN21JS
                          .
```

```
3917                                  N21JB
                                        .
                                        .
26                                      .-------> N21JBQ
24                                    DN21JB
                                        .
                                        .
3929                            CN21J............
                                    V
                                    V
3931                            RN21JE
                                        .
                                        .
3936                    CN24G*............
                            V
                            V
3938                    RN24G*
                                .
                                .
3943                            N24G
                                    .
                                    .
3952                                    .-------> LN24GD
3950                            LN24G
                                    .
                                    .
3955                     CN24G............
                                .
                                .
3958                                    .<-------- DN21ZI
3957                            DRN21Z
                                    V
                                    V
3959                            RN21ZE
                                    .
                                    .
3964                    CN24G+............
                            V
                            V
3966                     RN24G
                                .
                                .
71                              N24F
                                    .
                                    .
3980                                    .-------> DN24FQ
3978                            DN24F
                                    .
                                    .
3983                     CN24F............
                                .
                                .
3985                            N24D
                                    .
                                    .
3994                                    .-------> DN24DQ
3992                            DN24
                                    .
                                    .
3997                     CN24D............
                            V
                            V
3999                     LN24D
                                .
                                .
4005                            N21H
                                    .
                                    .
4013                                        .<-------- N21GI
4012                                  DRN21G
                                            V
                                            V
4014                                  RN21GE
                                        .
                                        .
4019                            CN21H............
                                    V
                                    V
4021                            RN21H
                                    .
                                    .
26                                      N24E
```

```
                .         .         .         .         .
                .         .         .         .         .
4035            .         .         .         .         .-------> DN24EQ
4033            .         .         .         .      DN24E
                .         .         .         .         V
                .         .         .         .         V
4038            .         .         .         .      RN24E
                .         .         .         .         .
                .         .         .         .         .
4043            .         .      CN24D*.......................
                .         .         .
                .         .         .
4045            .         .         .      N27
                .         .         .         .
                .         .         .         .
4054            .         .         .         .-------> DN27Q
4052            .         .         .      DN27
                .         .         .         V
                .         .         .         V
4057            .         .         .      RN27
                .         .         .         .
                .         .         .         .
4062            .         .         .         .      N26
                .         .         .         .         .
                .         .         .         .         .
4071            .         .         .         .         .-------> DN26Q
4069            .         .         .         .      DN26
                .         .         .         .         .
                .         .         .         .         .
4074            .         .         .      CN26............
                .         .         .         V
                .         .         .         V
4076            .         .         .      RN26
                .         .         .         .
                .         .         .         .
4081            .         .         .         .      N25
                .         .         .         .         .
                .         .         .         .         .
4090            .         .         .         .         .-------> DN25Q
4088            .         .         .         .      DN25
                .         .         .         .         .
                .         .         .         .         .
4093            .         .         .      CN25............
                .         .         .         V
                .         .         .         V
4095            .         .         .      RN25
                .         .         .         .
                .         .         .         .
4100            .         .         .         .      N24
                .         .         .         .         .
                .         .         .         .         .
4109            .         .         .         .         .-------> DN24Q
4107            .         .         .         .      DN24
                .         .         .         .         .
                .         .         .         .         .
4112            .         .      CN24.......................
                .         .         V
                .         .         V
4114            .         .      RCN24
                .         .         .
                .         .         .
4119            .         .         .      N23
                .         .         .         .
                .         .         .         .
4128            .         .         .         .-------> DN23Q
4126            .         .         .      DN23
                .         .         .         .
                .         .         .         .
4131            .      CN23.......................
                .         V
                .         V
4133            .      RN23
                .         .
                .         .
4139            .         .         .<-------  N21DI
4138            .         .      BN21DI
                .         .         V
                .         .         V
4140            .         .      RN21DS
                .         .         .
                .         .         .
4145            .         .         .      N21C
                .         .         .         .
```

```
4154                                                  .-------> LN21CD
4152                                          LN21C
                                                        .
                                                        .
4157                                   CN21C............
                                                        .
                                                        .
4159                                             N21
                                                        .
                                                        .
4168                                                    .-------> DN21Q
4166                                          DN21
                                                        .
                                                        .
4171                            CN21........................
                                   V
                                   V
4173                            RN21
                                   .
                                   .
4179                               .-------> N20DI
4178                         N21-20
                                   .
                                   .
4182                                   N11DB
                                   .
                                   .
4190                                                    .<------- D11DAS
4189                                        B11DAS
                                                  V
                                                  V
4191                                        R11DAS
                                                        .
                                                        .
4196                                   C11DAB............
                                   .
                                   .
4200                               .-------> LNBOUT
4199                                   LN11DB
                                   .
                                   .
4204                               .-------> N11DI
4203                                   DN11D
                                   V
                                   V
4207                                   RN11DE
                                   .
                                   .
4213                                                    .<-------     X5I
4212                                          DRX5
                                                  V
                                                  V
4214                                          RX5S
                                                        .
                                                        .
4219                                      CX1............
                                   .
                                   .
4222                               .------->     X1I
4221                                      DX1
                                   V
                                   V
4225                                     RX1E
                                   .
                                   .
4232                                                    .<------- DIVS89
4230                                         DIVS1
                                                  V
                                                  V
4233                                        RNDV89
                                                        .
                                                        .
4239                                                    .         DV1
                                                        .           .
                                                        .           .
4248                                                    .           .-------> DDV1Q
4246                                                    .       DDV1
                                                        .           .
                                                        .           .
4251                                          CPD1............
                                                  V
                                                  V
```

```
4254                RNCP1
                      .
                      .
4259                  .          DV2
                      .            .
                      .            .
4266                CPD2............
                      .
                      .
4274                  .-------->    DVRB
4269                89WRB
                      V
                      V
4277                RNRDV2
                      .
                      .
4282                  .          DV3
                      .            .
                      .            .
4289                CPD3............
                      V
                      V
4292                RNRDV3
                      .
                      .
4297                  .          DV4
                      .            .
                      .            .
4304                  .            .          DV5
                      .            .            .
                      .            .            .
4311                CPD5........................
                      .
                      .
4314                  .          DV6
                      .            .
                      .            .
4321                CPDV6...........
                      V
                      V
4323                RN11IS
                      .
                      .
4328                  .       N11EA
                      .            .
                      .            .
4335                CN11EA..........
                      V
                      V
4337                RN11ES
                      V
                      V
4342                LX50
                      .
                      .
4349                  .-------->   DX50I
4348                DX50
                      V
                      V
4352                RX50E
                      .
                      .
4359                  .            .<-------  DIVS87
4357                  .       DIVS2
                      .          V
                      .          V
4360                  .      RNDV87
                      .          .
                      .          .
4366                  .          .          DV7
                      .          .            .
                      .          .            .
4375                  .          .            .-------->   DDV7Q
4373                  .          .        DDV7
                      .          .            .
                      .          .            .
4378                  .       CPD7............
                      .          V
                      .          V
4380                  .      RNRDV7
                      .          .
                      .          .
4450                  .          .          DV8
4455
```

```
4506                        .-------> LN11ED
4505                  LN11E
                          V
                          V
509                 R-WBE1
                          .
                          .
4514                      .          WB1
                          .            .
                          .            .
4520                  CPWB1............
                          V
                          V
4522                   R-R3
                          .
                          .
4527                      .          WB2
                          .            .
                          .            .
4533                  CPWB2............
                          V
                          V
4535                  R-4-5
                          .
                          .
4540                      .          WB3
                          .            .
                          .            .
4546                  CPWB3............
                          V
                          V
4548                    R-6
                          .
                          .
4554                      .            .<-------    N22I
4553                      .       DRN22
                          .            .
                          .            .
4555                      .            .         WB4
                          .            .           .
                          .            .           .
4561                      .       CPWB4............
                          .            V
                          .            V
63                        .         R-R1
                          .            .
                          .            .
4568                      .            .         WB5
                          .            .           .
                          .            .           .
4574                      .       CPWB5............
                          .            V
                          .            V
4576                      .         R-R2
                          .            .
                          .            .
4581                   CPR6............
                          V
                          V
4583                  RCR26
                          .
                          .
4588                      .          WB7
                          .            .
                          .            .
4594                  CR6W7............
                          V
                          V
4596                   R-R7
                          .
                          .
4601                      .          WB6
                          .            V
                          .            V
4607                      .         R-R8
                          .            .
                          .            .
4612                   C7R8............
                          V
                          V
4614                   RC78
                          .
                          .
```

```
4619                                  WB8
                                       .
                                       .
4625                            CP-678............
                                       .
                                       .
4627                                  WB10
                                       V
                                       V
4633                                  R-R9
                                       .
                                       .
4638                             WBEOT............
                                       .
                                       .
4641                                   .-------->   TONRI
4640                              DVNR
                                       .
                                       .
4645                                   .-------->   DCLUB
4644                             CCLUB
                                       V
                                       V
4648                             RR287
                                       .
                                       .
4654                                   .-------->  DV87SI
4653                             DV87S
                                       V
                                       V
4657                             RR289
                                       .
                                       .
4663                                   .-------->   DV89I
4662                              DS89
                                       V
                                       V
4666                             TODET
                                       .
                                       .
4672                                   .-------->   DV91I
4671                              DV91
                                       .
                                       .
4675                                  WB9
                                       V
                                       V
4682                                  R-R10
                                       .
                                       .
4690                                                  .<--------     X1I
4689                                            DRX1I
                                                     V
                                                     V
4691                                             RX1S
                                                     .
                                                     .
4696                             CN11B1......................
                                       .
                                       .
4698                                  N11C
                                       .
                                       .
4706                                   .-------->  LN11CD
4705                                  LN11C
                                       .
                                       .
4710                                   .-------->  N11CWI
4709                                DN11CW
                                       .
                                       .
4714                                   .-------->  N11CEI
4713                                DN11CE
                                       .
                                       .
4718                                                  .<--------  N11CWI
4717                                            DRN11C
                                                     V
                                                     V
4719                                            LN11CW
                                                     .
                                                     .
4725                                                 .            .<--------  N11CEI
```

```
4724                                                  DR11C*
                                                          V
                                                          V
4726                                                  LN11CE
                                                          .
                                                          .
4731                                  CN11C1.......................
                                                          .
                                                          .
4734                                                      .<-------   N11DI
4733                                              BN11DI
                                                          .
                                                          .
4735                                  CN11D............
                                          V
                                          V
4737                                  RWBW1
                                                          .
                                                          .
4742                                                  N11A
                                                          .
                                                          .
4748                                  CWBW............
                                          V
                                          V
4750                                  RBWB
                                          V
                                          V
4755                                  RWBW2
                                                          .
                                                          .
4760                          CN11B............
                                                          .
4762                                  S30D
                                          V
                                          V
4769                                  RS30D
                                                          .
                                                          .
4774                                                  S30C
                                                          .
                                                          .
4781                                   XX1............
                                                          .
                                                          .
4783                                                  S30B
                                                          .
                                                          .
4790                                  CS30B............
                                                          .
                                                          .
4793                                                      .-------->  DS30BI
4792                                  DS30BO
                                          V
                                          V
4796                                  RS30BW
                                                          .
                                                          .
4801                                                  S30A
                                                          .
                                                          .
4808                                  CS30A............
                                                          .
                                                          .
4811                                                      .<-------   TONRI
4810                                              DRTONR
                                                          .
                                                          .
4813                                                      .<-------   N20DI
4812                                                  BN20DI
                                                          .
                                                          .
4814                                                      .       N20
                                                          .
                                                          .
4823                                                      .-------->  DN20Q
4821                                                      .       DN20
                                                          .
                                                          .
4826                                                  CN20........................
```

) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             JUN   1998                *
*           VERSION 4.1                 *
*                                       *
*  RUN DATE   09MAY07  TIME  17:20:59   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104               *
*                                       *
*****************************************
```

```
Project ID: GP_NW ADMPU_F1 - Major Basin: 01 - Return Period: 100 Years
                                                                      **
Glendale/Peoria ADMP Northwest Region Update                          **
Original HEC-1 Model: EC06BASE.DAT, Wood/Patel, March 2007            **
                      100-Year 6-Hour HEC-1 Model for Existing Conditions **
Modified HEC-1 Model: FC06ADMP.DAT, Wood/Patel, SZ, May 2007          **
                      100-Year 6-Hour HEC-1 Model for Future Conditions **
                      with CIP Improvements                           **
1) NOAA2 Rain fall Data                                               **
2) DDMSW MCUHP1 V3.3.2 Used                                           **
3) Happy Valley Road Improvements Included                            **
4) Pinnacle Peak Road and Channel Improvements Included               **
5) Camino A Lago North Included                                       **
6) Beardsley Road Channel Included                                    **
                                                                      **
**********************************************************************
**********************************************************************
**                                                                  **
** CONCEPT REFINEMENT STUDY FOR ROSE GARDEN LANE DRAINAGE IMPROVEMENTS **
** ORIGINAL HEC-1 FILE FROM GLENDAL/PEORIA ADMP UPDATE STUDY        **
** MODIFIED HEC-1 MODEL: LEVEL3R5.DAT, Wood/Patel & CVL, May 2005   **
** THIS IS THE PREFERRED ALTERNATIVE MODEL                          **
** WPA REVISED APRIL 14, 2006 FOR DOVE VALLEY RANCH IMPROVEMENTS    **
** USING LATEST SURVEY DATA.                                        **
**********************************************************************
**********************************************************************
**                                                                  **
**                    Glendale/Peoria ADMP Update                   **
**                                                                  **
**********************************************************************
**********************************************************************
PROJECT:                 Glendale Peoria ADMP Update
CLIENT:                  Flood Control District of Maricopa County
PREPARED BY:             Entellus, Inc.
PROJECT No:              FCD 99-44              Entellus 310.017
FILE NAME: LEVEL3.DAT              CREATED DATE: JUNE 6, 2001
STORM:                   100-year 6-hour Storm
DEVELOPMENT CONDITIONS: LEVEL 3 HYDROLOGY
```

```
41 IO        OUTPUT CONTROL VARIABLES
                IPRNT          5  PRINT CONTROL
                IPLOT          0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT        HYDROGRAPH TIME DATA
                 NMIN          2  MINUTES IN COMPUTATION INTERVAL
                IDATE     1    0  STARTING DATE
                ITIME        0000  STARTING TIME
                   NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
              NDDATE     2    0  ENDING DATE
              NDTIME        0918  ENDING TIME
              ICENT           19  CENTURY MARK

          COMPUTATION INTERVAL      .03 HOURS
               TOTAL TIME BASE   33.30 HOURS

     ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT

43 JD        INDEX STORM NO. 1
                STRM        3.20  PRECIPITATION DEPTH
                TRDA         .01  TRANSPOSITION DRAINAGE AREA
```

```
44 PI          PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .01       .01       .01
                 .01       .01       .01       .01       .01       .02       .02       .02       .02       .02
                 .02       .02       .04       .06       .06       .06       .06       .06       .06       .06
                 .01       .01       .01       .01       .01       .01       .01       .01       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00

47 JD          INDEX STORM NO. 2
                 STRM        3.18  PRECIPITATION DEPTH
                 TRDA         .50  TRANSPOSITION DRAINAGE AREA

48 PI          PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .01       .01       .01
                 .01       .01       .01       .01       .01       .02       .02       .02       .02       .02
                 .02       .02       .04       .06       .06       .06       .06       .06       .06       .06
                 .01       .01       .01       .01       .01       .01       .01       .01       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00

51 JD          INDEX STORM NO. 3
                 STRM        3.12  PRECIPITATION DEPTH
                 TRDA        2.80  TRANSPOSITION DRAINAGE AREA

52 PI          PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                 .01       .01       .01       .01       .01       .03       .03       .03       .03       .03
                 .03       .03       .03       .03       .03       .03       .03       .03       .03       .03
                 .02       .02       .02       .02       .02       .02       .02       .01       .01       .01
                 .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                 .01       .01       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00

55 JD          INDEX STORM NO. 4
                 STRM        2.95  PRECIPITATION DEPTH
                 TRDA       16.00  TRANSPOSITION DRAINAGE AREA

56 PI          PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
```

```
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .02       .02       .02       .02       .02
                .02       .02       .02       .03       .03       .03       .03       .03       .03       .03
                .02       .02       .02       .02       .02       .02       .02       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00

59 JD         INDEX STORM NO. 5
                 STRM        2.60  PRECIPITATION DEPTH
                 TRDA       90.00  TRANSPOSITION DRAINAGE AREA

60 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .02       .02       .02       .02       .02
                .02       .02       .02       .02       .02       .02       .02       .02       .02       .02
                .02       .02       .02       .02       .02       .02       .02       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
```

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	CBA	18.	4.10	2.	0.	0.	.01		
+	DIVERSION TO	DCBAQ	18.	4.10	1.	0.	0.	.01		
+	HYDROGRAPH AT	DCBA	15.	4.17	1.	0.	0.	.01		
+	ROUTED TO	RCBA	15.	4.27	1.	0.	0.	.01		
+	HYDROGRAPH AT	P28	56.	4.13	7.	2.	1.	.03		
+	2 COMBINED AT	CP28	62.	4.27	8.	2.	1.	.03		
+	DIVERSION TO	DB28	49.	4.03	2.	1.	0.	.03		
+	HYDROGRAPH AT	DT28	62.	4.27	6.	1.	1.	.03		
+	HYDROGRAPH AT	CBB	46.	4.07	4.	1.	1.	.02		
+	DIVERSION TO	DCBBQ	45.	4.03	2.	1.	0.	.02		
+	HYDROGRAPH AT	DCBB	43.	4.10	2.	0.	0.	.02		
+	ROUTED TO	RCBB	40.	4.17	2.	0.	0.	.02		
+	2 COMBINED AT	CP28a	95.	4.17	8.	2.	1.	.05		
+	ROUTED TO	R28a	76.	4.40	7.	2.	1.	.05		
+	HYDROGRAPH AT	P27	107.	4.17	17.	4.	3.	.06		
+	DIVERSION TO	DB27	54.	3.93	3.	1.	0.	.06		
+	HYDROGRAPH AT	DT27	107.	4.17	14.	3.	3.	.06		
+	2 COMBINED AT	CP27	165.	4.37	21.	5.	4.	.12		
+	HYDROGRAPH AT	P27A	16.	4.07	2.	0.	0.	.01		
+	DIVERSION TO	DB27a	7.	3.90	0.	0.	0.	.01		
+	HYDROGRAPH AT	DT27a	16.	4.07	1.	0.	0.	.01		
+	HYDROGRAPH AT	P27B	24.	4.10	3.	1.	1.	.01		
+	DIVERSION TO	DB27b	8.	3.83	1.	0.	0.	.01		
+	HYDROGRAPH AT	DT27b	24.	4.10	3.	1.	0.	.01		
	HYDROGRAPH AT	CBL	57.	4.10	6.	2.	1.	.03		

+	DIVERSION TO	DCBLQ	24.	3.87	1.	0.	0.	.03
	HYDROGRAPH AT	DCBL	57.	4.10	5.	1.	1.	.03
+	4 COMBINED AT	CCBL	223.	4.33	30.	8.	5.	.16
+	ROUTED TO	RCBL	222.	4.37	30.	8.	5.	.16
+	HYDROGRAPH AT	CBK	125.	4.13	12.	3.	2.	.05
+	DIVERSION TO	DCBKQ	125.	4.13	7.	2.	1.	.05
+	HYDROGRAPH AT	DCBK	97.	4.23	4.	1.	1.	.05
+	2 COMBINED AT	CCBK	288.	4.23	35.	9.	6.	.22
+	ROUTED TO	RCBK	290.	4.27	35.	9.	6.	.22
+	HYDROGRAPH AT	P14	19.	4.07	2.	0.	0.	.01
+	DIVERSION TO	RB14	19.	4.07	2.	0.	0.	.01
+	HYDROGRAPH AT	RT14	0.	.00	0.	0.	0.	.01
+	2 COMBINED AT	CP14	290.	4.27	35.	9.	6.	.22
+	HYDROGRAPH AT	P15	7.	4.23	1.	0.	0.	.01
	DIVERSION TO	DB15	7.	4.23	1.	0.	0.	.01
+	HYDROGRAPH AT	DT15	0.	.00	0.	0.	0.	.01
+	HYDROGRAPH AT	CBJ	34.	4.10	3.	1.	1.	.01
+	DIVERSION TO	DCBJQ	34.	4.10	2.	1.	0.	.01
+	HYDROGRAPH AT	DCBJ	22.	4.27	1.	0.	0.	.01
+	3 COMBINED AT	CP15	312.	4.27	36.	9.	6.	.25
+	ROUTED TO	R15	304.	4.30	36.	9.	6.	.25
+	HYDROGRAPH AT	CBH	37.	4.03	3.	1.	1.	.01
+	DIVERSION TO	DCBHQ	37.	4.03	2.	0.	0.	.01
+	HYDROGRAPH AT	DCBH	33.	4.10	1.	0.	0.	.01
+	ROUTED TO	RCBH	19.	4.23	1.	0.	0.	.01
+	HYDROGRAPH AT	P25S	52.	4.17	7.	2.	1.	.03
	DIVERSION TO	DP25SQ	37.	4.00	2.	0.	0.	.03
	HYDROGRAPH AT							

+		DP25S	52.	4.17	6.	1.	1.	.03
+	2 COMBINED AT	CP25S	69.	4.20	7.	2.	1.	.04
	2 COMBINED AT	AFR0	363.	4.30	42.	11.	8.	.29
+	HYDROGRAPH AT	E1	35.	4.07	3.	1.	0.	.01
+	DIVERSION TO	DE1Q	35.	4.03	1.	0.	0.	.01
+	HYDROGRAPH AT	DE1	33.	4.10	1.	0.	0.	.01
+	ROUTED TO	RE1	28.	4.23	1.	0.	0.	.01
+	HYDROGRAPH AT	E2	28.	4.10	3.	1.	0.	.02
+	ROUTED TO	RE2	28.	4.13	3.	1.	0.	.02
+	HYDROGRAPH AT	P13	127.	4.10	12.	3.	2.	.06
+	DIVERSION TO	DB13	59.	3.90	3.	1.	0.	.06
+	HYDROGRAPH AT	DT13	127.	4.10	9.	2.	2.	.06
+	3 COMBINED AT	CP13	156.	4.20	13.	3.	2.	.09
+	ROUTED TO	R13	150.	4.17	13.	3.	2.	.09
	HYDROGRAPH AT	P12	69.	4.17	8.	2.	2.	.04
+	DIVERSION TO	DB12	53.	4.03	2.	1.	0.	.04
+	HYDROGRAPH AT	DT12	69.	4.17	6.	2.	1.	.04
+	2 COMBINED AT	CP12	218.	4.17	19.	5.	3.	.13
+	HYDROGRAPH AT	E3	82.	4.37	14.	4.	3.	.08
+	DIVERSION TO	DE3Q	72.	4.23	3.	1.	1.	.08
+	HYDROGRAPH AT	DE3	82.	4.37	11.	3.	2.	.08
+	ROUTED TO	RE3	87.	4.33	11.	3.	2.	.08
+	HYDROGRAPH AT	P10	98.	4.13	11.	3.	2.	.05
+	DIVERSION TO	DB10	46.	3.93	2.	1.	0.	.05
+	HYDROGRAPH AT	DT10	98.	4.13	9.	2.	2.	.05
+	2 COMBINED AT	CP10	154.	4.33	19.	5.	3.	.14
+	ROUTED TO	R10	132.	4.47	19.	5.	3.	.14
	HYDROGRAPH AT	P11	39.	4.30	8.	2.	2.	.04

+	DIVERSION TO	DB11	39.	4.27	2.	1.	0.	.04
	HYDROGRAPH AT	DT11	39.	4.33	6.	1.	1.	.04
+	2 COMBINED AT	CP11	168.	4.47	25.	6.	4.	.18
+	HYDROGRAPH AT	E4	43.	4.30	8.	2.	1.	.04
+	DIVERSION TO	DE4Q	43.	4.30	5.	1.	1.	.04
+	HYDROGRAPH AT	DE4	24.	4.77	3.	1.	0.	.04
+	ROUTED TO	RE4	24.	4.80	3.	1.	0.	.04
+	HYDROGRAPH AT	P9	82.	4.10	9.	2.	2.	.05
+	DIVERSION TO	DB9	45.	3.93	2.	0.	0.	.05
+	HYDROGRAPH AT	DT9	82.	4.10	7.	2.	1.	.05
+	HYDROGRAPH AT	HV1	6.	4.27	1.	0.	0.	.01
+	DIVERSION TO	DHV1Q	6.	4.27	0.	0.	0.	.01
+	HYDROGRAPH AT	DHV1	6.	4.33	1.	0.	0.	.01
+	3 COMBINED AT	CP9	82.	4.10	11.	3.	2.	.09
	ROUTED TO	R9	81.	4.13	11.	3.	2.	.09
+	HYDROGRAPH AT	P8	14.	4.23	3.	1.	0.	.01
+	DIVERSION TO	DB8	12.	4.10	1.	0.	0.	.01
+	HYDROGRAPH AT	DT8	14.	4.23	2.	1.	0.	.01
+	HYDROGRAPH AT	P7	17.	4.20	3.	1.	1.	.01
+	DIVERSION TO	DB7	13.	4.07	1.	0.	0.	.01
+	HYDROGRAPH AT	DT7	17.	4.20	2.	1.	0.	.01
+	3 COMBINED AT	CP7	109.	4.17	15.	4.	3.	.12
+	ROUTED TO	R7	107.	4.20	15.	4.	3.	.12
+	HYDROGRAPH AT	P6	46.	4.50	14.	4.	3.	.07
+	DIVERSION TO	DB6	45.	4.40	4.	1.	1.	.07
+	HYDROGRAPH AT	DT6	46.	4.50	11.	3.	2.	.07
+	2 COMBINED AT	CP6	113.	4.47	26.	6.	5.	.19
	3 COMBINED AT	HPVLY	411.	4.20	69.	17.	12.	.50

+	HYDROGRAPH AT	A11MA	220.	4.07	19.	5.	3.	.07
	DIVERSION TO	DA11MA	220.	4.07	15.	4.	3.	.07
+	HYDROGRAPH AT	A11MAQ	123.	4.23	5.	1.	1.	.07
+	ROUTED TO	SA11MA	21.	4.50	5.	1.	1.	.07
+	ROUTED TO	RA11MA	21.	4.77	5.	1.	1.	.07
+	HYDROGRAPH AT	A11MB	498.	4.10	51.	13.	9.	.19
+	DIVERSION TO	DA11MB	144.	3.77	7.	2.	1.	.19
+	HYDROGRAPH AT	A11MBQ	498.	4.10	43.	11.	8.	.19
+	ROUTED TO	SA11MB	268.	4.33	41.	11.	8.	.19
+	HYDROGRAPH AT	A11NA	211.	4.07	17.	4.	3.	.08
+	DIVERSION TO	A11NAQ	62.	3.80	3.	1.	1.	.08
+	HYDROGRAPH AT	DA11NA	211.	4.07	14.	3.	2.	.08
+	ROUTED TO	SA11NA	31.	4.43	14.	3.	2.	.08
+	ROUTED TO	RA11NA	31.	4.70	14.	3.	2.	.08
	3 COMBINED AT	CA11MB	292.	4.37	59.	15.	11.	.34
+	ROUTED TO	RA11MB	260.	4.57	59.	15.	11.	.34
+	HYDROGRAPH AT	A11O	123.	4.10	13.	3.	2.	.06
+	DIVERSION TO	DA11OQ	33.	3.80	2.	0.	0.	.06
+	HYDROGRAPH AT	DA11O	123.	4.10	11.	3.	2.	.06
+	ROUTED TO	SA11O	35.	4.53	11.	3.	2.	.06
+	ROUTED TO	RA11O	35.	4.80	11.	3.	2.	.06
+	HYDROGRAPH AT	A11KB	227.	4.13	23.	6.	4.	.11
+	ROUTED TO	SA11KB	32.	4.67	21.	6.	4.	.11
+	HYDROGRAPH AT	A11KA	199.	4.07	19.	5.	3.	.08
+	DIVERSION TO	A11KAQ	5.	3.27	1.	0.	0.	.08
+	HYDROGRAPH AT	DA11KA	199.	4.07	18.	4.	3.	.08
	ROUTED TO	SA11KA	31.	4.53	17.	4.	3.	.08
	ROUTED TO							

+		RA11KA	31.	4.77	17.	4.	3.	.08
+	3 COMBINED AT	CA11KB	98.	4.77	49.	13.	9.	.24
	ROUTED TO	RA11KB	98.	5.00	49.	13.	9.	.24
+	HYDROGRAPH AT	A11G	94.	4.23	13.	3.	2.	.06
+	DIVERSION TO	DA11GQ	44.	3.97	2.	0.	0.	.06
+	HYDROGRAPH AT	DA11G	94.	4.23	11.	3.	2.	.06
+	ROUTED TO	RA11GN	88.	4.43	11.	3.	2.	.06
+	HYDROGRAPH AT	A11KC	285.	4.10	27.	7.	5.	.13
+	DIVERSION TO	A11KCQ	57.	3.80	4.	1.	1.	.13
+	HYDROGRAPH AT	DA11KC	285.	4.10	23.	6.	4.	.13
+	ROUTED TO	SA11KC	74.	4.47	23.	6.	4.	.13
+	3 COMBINED AT	CA11KC	227.	4.53	83.	21.	15.	.44
+	ROUTED TO	RA11KC	224.	4.63	83.	21.	15.	.44
+	HYDROGRAPH AT	A11J	172.	4.33	28.	7.	5.	.11
	DIVERSION TO	DA11JQ	122.	4.10	6.	2.	1.	.11
+	HYDROGRAPH AT	DA11J	172.	4.33	22.	5.	4.	.11
+	ROUTED TO	SA11J	76.	4.83	22.	5.	4.	.11
+	3 COMBINED AT	CA11J	468.	4.67	157.	41.	29.	.89
+	HYDROGRAPH AT	A11L	398.	4.27	74.	19.	13.	.26
+	DIVERSION TO	DA11L	358.	4.17	21.	5.	4.	.26
+	HYDROGRAPH AT	DA11LQ	398.	4.27	54.	13.	10.	.26
+	ROUTED TO	RA11L	382.	4.53	54.	13.	10.	.26
+	HYDROGRAPH AT	A11I	299.	4.20	43.	11.	8.	.15
+	DIVERSION TO	DA11I	299.	4.20	24.	6.	4.	.15
+	HYDROGRAPH AT	DA11IQ	249.	4.37	19.	5.	3.	.15
+	3 COMBINED AT	CA11I	886.	4.63	224.	57.	41.	1.31
+	ROUTED TO	RA11I	861.	4.87	223.	57.	41.	1.31
	HYDROGRAPH AT	A11EA	158.	4.37	27.	7.	5.	.14

+	DIVERSION TO	D11EAQ	154.	4.30	9.	2.	2.	.14
	HYDROGRAPH AT	D11EA	158.	4.37	18.	4.	3.	.14
+	ROUTED TO	RA11EA	148.	4.60	18.	4.	3.	.14
+	HYDROGRAPH AT	A11EB	163.	4.53	38.	10.	7.	.19
+	DIVERSION TO	D11EBQ	163.	4.53	23.	6.	4.	.19
+	HYDROGRAPH AT	D11EB	115.	4.93	16.	4.	3.	.19
+	3 COMBINED AT	CA11EB	941.	4.93	247.	64.	46.	1.64
+	HYDROGRAPH AT	41	148.	4.10	11.	3.	2.	.05
+	DIVERSION TO	D41Q	128.	4.00	5.	1.	1.	.05
+	HYDROGRAPH AT	D41	148.	4.10	6.	1.	1.	.05
+	ROUTED TO	B41	85.	4.20	6.	1.	1.	.05
+	HYDROGRAPH AT	42	194.	4.13	18.	5.	3.	.08
+	DIVERSION TO	D42Q	167.	4.03	8.	2.	1.	.08
+	HYDROGRAPH AT	D42	194.	4.13	10.	3.	2.	.08
	ROUTED TO	B42	122.	4.27	10.	3.	2.	.08
+	2 COMBINED AT	C41	205.	4.23	16.	4.	3.	.13
+	ROUTED TO	RC41	163.	4.73	16.	4.	3.	.13
+	HYDROGRAPH AT	A11F	419.	4.37	63.	16.	11.	.33
+	DIVERSION TO	DA11FQ	398.	4.27	23.	6.	4.	.33
+	HYDROGRAPH AT	DA11F	419.	4.37	40.	10.	7.	.33
+	2 COMBINED AT	CA11F	419.	4.37	56.	14.	10.	.46
+	2 COMBINED AT	CA11E	1158.	4.83	287.	74.	53.	2.11
+	ROUTED TO	RA11E	1145.	4.93	286.	74.	53.	2.11
+	HYDROGRAPH AT	A09U	357.	4.13	35.	9.	6.	.17
+	DIVERSION TO	DA09UQ	216.	3.97	8.	2.	2.	.17
+	HYDROGRAPH AT	DA09U	357.	4.13	26.	7.	5.	.17
+	DIVERSION TO	A09UI	0.	.00	0.	0.	0.	.17
	HYDROGRAPH AT	DA09U	357.	4.13	26.	7.	5.	.17

+	ROUTED TO	RA09UW	270.	4.57	26.	7.	5.	.17
	HYDROGRAPH AT	A09T	287.	4.27	39.	10.	7.	.18
+	DIVERSION TO	DA09TQ	287.	4.27	19.	5.	3.	.18
+	HYDROGRAPH AT	DA09T	271.	4.33	20.	5.	4.	.18
+	2 COMBINED AT	CA09T	424.	4.57	46.	12.	8.	.36
+	DIVERSION TO	A09TI	0.	.00	0.	0.	0.	.36
+	HYDROGRAPH AT	DA09T	424.	4.57	46.	12.	8.	.36
+	ROUTED TO	RA09TW	398.	4.70	46.	12.	8.	.36
+	HYDROGRAPH AT	A11A	486.	4.30	75.	19.	14.	.30
+	DIVERSION TO	DA11A	447.	4.20	28.	7.	5.	.30
+	HYDROGRAPH AT	DA11AQ	486.	4.30	47.	12.	9.	.30
+	3 COMBINED AT	CX23	1490.	4.90	357.	92.	66.	2.76
+	ROUTED TO	RX23	1455.	5.13	355.	92.	66.	2.76
+	HYDROGRAPH AT	S1	139.	4.37	23.	6.	4.	.12
	DIVERSION TO	DS1Q	85.	4.10	4.	1.	1.	.12
+	HYDROGRAPH AT	DS1	139.	4.37	19.	5.	3.	.12
+	HYDROGRAPH AT	P2	111.	4.10	11.	3.	2.	.05
+	DIVERSION TO	RB2	111.	4.10	10.	2.	2.	.05
+	HYDROGRAPH AT	RT2	18.	4.57	1.	0.	0.	.05
+	3 COMBINED AT	CS1	1473.	5.13	365.	95.	68.	2.93
+	ROUTED TO	RS1	1472.	5.17	365.	95.	68.	2.93
+	HYDROGRAPH AT	S2	33.	4.03	2.	1.	0.	.01
+	DIVERSION TO	DS2Q	33.	4.03	1.	0.	0.	.01
+	HYDROGRAPH AT	DS2	30.	4.10	1.	0.	0.	.01
+	HYDROGRAPH AT	S3	18.	4.03	1.	0.	0.	.01
+	3 COMBINED AT	CS2	1471.	5.17	365.	95.	68.	2.95
	ROUTED TO	RS2	1470.	5.17	365.	95.	68.	2.95
	HYDROGRAPH AT							

+	P3	85.	4.17	11.	3.	2.	.05
+ DIVERSION TO	RB3	85.	4.17	11.	3.	2.	.05
HYDROGRAPH AT	RT3	10.	5.13	1.	0.	0.	.05
+ 2 COMBINED AT	CP3	1470.	5.17	365.	95.	68.	3.01
+ HYDROGRAPH AT	P4b	45.	4.07	4.	1.	1.	.02
+ DIVERSION TO	RB4b	12.	3.80	1.	0.	0.	.02
+ HYDROGRAPH AT	RT4b	45.	4.07	3.	1.	1.	.02
+ HYDROGRAPH AT	S4	17.	4.23	3.	1.	0.	.01
+ DIVERSION TO	DS4Q	17.	4.20	1.	0.	0.	.01
+ HYDROGRAPH AT	DS4	17.	4.27	2.	0.	0.	.01
+ HYDROGRAPH AT	P1	47.	4.20	6.	1.	1.	.03
+ DIVERSION TO	DB1	47.	4.20	4.	1.	1.	.03
+ HYDROGRAPH AT	DT1	27.	4.50	2.	0.	0.	.03
+ 2 COMBINED AT	CP1	38.	4.50	4.	1.	1.	.04
+ HYDROGRAPH AT	HV2	7.	5.20	5.	1.	1.	.03
+ ROUTED TO	RHV2	7.	5.27	5.	1.	1.	.03
+ DIVERSION TO	DBHV2	7.	5.27	2.	0.	0.	.03
+ HYDROGRAPH AT	DTHV2	7.	5.73	4.	1.	1.	.03
+ HYDROGRAPH AT	P4a	52.	4.20	8.	2.	1.	.04
+ DIVERSION TO	DB4a	30.	4.00	1.	0.	0.	.04
+ HYDROGRAPH AT	DT4a	52.	4.20	6.	2.	1.	.04
+ 5 COMBINED AT	SOUTH	1470.	5.17	373.	98.	70.	3.14
+ HYDROGRAPH AT	N11O	89.	4.27	10.	2.	2.	.05
+ DIVERSION TO	DN11OQ	89.	4.27	6.	1.	1.	.05
+ HYDROGRAPH AT	DN11O	64.	4.43	4.	1.	1.	.05
+ DIVERSION TO	N11OI	58.	4.43	4.	1.	1.	.05
+ HYDROGRAPH AT	DN11O	6.	4.43	0.	0.	0.	.05
ROUTED TO	RN11OW	2.	5.53	0.	0.	0.	.05

+	HYDROGRAPH AT	DRA09T	0.	.00	0.	0.	0.	.36
	ROUTED TO	RA09TS	0.	.00	0.	0.	0.	.36
+	HYDROGRAPH AT	A09R	171.	4.40	32.	8.	6.	.14
+	DIVERSION TO	DA09RQ	171.	4.40	21.	5.	4.	.14
+	HYDROGRAPH AT	DA09R	108.	4.77	11.	3.	2.	.14
+	3 COMBINED AT	CA09R	108.	4.77	12.	3.	2.	.20
+	DIVERSION TO	A09RI	107.	4.77	12.	3.	2.	.20
+	HYDROGRAPH AT	DA09R	1.	5.20	0.	0.	0.	.20
+	ROUTED TO	RA09RW	0.	7.40	0.	0.	0.	.20
+	HYDROGRAPH AT	A09S	117.	4.20	21.	5.	4.	.07
+	DIVERSION TO	DA09S	117.	4.20	14.	4.	3.	.07
+	HYDROGRAPH AT	DA09SQ	70.	4.60	7.	2.	1.	.07
+	2 COMBINED AT	CA09S	70.	4.60	7.	2.	1.	.27
+	ROUTED TO	RA09SW	61.	4.77	7.	2.	1.	.27
	HYDROGRAPH AT	A09QA	130.	4.27	16.	4.	3.	.09
+	DIVERSION TO	A09QAQ	130.	4.27	9.	2.	2.	.09
+	HYDROGRAPH AT	DA09QA	106.	4.43	7.	2.	1.	.09
+	2 COMBINED AT	CA09QA	105.	4.43	14.	3.	2.	.36
+	DIVERSION TO	A09QAI	105.	4.43	13.	3.	2.	.36
+	HYDROGRAPH AT	DA09QA	1.	6.00	0.	0.	0.	.36
+	ROUTED TO	RA09QW	1.	6.13	0.	0.	0.	.36
+	HYDROGRAPH AT	A99YA	174.	4.20	19.	5.	4.	.10
+	DIVERSION TO	A99YAQ	174.	4.20	11.	3.	2.	.10
+	HYDROGRAPH AT	DA99YA	148.	4.33	9.	2.	2.	.10
+	2 COMBINED AT	CA99YA	147.	4.33	9.	2.	2.	.46
+	ROUTED TO	RA99YA	124.	4.47	9.	2.	2.	.46
+	HYDROGRAPH AT	A99YB	327.	4.20	37.	9.	7.	.17
	DIVERSION TO	A99YBQ	327.	4.20	21.	5.	4.	.17

+	HYDROGRAPH AT	DA99YB	289.	4.30	15.	4.	3.	.17
	3 COMBINED AT	CA99YB	1460.	5.17	381.	100.	72.	3.77
+	3 COMBINED AT	AFR1	1578.	5.17	454.	118.	85.	4.56
+	HYDROGRAPH AT	N11NA	68.	4.03	5.	1.	1.	.02
+	DIVERSION TO	N11NAQ	63.	3.97	2.	1.	0.	.02
+	HYDROGRAPH AT	DN11NA	68.	4.03	2.	1.	0.	.02
+	ROUTED TO	RN11NA	30.	4.57	2.	1.	0.	.02
+	HYDROGRAPH AT	N11NC	270.	4.23	29.	7.	5.	.17
+	DIVERSION TO	N11NCQ	201.	4.07	7.	2.	1.	.17
+	HYDROGRAPH AT	DN11NC	270.	4.23	21.	5.	4.	.17
+	2 COMBINED AT	CN11NC	271.	4.23	23.	6.	4.	.19
+	DIVERSION TO	N11NP	149.	4.13	18.	4.	3.	.19
+	HYDROGRAPH AT	DN11NC	122.	4.23	6.	1.	1.	.19
+	ROUTED TO	RN11NC	108.	4.37	6.	1.	1.	.19
	HYDROGRAPH AT	N11ND	62.	4.23	10.	2.	2.	.05
+	HYDROGRAPH AT	N11K	152.	4.33	28.	7.	5.	.17
+	3 COMBINED AT	CN11K	315.	4.37	43.	11.	8.	.41
+	DIVERSION TO	N11KP	0.	.00	0.	0.	0.	.41
+	HYDROGRAPH AT	DN11K	315.	4.37	43.	11.	8.	.41
+	DIVERSION TO	DN11KS	0.	.00	0.	0.	0.	.41
+	HYDROGRAPH AT	DN11KW	315.	4.37	43.	11.	8.	.41
+	ROUTED TO	RN11KW	293.	4.57	43.	11.	8.	.41
+	HYDROGRAPH AT	BA09UI	0.	.00	0.	0.	0.	.17
+	ROUTED TO	RA09US	0.	.00	0.	0.	0.	.17
+	HYDROGRAPH AT	N11NB	164.	4.37	25.	6.	5.	.14
+	DIVERSION TO	N11NBQ	76.	4.03	3.	1.	0.	.14
	HYDROGRAPH AT	DN11NB	164.	4.37	22.	6.	4.	.14
	2 COMBINED AT							

+		CN11NB	164.	4.37	22.	6.	4.	.14
+	ROUTED TO	RN11NW	152.	4.77	22.	6.	4.	.14
+	HYDROGRAPH AT	BN11OI	58.	4.43	4.	1.	1.	.05
+	ROUTED TO	RN11OS	30.	5.20	4.	1.	1.	.05
+	HYDROGRAPH AT	N11M	161.	4.23	17.	4.	3.	.10
+	DIVERSION TO	DN11MQ	161.	4.23	11.	3.	2.	.10
+	HYDROGRAPH AT	DN11M	130.	4.37	6.	2.	1.	.10
+	3 COMBINED AT	CN11M	184.	4.73	32.	8.	6.	.24
+	DIVERSION TO	N11MI	46.	4.73	8.	2.	1.	.24
+	HYDROGRAPH AT	DN11M	138.	4.73	24.	6.	4.	.24
+	ROUTED TO	RN11MS	131.	5.03	24.	6.	4.	.24
+	HYDROGRAPH AT	N11J	212.	4.37	41.	10.	7.	.24
+	DIVERSION TO	LN11JD	96.	4.07	4.	1.	1.	.24
+	HYDROGRAPH AT	LN11J	212.	4.37	37.	9.	7.	.24
+	3 COMBINED AT	CN11J	427.	4.60	94.	24.	17.	.90
+	DIVERSION TO	N11JI	0.	.00	0.	0.	0.	.90
+	HYDROGRAPH AT	DN11J	427.	4.60	94.	24.	17.	.90
+	ROUTED TO	RN11JW	425.	4.67	94.	24.	17.	.90
+	HYDROGRAPH AT	DRN11M	46.	4.73	8.	2.	1.	.24
+	ROUTED TO	RN11MW	41.	5.33	8.	2.	1.	.24
+	2 COMBINED AT	CX4	425.	4.67	102.	25.	18.	.90
+	ROUTED TO	RX4	421.	4.80	102.	25.	18.	.90
+	HYDROGRAPH AT	A09O	133.	4.67	34.	9.	6.	.19
+	DIVERSION TO	DA09OQ	128.	4.53	9.	2.	2.	.19
+	HYDROGRAPH AT	DA09O	133.	4.67	25.	6.	4.	.19
+	ROUTED TO	SA09O	41.	5.87	23.	6.	4.	.19
+	HYDROGRAPH AT	BA09RI	107.	4.77	12.	3.	2.	.20
+	ROUTED TO	RA09RS	76.	5.30	12.	3.	2.	.20

+	3 COMBINED AT	CA09O	412.	4.83	128.	33.	24.	1.09
	DIVERSION TO	A09OI	0.	.00	0.	0.	0.	1.09
+	HYDROGRAPH AT	DA09O	410.	4.83	128.	33.	24.	1.09
+	ROUTED TO	RA09OW	406.	4.90	128.	33.	24.	1.09
+	HYDROGRAPH AT	A09P	200.	4.43	34.	8.	6.	.19
+	DIVERSION TO	DA09PQ	180.	4.30	9.	2.	2.	.19
+	HYDROGRAPH AT	DA09P	200.	4.43	25.	6.	4.	.19
+	ROUTED TO	SA09P	50.	5.27	24.	6.	4.	.19
+	2 COMBINED AT	CA09P	436.	5.30	145.	37.	27.	1.28
+	ROUTED TO	RA09P	435.	5.33	145.	37.	27.	1.28
+	HYDROGRAPH AT	BA09QA	105.	4.43	13.	3.	2.	.36
+	ROUTED TO	RA09QB	87.	5.00	13.	3.	2.	.36
+	HYDROGRAPH AT	A09QB	162.	4.27	23.	6.	4.	.14
+	DIVERSION TO	A09QBQ	3.	3.63	0.	0.	0.	.14
	HYDROGRAPH AT	DA09QB	162.	4.27	23.	6.	4.	.14
+	3 COMBINED AT	CA09Q	513.	4.97	172.	44.	32.	1.42
+	DIVERSION TO	A09QI	0.	.00	0.	0.	0.	1.42
+	HYDROGRAPH AT	DA09Q	513.	4.97	172.	44.	32.	1.42
+	ROUTED TO	RA09QW	508.	5.07	172.	44.	32.	1.42
+	HYDROGRAPH AT	A10A	295.	4.27	35.	9.	6.	.19
+	DIVERSION TO	DA10AQ	282.	4.20	13.	3.	2.	.19
+	HYDROGRAPH AT	DA10A	295.	4.27	23.	6.	4.	.19
+	2 COMBINED AT	CA10A	527.	5.03	187.	48.	34.	1.61
+	ROUTED TO	RA10A	525.	5.07	187.	48.	34.	1.61
+	HYDROGRAPH AT	A99X	606.	4.13	67.	17.	12.	.26
+	DIVERSION TO	DA99XQ	192.	3.83	13.	3.	2.	.26
+	HYDROGRAPH AT	DA99X	606.	4.13	54.	14.	10.	.26
	2 COMBINED AT	CA99X	572.	4.40	231.	59.	42.	1.88

+	2 COMBINED AT	AFR2	1866.	5.17	617.	160.	115.	6.43
	HYDROGRAPH AT	BN11KS	0.	.00	0.	0.	0.	.41
+	ROUTED TO	3.1	0.	.00	0.	0.	0.	.41
+	HYDROGRAPH AT	M3	106.	4.33	21.	5.	4.	.12
+	DIVERSION TO	3R	105.	4.33	17.	4.	3.	.12
+	HYDROGRAPH AT	3S	36.	5.27	4.	1.	1.	.12
+	2 COMBINED AT	3.2	36.	5.27	4.	1.	1.	.12
+	ROUTED TO	4.1	35.	5.50	5.	1.	1.	.12
+	HYDROGRAPH AT	M4	123.	4.30	24.	6.	4.	.13
+	DIVERSION TO	4R	123.	4.30	18.	5.	3.	.13
+	HYDROGRAPH AT	4S	52.	5.10	6.	2.	1.	.13
+	2 COMBINED AT	4.2	63.	5.50	11.	3.	2.	.25
+	HYDROGRAPH AT	M1	100.	4.30	18.	5.	3.	.11
+	DIVERSION TO	1R	100.	4.30	15.	4.	3.	.11
	HYDROGRAPH AT	1S	34.	5.13	4.	1.	1.	.11
+	ROUTED TO	2.1	31.	5.40	4.	1.	1.	.11
+	HYDROGRAPH AT	M2	161.	4.30	30.	7.	5.	.16
+	DIVERSION TO	2R	161.	4.30	21.	5.	4.	.16
+	HYDROGRAPH AT	2S	84.	4.90	9.	2.	2.	.16
+	2 COMBINED AT	2.3	83.	4.90	13.	3.	2.	.26
+	DIVERSION TO	X5I	0.	.00	0.	0.	0.	.26
+	HYDROGRAPH AT	DX5	83.	4.90	13.	3.	2.	.26
+	ROUTED TO	2.2	79.	5.07	13.	3.	2.	.26
+	2 COMBINED AT	4.3	124.	5.10	23.	6.	4.	.52
+	ROUTED TO	10.1	119.	5.37	25.	6.	5.	.52
+	HYDROGRAPH AT	M10	152.	4.17	25.	6.	5.	.09
	DIVERSION TO	I0R	152.	4.17	12.	3.	2.	.09
	HYDROGRAPH AT							

+	10S	139.	4.27	13.	3.	2.	.09
+ 2 COMBINED AT	10.2	128.	4.33	36.	9.	7.	.61
ROUTED TO	11A.1	126.	5.43	37.	9.	7.	.61
+ HYDROGRAPH AT	M11A	63.	4.33	14.	4.	3.	.07
+ DIVERSION TO	11AR	63.	4.33	11.	3.	2.	.07
+ HYDROGRAPH AT	11AS	21.	5.40	3.	1.	1.	.07
+ 2 COMBINED AT	11A.2	135.	5.43	39.	10.	7.	.67
+ ROUTED TO	RN11G	127.	5.67	39.	10.	7.	.67
+ HYDROGRAPH AT	N11DA	295.	4.30	54.	14.	10.	.26
+ DIVERSION TO	LDAOUT	277.	4.23	16.	4.	3.	.26
+ HYDROGRAPH AT	LN11DA	295.	4.30	38.	10.	7.	.26
+ ROUTED TO	SN11DA	121.	5.00	38.	10.	7.	.26
+ DIVERSION TO	D11DAS	21.	5.00	8.	2.	1.	.26
+ HYDROGRAPH AT	N11DAW	100.	5.00	30.	8.	5.	.26
ROUTED TO	RN11DA	100.	5.20	30.	8.	5.	.26
+ HYDROGRAPH AT	N11FB	114.	4.33	25.	6.	5.	.12
+ DIVERSION TO	LN1FBD	114.	4.33	21.	5.	4.	.12
+ HYDROGRAPH AT	LN11FB	29.	5.57	4.	1.	1.	.12
+ 2 COMBINED AT	CN11FB	124.	5.57	34.	8.	6.	.38
+ 2 COMBINED AT	C98RGL	197.	5.67	63.	16.	11.	1.05
+ ROUTED TO	RN11FB	192.	5.77	63.	16.	11.	1.05
+ HYDROGRAPH AT	DN11JI	0.	.00	0.	0.	0.	.90
+ ROUTED TO	6.1	0.	.00	0.	0.	0.	.90
+ ROUTED TO	6.2	0.	.00	0.	0.	0.	.90
+ HYDROGRAPH AT	M5	18.	4.20	3.	1.	0.	.02
+ DIVERSION TO	5R	18.	4.17	1.	0.	0.	.02
+ HYDROGRAPH AT	5S	18.	4.23	2.	0.	0.	.02
ROUTED TO	6.3	18.	4.30	2.	0.	0.	.02

+ HYDROGRAPH AT	M6	42.	4.13	6.	2.	1.	.02
DIVERSION TO	6R	42.	4.13	3.	1.	1.	.02
+ HYDROGRAPH AT	6S	38.	4.23	3.	1.	1.	.02
+ 3 COMBINED AT	6.4	51.	4.30	5.	1.	1.	.04
+ ROUTED TO	8.1	51.	4.40	5.	1.	1.	.04
+ HYDROGRAPH AT	M7	80.	4.40	19.	5.	4.	.11
+ DIVERSION TO	7R	80.	4.40	16.	4.	3.	.11
+ HYDROGRAPH AT	7S	26.	5.63	4.	1.	1.	.11
+ ROUTED TO	8.2	26.	5.73	4.	1.	1.	.11
+ HYDROGRAPH AT	M8	63.	4.30	12.	3.	2.	.07
+ DIVERSION TO	8R	63.	4.30	10.	3.	2.	.07
+ HYDROGRAPH AT	8S	11.	5.57	1.	0.	0.	.07
+ 3 COMBINED AT	8.3	51.	4.40	10.	3.	2.	.22
+ ROUTED TO	9.1	49.	4.50	10.	3.	2.	.22
HYDROGRAPH AT	M9	157.	4.23	22.	5.	4.	.12
+ DIVERSION TO	9R	157.	4.23	16.	4.	3.	.12
+ HYDROGRAPH AT	9S	72.	4.70	5.	1.	1.	.12
+ 2 COMBINED AT	9.2	108.	4.70	16.	4.	3.	.34
+ ROUTED TO	12A.1	100.	4.77	16.	4.	3.	.34
+ HYDROGRAPH AT	M12A	194.	4.17	23.	6.	4.	.11
+ DIVERSION TO	12AR	194.	4.17	15.	4.	3.	.11
+ HYDROGRAPH AT	12AS	131.	4.40	8.	2.	1.	.11
+ 2 COMBINED AT	12A.2	146.	4.73	23.	6.	4.	.45
+ ROUTED TO	11B.1	143.	4.77	23.	6.	4.	.45
+ HYDROGRAPH AT	M11B	25.	4.17	4.	1.	1.	.02
+ DIVERSION TO	11BR	25.	4.17	2.	1.	0.	.02
+ HYDROGRAPH AT	11BS	17.	4.47	1.	0.	0.	.02
HYDROGRAPH AT	MA1	20.	4.13	4.	1.	1.	.01

DIVERSION TO	A1R	20.	4.13	2.	1.	0.	.01
HYDROGRAPH AT	A1S	12.	4.53	1.	0.	0.	.01
3 COMBINED AT	11B.2	160.	4.77	26.	7.	5.	.48
ROUTED TO	RA09KS	147.	4.73	26.	7.	5.	.48
HYDROGRAPH AT	N11FA	195.	4.30	38.	10.	7.	.18
DIVERSION TO	LN1FAD	195.	4.30	16.	4.	3.	.18
HYDROGRAPH AT	LN11FA	186.	4.43	23.	6.	4.	.18
HYDROGRAPH AT	A09GA	200.	4.07	22.	6.	4.	.07
DIVERSION TO	L09GAD	198.	4.07	12.	3.	2.	.07
HYDROGRAPH AT	LA09GA	193.	4.10	10.	3.	2.	.07
4 COMBINED AT	CN11FA	374.	4.97	99.	25.	18.	1.78
ROUTED TO	RN11FA	364.	5.03	99.	25.	18.	1.78
HYDROGRAPH AT	A09GB	27.	4.67	10.	3.	2.	.05
DIVERSION TO	L09GBD	27.	4.67	6.	1.	1.	.05
HYDROGRAPH AT	LA09GB	20.	5.40	5.	1.	1.	.05
2 COMBINED AT	CA09G	363.	5.03	102.	26.	19.	1.84
DIVERSION TO	A09GI	73.	5.03	20.	5.	4.	1.84
HYDROGRAPH AT	DA09G	290.	5.03	82.	21.	15.	1.84
ROUTED TO	RA09GW	284.	5.10	82.	21.	15.	1.84
HYDROGRAPH AT	DA09oI	0.	.00	0.	0.	0.	1.09
ROUTED TO	371	0.	.00	0.	0.	0.	1.09
HYDROGRAPH AT	M370	136.	4.30	25.	6.	4.	.13
DIVERSION TO	DM370Q	136.	4.30	11.	3.	2.	.13
HYDROGRAPH AT	DM370	120.	4.50	13.	3.	2.	.13
2 COMBINED AT	372	120.	4.50	13.	3.	2.	.13
ROUTED TO	B4	12.	5.93	9.	3.	2.	.13
ROUTED TO	12B.1	12.	6.10	9.	3.	2.	.13
HYDROGRAPH AT							

+	M12B	50.	4.23	9.	2.	2.	.04
+ DIVERSION TO	12BR	50.	4.23	6.	2.	1.	.04
HYDROGRAPH AT	12BS	25.	4.80	3.	1.	0.	.04
+ 2 COMBINED AT	12B.2	26.	4.80	12.	4.	3.	.17
+ ROUTED TO	A2.1	24.	4.90	12.	4.	3.	.17
+ HYDROGRAPH AT	MA2	54.	4.10	8.	2.	1.	.03
+ DIVERSION TO	A2R	54.	4.10	5.	1.	1.	.03
+ HYDROGRAPH AT	A2S	32.	4.40	2.	1.	0.	.03
+ 2 COMBINED AT	A2.2	34.	4.90	14.	5.	3.	.20
+ ROUTED TO	RX7S	30.	5.30	13.	5.	3.	.20
+ 2 COMBINED AT	CX8	295.	5.10	89.	24.	17.	2.04
+ ROUTED TO	RX8W	284.	5.27	88.	24.	17.	2.04
+ HYDROGRAPH AT	A09H	198.	4.43	49.	13.	9.	.24
+ DIVERSION TO	LA09HD	198.	4.43	26.	7.	5.	.24
HYDROGRAPH AT	LA09H	161.	4.83	25.	6.	4.	.24
+ 2 COMBINED AT	CA09H1	371.	5.27	104.	28.	20.	2.27
+ HYDROGRAPH AT	A09J	166.	4.33	34.	9.	6.	.17
+ DIVERSION TO	LA09JD	166.	4.33	16.	4.	3.	.17
+ HYDROGRAPH AT	LA09J	151.	4.53	19.	5.	3.	.17
+ DIVERSION TO	A09JI	0.	.00	0.	0.	0.	.17
+ HYDROGRAPH AT	DA09J	151.	4.53	19.	5.	3.	.17
+ ROUTED TO	RA09JS	129.	4.87	19.	5.	3.	.17
+ 2 COMBINED AT	CA09H	439.	5.27	117.	31.	22.	2.44
+ ROUTED TO	RA09H	438.	5.30	117.	31.	22.	2.44
+ HYDROGRAPH AT	BA09QI	0.	.00	0.	0.	0.	1.42
+ ROUTED TO	RA09QS	0.	.00	0.	0.	0.	1.42
+ HYDROGRAPH AT	A09M	266.	4.47	51.	13.	9.	.25
+ DIVERSION TO	LA09MD	266.	4.47	24.	6.	4.	.25

+	HYDROGRAPH AT	LA09M	254.	4.57	28.	7.	5.	.25
	2 COMBINED AT	CA09M	254.	4.57	28.	7.	5.	.25
+	ROUTED TO	RA09M	239.	4.67	28.	7.	5.	.25
+	HYDROGRAPH AT	A09N	140.	4.27	24.	6.	4.	.11
+	DIVERSION TO	DA09NQ	27.	3.83	2.	0.	0.	.11
+	HYDROGRAPH AT	DA09N	140.	4.27	23.	6.	4.	.11
+	2 COMBINED AT	CA09N	330.	4.67	50.	13.	9.	.36
+	ROUTED TO	LA09N	145.	5.17	47.	13.	9.	.36
+	ROUTED TO	RA09N	144.	5.27	47.	13.	9.	.36
+	HYDROGRAPH AT	DRA09J	0.	.00	0.	0.	0.	.17
+	ROUTED TO	RA09JW	0.	.00	0.	0.	0.	.17
+	HYDROGRAPH AT	A09L	142.	4.33	29.	7.	5.	.14
+	3 COMBINED AT	CA09L	199.	5.07	74.	20.	14.	.50
+	ROUTED TO	LA09L	176.	5.43	73.	20.	14.	.50
	ROUTED TO	RA09LS	176.	5.50	73.	20.	14.	.50
+	HYDROGRAPH AT	A09IH	102.	4.27	19.	5.	3.	.09
+	DIVERSION TO	A09IHQ	2.	2.50	0.	0.	0.	.09
+	HYDROGRAPH AT	DA09IH	102.	4.27	18.	5.	3.	.09
+	2 COMBINED AT	CA09IH	192.	5.40	89.	24.	17.	.59
+	ROUTED TO	LA09IH	179.	5.77	88.	24.	17.	.59
+	HYDROGRAPH AT	A09I	134.	4.37	30.	8.	5.	.13
+	DIVERSION TO	LA09ID	134.	4.37	11.	3.	2.	.13
+	HYDROGRAPH AT	LA09I	131.	4.47	19.	5.	3.	.13
+	3 COMBINED AT	CX10	593.	5.30	198.	53.	38.	3.15
+	ROUTED TO	RX10	581.	5.50	197.	53.	38.	3.15
+	HYDROGRAPH AT	A99V	408.	4.27	44.	11.	8.	.21
+	DIVERSION TO	DA99VQ	408.	4.27	24.	6.	4.	.21
	HYDROGRAPH AT	DA99V	341.	4.37	20.	5.	4.	.21

+	2 COMBINED AT	CA99V	582.	5.50	210.	56.	41.	3.36
	HYDROGRAPH AT	A10	568.	4.10	58.	15.	11.	.21
+	DIVERSION TO	DA10Q	568.	4.10	33.	8.	6.	.21
+	HYDROGRAPH AT	DA10	539.	4.17	25.	6.	5.	.21
+	HYDROGRAPH AT	A99W	291.	4.47	53.	13.	10.	.22
+	DIVERSION TO	LA99WD	291.	4.47	26.	7.	5.	.22
+	HYDROGRAPH AT	LA99W	276.	4.57	27.	7.	5.	.22
+	4 COMBINED AT	AFR3	2068.	5.23	770.	202.	146.	10.22
+	HYDROGRAPH AT	DRA09G	73.	5.03	20.	5.	4.	1.84
+	ROUTED TO	RA09GS	63.	5.60	20.	5.	4.	1.84
+	HYDROGRAPH AT	A09F	425.	4.53	84.	21.	15.	.37
+	DIVERSION TO	LA09FD	412.	4.43	31.	8.	6.	.37
+	HYDROGRAPH AT	LA09F	425.	4.53	54.	13.	10.	.37
+	2 COMBINED AT	CA09F	425.	4.53	81.	21.	15.	.37
	ROUTED TO	RA09FW	415.	4.70	81.	21.	15.	.37
+	HYDROGRAPH AT	A09E	147.	4.37	33.	8.	6.	.15
+	DIVERSION TO	LA09ED	147.	4.37	18.	4.	3.	.15
+	HYDROGRAPH AT	LA09E	114.	4.73	16.	4.	3.	.15
+	2 COMBINED AT	CA09E	522.	4.73	96.	24.	18.	.51
+	ROUTED TO	RA09E	492.	4.87	96.	24.	18.	.51
+	HYDROGRAPH AT	A09D	589.	4.13	63.	16.	11.	.25
+	DIVERSION TO	LA09DD	589.	4.13	34.	9.	6.	.25
+	HYDROGRAPH AT	LA09D	521.	4.23	29.	7.	5.	.25
+	2 COMBINED AT	CA09C*	483.	4.87	119.	30.	22.	.77
+	ROUTED TO	RA09C*	480.	4.90	119.	30.	22.	.77
+	HYDROGRAPH AT	A09C	99.	4.37	15.	4.	3.	.07
	DIVERSION TO	DA09CQ	99.	4.37	9.	2.	2.	.07
	HYDROGRAPH AT							

+		DA09C	63.	4.67	6.	2.	1.	.07
+	2 COMBINED AT	CA09C	509.	4.90	123.	31.	22.	.84
	ROUTED TO	RA09C	493.	5.00	123.	31.	22.	.84
+	HYDROGRAPH AT	A09B	116.	4.07	12.	3.	2.	.04
+	DIVERSION TO	DA09BQ	2.	.70	0.	0.	0.	.04
+	HYDROGRAPH AT	DA09B	116.	4.07	11.	3.	2.	.04
+	ROUTED TO	RA09B	91.	4.50	11.	3.	2.	.04
+	HYDROGRAPH AT	A09A	74.	4.57	18.	5.	3.	.08
+	3 COMBINED AT	CA09A	554.	5.00	146.	38.	27.	.96
+	ROUTED TO	RA09AW	465.	5.70	144.	38.	27.	.96
+	HYDROGRAPH AT	A99T	84.	4.03	6.	1.	1.	.03
+	DIVERSION TO	LA99TD	23.	3.83	2.	0.	0.	.03
+	HYDROGRAPH AT	LA99T	84.	4.03	4.	1.	1.	.03
+	ROUTED TO	RA99T	70.	4.17	4.	1.	1.	.03
	HYDROGRAPH AT	A09	300.	4.23	32.	8.	6.	.18
+	DIVERSION TO	DA09Q	189.	4.03	7.	2.	1.	.18
+	HYDROGRAPH AT	DA09	300.	4.23	25.	6.	4.	.18
+	3 COMBINED AT	CA09	458.	5.73	163.	43.	31.	1.17
+	HYDROGRAPH AT	A99U	93.	4.27	15.	4.	3.	.07
+	DIVERSION TO	DA99UQ	85.	4.17	5.	1.	1.	.07
+	HYDROGRAPH AT	DA99U	93.	4.27	10.	3.	2.	.07
+	3 COMBINED AT	AFR4	2079.	5.27	874.	230.	166.	11.46
+	HYDROGRAPH AT	A07G	421.	4.23	68.	17.	12.	.26
+	DIVERSION TO	LA07GD	421.	4.23	31.	8.	6.	.26
+	HYDROGRAPH AT	LA07G	401.	4.33	38.	9.	7.	.26
+	ROUTED TO	RA07G	352.	4.57	38.	9.	7.	.26
+	HYDROGRAPH AT	A07F	179.	4.70	48.	12.	9.	.23
	ROUTED TO	RA07F	178.	4.80	48.	12.	9.	.23

+	HYDROGRAPH AT	A07E	413.	4.20	63.	16.	11.	.23
	3 COMBINED AT	CA07E	711.	4.57	145.	37.	27.	.72
+	ROUTED TO	RA07E	694.	4.63	145.	37.	27.	.72
+	HYDROGRAPH AT	A07C	228.	4.37	37.	9.	7.	.17
+	DIVERSION TO	DA07CQ	228.	4.37	20.	5.	4.	.17
+	HYDROGRAPH AT	DA07C	202.	4.53	18.	5.	3.	.17
+	2 COMBINED AT	CA07C	830.	4.63	160.	41.	29.	.89
+	ROUTED TO	RA07C	815.	4.67	160.	41.	29.	.89
+	HYDROGRAPH AT	A07H	221.	4.13	24.	6.	4.	.09
+	DIVERSION TO	DA07HQ	10.	3.40	2.	1.	0.	.09
+	HYDROGRAPH AT	DA07H	221.	4.13	22.	5.	4.	.09
+	ROUTED TO	RA07H	206.	4.27	22.	5.	4.	.09
+	HYDROGRAPH AT	A08B	121.	4.37	20.	5.	4.	.10
+	ROUTED TO	RA08B	114.	4.73	20.	5.	4.	.10
+	HYDROGRAPH AT	A07D	118.	5.00	40.	10.	7.	.23
+	DIVERSION TO	DA07DQ	29.	4.13	1.	0.	0.	.23
+	HYDROGRAPH AT	DA07D	118.	5.00	39.	10.	7.	.23
+	4 COMBINED AT	CA07D	1009.	4.70	228.	58.	42.	1.31
+	ROUTED TO	RA07D	954.	4.90	228.	58.	42.	1.31
+	HYDROGRAPH AT	A99S	81.	4.40	11.	3.	2.	.08
+	DIVERSION TO	DA99SQ	81.	4.40	8.	2.	1.	.08
+	HYDROGRAPH AT	DA99S	37.	4.87	3.	1.	1.	.08
+	HYDROGRAPH AT	A08A	71.	4.80	22.	6.	4.	.14
+	DIVERSION TO	DA08AQ	1.	2.57	0.	0.	0.	.14
+	HYDROGRAPH AT	DA08A	71.	4.80	22.	6.	4.	.14
+	ROUTED TO	RA08A	70.	4.97	22.	6.	4.	.14
+	HYDROGRAPH AT	A99R	70.	4.13	6.	2.	1.	.04
	DIVERSION TO	DA99RQ	62.	4.07	2.	1.	0.	.04

+	HYDROGRAPH AT	DA99R	70.	4.13	4.	1.	1.	.04
	ROUTED TO	RA99R	52.	4.50	4.	1.	1.	.04
+	HYDROGRAPH AT	A08	185.	4.07	11.	3.	2.	.08
+	5 COMBINED AT	CA08	1009.	4.93	254.	65.	47.	1.64
+	2 COMBINED AT	AFR5	2652.	5.20	1049.	276.	199.	13.11
+	HYDROGRAPH AT	N11P5	77.	4.07	5.	1.	1.	.03
+	*DIVERSION TO*	N11P5Q	73.	4.00	3.	1.	1.	.03
+	HYDROGRAPH AT	DN11P5	77.	4.07	2.	1.	0.	.03
+	ROUTED TO	R11P5S	44.	4.30	2.	1.	0.	.03
+	HYDROGRAPH AT	N11P1	96.	4.23	10.	3.	2.	.06
+	DIVERSION TO	N11P1Q	96.	4.23	7.	2.	1.	.06
+	HYDROGRAPH AT	DN11P1	51.	4.53	3.	1.	1.	.06
+	2 COMBINED AT	CN11P1	66.	4.53	6.	1.	1.	.09
+	ROUTED TO	R11P1E	57.	4.63	6.	1.	1.	.09
	HYDROGRAPH AT	N11P6	476.	4.07	37.	9.	7.	.16
+	DIVERSION TO	N11P6Q	392.	3.97	16.	4.	3.	.16
+	HYDROGRAPH AT	DN11P6	476.	4.07	20.	5.	4.	.16
+	ROUTED TO	R11P6S	407.	4.17	20.	5.	4.	.16
+	HYDROGRAPH AT	N11P9	108.	4.10	7.	2.	1.	.04
+	DIVERSION TO	N11P9Q	108.	4.10	5.	1.	1.	.04
+	HYDROGRAPH AT	DN11P9	78.	4.20	2.	1.	0.	.04
+	2 COMBINED AT	CN11P9	457.	4.20	23.	6.	4.	.20
+	ROUTED TO	R11P9S	421.	4.23	23.	6.	4.	.20
+	HYDROGRAPH AT	N11P2	136.	4.17	10.	3.	2.	.06
+	2 COMBINED AT	CN11P2	542.	4.23	33.	8.	6.	.26
+	2 COMBINED AT	LEJOS	542.	4.23	38.	10.	7.	.36
	DIVERSION TO	VPRET	542.	4.23	20.	5.	4.	.36
	HYDROGRAPH AT							

+		VPDIV	337.	4.37	18.	5.	3.	.36
+	HYDROGRAPH AT	N11P4	70.	4.23	8.	2.	1.	.05
	DIVERSION TO	N11P4Q	37.	4.00	1.	0.	0.	.05
+	HYDROGRAPH AT	DN11P4	70.	4.23	7.	2.	1.	.05
+	ROUTED TO	R11P4S	68.	4.33	7.	2.	1.	.05
+	DIVERSION TO	N11P4E	34.	4.33	4.	1.	1.	.05
+	HYDROGRAPH AT	DN11P4	34.	4.33	4.	1.	1.	.05
+	2 COMBINED AT	SDLEJ1	370.	4.37	22.	5.	4.	.41
+	HYDROGRAPH AT	N11P8	125.	4.07	9.	2.	2.	.04
+	DIVERSION TO	N11P8Q	116.	4.00	5.	1.	1.	.04
+	HYDROGRAPH AT	DN11P8	125.	4.07	4.	1.	1.	.04
+	ROUTED TO	R11P8S	98.	4.17	4.	1.	1.	.04
+	HYDROGRAPH AT	N11P7	177.	4.07	10.	2.	2.	.06
+	DIVERSION TO	N11P7Q	177.	4.03	6.	2.	1.	.06
	HYDROGRAPH AT	DN11P7	167.	4.10	3.	1.	1.	.06
+	2 COMBINED AT	CN11P7	210.	4.13	7.	2.	1.	.10
+	DIVERSION TO	N11P7E	42.	4.13	1.	0.	0.	.10
+	HYDROGRAPH AT	DN11P7	168.	4.13	6.	1.	1.	.10
+	ROUTED TO	R11P7S	129.	4.27	6.	1.	1.	.10
+	HYDROGRAPH AT	RDP4E	34.	4.33	4.	1.	1.	.05
+	2 COMBINED AT	SUMP7S	161.	4.27	9.	2.	2.	.10
+	2 COMBINED AT	SDLEJ2	473.	4.37	31.	8.	6.	.51
+	ROUTED TO	RSDL2	444.	4.40	31.	8.	6.	.51
+	HYDROGRAPH AT	BN11NP	149.	4.13	18.	4.	3.	.19
+	ROUTED TO	RN11NP	158.	4.27	18.	4.	3.	.19
+	HYDROGRAPH AT	N11L5A	62.	4.20	8.	2.	1.	.05
+	2 COMBINED AT	C89	217.	4.27	26.	6.	5.	.05
	DIVERSION TO	ED89	0.	.00	0.	0.	0.	.05

+	HYDROGRAPH AT	D89	217.	4.27	26.	6.	5.	.05
	ROUTED TO	R89E	200.	4.33	26.	6.	5.	.05
+	HYDROGRAPH AT	N11L3A	44.	4.13	5.	1.	1.	.03
+	2 COMBINED AT	C87	230.	4.33	30.	8.	5.	.07
+	DIVERSION TO	SOL	0.	.00	0.	0.	0.	.07
+	HYDROGRAPH AT	D87	230.	4.33	30.	8.	5.	.07
+	2 COMBINED AT	C87BA	637.	4.40	59.	15.	11.	.58
+	DIVERSION TO	87BAS	615.	4.40	50.	12.	9.	.58
+	HYDROGRAPH AT	87BP	22.	3.87	10.	2.	2.	.58
+	ROUTED TO	R87BP	22.	3.93	10.	2.	2.	.58
+	HYDROGRAPH AT	87	41.	4.23	5.	1.	1.	.03
+	DIVERSION TO	D87Q	31.	4.07	1.	0.	0.	.03
+	HYDROGRAPH AT	D87	41.	4.23	4.	1.	1.	.03
+	HYDROGRAPH AT	R87B	615.	4.40	50.	12.	9.	.58
	2 COMBINED AT	C87B	683.	4.40	56.	14.	10.	.03
+	ROUTED TO	87BA	95.	5.03	54.	14.	10.	.03
+	2 COMBINED AT	87BOUT	114.	5.03	60.	15.	11.	.61
+	ROUTED TO	R87BA	114.	5.07	60.	15.	11.	.61
+	DIVERSION TO	87OUT	114.	5.07	60.	15.	11.	.61
+	HYDROGRAPH AT	D87BA	0.	.00	0.	0.	0.	.61
+	HYDROGRAPH AT	LACAI	51.	4.17	6.	1.	1.	.04
+	DIVERSION TO	LACAIQ	28.	3.97	1.	0.	0.	.04
+	HYDROGRAPH AT	DLACAI	51.	4.17	5.	1.	1.	.04
+	ROUTED TO	RTCAI	50.	4.20	5.	1.	1.	.04
+	DIVERSION TO	LECHE	20.	4.07	3.	1.	1.	.04
+	HYDROGRAPH AT	DNLECH	30.	4.20	2.	0.	0.	.04
+	2 COMBINED AT	SDLEJ3	27.	4.20	1.	0.	0.	.64
	HYDROGRAPH AT	SUMMIT	36.	4.17	4.	1.	1.	.03

+	HYDROGRAPH AT	RDLECH	20.	4.07	3.	1.	1.	.04
	2 COMBINED AT	LEJCHL	56.	4.17	8.	2.	1.	.03
+	HYDROGRAPH AT	RDP7E	42.	4.13	1.	0.	0.	.10
+	ROUTED TO	R11P7E	26.	4.40	1.	0.	0.	.10
+	DIVERSION TO	EAST83	18.	4.40	1.	0.	0.	.10
+	HYDROGRAPH AT	D2-18	8.	4.40	0.	0.	0.	.10
+	2 COMBINED AT	83CL	56.	4.17	8.	2.	1.	.13
+	DIVERSION TO	EAGLE	55.	4.17	8.	2.	1.	.13
+	HYDROGRAPH AT	24PIPE	0.	.00	0.	0.	0.	.13
+	2 COMBINED AT	SDLEJ4	27.	4.20	1.	0.	0.	.77
+	ROUTED TO	RT83CL	22.	4.33	1.	0.	0.	.77
+	HYDROGRAPH AT	N11P3	38.	4.30	7.	2.	1.	.04
+	2 COMBINED AT	83SD	56.	4.33	8.	2.	1.	.81
+	ROUTED TO	R83SD	55.	4.33	8.	2.	1.	.81
	HYDROGRAPH AT	BN11KP	0.	.00	0.	0.	0.	.41
+	ROUTED TO	R91	0.	.00	0.	0.	0.	.41
+	HYDROGRAPH AT	N11L5	67.	4.17	8.	2.	1.	.04
+	HYDROGRAPH AT	RED89	0.	.00	0.	0.	0.	.05
+	ROUTED TO	R89S	0.	.00	0.	0.	0.	.05
+	HYDROGRAPH AT	N11L2	18.	4.13	2.	0.	0.	.01
+	4 COMBINED AT	CN11L5	84.	4.17	10.	2.	2.	.05
+	DIVERSION TO	DIVS89	0.	4.17	0.	0.	0.	.05
+	HYDROGRAPH AT	D11L5	84.	4.17	10.	2.	2.	.05
+	ROUTED TO	RN11L5	82.	4.20	10.	2.	2.	.05
+	HYDROGRAPH AT	N11L3	64.	4.17	7.	2.	1.	.04
+	DIVERSION TO	N11L3Q	54.	4.07	2.	1.	0.	.04
	HYDROGRAPH AT	DN11L3	64.	4.17	5.	1.	1.	.04
	HYDROGRAPH AT							

+		RSOL	0.	.00	0.	0.	0.	.07
+	ROUTED TO	RTSOL	0.	.00	0.	0.	0.	.07
	3 COMBINED AT	PPSD1	145.	4.17	15.	4.	3.	.09
+	DIVERSION TO	DIVS87	23.	4.17	1.	0.	0.	.09
+	HYDROGRAPH AT	PPDIV	122.	4.10	14.	4.	3.	.09
+	HYDROGRAPH AT	N11L4	12.	4.23	2.	0.	0.	.01
+	DIVERSION TO	N11L4Q	9.	4.10	0.	0.	0.	.01
+	HYDROGRAPH AT	DN11L4	12.	4.23	1.	0.	0.	.01
+	HYDROGRAPH AT	N21I1	98.	4.23	15.	4.	3.	.08
+	DIVERSION TO	N21I1Q	9.	3.77	0.	0.	0.	.08
+	HYDROGRAPH AT	DN21I1	98.	4.23	15.	4.	3.	.08
+	HYDROGRAPH AT	87OUT	114.	5.07	60.	15.	11.	.61
+	4 COMBINED AT	PPSD	287.	4.33	92.	24.	17.	.18
+	DIVERSION TO	DIVS86	0.	.00	0.	0.	0.	.18
	HYDROGRAPH AT	DIVS3	287.	4.33	92.	24.	17.	.18
+	ROUTED TO	RPPSD	286.	4.37	92.	24.	17.	.18
+	HYDROGRAPH AT	N21I2	50.	4.30	10.	3.	2.	.06
+	HYDROGRAPH AT	N21I4	34.	4.20	5.	1.	1.	.03
+	4 COMBINED AT	TEMP0	368.	4.37	103.	26.	19.	1.08
+	HYDROGRAPH AT	N21Z	151.	4.37	23.	6.	4.	.11
+	DIVERSION TO	N21ZI	151.	4.37	14.	3.	2.	.11
+	HYDROGRAPH AT	LN21Z	120.	4.57	10.	2.	2.	.11
+	DIVERSION TO	DN21ZI	0.	4.57	0.	0.	0.	.11
+	HYDROGRAPH AT	DN21ZO	120.	4.57	10.	2.	2.	.11
+	DIVERSION TO	N21ZI*	60.	4.57	5.	1.	1.	.11
+	HYDROGRAPH AT	DN21Z*	60.	4.57	5.	1.	1.	.11
+	ROUTED TO	RN21ZW	48.	4.80	5.	1.	1.	.11
	DIVERSION TO	D1/2ST	12.	4.73	3.	1.	0.	.11

+	HYDROGRAPH AT	1/2ST	36.	4.80	2.	1.	0.	.11
	HYDROGRAPH AT	R1/2ST	12.	4.73	3.	1.	0.	.11
+	HYDROGRAPH AT	18PIPE	18.	4.40	1.	0.	0.	.10
+	HYDROGRAPH AT	CLDIV	55.	4.17	8.	2.	1.	.13
+	2 COMBINED AT	CPIPE	72.	4.37	9.	2.	2.	.23
+	ROUTED TO	RCPIPE	71.	4.53	9.	2.	2.	.23
+	HYDROGRAPH AT	N21I3	107.	4.37	17.	4.	3.	.09
+	3 COMBINED AT	CN21I3	166.	4.50	29.	7.	5.	.32
+	DIVERSION TO	N21I3O	166.	4.50	29.	7.	5.	.32
+	HYDROGRAPH AT	R21I3	0.	.00	0.	0.	0.	.32
+	2 COMBINED AT	PPK_E	36.	4.80	2.	1.	0.	.43
+	DIVERSION TO	PPKEW3	35.	4.80	2.	1.	0.	.43
+	HYDROGRAPH AT	PPKEW2	0.	.00	0.	0.	0.	.43
+	2 COMBINED AT	US_BSN	368.	4.37	103.	26.	19.	1.51
	DIVERSION TO	PPBAS	10.	3.73	10.	3.	2.	1.51
+	HYDROGRAPH AT	PPBP	332.	4.40	88.	22.	16.	1.51
+	ROUTED TO	R83BSN	22.	7.80	21.	15.	11.	1.51
+	HYDROGRAPH AT	RPPB	10.	3.73	10.	3.	2.	1.51
+	2 COMBINED AT	JCT1	32.	7.80	29.	18.	13.	1.51
+	HYDROGRAPH AT	RESD	35.	4.80	2.	1.	0.	.43
+	2 COMBINED AT	JCT	47.	4.97	30.	18.	14.	1.51
+	ROUTED TO	OUTLET	47.	5.07	30.	18.	14.	1.51
+	HYDROGRAPH AT	N21F	158.	4.33	33.	8.	6.	.13
+	DIVERSION TO	DN21FQ	27.	3.77	2.	0.	0.	.13
+	HYDROGRAPH AT	DN21F	158.	4.33	32.	8.	6.	.13
+	2 COMBINED AT	CN21F	145.	4.43	59.	26.	19.	1.63
+	HYDROGRAPH AT	N21G	92.	4.23	17.	4.	3.	.06
	HYDROGRAPH AT	DR21Z*	60.	4.57	5.	1.	1.	.11

+	ROUTED TO	RN21ZS	37.	5.13	5.	1.	1.	.11
	2 COMBINED AT	CN21G	92.	4.23	22.	5.	4.	.06
+	DIVERSION TO	N21GI	3.	4.23	0.	0.	0.	.06
+	HYDROGRAPH AT	DN21GO	89.	4.23	21.	5.	4.	.06
+	ROUTED TO	RN21GS	87.	4.57	21.	5.	4.	.06
+	HYDROGRAPH AT	N21E	100.	4.23	18.	4.	3.	.06
+	3 COMBINED AT	CN21E	288.	4.43	95.	34.	26.	1.76
+	ROUTED TO	RN21E	285.	4.63	95.	34.	26.	1.76
+	HYDROGRAPH AT	N21D	78.	4.23	14.	4.	3.	.05
+	DIVERSION TO	LN21DD	78.	4.23	8.	2.	1.	.05
+	HYDROGRAPH AT	LN21D	61.	4.53	6.	2.	1.	.05
+	2 COMBINED AT	CN21D	333.	4.63	100.	36.	27.	1.81
+	DIVERSION TO	N21DI	290.	4.63	86.	31.	23.	1.81
+	HYDROGRAPH AT	DN21D	43.	4.63	15.	4.	3.	1.81
	ROUTED TO	RN21DE	40.	5.40	14.	4.	3.	1.81
+	HYDROGRAPH AT	20	94.	4.10	10.	3.	2.	.04
+	DIVERSION TO	D20Q	30.	3.80	1.	0.	0.	.04
+	HYDROGRAPH AT	D20	94.	4.10	9.	2.	2.	.04
+	ROUTED TO	R20	93.	4.13	9.	2.	2.	.04
+	HYDROGRAPH AT	19	103.	4.10	10.	3.	2.	.05
+	DIVERSION TO	D19Q	5.	3.53	1.	0.	0.	.05
+	HYDROGRAPH AT	D19	103.	4.10	10.	2.	2.	.05
+	2 COMBINED AT	HC6	192.	4.13	18.	5.	3.	.09
+	ROUTED TO	B19	83.	4.43	12.	4.	3.	.09
+	ROUTED TO	RHC6	82.	4.47	12.	4.	3.	.09
+	HYDROGRAPH AT	21	55.	4.13	7.	2.	1.	.03
	2 COMBINED AT	HC7	111.	4.43	18.	6.	4.	.11
	ROUTED TO							

	RHC7	108.	4.53	18.	6.	4.	.11
HYDROGRAPH AT	33	75.	4.10	9.	2.	2.	.04
DIVERSION TO	D33Q	1.	1.30	0.	0.	0.	.04
HYDROGRAPH AT	D33	75.	4.10	9.	2.	2.	.04
ROUTED TO	B33	5.	5.13	5.	2.	2.	.04
ROUTED TO	R33	5.	5.77	5.	2.	2.	.04
HYDROGRAPH AT	34	82.	4.03	6.	2.	1.	.03
DIVERSION TO	D34Q	6.	3.50	1.	0.	0.	.03
HYDROGRAPH AT	D34	82.	4.03	6.	1.	1.	.03
ROUTED TO	B34	4.	4.50	3.	1.	1.	.03
ROUTED TO	R34	4.	5.00	3.	1.	1.	.03
HYDROGRAPH AT	35	43.	4.27	9.	2.	2.	.04
4 COMBINED AT	HC8A	149.	4.53	34.	12.	9.	.23
HYDROGRAPH AT	22	114.	4.07	10.	3.	2.	.04
DIVERSION TO	D22Q	47.	3.83	2.	1.	0.	.04
HYDROGRAPH AT	D22	114.	4.07	8.	2.	1.	.04
ROUTED TO	R22	110.	4.10	8.	2.	1.	.04
HYDROGRAPH AT	23	66.	4.10	7.	2.	1.	.03
2 COMBINED AT	HC8	176.	4.10	15.	4.	3.	.07
ROUTED TO	B23	145.	4.23	11.	3.	2.	.07
HYDROGRAPH AT	25	24.	4.13	4.	1.	1.	.01
3 COMBINED AT	HC9	264.	4.23	48.	15.	11.	.31
ROUTED TO	RHC9	257.	4.30	48.	15.	11.	.31
HYDROGRAPH AT	27	81.	4.10	9.	2.	2.	.04
HYDROGRAPH AT	36	93.	4.13	10.	3.	2.	.05
DIVERSION TO	D36Q	12.	3.67	1.	0.	0.	.05
HYDROGRAPH AT	D36	93.	4.13	9.	2.	2.	.05
ROUTED TO	R36	92.	4.17	9.	2.	2.	.05

+	HYDROGRAPH AT	37w	9.	4.27	2.	0.	0.	.01
	4 COMBINED AT	C37W	404.	4.27	67.	20.	15.	.41
+	ROUTED TO	B37W	327.	4.43	67.	20.	15.	.41
+	ROUTED TO	RB37W	325.	4.53	67.	20.	15.	.41
+	HYDROGRAPH AT	37e	22.	4.13	3.	1.	1.	.01
+	HYDROGRAPH AT	24	43.	4.10	5.	1.	1.	.02
+	DIVERSION TO	D24Q	22.	3.90	1.	0.	0.	.02
+	HYDROGRAPH AT	D24	43.	4.10	4.	1.	1.	.02
+	ROUTED TO	R24	43.	4.10	4.	1.	1.	.02
+	HYDROGRAPH AT	100	87.	4.10	9.	2.	2.	.04
+	DIVERSION TO	D100Q	64.	3.97	2.	1.	0.	.04
+	HYDROGRAPH AT	D100	87.	4.10	7.	2.	1.	.04
+	2 COMBINED AT	HC100	130.	4.10	10.	3.	2.	.06
+	ROUTED TO	R100	130.	4.10	10.	3.	2.	.06
	HYDROGRAPH AT	28R	26.	4.10	3.	1.	1.	.01
+	2 COMBINED AT	HC28R	155.	4.10	13.	3.	2.	.07
+	ROUTED TO	R28R	151.	4.20	13.	3.	2.	.07
+	HYDROGRAPH AT	26R	149.	4.10	13.	3.	2.	.06
+	DIVERSION TO	D26RQ	94.	3.93	3.	1.	1.	.06
+	HYDROGRAPH AT	D26R	149.	4.10	10.	2.	2.	.06
+	ROUTED TO	R26R	143.	4.17	10.	2.	2.	.06
+	HYDROGRAPH AT	29	73.	4.10	8.	2.	1.	.03
+	2 COMBINED AT	HC11	215.	4.13	18.	4.	3.	.10
+	ROUTED TO	B29	118.	4.37	13.	4.	3.	.10
+	HYDROGRAPH AT	48	34.	4.17	5.	1.	1.	.03
+	5 COMBINED AT	HC12	533.	4.40	99.	30.	22.	.61
+	HYDROGRAPH AT	49	34.	4.17	5.	1.	1.	.02
	ROUTED TO	B49	4.	5.17	0.	0.	0.	.02

+	2 COMBINED AT	C-N24M	529.	4.40	99.	30.	22.	.64
	ROUTED TO	RB49	494.	4.77	98.	30.	22.	.64
+	HYDROGRAPH AT	N24V	109.	4.10	8.	2.	1.	.05
+	DIVERSION TO	DN24VQ	109.	4.10	5.	1.	1.	.05
+	HYDROGRAPH AT	DN24V	92.	4.17	4.	1.	1.	.05
+	ROUTED TO	RN24V	28.	5.30	4.	1.	1.	.05
+	HYDROGRAPH AT	N24M	305.	4.23	38.	9.	7.	.17
+	DIVERSION TO	DN24MQ	305.	4.23	27.	7.	5.	.17
+	HYDROGRAPH AT	DN24M	173.	4.50	10.	3.	2.	.17
+	3 COMBINED AT	CN24M	535.	4.73	109.	32.	24.	.85
+	ROUTED TO	RN24M	481.	5.23	108.	32.	23.	.85
+	HYDROGRAPH AT	45	156.	4.07	14.	3.	2.	.06
+	DIVERSION TO	D45Q	36.	3.77	2.	1.	0.	.06
+	HYDROGRAPH AT	D45	156.	4.07	12.	3.	2.	.06
	ROUTED TO	R45	148.	4.13	12.	3.	2.	.06
+	HYDROGRAPH AT	47	81.	4.10	9.	2.	2.	.04
+	2 COMBINED AT	HC14	228.	4.13	20.	5.	4.	.10
+	ROUTED TO	RHC14	219.	4.17	20.	5.	4.	.10
+	HYDROGRAPH AT	50	47.	4.13	6.	2.	1.	.03
+	ROUTED TO	R50	45.	4.20	6.	2.	1.	.03
+	HYDROGRAPH AT	51	18.	4.13	3.	1.	0.	.01
+	3 COMBINED AT	HC15	281.	4.17	29.	7.	5.	.14
+	ROUTED TO	B51	195.	4.37	25.	7.	5.	.14
+	HYDROGRAPH AT	46	161.	4.07	14.	4.	3.	.06
+	DIVERSION TO	D46Q	91.	3.90	4.	1.	1.	.06
+	HYDROGRAPH AT	D46	161.	4.07	10.	3.	2.	.06
	ROUTED TO	R46	155.	4.17	10.	3.	2.	.06
	HYDROGRAPH AT							

+	52	75.	4.13	10.	2.	2.	.04
+ 2 COMBINED AT	HC16	228.	4.17	20.	5.	4.	.10
HYDROGRAPH AT	53R	153.	4.10	16.	4.	3.	.07
+ DIVERSION TO	D53RQ	30.	3.73	2.	1.	0.	.07
+ HYDROGRAPH AT	D53R	153.	4.10	14.	3.	2.	.07
+ ROUTED TO	R53	147.	4.17	14.	3.	2.	.07
+ HYDROGRAPH AT	54R	38.	4.13	5.	1.	1.	.02
+ 2 COMBINED AT	HC17	184.	4.13	18.	5.	3.	.09
+ 2 COMBINED AT	HC17A	411.	4.13	38.	10.	7.	.19
+ ROUTED TO	B52	118.	4.57	25.	9.	6.	.19
+ HYDROGRAPH AT	56R	34.	4.03	3.	1.	1.	.01
+ ROUTED TO	B56	15.	4.23	2.	0.	0.	.01
+ 3 COMBINED AT	C-N24I	299.	4.43	51.	16.	12.	.35
+ ROUTED TO	R-N24I	286.	4.67	51.	16.	12.	.35
HYDROGRAPH AT	55	159.	4.10	15.	4.	3.	.05
+ DIVERSION TO	D55Q	85.	3.90	5.	1.	1.	.05
+ HYDROGRAPH AT	D55	159.	4.10	10.	3.	2.	.05
+ ROUTED TO	R55	158.	4.10	10.	3.	2.	.05
+ HYDROGRAPH AT	57R	20.	4.07	2.	0.	0.	.01
+ 2 COMBINED AT	HC18	177.	4.10	12.	3.	2.	.06
+ ROUTED TO	B57R	105.	4.23	8.	2.	2.	.06
+ ROUTED TO	RB57R	98.	4.33	8.	2.	2.	.06
+ HYDROGRAPH AT	N24I	328.	4.57	72.	18.	13.	.30
+ DIVERSION TO	DN24IQ	167.	4.27	13.	3.	2.	.30
+ HYDROGRAPH AT	DN24I	328.	4.57	61.	15.	11.	.30
+ 4 COMBINED AT	CP57R	717.	5.27	209.	61.	45.	1.56
+ HYDROGRAPH AT	N24H	403.	4.33	54.	14.	10.	.23
DIVERSION TO	DN24HQ	101.	3.93	8.	2.	1.	.23

+	HYDROGRAPH AT	DN24H	403.	4.33	47.	12.	8.	.23
+	HYDROGRAPH AT	N24N	165.	4.27	25.	6.	4.	.13
+	DIVERSION TO	DN24NQ	165.	4.27	11.	3.	2.	.13
+	HYDROGRAPH AT	DN24N	156.	4.37	14.	3.	2.	.13
+	ROUTED TO	RN24N	99.	5.03	14.	3.	2.	.13
+	HYDROGRAPH AT	N24J	110.	4.57	26.	7.	5.	.12
+	DIVERSION TO	DN24JQ	4.	3.07	1.	0.	0.	.12
+	HYDROGRAPH AT	DN24J	110.	4.57	26.	6.	5.	.12
+	2 COMBINED AT	CN24J	174.	5.00	39.	10.	7.	.25
+	ROUTED TO	RN24J	171.	5.07	39.	10.	7.	.25
+	HYDROGRAPH AT	N24K	169.	4.70	47.	12.	9.	.21
+	DIVERSION TO	DN24KQ	47.	4.17	5.	1.	1.	.21
+	HYDROGRAPH AT	DN24K	169.	4.70	44.	11.	8.	.21
+	4 COMBINED AT	CN24I	960.	5.27	315.	88.	64.	2.25
	ROUTED TO	RN24I	942.	5.37	314.	88.	64.	2.25
+	HYDROGRAPH AT	N21JA	177.	4.17	17.	4.	3.	.08
+	DIVERSION TO	N21JAQ	157.	4.10	7.	2.	1.	.08
+	HYDROGRAPH AT	DN21JA	177.	4.17	10.	3.	2.	.08
+	ROUTED TO	RN21JS	129.	4.43	10.	3.	2.	.08
+	HYDROGRAPH AT	N21JB	245.	4.27	29.	7.	5.	.17
+	DIVERSION TO	N21JBQ	165.	4.07	6.	2.	1.	.17
+	HYDROGRAPH AT	DN21JB	245.	4.27	23.	6.	4.	.17
+	2 COMBINED AT	CN21J	324.	4.43	33.	8.	6.	.25
+	ROUTED TO	RN21JE	281.	4.73	33.	8.	6.	.25
+	2 COMBINED AT	CN24G*	1030.	4.83	337.	94.	68.	2.50
+	ROUTED TO	RN24G*	1015.	4.93	336.	94.	68.	2.50
+	HYDROGRAPH AT	N24G	403.	4.57	78.	20.	14.	.43
	DIVERSION TO	LN24GD	399.	4.50	30.	8.	5.	.43

+	HYDROGRAPH AT	LN24G	403.	4.57	48.	12.	9.	.43
	2 COMBINED AT	CN24G	1201.	4.93	364.	101.	73.	2.93
+	HYDROGRAPH AT	DRN21Z	0.	4.57	0.	0.	0.	.11
+	ROUTED TO	RN21ZE	0.	7.17	0.	0.	0.	.11
+	2 COMBINED AT	CN24G+	1201.	4.93	364.	101.	73.	2.93
+	ROUTED TO	RN24G	1191.	4.97	364.	101.	73.	2.93
+	HYDROGRAPH AT	N24F	142.	4.33	21.	5.	4.	.11
+	DIVERSION TO	DN24FQ	105.	4.13	5.	1.	1.	.11
+	HYDROGRAPH AT	DN24E	142.	4.33	16.	4.	3.	.11
+	2 COMBINED AT	CN24F	1224.	4.97	374.	104.	75.	3.03
+	HYDROGRAPH AT	N24D	180.	4.17	26.	7.	5.	.09
+	DIVERSION TO	DN24DQ	4.	1.67	1.	0.	0.	.09
+	HYDROGRAPH AT	DN24	180.	4.17	25.	6.	5.	.09
+	2 COMBINED AT	CN24D	1252.	4.97	390.	109.	79.	3.12
	ROUTED TO	LN24D	18.	14.37	18.	16.	13.	3.12
+	HYDROGRAPH AT	N21H	50.	4.17	6.	2.	1.	.03
+	HYDROGRAPH AT	DRN21G	3.	4.23	0.	0.	0.	.06
+	ROUTED TO	RN21GE	2.	4.63	0.	0.	0.	.06
+	2 COMBINED AT	CN21H	50.	4.17	7.	2.	1.	.03
+	ROUTED TO	RN21H	37.	5.10	7.	2.	1.	.03
+	HYDROGRAPH AT	N24E	18.	4.43	4.	1.	1.	.02
+	DIVERSION TO	DN24EQ	18.	4.43	2.	1.	0.	.02
+	HYDROGRAPH AT	DN24E	10.	5.00	1.	0.	0.	.02
+	ROUTED TO	RN24E	8.	5.40	1.	0.	0.	.02
+	3 COMBINED AT	CN24D*	37.	5.23	19.	18.	15.	3.18
+	HYDROGRAPH AT	N27	279.	4.40	59.	15.	11.	.28
	DIVERSION TO	DN27Q	279.	4.40	30.	8.	5.	.28
	HYDROGRAPH AT							

+	DN27	230.	4.63	30.	7.	5.	.28
+ ROUTED TO	RN27	186.	5.03	30.	7.	5.	.28
HYDROGRAPH AT	N26	86.	4.17	10.	2.	2.	.04
+ DIVERSION TO	DN26Q	86.	4.17	6.	1.	1.	.04
+ HYDROGRAPH AT	DN26	62.	4.30	4.	1.	1.	.04
+ 2 COMBINED AT	CN26	193.	5.03	34.	8.	6.	.32
+ ROUTED TO	RN26	149.	5.40	34.	8.	6.	.32
+ HYDROGRAPH AT	N25	288.	4.50	56.	14.	10.	.24
+ DIVERSION TO	DN25Q	288.	4.50	37.	9.	7.	.24
+ HYDROGRAPH AT	DN25	171.	4.93	20.	5.	4.	.24
+ 2 COMBINED AT	CN25	226.	5.40	53.	13.	9.	.56
+ ROUTED TO	RN25	198.	5.87	53.	13.	9.	.56
+ HYDROGRAPH AT	N24	167.	4.27	26.	7.	5.	.11
+ DIVERSION TO	DN24Q	167.	4.27	14.	3.	2.	.11
+ HYDROGRAPH AT	DN24	151.	4.40	13.	3.	2.	.11
+ 3 COMBINED AT	CN24	218.	6.20	82.	37.	29.	3.85
+ ROUTED TO	RCN24	139.	6.90	62.	27.	21.	3.85
+ HYDROGRAPH AT	N23	425.	4.37	86.	22.	16.	.39
+ DIVERSION TO	DN23Q	161.	4.00	11.	3.	2.	.39
+ HYDROGRAPH AT	DN23	425.	4.37	75.	19.	14.	.39
+ 3 COMBINED AT	CN23	281.	4.47	126.	43.	33.	6.05
+ ROUTED TO	RN23	268.	5.07	126.	43.	33.	6.05
+ HYDROGRAPH AT	BN21DI	290.	4.63	86.	31.	23.	1.81
+ ROUTED TO	RN21DS	268.	5.23	85.	31.	23.	1.81
+ HYDROGRAPH AT	N21C	430.	4.40	100.	25.	18.	.39
+ DIVERSION TO	LN21CD	58.	3.77	6.	1.	1.	.39
+ HYDROGRAPH AT	LN21C	430.	4.40	96.	24.	17.	.39
2 COMBINED AT	CN21C	539.	5.07	182.	59.	44.	.39

+	HYDROGRAPH AT	N21	645.	4.63	159.	40.	29.	.62
	DIVERSION TO	DN21Q	58.	3.63	12.	3.	2.	.62
+	HYDROGRAPH AT	DN21	645.	4.63	150.	37.	27.	.62
+	3 COMBINED AT	CN21	1067.	5.00	408.	121.	90.	7.06
+	ROUTED TO	RN21	1051.	5.30	407.	121.	89.	7.06
+	DIVERSION TO	N20DI	1051.	5.30	407.	121.	89.	7.06
+	HYDROGRAPH AT	N21-20	0.	.00	0.	0.	0.	7.06
+	HYDROGRAPH AT	N11DB	320.	4.30	54.	14.	10.	.25
+	HYDROGRAPH AT	B11DAS	21.	5.00	8.	2.	1.	.26
+	ROUTED TO	R11DAS	21.	5.53	8.	2.	1.	.26
+	2 COMBINED AT	C11DAB	320.	4.30	61.	16.	11.	.25
+	DIVERSION TO	LNBOUT	320.	4.30	29.	7.	5.	.25
+	HYDROGRAPH AT	LN11DB	262.	4.53	33.	8.	6.	.25
+	DIVERSION TO	N11DI	236.	4.53	30.	7.	5.	.25
	HYDROGRAPH AT	DN11D	26.	4.53	3.	1.	1.	.25
+	ROUTED TO	RN11DE	19.	5.00	3.	1.	1.	.25
+	HYDROGRAPH AT	DRX5	0.	.00	0.	0.	0.	.26
+	ROUTED TO	RX5S	0.	.00	0.	0.	0.	.26
+	2 COMBINED AT	CX1	19.	5.00	3.	1.	1.	.25
+	DIVERSION TO	X1I	0.	.00	0.	0.	0.	.25
+	HYDROGRAPH AT	DX1	19.	5.00	3.	1.	1.	.25
+	ROUTED TO	RX1E	17.	5.23	3.	1.	1.	.25
+	HYDROGRAPH AT	DIVS1	0.	4.17	0.	0.	0.	.05
+	ROUTED TO	RNDV89	0.	4.20	0.	0.	0.	.05
+	HYDROGRAPH AT	DV1	107.	4.27	19.	5.	4.	.09
+	DIVERSION TO	DDV1Q	2.	2.30	0.	0.	0.	.09
+	HYDROGRAPH AT	DDV1	107.	4.27	19.	5.	3.	.09
	2 COMBINED AT	CPD1	107.	4.27	19.	5.	3.	.09

+	ROUTED TO	RNCP1	107.	4.27	19.	5.	3.	.09
	HYDROGRAPH AT	DV2	28.	4.33	7.	2.	1.	.03
+	2 COMBINED AT	CPD2	134.	4.27	26.	6.	5.	.12
+	DIVERSION TO	DVRB	53.	4.13	7.	2.	1.	.12
+	HYDROGRAPH AT	89WRB	81.	4.27	19.	5.	3.	.12
+	ROUTED TO	RNRDV2	78.	4.37	19.	5.	3.	.12
+	HYDROGRAPH AT	DV3	62.	4.23	11.	3.	2.	.05
+	2 COMBINED AT	CPD3	136.	4.33	30.	7.	5.	.17
+	ROUTED TO	RNRDV3	135.	4.40	30.	7.	5.	.17
+	HYDROGRAPH AT	DV4	54.	4.33	13.	3.	2.	.06
+	HYDROGRAPH AT	DV5	44.	4.17	6.	2.	1.	.03
+	3 COMBINED AT	CPD5	223.	4.37	48.	12.	9.	.26
+	HYDROGRAPH AT	DV6	103.	4.27	19.	5.	4.	.09
+	2 COMBINED AT	CPDV6	324.	4.33	68.	17.	12.	.35
	ROUTED TO	RN11IS	320.	4.43	67.	17.	12.	.35
+	HYDROGRAPH AT	N11EA	251.	4.40	58.	15.	11.	.26
+	2 COMBINED AT	CN11EA	554.	4.43	124.	31.	23.	.61
+	ROUTED TO	RN11ES	550.	4.53	124.	31.	23.	.61
+	ROUTED TO	LX50	507.	4.70	200.	158.	154.	.61
+	DIVERSION TO	DX50I	384.	4.70	177.	148.	145.	.61
+	HYDROGRAPH AT	DX50	123.	4.70	24.	10.	9.	.61
+	ROUTED TO	RX50E	121.	4.90	24.	10.	9.	.61
+	HYDROGRAPH AT	DIVS2	23.	4.17	1.	0.	0.	.09
+	ROUTED TO	RNDV87	5.	4.30	1.	0.	0.	.09
+	HYDROGRAPH AT	DV7	164.	4.43	30.	8.	5.	.13
+	DIVERSION TO	DDV7Q	98.	4.10	5.	1.	1.	.13
	HYDROGRAPH AT	DDV7	164.	4.43	25.	6.	5.	.13
	2 COMBINED AT							

+	CPD7	168.	4.40	26.	7.	5.	.13
+ ROUTED TO	RNRDV7	167.	4.53	26.	7.	5.	.13
HYDROGRAPH AT	DV8	115.	4.30	23.	6.	4.	.09
+ 2 COMBINED AT	CPD8	270.	4.50	49.	12.	9.	.22
+ HYDROGRAPH AT	DV9	100.	4.10	10.	2.	2.	.04
+ 2 COMBINED AT	DVCP9	308.	4.43	59.	15.	11.	.27
+ HYDROGRAPH AT	DIVS13	0.	.00	0.	0.	0.	.18
+ ROUTED TO	RNRS86	0.	.00	0.	0.	0.	.18
+ HYDROGRAPH AT	DV10	330.	4.23	47.	12.	9.	.21
+ DIVERSION TO	DDV10Q	58.	3.80	2.	1.	0.	.21
+ HYDROGRAPH AT	DDV10	330.	4.23	45.	11.	8.	.21
+ 2 COMBINED AT	CPD10	330.	4.23	45.	11.	8.	.21
+ ROUTED TO	RNRD10	324.	4.33	45.	11.	8.	.21
+ HYDROGRAPH AT	DV11	241.	4.23	42.	11.	8.	.14
3 COMBINED AT	CPD11	810.	4.40	144.	36.	26.	.62
+ ROUTED TO	RCP11S	792.	4.50	144.	36.	26.	.62
+ HYDROGRAPH AT	N22A	404.	4.33	84.	21.	15.	.30
+ 2 COMBINED AT	CN22A	1110.	4.50	225.	57.	41.	.92
+ DIVERSION TO	LN22DA	741.	4.17	38.	9.	7.	.92
+ HYDROGRAPH AT	LN22A	1110.	4.50	190.	48.	34.	.92
+ ROUTED TO	R22AS	1068.	4.67	190.	48.	34.	.92
+ HYDROGRAPH AT	N22B	260.	4.27	46.	12.	8.	.17
+ DIVERSION TO	LN22DB	260.	4.27	24.	6.	4.	.17
+ HYDROGRAPH AT	LN22B	221.	4.50	22.	6.	4.	.17
+ 3 COMBINED AT	CN22	1213.	4.70	228.	61.	46.	1.71
+ DIVERSION TO	N22I	500.	4.33	152.	42.	32.	1.71
+ HYDROGRAPH AT	DN22	713.	4.70	76.	19.	14.	1.71
ROUTED TO	RN22W	709.	4.80	76.	19.	14.	1.71

+	HYDROGRAPH AT	DRX50I	384.	4.70	177.	148.	145.	.61
	ROUTED TO	RX50W	381.	4.87	177.	148.	145.	.61
+	HYDROGRAPH AT	N11EB	333.	4.27	53.	13.	10.	.23
+	4 COMBINED AT	CN11E	1142.	4.77	294.	177.	167.	2.19
+	DIVERSION TO	LN11ED	144.	2.63	63.	16.	11.	2.19
+	HYDROGRAPH AT	LN11E	1142.	4.77	293.	177.	155.	2.19
+	ROUTED TO	R-WBE1	1142.	4.80	293.	177.	155.	2.19
+	HYDROGRAPH AT	WB1	146.	4.30	28.	7.	5.	.12
+	2 COMBINED AT	CPWB1	1220.	4.77	318.	183.	160.	2.31
+	ROUTED TO	R-R3	1220.	4.80	316.	183.	157.	2.31
+	HYDROGRAPH AT	WB2	134.	4.23	22.	6.	4.	.09
+	2 COMBINED AT	CPWB2	1278.	4.80	336.	188.	161.	2.40
+	ROUTED TO	R-4-5	1217.	4.90	280.	174.	145.	2.40
+	HYDROGRAPH AT	WB3	30.	4.03	2.	1.	0.	.01
	2 COMBINED AT	CPWB3	1217.	4.90	280.	174.	146.	2.41
+	ROUTED TO	R-6	1173.	4.97	278.	173.	145.	2.41
+	HYDROGRAPH AT	DRN22	500.	4.33	152.	42.	32.	1.71
+	HYDROGRAPH AT	WB4	193.	4.20	28.	7.	5.	.11
+	2 COMBINED AT	CPWB4	680.	4.30	175.	48.	36.	.11
+	ROUTED TO	R-R1	772.	4.33	167.	48.	36.	.11
+	HYDROGRAPH AT	WB5	247.	4.17	29.	7.	5.	.11
+	2 COMBINED AT	CPWB5	960.	4.33	193.	55.	41.	.22
+	ROUTED TO	R-R2	612.	4.77	141.	51.	40.	.22
+	2 COMBINED AT	CPR6	1757.	4.97	420.	224.	186.	2.63
+	ROUTED TO	RCR26	1737.	5.07	418.	224.	185.	2.63
+	HYDROGRAPH AT	WB7	87.	4.13	12.	3.	2.	.05
+	2 COMBINED AT	CR6W7	1749.	5.07	420.	224.	187.	2.67
	ROUTED TO	R-R7	1746.	5.07	420.	224.	185.	2.67

HYDROGRAPH AT	WB6	136.	4.33	29.	7.	5.	.12
ROUTED TO	R-R8	22.	5.83	20.	7.	5.	.12
2 COMBINED AT	C7R8	1759.	5.07	438.	230.	190.	2.79
ROUTED TO	RC78	1755.	5.10	437.	230.	189.	2.79
HYDROGRAPH AT	WB8	39.	4.77	17.	5.	3.	.07
2 COMBINED AT	CP-678	1782.	5.10	450.	234.	192.	2.86
HYDROGRAPH AT	WB10	130.	4.27	24.	6.	4.	.09
ROUTED TO	R-R9	56.	4.93	23.	6.	4.	.09
2 COMBINED AT	WBEOT	1817.	5.10	466.	238.	196.	2.95
DIVERSION TO	TONRI	100.	4.93	80.	60.	51.	2.95
HYDROGRAPH AT	DVNR	1717.	5.10	386.	177.	145.	2.95
DIVERSION TO	DCLUB	385.	5.10	72.	23.	17.	2.95
HYDROGRAPH AT	CCLUB	1332.	5.10	314.	154.	128.	2.95
ROUTED TO	RR287	1332.	5.13	314.	154.	128.	2.95
DIVERSION TO	DV87SI	397.	5.13	75.	24.	18.	2.95
HYDROGRAPH AT	DV87S	934.	5.13	239.	130.	110.	2.95
ROUTED TO	RR289	930.	5.17	239.	130.	109.	2.95
DIVERSION TO	DV89I	392.	5.17	58.	14.	10.	2.95
HYDROGRAPH AT	DS89	537.	5.17	181.	116.	99.	2.95
ROUTED TO	TODET	535.	5.20	181.	116.	99.	2.95
DIVERSION TO	DV91I	495.	5.23	83.	21.	15.	2.95
HYDROGRAPH AT	DV91	124.	5.83	103.	96.	84.	2.95
HYDROGRAPH AT	WB9	173.	4.50	47.	12.	9.	.22
ROUTED TO	R-R10	30.	6.47	25.	12.	9.	.22
HYDROGRAPH AT	DRX1I	0.	.00	0.	0.	0.	.25
ROUTED TO	RX1S	0.	.00	0.	0.	0.	.25
3 COMBINED AT	CN11B1	148.	5.83	125.	105.	92.	3.17
HYDROGRAPH AT							

+	N11C	293.	4.30	51.	13.	9.	.25
+ DIVERSION TO	LN11CD	293.	4.30	25.	6.	5.	.25
HYDROGRAPH AT	LN11C	256.	4.50	26.	6.	5.	.25
+ DIVERSION TO	N11CWI	1.	4.50	0.	0.	0.	.25
+ HYDROGRAPH AT	DN11CW	255.	4.50	26.	6.	5.	.25
+ DIVERSION TO	N11CEI	14.	4.50	4.	1.	1.	.25
+ HYDROGRAPH AT	DN11CE	241.	4.50	22.	6.	4.	.25
+ HYDROGRAPH AT	DRN11C	1.	4.50	0.	0.	0.	.25
+ ROUTED TO	LN11CW	0.	4.70	0.	0.	0.	.25
+ HYDROGRAPH AT	DR11C*	14.	4.50	4.	1.	1.	.25
+ ROUTED TO	LN11CE	3.	6.80	3.	1.	1.	.25
+ 3 COMBINED AT	CN11C1	242.	4.50	25.	6.	5.	.25
+ HYDROGRAPH AT	BN11DI	236.	4.53	30.	7.	5.	.25
+ 2 COMBINED AT	CN11D	469.	4.53	55.	14.	10.	.25
ROUTED TO	RWBW1	364.	4.97	55.	14.	10.	.25
+ HYDROGRAPH AT	N11A	596.	4.67	187.	48.	35.	.93
+ 2 COMBINED AT	CWBW	754.	5.13	230.	59.	43.	1.18
+ ROUTED TO	RBWB	25.	5.23	25.	25.	22.	1.18
+ ROUTED TO	RWBW2	25.	7.03	25.	25.	21.	1.18
+ 2 COMBINED AT	CN11B	166.	5.83	149.	130.	112.	4.35
+ HYDROGRAPH AT	S30D	209.	4.23	32.	8.	6.	.13
+ ROUTED TO	RS30D	198.	4.53	32.	8.	6.	.13
+ HYDROGRAPH AT	S30C	496.	4.40	116.	29.	21.	.45
+ 2 COMBINED AT	XX1	671.	4.50	147.	37.	27.	.58
+ HYDROGRAPH AT	S30B	311.	4.73	86.	22.	16.	.40
+ 2 COMBINED AT	CS30B	892.	4.57	226.	58.	42.	.98
+ DIVERSION TO	DS30BI	342.	4.57	34.	9.	6.	.98
HYDROGRAPH AT	DS30BO	550.	4.47	192.	49.	35.	.98

```
          ROUTED TO
+                        RS30BW      550.    4.83        191.        49.        35.        .98

          HYDROGRAPH AT
                          S30A      524.    4.43        120.        30.        22.        .53

          2 COMBINED AT
+                        CS30A      997.    4.57        304.        78.        56.       1.51

          HYDROGRAPH AT
+                        DRTONR     100.    4.93         80.        60.        51.       2.95

          HYDROGRAPH AT
+                        BN20DI    1051.    5.30        407.       121.        89.       7.06

          HYDROGRAPH AT
+                          N20      842.    4.13         99.        25.        18.        .35

          DIVERSION TO
+                        DN20Q       25.    2.97          7.         2.         1.        .35

          HYDROGRAPH AT
+                         DN20      842.    4.13         92.        23.        17.        .35

          3 COMBINED AT
+                         CN20     1175.    5.27        537.       195.       153.       8.00
1
                                   SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                                       (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                                          INTERPOLATED TO
                                                                       COMPUTATION INTERVAL
          ISTAQ    ELEMENT      DT        PEAK    TIME TO     VOLUME      DT       PEAK    TIME TO     VOLUME
                                                    PEAK                                              PEAK

                              (MIN)      (CFS)     (MIN)      (IN)     (MIN)     (CFS)     (MIN)       (IN)

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
              RCBA  MANE          .50     14.94    255.50      1.08      2.00     14.85    256.00       1.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4018E+00 EXCESS= .0000E+00 OUTFLOW= .4018E+00 BASIN STORAGE= .6963E-03 PERCENT ERROR=   -.2

          FOR STORM = 2  STORM AREA (SQ MI) =        .50
              RCBA  MANE          .60     14.68    255.60      1.06      2.00     14.61    256.00       1.05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3943E+00 EXCESS= .0000E+00 OUTFLOW= .3950E+00 BASIN STORAGE= .7202E-03 PERCENT ERROR=   -.4

          FOR STORM = 3  STORM AREA (SQ MI) =       2.80
              RCBA  MANE          .40      8.82    262.40       .92      2.00      8.81    262.00        .91

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3457E+00 EXCESS= .0000E+00 OUTFLOW= .3452E+00 BASIN STORAGE= .6687E-03 PERCENT ERROR=   -.1

          FOR STORM = 4  STORM AREA (SQ MI) =      16.00
              RCBA  MANE          .50      6.32    269.00       .69      2.00      6.01    270.00        .69

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2571E+00 EXCESS= .0000E+00 OUTFLOW= .2573E+00 BASIN STORAGE= .6731E-03 PERCENT ERROR=   -.3

          FOR STORM = 5  STORM AREA (SQ MI) =      90.00
              RCBA  MANE          .50      2.38    292.00       .30      2.00      2.38    292.00        .30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1099E+00 EXCESS= .0000E+00 OUTFLOW= .1101E+00 BASIN STORAGE= .6919E-03 PERCENT ERROR=   -.9

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
              RCBB  MANE          .60     43.22    249.60      1.00      2.00     40.52    250.00       1.00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9001E+00 EXCESS= .0000E+00 OUTFLOW= .9024E+00 BASIN STORAGE= .4286E-03 PERCENT ERROR=   -.3

          FOR STORM = 2  STORM AREA (SQ MI) =        .50
              RCBB  MANE          .50     43.72    249.00       .98      2.00     39.97    250.00        .99

INUITY SUMMARY (AC-FT) - INFLOW= .8828E+00 EXCESS= .0000E+00 OUTFLOW= .8846E+00 BASIN STORAGE= .4278E-03 PERCENT ERROR=   -.3
```

```
FOR STORM = 3  STORM AREA (SQ MI) =        2.80
    RCBB  MANE          .60     25.50    253.80        .76      2.00     23.68    254.00          .77

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6888E+00 EXCESS= .0000E+00 OUTFLOW= .6907E+00 BASIN STORAGE= .4345E-03 PERCENT ERROR=   -.4

FOR STORM = 4  STORM AREA (SQ MI) =       16.00
    RCBB  MANE          .60     14.65    262.20        .51      2.00     13.68    262.00          .52

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4613E+00 EXCESS= .0000E+00 OUTFLOW= .4624E+00 BASIN STORAGE= .4024E-03 PERCENT ERROR=   -.3

FOR STORM = 5  STORM AREA (SQ MI) =       90.00
    RCBB  MANE          .50      2.42    306.00        .13      2.00      2.42    306.00          .13

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1178E+00 EXCESS= .0000E+00 OUTFLOW= .1182E+00 BASIN STORAGE= .4034E-03 PERCENT ERROR=   -.7

FOR STORM = 1  STORM AREA (SQ MI) =         .01
    R28a  MANE         1.40     76.36    263.20       1.35      2.00     75.95    264.00         1.35

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3767E+01 EXCESS= .0000E+00 OUTFLOW= .3667E+01 BASIN STORAGE= .2111E-02 PERCENT ERROR=   2.6

FOR STORM = 2  STORM AREA (SQ MI) =         .50
    R28a  MANE          .80     75.12    263.20       1.32      2.00     75.02    264.00         1.32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3723E+01 EXCESS= .0000E+00 OUTFLOW= .3590E+01 BASIN STORAGE= .2074E-02 PERCENT ERROR=   3.5

FOR STORM = 3  STORM AREA (SQ MI) =        2.80
    R28a  MANE         1.30     52.62    270.40       1.21      2.00     52.54    270.00         1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3360E+01 EXCESS= .0000E+00 OUTFLOW= .3293E+01 BASIN STORAGE= .2116E-02 PERCENT ERROR=   1.9

FOR STORM = 4  STORM AREA (SQ MI) =       16.00
    R28a  MANE         1.10     35.52    278.30        .99      2.00     35.52    278.00          .99

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2755E+01 EXCESS= .0000E+00 OUTFLOW= .2697E+01 BASIN STORAGE= .2410E-02 PERCENT ERROR=   2.0

FOR STORM = 5  STORM AREA (SQ MI) =       90.00
    R28a  MANE         1.50     18.39    276.00        .62      2.00     18.39    276.00          .62

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1727E+01 EXCESS= .0000E+00 OUTFLOW= .1688E+01 BASIN STORAGE= .2524E-02 PERCENT ERROR=   2.1

FOR STORM = 1  STORM AREA (SQ MI) =         .01
    RCBL  MANE         2.00    225.33    260.00       1.73      2.00    225.33    260.00         1.73

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1524E+02 EXCESS= .0000E+00 OUTFLOW= .1524E+02 BASIN STORAGE= .7399E-04 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =         .50
    RCBL  MANE         1.80    220.53    261.00       1.71      2.00    220.29    262.00         1.71

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1504E+02 EXCESS= .0000E+00 OUTFLOW= .1504E+02 BASIN STORAGE= .7846E-04 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =        2.80
    RCBL  MANE         2.00    162.24    266.00       1.57      2.00    162.24    266.00         1.57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1383E+02 EXCESS= .0000E+00 OUTFLOW= .1383E+02 BASIN STORAGE= .7941E-04 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =       16.00
    RCBL  MANE         2.00    116.07    268.00       1.34      2.00    116.07    268.00         1.34
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1175E+02 EXCESS= .0000E+00 OUTFLOW= .1175E+02 BASIN STORAGE= .8193E-04 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =       90.00
            RCBL  MANE          2.00     74.89    276.00       .95      2.00     74.89    276.00        .95

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8342E+01 EXCESS= .0000E+00 OUTFLOW= .8341E+01 BASIN STORAGE= .7692E-04 PERCENT ERROR=    .0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RCBK  MANE          1.27    294.89    256.08      1.50      2.00    293.50    256.00       1.50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1739E+02 EXCESS= .0000E+00 OUTFLOW= .1739E+02 BASIN STORAGE= .3851E-03 PERCENT ERROR=    .0

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
            RCBK  MANE          1.27    290.35    256.04      1.48      2.00    289.46    256.00       1.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1713E+02 EXCESS= .0000E+00 OUTFLOW= .1713E+02 BASIN STORAGE= .3942E-03 PERCENT ERROR=    .0

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
            RCBK  MANE          1.39    207.99    265.04      1.32      2.00    207.40    266.00       1.32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1528E+02 EXCESS= .0000E+00 OUTFLOW= .1529E+02 BASIN STORAGE= .3907E-03 PERCENT ERROR=    .0

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
            RCBK  MANE          1.59    130.33    280.49      1.08      2.00    128.62    280.00       1.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1247E+02 EXCESS= .0000E+00 OUTFLOW= .1248E+02 BASIN STORAGE= .3897E-03 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
            RCBK  MANE          1.87     74.51    278.66       .72      2.00     74.45    278.00        .72

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8339E+01 EXCESS= .0000E+00 OUTFLOW= .8341E+01 BASIN STORAGE= .3927E-03 PERCENT ERROR=    .0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
             R15  MANE          1.65    311.65    258.11      1.37      2.00    309.88    258.00       1.37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1796E+02 EXCESS= .0000E+00 OUTFLOW= .1797E+02 BASIN STORAGE= .5209E-03 PERCENT ERROR=    .0

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
             R15  MANE          1.66    306.52    259.11      1.35      2.00    302.74    258.00       1.35

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1771E+02 EXCESS= .0000E+00 OUTFLOW= .1771E+02 BASIN STORAGE= .5287E-03 PERCENT ERROR=    .0

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
             R15  MANE          1.84    218.64    268.15      1.20      2.00    217.55    268.00       1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1568E+02 EXCESS= .0000E+00 OUTFLOW= .1568E+02 BASIN STORAGE= .5405E-03 PERCENT ERROR=    .0

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
             R15  MANE          2.00    127.49    282.00       .96      2.00    127.49    282.00        .96

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1264E+02 EXCESS= .0000E+00 OUTFLOW= .1264E+02 BASIN STORAGE= .5569E-03 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
             R15  MANE          2.00     74.45    280.00       .64      2.00     74.45    280.00        .64

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8340E+01 EXCESS= .0000E+00 OUTFLOW= .8343E+01 BASIN STORAGE= .5462E-03 PERCENT ERROR=    .0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
             RE1  MANE           .50     46.80    251.00       .78      2.00     28.11    254.00        .73
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .5795E+00 EXCESS= .0000E+00 OUTFLOW= .5854E+00 BASIN STORAGE= .9395E-03 PERCENT ERROR=  -1.2

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
             RE1  MANE          .70     45.57    251.30       .77      2.00     31.75    252.00        .74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5669E+00 EXCESS= .0000E+00 OUTFLOW= .5738E+00 BASIN STORAGE= .9004E-03 PERCENT ERROR=  -1.4

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
             RE1  MANE          .40     19.17    259.20       .48      2.00     12.54    262.00        .46

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3565E+00 EXCESS= .0000E+00 OUTFLOW= .3612E+00 BASIN STORAGE= .9068E-03 PERCENT ERROR=  -1.6

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
             RE1  MANE          .40      6.74    276.80       .19      2.00      4.04    278.00        .18

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1368E+00 EXCESS= .0000E+00 OUTFLOW= .1387E+00 BASIN STORAGE= .8554E-03 PERCENT ERROR=  -2.0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
             RE1  MANE          .40       .00    320.80       .00      2.00       .00    320.00        .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3864E-08 EXCESS= .0000E+00 OUTFLOW= .3864E-08 BASIN STORAGE= .4225E-06 PERCENT ERROR=******

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
             RE2  MANE         2.00     28.17    248.00      1.48      2.00     28.17    248.00       1.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1266E+01 EXCESS= .0000E+00 OUTFLOW= .1266E+01 BASIN STORAGE= .4434E-03 PERCENT ERROR=   -.1

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
             RE2  MANE         2.00     27.90    248.00      1.47      2.00     27.90    248.00       1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1251E+01 EXCESS= .0000E+00 OUTFLOW= .1252E+01 BASIN STORAGE= .4414E-03 PERCENT ERROR=   -.1

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
             RE2  MANE         2.00     15.28    250.00      1.14      2.00     15.28    250.00       1.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9756E+00 EXCESS= .0000E+00 OUTFLOW= .9758E+00 BASIN STORAGE= .4537E-03 PERCENT ERROR=   -.1

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
             RE2  MANE         2.00     10.53    250.00       .83      2.00     10.53    250.00        .83

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7092E+00 EXCESS= .0000E+00 OUTFLOW= .7093E+00 BASIN STORAGE= .4172E-03 PERCENT ERROR=   -.1

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
             RE2  MANE         2.00      5.33    252.00       .45      2.00      5.33    252.00        .45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3842E+00 EXCESS= .0000E+00 OUTFLOW= .3842E+00 BASIN STORAGE= .4384E-03 PERCENT ERROR=   -.1

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
             R13  MANE         2.00    150.61    250.00      1.32      2.00    150.61    250.00       1.32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6296E+01 EXCESS= .0000E+00 OUTFLOW= .6281E+01 BASIN STORAGE= .1287E-02 PERCENT ERROR=    .2

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
             R13  MANE         2.00    149.34    250.00      1.31      2.00    149.34    250.00       1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6235E+01 EXCESS= .0000E+00 OUTFLOW= .6221E+01 BASIN STORAGE= .1284E-02 PERCENT ERROR=    .2

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
             R13  MANE         2.00     82.58    252.00      1.03      2.00     82.58    252.00       1.03
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .4896E+01 EXCESS= .0000E+00 OUTFLOW= .4887E+01 BASIN STORAGE= .1312E-02 PERCENT ERROR=    .2

        FOR STORM = 4  STORM AREA (SQ MI) =       16.00
             R13  MANE          2.00     58.13    252.00       .74      2.00     58.13    252.00        .74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3523E+01 EXCESS= .0000E+00 OUTFLOW= .3517E+01 BASIN STORAGE= .1303E-02 PERCENT ERROR=    .1

        FOR STORM = 5  STORM AREA (SQ MI) =       90.00
             R13  MANE          2.00     32.42    254.00       .40      2.00     32.42    254.00        .40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1909E+01 EXCESS= .0000E+00 OUTFLOW= .1904E+01 BASIN STORAGE= .1468E-02 PERCENT ERROR=    .2

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
             RE3  MANE           .90     92.44    260.10      1.21      2.00     88.06    260.00       1.22

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5298E+01 EXCESS= .0000E+00 OUTFLOW= .5309E+01 BASIN STORAGE= .6626E-03 PERCENT ERROR=   -.2

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
             RE3  MANE          1.00     86.72    263.00      1.20      2.00     86.68    260.00       1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5226E+01 EXCESS= .0000E+00 OUTFLOW= .5236E+01 BASIN STORAGE= .6751E-03 PERCENT ERROR=   -.2

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
             RE3  MANE           .70     67.16    263.90       .89      2.00     64.40    264.00        .90

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3900E+01 EXCESS= .0000E+00 OUTFLOW= .3907E+01 BASIN STORAGE= .6524E-03 PERCENT ERROR=   -.2

        FOR STORM = 4  STORM AREA (SQ MI) =       16.00
             RE3  MANE           .70     49.50    270.20       .59      2.00     39.27    270.00        .59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2557E+01 EXCESS= .0000E+00 OUTFLOW= .2564E+01 BASIN STORAGE= .6786E-03 PERCENT ERROR=   -.3

        FOR STORM = 5  STORM AREA (SQ MI) =       90.00
             RE3  MANE           .60     21.83    295.20       .21      2.00     13.26    300.00        .21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9308E+00 EXCESS= .0000E+00 OUTFLOW= .9338E+00 BASIN STORAGE= .6608E-03 PERCENT ERROR=   -.4

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
             R10  MANE          1.90    136.78    267.90      1.31      2.00    136.74    268.00       1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9586E+01 EXCESS= .0000E+00 OUTFLOW= .9570E+01 BASIN STORAGE= .1743E-02 PERCENT ERROR=    .2

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
             R10  MANE          1.50    131.30    268.50      1.29      2.00    129.99    270.00       1.28

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9434E+01 EXCESS= .0000E+00 OUTFLOW= .9401E+01 BASIN STORAGE= .1831E-02 PERCENT ERROR=    .3

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
             R10  MANE          1.10     92.18    273.90       .99      2.00     92.08    274.00        .99

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7291E+01 EXCESS= .0000E+00 OUTFLOW= .7269E+01 BASIN STORAGE= .1787E-02 PERCENT ERROR=    .3

        FOR STORM = 4  STORM AREA (SQ MI) =       16.00
             R10  MANE          1.70     58.41    280.50       .70      2.00     58.05    282.00        .70

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5135E+01 EXCESS= .0000E+00 OUTFLOW= .5125E+01 BASIN STORAGE= .1757E-02 PERCENT ERROR=    .2

        FOR STORM = 5  STORM AREA (SQ MI) =       90.00
```

```
R10  MANE        1.20     21.00    261.60       .32      2.00     20.97    262.00        .32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2389E+01 EXCESS= .0000E+00 OUTFLOW= .2373E+01 BASIN STORAGE= .1703E-02 PERCENT ERROR=    .6

     FOR STORM = 1  STORM AREA (SQ MI) =        .01
R51  MANE        2.00   1972.60    302.00      1.42      2.00   1972.60    302.00       1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2230E+03 EXCESS= .0000E+00 OUTFLOW= .2230E+03 BASIN STORAGE= .3616E-02 PERCENT ERROR=    .0

     FOR STORM = 2  STORM AREA (SQ MI) =        .50
R51  MANE        2.00   1943.30    302.00      1.41      2.00   1943.30    302.00       1.41

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2201E+03 EXCESS= .0000E+00 OUTFLOW= .2201E+03 BASIN STORAGE= .3681E-02 PERCENT ERROR=    .0

     FOR STORM = 3  STORM AREA (SQ MI) =       2.80
R51  MANE        2.00   1485.57    310.00      1.21      2.00   1485.57    310.00       1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1889E+03 EXCESS= .0000E+00 OUTFLOW= .1890E+03 BASIN STORAGE= .3624E-02 PERCENT ERROR=    .0

     FOR STORM = 4  STORM AREA (SQ MI) =      16.00
R51  MANE        2.00   1044.99    316.00       .95      2.00   1044.99    316.00        .95

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1494E+03 EXCESS= .0000E+00 OUTFLOW= .1495E+03 BASIN STORAGE= .3684E-02 PERCENT ERROR=    .0

     FOR STORM = 5  STORM AREA (SQ MI) =      90.00
R51  MANE        2.00    539.74    336.00       .59      2.00    539.74    336.00        .59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9246E+02 EXCESS= .0000E+00 OUTFLOW= .9247E+02 BASIN STORAGE= .3611E-02 PERCENT ERROR=    .0

     FOR STORM = 1  STORM AREA (SQ MI) =        .01
R52  MANE         .75   1969.74    302.50      1.42      2.00   1967.69    302.00       1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2240E+03 EXCESS= .0000E+00 OUTFLOW= .2240E+03 BASIN STORAGE= .5420E-03 PERCENT ERROR=    .0

     FOR STORM = 2  STORM AREA (SQ MI) =        .50
R52  MANE         .75   1939.63    303.16      1.40      2.00   1936.99    302.00       1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2211E+03 EXCESS= .0000E+00 OUTFLOW= .2211E+03 BASIN STORAGE= .5384E-03 PERCENT ERROR=    .0

     FOR STORM = 3  STORM AREA (SQ MI) =       2.80
R52  MANE         .82   1485.59    310.04      1.20      2.00   1485.58    310.00       1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1897E+03 EXCESS= .0000E+00 OUTFLOW= .1897E+03 BASIN STORAGE= .5399E-03 PERCENT ERROR=    .0

     FOR STORM = 4  STORM AREA (SQ MI) =      16.00
R52  MANE         .91   1044.16    316.81       .95      2.00   1043.52    316.00        .95

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1499E+03 EXCESS= .0000E+00 OUTFLOW= .1499E+03 BASIN STORAGE= .5380E-03 PERCENT ERROR=    .0

     FOR STORM = 5  STORM AREA (SQ MI) =      90.00
R52  MANE        1.12    539.57    336.67       .59      2.00    539.28    336.00        .59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9268E+02 EXCESS= .0000E+00 OUTFLOW= .9268E+02 BASIN STORAGE= .5395E-03 PERCENT ERROR=    .0

     FOR STORM = 1  STORM AREA (SQ MI) =        .01
RHV2 MANE        2.00      7.08    316.00      1.75      2.00      7.08    316.00       1.75

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2888E+01 EXCESS= .0000E+00 OUTFLOW= .2888E+01 BASIN STORAGE= .5656E-03 PERCENT ERROR=    .0
```

```
FOR STORM = 2  STORM AREA (SQ MI) =        .50
    RHV2  MANE        2.00      7.02    316.00      1.73      2.00      7.02    316.00        1.73

TINUITY SUMMARY (AC-FT) - INFLOW= .2862E+01 EXCESS= .0000E+00 OUTFLOW= .2862E+01 BASIN STORAGE= .5630E-03 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
    RHV2  MANE        2.00      5.93    320.00      1.50      2.00      5.93    320.00        1.50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2483E+01 EXCESS= .0000E+00 OUTFLOW= .2483E+01 BASIN STORAGE= .5801E-03 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
    RHV2  MANE        2.00      4.79    324.00      1.26      2.00      4.79    324.00        1.26

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2081E+01 EXCESS= .0000E+00 OUTFLOW= .2080E+01 BASIN STORAGE= .5954E-03 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
    RHV2  MANE        2.00      3.29    328.00       .92      2.00      3.29    328.00         .92

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1515E+01 EXCESS= .0000E+00 OUTFLOW= .1515E+01 BASIN STORAGE= .5886E-03 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
    4.1  MANE         .77     36.38    327.87       .36      2.00     36.28    328.00         .36

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2172E+01 EXCESS= .0000E+00 OUTFLOW= .2323E+01 BASIN STORAGE= .2211E-05 PERCENT ERROR=  -7.0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
    4.1  MANE         .71     34.81    329.51       .34      2.00     34.43    330.00         .34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2063E+01 EXCESS= .0000E+00 OUTFLOW= .2217E+01 BASIN STORAGE= .2213E-05 PERCENT ERROR=  -7.5

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
    4.1  MANE         .81      2.99    439.92       .03      2.00      2.99    440.00         .03

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1516E+00 EXCESS= .0000E+00 OUTFLOW= .1713E+00 BASIN STORAGE= .1823E-05 PERCENT ERROR= -13.0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
    4.1  MANE        2.00       .05    346.20       .00      2.00       .05    348.00         .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6489E-02 EXCESS= .0000E+00 OUTFLOW= .7042E-02 BASIN STORAGE= .1581E-05 PERCENT ERROR=  -8.5

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
    4.1  MANE        2.00       .03    364.60       .00      2.00       .03    364.00         .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4103E-02 EXCESS= .0000E+00 OUTFLOW= .4357E-02 BASIN STORAGE= .1595E-05 PERCENT ERROR=  -6.2

FOR STORM = 1  STORM AREA (SQ MI) =        .01
    2.1  MANE         .83     33.55    319.97       .36      2.00     33.55    320.00         .36

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1966E+01 EXCESS= .0000E+00 OUTFLOW= .2039E+01 BASIN STORAGE= .1236E-05 PERCENT ERROR=  -3.7

FOR STORM = 2  STORM AREA (SQ MI) =        .50
    2.1  MANE         .46     32.16    322.30       .33      2.00     30.95    324.00         .33

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1869E+01 EXCESS= .0000E+00 OUTFLOW= .1889E+01 BASIN STORAGE= .1052E-05 PERCENT ERROR=  -1.1

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
    2.1  MANE         .73      4.11    409.32       .04      2.00      4.08    410.00         .04

TINUITY SUMMARY (AC-FT) - INFLOW= .1999E+00 EXCESS= .0000E+00 OUTFLOW= .2294E+00 BASIN STORAGE= .1147E-05 PERCENT ERROR= -14.7
```

```
FOR STORM = 4  STORM AREA (SQ MI) =      16.00
    2.1  MANE        2.00       .05    335.68       .00      2.00       .05    334.00         .00

TINUITY SUMMARY (AC-FT) - INFLOW= .5736E-02 EXCESS= .0000E+00 OUTFLOW= .6127E-02 BASIN STORAGE= .9372E-06 PERCENT ERROR=  -6.8

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
    2.1  MANE        2.00       .03    349.09       .00      2.00       .03    350.00         .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3639E-02 EXCESS= .0000E+00 OUTFLOW= .3793E-02 BASIN STORAGE= .9658E-06 PERCENT ERROR=  -4.3

FOR STORM = 1  STORM AREA (SQ MI) =        .01
    2.2  MANE         .67     87.43    300.62       .49      2.00     86.35    300.00         .49

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6658E+01 EXCESS= .0000E+00 OUTFLOW= .6913E+01 BASIN STORAGE= .8862E-05 PERCENT ERROR=  -3.8

FOR STORM = 2  STORM AREA (SQ MI) =        .50
    2.2  MANE         .82     79.96    302.87       .46      2.00     79.33    304.00         .46

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6364E+01 EXCESS= .0000E+00 OUTFLOW= .6545E+01 BASIN STORAGE= .8303E-05 PERCENT ERROR=  -2.8

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
    2.2  MANE         .74     38.22    329.44       .18      2.00     37.70    330.00         .18

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2381E+01 EXCESS= .0000E+00 OUTFLOW= .2500E+01 BASIN STORAGE= .8539E-05 PERCENT ERROR=  -5.0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
    2.2  MANE        2.00       .08    325.09       .00      2.00       .08    324.00         .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1609E-01 EXCESS= .0000E+00 OUTFLOW= .1635E-01 BASIN STORAGE= .8086E-05 PERCENT ERROR=  -1.7

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
    2.2  MANE        2.07       .05    335.07       .00      2.00       .05    334.00         .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1039E-01 EXCESS= .0000E+00 OUTFLOW= .1045E-01 BASIN STORAGE= .7937E-05 PERCENT ERROR=   -.7

FOR STORM = 1  STORM AREA (SQ MI) =        .01
   10.1  MANE        2.00     134.40    343.05       .48      2.00    132.29    344.00         .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1253E+02 EXCESS= .0000E+00 OUTFLOW= .1321E+02 BASIN STORAGE= .2144E-03 PERCENT ERROR=  -5.5

FOR STORM = 2  STORM AREA (SQ MI) =        .50
   10.1  MANE        1.13     123.50    320.72       .46      2.00    121.96    322.00         .46

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1182E+02 EXCESS= .0000E+00 OUTFLOW= .1259E+02 BASIN STORAGE= .2443E-03 PERCENT ERROR=  -6.5

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
   10.1  MANE        2.00      43.29    365.36       .15      2.00     42.68    366.00         .15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3800E+01 EXCESS= .0000E+00 OUTFLOW= .4081E+01 BASIN STORAGE= .2441E-03 PERCENT ERROR=  -7.4

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
   10.1  MANE        2.05       .14    464.52       .00      2.00       .14    464.00         .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3152E-01 EXCESS= .0000E+00 OUTFLOW= .3211E-01 BASIN STORAGE= .2235E-03 PERCENT ERROR=  -2.6

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
   10.1  MANE        2.05       .08    507.05       .00      2.00       .08    508.00         .00

TINUITY SUMMARY (AC-FT) - INFLOW= .2020E-01 EXCESS= .0000E+00 OUTFLOW= .2023E-01 BASIN STORAGE= .2263E-03 PERCENT ERROR=  -1.3
```

```
FOR STORM = 1  STORM AREA (SQ MI) =        .01
   11A.1  MANE        2.00    144.79    323.29       .62      2.00    143.01    324.00        .62

NTINUITY SUMMARY (AC-FT) - INFLOW= .1985E+02 EXCESS= .0000E+00 OUTFLOW= .1994E+02 BASIN STORAGE= .1559E-03 PERCENT ERROR=   -.5

FOR STORM = 2  STORM AREA (SQ MI) =        .50
   11A.1  MANE        2.00    138.84    325.86       .61      2.00    138.49    326.00        .61

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1916E+02 EXCESS= .0000E+00 OUTFLOW= .1962E+02 BASIN STORAGE= .1803E-03 PERCENT ERROR=  -2.4

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
   11A.1  MANE         .77    101.63    266.97       .32      2.00    100.66    268.00        .32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1003E+02 EXCESS= .0000E+00 OUTFLOW= .1027E+02 BASIN STORAGE= .2562E-03 PERCENT ERROR=  -2.4

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
   11A.1  MANE         .77     76.07    272.30       .16      2.00     75.79    272.00        .16

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5002E+01 EXCESS= .0000E+00 OUTFLOW= .5185E+01 BASIN STORAGE= .2239E-03 PERCENT ERROR=  -3.7

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
   11A.1  MANE         .70     46.97    284.53       .11      2.00     45.89    286.00        .11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3335E+01 EXCESS= .0000E+00 OUTFLOW= .3476E+01 BASIN STORAGE= .2258E-03 PERCENT ERROR=  -4.2

FOR STORM = 1  STORM AREA (SQ MI) =        .01
    6.3  MANE         .72     17.80    257.99      1.07      2.00     17.79    258.00       1.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9122E+00 EXCESS= .0000E+00 OUTFLOW= .9145E+00 BASIN STORAGE= .2248E-07 PERCENT ERROR=   -.3

FOR STORM = 2  STORM AREA (SQ MI) =        .50
    6.3  MANE         .75     17.50    258.45      1.06      2.00     17.26    260.00       1.07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8984E+00 EXCESS= .0000E+00 OUTFLOW= .9069E+00 BASIN STORAGE= .2143E-07 PERCENT ERROR=   -.9

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
    6.3  MANE         .85     11.22    265.63       .73      2.00     11.20    266.00        .73

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6129E+00 EXCESS= .0000E+00 OUTFLOW= .6235E+00 BASIN STORAGE= .2086E-07 PERCENT ERROR=  -1.7

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
    6.3  MANE         .78      6.88    275.91       .41      2.00      6.86    276.00        .41

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3421E+00 EXCESS= .0000E+00 OUTFLOW= .3494E+00 BASIN STORAGE= .2274E-07 PERCENT ERROR=  -2.1

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
    6.3  MANE        2.00       .00    301.98       .00      2.00       .00    302.00        .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3584E-03 EXCESS= .0000E+00 OUTFLOW= .3620E-03 BASIN STORAGE= .1507E-07 PERCENT ERROR=  -1.0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
    8.1  MANE        1.41     51.46    263.89      1.25      2.00     51.34    264.00       1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2517E+01 EXCESS= .0000E+00 OUTFLOW= .2541E+01 BASIN STORAGE= .7332E-06 PERCENT ERROR=  -1.0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
    8.1  MANE        1.43     49.77    264.06      1.24      2.00     49.38    264.00       1.24
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2484E+01 EXCESS= .0000E+00 OUTFLOW= .2513E+01 BASIN STORAGE= .6603E-06 PERCENT ERROR=  -1.2

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
            8.1  MANE        2.00     33.95    272.05      1.02      2.00     33.95    272.00        1.02

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2025E+01 EXCESS= .0000E+00 OUTFLOW= .2066E+01 BASIN STORAGE= .6927E-06 PERCENT ERROR=  -2.1

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
            8.1  MANE        1.97     20.91    284.95       .75      2.00     20.70    284.00         .75

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1506E+01 EXCESS= .0000E+00 OUTFLOW= .1529E+01 BASIN STORAGE= .6554E-06 PERCENT ERROR=  -1.6

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
            8.1  MANE         .74     10.90    287.03       .39      2.00     10.79    286.00         .38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7398E+00 EXCESS= .0000E+00 OUTFLOW= .7822E+00 BASIN STORAGE= .6222E-06 PERCENT ERROR=  -5.7

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
            8.2  MANE         .77     26.70    341.92       .34      2.00     26.66    342.00         .34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2030E+01 EXCESS= .0000E+00 OUTFLOW= .2053E+01 BASIN STORAGE= .1329E-06 PERCENT ERROR=  -1.1

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
            8.2  MANE         .65     25.74    343.47       .32      2.00     25.50    344.00         .32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1929E+01 EXCESS= .0000E+00 OUTFLOW= .1949E+01 BASIN STORAGE= .1110E-06 PERCENT ERROR=  -1.0

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
            8.2  MANE         .76      2.30    467.85       .02      2.00      2.30    468.00         .02

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1436E+00 EXCESS= .0000E+00 OUTFLOW= .1506E+00 BASIN STORAGE= .8816E-07 PERCENT ERROR=  -4.9

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
            8.2  MANE        2.00       .04    305.33       .00      2.00       .04    304.00         .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6060E-02 EXCESS= .0000E+00 OUTFLOW= .6059E-02 BASIN STORAGE= .8061E-07 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
            8.2  MANE        2.00       .02    311.89       .00      2.00       .02    312.00         .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3832E-02 EXCESS= .0000E+00 OUTFLOW= .3834E-02 BASIN STORAGE= .7610E-07 PERCENT ERROR=   -.1

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
            9.1  MANE        1.05     50.92    269.55       .46      2.00     50.41    270.00         .46

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5282E+01 EXCESS= .0000E+00 OUTFLOW= .5305E+01 BASIN STORAGE= .2527E-05 PERCENT ERROR=   -.4

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
            9.1  MANE        1.06     49.23    269.69       .44      2.00     49.10    270.00         .44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5074E+01 EXCESS= .0000E+00 OUTFLOW= .5108E+01 BASIN STORAGE= .2788E-05 PERCENT ERROR=   -.7

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
            9.1  MANE        1.72     33.93    276.95       .19      2.00     33.69    276.00         .19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2221E+01 EXCESS= .0000E+00 OUTFLOW= .2228E+01 BASIN STORAGE= .2346E-05 PERCENT ERROR=   -.3

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
            9.1  MANE        2.00     20.66    290.44       .14      2.00     20.42    290.00         .14
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1539E+01 EXCESS= .0000E+00 OUTFLOW= .1576E+01 BASIN STORAGE= .1995E-05 PERCENT ERROR=  -2.4

        FOR STORM = 5  STORM AREA (SQ MI) =       90.00
           9.1  MANE          .50     10.54    298.07       .07      2.00     10.20    300.00         .07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7813E+00 EXCESS= .0000E+00 OUTFLOW= .7769E+00 BASIN STORAGE= .2814E-05 PERCENT ERROR=    .6

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
          12A.1  MANE         1.16    103.92    285.18       .45      2.00    103.43    284.00         .45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8029E+01 EXCESS= .0000E+00 OUTFLOW= .8047E+01 BASIN STORAGE= .2276E-05 PERCENT ERROR=   -.2

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
          12A.1  MANE         1.00    105.74    284.18       .43      2.00     99.86    286.00         .43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7709E+01 EXCESS= .0000E+00 OUTFLOW= .7729E+01 BASIN STORAGE= .2292E-05 PERCENT ERROR=   -.3

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
          12A.1  MANE         1.49     33.54    280.00       .17      2.00     33.54    280.00         .16

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2968E+01 EXCESS= .0000E+00 OUTFLOW= .2977E+01 BASIN STORAGE= .2129E-05 PERCENT ERROR=   -.3

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
          12A.1  MANE         1.70     20.44    293.49       .09      2.00     20.40    294.00         .09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1585E+01 EXCESS= .0000E+00 OUTFLOW= .1602E+01 BASIN STORAGE= .2167E-05 PERCENT ERROR=  -1.1

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
          12A.1  MANE          .66     10.13    305.65       .04      2.00     10.06    306.00         .04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7895E+00 EXCESS= .0000E+00 OUTFLOW= .8011E+00 BASIN STORAGE= .3149E-05 PERCENT ERROR=  -1.5

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
          11B.1  MANE          .83    149.11    285.80       .50      2.00    148.39    286.00         .50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1205E+02 EXCESS= .0000E+00 OUTFLOW= .1205E+02 BASIN STORAGE= .2680E-05 PERCENT ERROR=    .0

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
          11B.1  MANE          .88    143.43    286.56       .49      2.00    142.94    286.00         .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1163E+02 EXCESS= .0000E+00 OUTFLOW= .1164E+02 BASIN STORAGE= .2555E-05 PERCENT ERROR=   -.1

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
          11B.1  MANE         1.06     92.65    280.58       .22      2.00     91.67    280.00         .22

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5340E+01 EXCESS= .0000E+00 OUTFLOW= .5376E+01 BASIN STORAGE= .2629E-05 PERCENT ERROR=   -.7

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
          11B.1  MANE         1.36     31.53    311.45       .10      2.00     31.04    312.00         .10

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2339E+01 EXCESS= .0000E+00 OUTFLOW= .2353E+01 BASIN STORAGE= .2610E-05 PERCENT ERROR=   -.6

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
          11B.1  MANE          .64     10.02    310.78       .03      2.00      9.96    310.00         .03

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8117E+00 EXCESS= .0000E+00 OUTFLOW= .8200E+00 BASIN STORAGE= .4011E-05 PERCENT ERROR=  -1.0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
           RSDL2  MANE         1.18    459.30    263.60       .58      2.00    450.34    264.00         .58
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1578E+02 EXCESS= .0000E+00 OUTFLOW= .1577E+02 BASIN STORAGE= .1599E-03 PERCENT ERROR=    .1

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
           RSDL2  MANE        1.18    453.56    263.16       .57      2.00    447.58    264.00        .57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1535E+02 EXCESS= .0000E+00 OUTFLOW= .1534E+02 BASIN STORAGE= .1577E-03 PERCENT ERROR=    .1

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
           RSDL2  MANE        1.51    131.28    284.19       .29      2.00    130.32    284.00        .29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7895E+01 EXCESS= .0000E+00 OUTFLOW= .7893E+01 BASIN STORAGE= .1593E-03 PERCENT ERROR=    .0

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
           RSDL2  MANE        2.00     32.27    278.00       .09      2.00     32.27    278.00        .09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2397E+01 EXCESS= .0000E+00 OUTFLOW= .2398E+01 BASIN STORAGE= .1626E-03 PERCENT ERROR=    .0

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
           RSDL2  MANE        2.00     13.66    276.00       .03      2.00     13.66    276.00        .03

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7969E+00 EXCESS= .0000E+00 OUTFLOW= .7970E+00 BASIN STORAGE= .1576E-03 PERCENT ERROR=    .0

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
            R89E  MANE        1.81    200.94    261.21      5.31      2.00    200.62    260.00       5.31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1279E+02 EXCESS= .0000E+00 OUTFLOW= .1274E+02 BASIN STORAGE= .2034E-03 PERCENT ERROR=    .4

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
            R89E  MANE        1.82    200.11    261.55      5.26      2.00    199.89    260.00       5.27

TINUITY SUMMARY (AC-FT) - INFLOW= .1267E+02 EXCESS= .0000E+00 OUTFLOW= .1263E+02 BASIN STORAGE= .2215E-03 PERCENT ERROR=    .4

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
            R89E  MANE        1.85    184.93    264.38      4.73      2.00    184.72    264.00       4.73

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1139E+02 EXCESS= .0000E+00 OUTFLOW= .1134E+02 BASIN STORAGE= .2276E-03 PERCENT ERROR=    .4

        FOR STORM = 4  STORM AREA (SQ MI) =      16.00
            R89E  MANE        1.98    130.06    266.66      3.22      2.00    129.37    268.00       3.22

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7755E+01 EXCESS= .0000E+00 OUTFLOW= .7728E+01 BASIN STORAGE= .2277E-03 PERCENT ERROR=    .3

        FOR STORM = 5  STORM AREA (SQ MI) =      90.00
            R89E  MANE        2.00     37.50    290.00      1.19      2.00     37.50    290.00       1.19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2853E+01 EXCESS= .0000E+00 OUTFLOW= .2849E+01 BASIN STORAGE= .2350E-03 PERCENT ERROR=    .2

        FOR STORM = 1  STORM AREA (SQ MI) =        .01
           R87BP  MANE        2.00     22.41    236.00       .15      2.00     22.41    236.00        .15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4727E+01 EXCESS= .0000E+00 OUTFLOW= .4727E+01 BASIN STORAGE= .1738E-03 PERCENT ERROR=    .0

        FOR STORM = 2  STORM AREA (SQ MI) =        .50
           R87BP  MANE        2.00     22.48    236.00       .15      2.00     22.48    236.00        .15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4716E+01 EXCESS= .0000E+00 OUTFLOW= .4716E+01 BASIN STORAGE= .1732E-03 PERCENT ERROR=    .0

        FOR STORM = 3  STORM AREA (SQ MI) =       2.80
```

```
R87BP  MANE        2.00     22.38    232.00       .16      2.00     22.38    232.00         .16

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5007E+01 EXCESS= .0000E+00 OUTFLOW= .5007E+01 BASIN STORAGE= .1658E-03 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
R87BP  MANE        2.00     22.39    236.00       .14      2.00     22.39    236.00         .14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4221E+01 EXCESS= .0000E+00 OUTFLOW= .4221E+01 BASIN STORAGE= .1570E-03 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
R87BP  MANE        2.00     22.11    248.00       .12      2.00     22.11    248.00         .12

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3649E+01 EXCESS= .0000E+00 OUTFLOW= .3649E+01 BASIN STORAGE= .1778E-03 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
R87BA  MANE        1.38    117.63    302.74       .99      2.00    117.62    304.00         .99

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3198E+02 EXCESS= .0000E+00 OUTFLOW= .3198E+02 BASIN STORAGE= .1358E-03 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
R87BA  MANE        1.38    116.61    303.27       .97      2.00    116.60    304.00         .97

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3142E+02 EXCESS= .0000E+00 OUTFLOW= .3142E+02 BASIN STORAGE= .1366E-03 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
R87BA  MANE        1.45     93.71    311.04       .68      2.00     93.70    310.00         .68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2190E+02 EXCESS= .0000E+00 OUTFLOW= .2190E+02 BASIN STORAGE= .1362E-03 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
R87BA  MANE        1.54     67.74    305.65       .37      2.00     67.73    304.00         .37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1196E+02 EXCESS= .0000E+00 OUTFLOW= .1196E+02 BASIN STORAGE= .1382E-03 PERCENT ERROR=    .0

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
R87BA  MANE        1.85     27.76    310.01       .13      2.00     27.76    310.00         .13

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4350E+01 EXCESS= .0000E+00 OUTFLOW= .4350E+01 BASIN STORAGE= .1366E-03 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
R83SD  MANE         .43     65.60    259.81       .10      2.00     65.60    260.00         .10

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4490E+01 EXCESS= .0000E+00 OUTFLOW= .4491E+01 BASIN STORAGE= .4603E-07 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
R83SD  MANE         .44     64.70    260.20       .10      2.00     64.69    260.00         .10

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4433E+01 EXCESS= .0000E+00 OUTFLOW= .4434E+01 BASIN STORAGE= .3959E-07 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
R83SD  MANE         .53     35.92    266.18       .08      2.00     35.92    266.00         .08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3285E+01 EXCESS= .0000E+00 OUTFLOW= .3285E+01 BASIN STORAGE= .5071E-07 PERCENT ERROR=    .0

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
R83SD  MANE         .58     20.37    267.01       .05      2.00     20.36    268.00         .05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2345E+01 EXCESS= .0000E+00 OUTFLOW= .2345E+01 BASIN STORAGE= .4763E-07 PERCENT ERROR=    .0
```

```
FOR STORM = 5  STORM AREA (SQ MI) =      90.00
   R83SD  MANE          .62     12.17    267.76       .03      2.00     12.17    268.00        .03

NTINUITY SUMMARY (AC-FT) - INFLOW= .1453E+01 EXCESS= .0000E+00 OUTFLOW= .1453E+01 BASIN STORAGE= .4702E-07 PERCENT ERROR=    .0

FOR STORM = 1  STORM AREA (SQ MI) =        .01
    R91  MANE         2.00       .00       .00       .00      2.00       .00    310.00        .00

FOR STORM = 2  STORM AREA (SQ MI) =        .50
    R91  MANE         2.00       .00       .00       .00      2.00       .00    310.00        .00

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
    R91  MANE         2.00       .00       .00       .00      2.00       .00    310.00        .00

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
    R91  MANE         2.00       .00       .00       .00      2.00       .00    310.00        .00

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
    R91  MANE         2.00       .00       .00       .00      2.00       .00    310.00        .00

FOR STORM = 1  STORM AREA (SQ MI) =        .01
  RN11L5  MANE         2.00     82.56    252.00      1.74      2.00     82.56    252.00       1.74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4846E+01 EXCESS= .0000E+00 OUTFLOW= .4830E+01 BASIN STORAGE= .3032E-03 PERCENT ERROR=    .3

FOR STORM = 2  STORM AREA (SQ MI) =        .50
  RN11L5  MANE         2.00     81.90    252.00      1.72      2.00     81.90    252.00       1.72

TINUITY SUMMARY (AC-FT) - INFLOW= .4799E+01 EXCESS= .0000E+00 OUTFLOW= .4783E+01 BASIN STORAGE= .3016E-03 PERCENT ERROR=    .3

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
  RN11L5  MANE         2.00     51.23    254.00      1.45      2.00     51.23    254.00       1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4038E+01 EXCESS= .0000E+00 OUTFLOW= .4032E+01 BASIN STORAGE= .2802E-03 PERCENT ERROR=    .1

FOR STORM = 4  STORM AREA (SQ MI) =      16.00
  RN11L5  MANE         2.00     37.33    254.00      1.16      2.00     37.33    254.00       1.16

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3228E+01 EXCESS= .0000E+00 OUTFLOW= .3224E+01 BASIN STORAGE= .2917E-03 PERCENT ERROR=    .1

FOR STORM = 5  STORM AREA (SQ MI) =      90.00
  RN11L5  MANE         2.00     22.26    258.00       .77      2.00     22.26    258.00        .77

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2125E+01 EXCESS= .0000E+00 OUTFLOW= .2123E+01 BASIN STORAGE= .3014E-03 PERCENT ERROR=    .1

FOR STORM = 1  STORM AREA (SQ MI) =        .01
     RPPSD  MANE          .93    289.09    261.44      4.80      2.00    288.52    262.00       4.80

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4714E+02 EXCESS= .0000E+00 OUTFLOW= .4714E+02 BASIN STORAGE= .1226E-05 PERCENT ERROR=    .0

FOR STORM = 2  STORM AREA (SQ MI) =        .50
     RPPSD  MANE         1.03    286.50    260.71      4.73      2.00    285.73    262.00       4.73

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4643E+02 EXCESS= .0000E+00 OUTFLOW= .4644E+02 BASIN STORAGE= .1226E-05 PERCENT ERROR=    .0

FOR STORM = 3  STORM AREA (SQ MI) =       2.80
     RPPSD  MANE         1.00    209.67    266.45      3.52      2.00    209.33    266.00       3.52
```

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3450E+02 EXCESS= .0000E+00 OUTFLOW= .3450E+02 BASIN STORAGE= .1226E-05 PERCENT ERROR=    .0

     FOR STORM = 4  STORM AREA (SQ MI) =      16.00
       RPPSD  MANE        1.08    148.04    274.21      2.21      2.00    147.98    274.00        2.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2165E+02 EXCESS= .0000E+00 OUTFLOW= .2165E+02 BASIN STORAGE= .1226E-05 PERCENT ERROR=    .0

     FOR STORM = 5  STORM AREA (SQ MI) =      90.00
       RPPSD  MANE        1.26     88.55    268.93      1.03      2.00     87.91    270.00        1.03

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1012E+02 EXCESS= .0000E+00 OUTFLOW= .1013E+02 BASIN STORAGE= .1226E-05 PERCENT ERROR=    .0

     FOR STORM = 1  STORM AREA (SQ MI) =        .01
      RCPIPE  MANE        2.00     72.34    271.99       .37      2.00     72.32    272.00         .37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4521E+01 EXCESS= .0000E+00 OUTFLOW= .4543E+01 BASIN STORAGE= .3236E-06 PERCENT ERROR=   -.5

     FOR STORM = 2  STORM AREA (SQ MI) =        .50
      RCPIPE  MANE        2.00     71.22    272.21       .37      2.00     71.11    272.00         .37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4469E+01 EXCESS= .0000E+00 OUTFLOW= .4491E+01 BASIN STORAGE= .4049E-06 PERCENT ERROR=   -.5

     FOR STORM = 3  STORM AREA (SQ MI) =       2.80
      RCPIPE  MANE        2.00     41.70    263.97       .30      2.00     41.70    264.00         .30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3653E+01 EXCESS= .0000E+00 OUTFLOW= .3663E+01 BASIN STORAGE= .3105E-06 PERCENT ERROR=   -.3

     FOR STORM = 4  STORM AREA (SQ MI) =      16.00
      RCPIPE  MANE        2.00     35.37    264.92       .22      2.00     35.35    264.00         .22

INUITY SUMMARY (AC-FT) - INFLOW= .2674E+01 EXCESS= .0000E+00 OUTFLOW= .2683E+01 BASIN STORAGE= .3307E-06 PERCENT ERROR=   -.3

     FOR STORM = 5  STORM AREA (SQ MI) =      90.00
      RCPIPE  MANE        2.00     18.22    276.30       .10      2.00     18.18    276.00         .10

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1254E+01 EXCESS= .0000E+00 OUTFLOW= .1257E+01 BASIN STORAGE= .3434E-06 PERCENT ERROR=   -.2

     FOR STORM = 1  STORM AREA (SQ MI) =        .01
       OUTLET  MANE        2.32     62.10    292.89       .59      2.00     61.48    294.00         .59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4719E+02 EXCESS= .0000E+00 OUTFLOW= .4715E+02 BASIN STORAGE= .4166E-01 PERCENT ERROR=    .0

     FOR STORM = 2  STORM AREA (SQ MI) =        .50
       OUTLET  MANE        2.33     60.79    293.31       .58      2.00     60.45    294.00         .58

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4641E+02 EXCESS= .0000E+00 OUTFLOW= .4637E+02 BASIN STORAGE= .3893E-01 PERCENT ERROR=    .0

     FOR STORM = 3  STORM AREA (SQ MI) =       2.80
       OUTLET  MANE        1.87     44.94    305.74       .41      2.00     44.84    304.00         .41

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3276E+02 EXCESS= .0000E+00 OUTFLOW= .3273E+02 BASIN STORAGE= .2917E-01 PERCENT ERROR=    .0

     FOR STORM = 4  STORM AREA (SQ MI) =      16.00
       OUTLET  MANE        2.15     27.11    329.19       .23      2.00     27.06    330.00         .23

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1826E+02 EXCESS= .0000E+00 OUTFLOW= .1823E+02 BASIN STORAGE= .2364E-01 PERCENT ERROR=    .0

     FOR STORM = 5  STORM AREA (SQ MI) =      90.00
```

OUTLET	MANE	2.02	11.50	393.81	.07	2.00	11.50	394.00	.07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5908E+01 EXCESS= .0000E+00 OUTFLOW= .5896E+01 BASIN STORAGE= .1429E-01 PERCENT ERROR= .0

SUMMARY OF DAM OVERTOPPING/BREACH ANALYSIS FOR STATION B4
(PEAKS SHOWN ARE FOR INTERNAL TIME STEP USED DURING BREACH FORMATION)

PLAN 1 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	.00	3.00	4.00
STORAGE	0.	28.	37.
OUTFLOW	0.	121.	274.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	.56	.00	5.	13.	.00	5.97	.00

PLAN 2 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	.00	3.00	4.00
STORAGE	0.	28.	37.
OUTFLOW	0.	121.	274.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	.55	.00	5.	12.	.00	5.97	.00

PLAN 3 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	.00	3.00	4.00
STORAGE	0.	28.	37.
OUTFLOW	0.	121.	274.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	.39	.00	3.	9.	.00	6.17	.00

PLAN 4 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	.00	3.00	4.00
STORAGE	0.	28.	37.
OUTFLOW	0.	121.	274.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	.22	.00	2.	5.	.00	6.47	.00

PLAN 5 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	.00	3.00	4.00
STORAGE	0.	28.	37.
OUTFLOW	0.	121.	274.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	.00	.00	0.	0.	.00	6.13	.00

*** NORMAL END OF HEC-1 ***