

Historic - Photos & Newspaper Articles Regarding Floods & Other Events in Arizona from Public Displays

Various Photographers and Newspapers

1996

007.203

0	Year	Title or Newspaper Article Title	x Photograph's Key Words - Event
1	1992 August 24	Sunset Dam, Wickenburg	x Photograph - Containing Water
2	1972 June 22	Arizona Canal / 38th Street and Camelback Road	x Photograph - Overtopped Canal Near Home
3	1993 January 21	ACDC W. of 43rd Avenue	x Photograph - Flooding
4	1994 January 21	ACDC W. of 43rd Avenue	x Photograph - Flooding
5	1930's Date Unknown	Gilbert	x Photograph - Downtown Flooding
6	1978 March 4	Cave Creek and Arizona Canal	x Photograph - Spillways
7	1978 March 4	Holly Acres / Gila River / 123rd Avenue and Southern	x Photograph - Flooding
8	1987 Date Unknown	FCD Advisory Board	x Photograph - Group Picture
9	1992 July 24	Grand Canal and Indian School Road	x Photograph - Floodwaters Measures in Feet in West Phoenix Area
10	1993 July 24	Grand Canal	x Photograph - Back Yard Flooded as Stormwater Poned Up Against the Grand Canal in West Phoenix
11	1993 July 24	Indian Bend Wash	x Photograph - Flooding Looking Upstream from Shea Boulevard West of 56th Street
12	1997 Date Unknown	32nd Street and Missouri	x Photograph - Shows How High the Floodwaters Rose Against a House
13	1972 June 22	Arizona Canal, Vicinity of Lafayette Street	x Photograph - Looking West - Flooding
14	1990 August 14	43rd Avenue / Alta Vista Road	x Photograph - Residential Flooding
15	1963 August ??	Grand Canal and 67th Avenue	x Photograph - Residential Street Flooding
16	1990 August 15	ACDC Above Skunk Creek	x Photograph - Looking Upstream About 75th Avenue North of Greenway
17	1993 January 24	Gillespie Dam	x Photograph - 2:00 p.m. Q=65,000 cfs
18	1972 June 22	Arizona Canal / 7th Street	x Photograph - Too Much Water Would Spill into Neighborhoods as Shown Here East of 7th Street
19	1972 June 22	Dream Draw / 12th Street	x Photograph - Before Flood Control District and Corps of Engineers Built Dreamy Draw Dam
20	1972 June 22	Phoenix Downtown	x Photograph - Flooding
21	1972 June 22	I-17 / Buckeye Road	x Photograph - Freeway Underpass Flooding
22	1972 June 22	I-17 / Grant Street	x Photograph - Freeway Underpass Flooding
23	1990's Date Unknown	Agua Fria and Gila Rivers Confluence	x Photograph - Technician Examines Grasses in District Wetlands
24	1951 August 3	Litchfield Park Area	x Photograph - Storm Runoff Inundates Farm Areas
25	1951 August 3	Litchfield Avenue	x Photograph - Car Stranded in Floodwaters
26	1997 Date Unknown	ACDC / Glendale	x Photograph - Floodwaters
27	1997 Date Unknown	Maricopa County Board of Supervisors	x Photograph - Group Picture
28	1980's Date Unknown	Central High School	x Photograph - Flooding
29	1980's Date Unknown	Salt River / 19th Avenue Bridge	x Photograph - looking North at South End of 19th Avenue Bridge
30	19?? Date Unknown	Historic Flooding Photo - Location & Date Unknown	x Photograph - Flooding
31	1996 April 12	Roosevelt Dam	x Photograph - Dedication
32	1967 March 17	Powerline Dam	x Photograph - Groundbreaking
33	1982 April 8	Adobe Dam	x Photograph - Dedication and Aerial Photos / Negatives
34	1972 June 22	Phoenix Downtown	x Photograph - Flooding in Alleyway Between Main Hospital Building
35	1951 August 3	Luke Air Force Base	x Photograph - Flooding
36	1951 August 30	Goodyear	x Photograph - Flooding at Western Intersection and Litchfield Avenue
37	1991 March ?	Cave Creek Sediment Basin	x Photograph - Stormwater Runoff / Outflow Tower, Channelized Cave Creek Wash into ACDC
38	1990 August 14	ACDC / 35th Avenue N. of Dunlap	x Photograph - Storm Drain / Outfall / Heavy Rains / Diverts Runoff
39	1990 August 15	ACDC / 67th Avenue S. of Greenway	x Photograph - Stormwater / This Location Flows - 4,000 cfs
40	1990 August 15	Skunk Creek / 75th Avenue N. of Greenway	x Photograph - Runoff / Some Waters from ACDC / Outfalls
41	1990 September 3	Vineyard Dam	x Photograph - Stormwater
42	1990 August 14	Southern / 43rd Avenue	x Photograph - Flooding
43	1990 August 14	Guadalupe Channel / Sossaman and Power Roads	x Photograph - Flooding
44	1990 August 14	Laveen	x Photograph - Flooding
45	1990 August 14	Rittenhouse Dam	x Photograph - Built in 1969 for Collecting Runoff

0	Year	Title or Newspaper Article Title	x Photograph's Key Words - Event
46	1980 Date Unknown	Cave Buttes Dam - Cave Creek Dam	x Photograph - Water Behind Dams
47	1992 July 25	Downpour Deluges Valley - Heavy Rains Flood Homes, Block Streets (& Pictures)	x Series of Thunderstorms, Flooding, Homes, Stranding Motorists, Knocking Out Power, Raging Currents, Pull One Couple, Car, Flooded Wash, Paradise Valley, Flash Flood Watch, Storms, Dumping, 6 Inches of Rain, 27th Avenue and Camelback Road, 6.25 Inches, 5.4 Inches, 43rd Avenue and Thomas Road, Mesa, Tempe, Apache Junction, Phoenix Sky Harbor International Airport, American Red Cross, Emergency Shelter, Phoenix, Salt River Project, Arizona Public Service, Flood-related Calls, Historic State Capitol, Cave Creek Wash, Gilbert, Ankle Deep Water, Williams Air Force Base, Pat Thompson, Retention Basin, Mesa Drive and Jensen Road, Adam Flores, Vehicle, Swept Away, Indian Bend Wash, Scottsdale, Boating, Dan Langmade
48	1992 July 25	Monsoon' Wrecks Havoc - Flooding in Valley Widespread (& Pictures)	x Heavy Rain, Record Storm, Lightening, Thunder, Swamped Homes, Businesses, Stranded Motorists, Collapsed, Roof, Knocked Out Telephone, Electricity, Water Raging, Salt River Bed, Death of Motorcyclist, Street Near 42nd and Northern Avenues Collapsed, Scattered Showers, Storm, Coffee-colored Water, Homes Awash in Water, John Clark, Maryvale Home, Originated in Northern Mexico, Light Winds, Phoenix Area, Ortega, Phoenix Police Officer, Atop His Car, Interstate 17 and Bell Road, Phoenix Fire Captain Kevin Boyle, Antics of Motorists, Refused to Heed High Water, Stranded, Matt Phillips, Spokesman for Rural/Metro Fire Department, 40th Street and Stanford Drive, Pulling Car and Passenger Out, Second Car, Washed Away, Then Rescue Passengers from Second Vehicle, Valley Vista Lane, Tatum Boulevard, Red Cross, Mary Ulrich, Spokeswoman, Mobil Feeding Units, Family-services, Downpour Collapsed 20-foot Roof Section, 2801 W. Indian School Road, Heavy Water, Closed Roads, Grand Avenue, Glendale Avenue, State Capitol, 17th Avenue and Jefferson Street, Tow Trucks, Water as Deep as Car Windows, J. Elliott Hibbs, Director, Department of Administration, Jefferson Street at 19th Avenue, Paradise Valley Drenched, Closed All Main Streets, Gilbert, Murky Brown Pools, Homeowners, 3 1/2 Feet of Water, 164th Street and Campbell Road, Mesa, Chandler, Deluge, Salt River Project, Water From Granite Reef into Salt River, Teri Morris, SRP Spokeswoman, Runoff, Storm Drains, Canals, Overflowing, Susan Fitzgerald, Spokeswoman for Maricopa County Flood Control District, Arizona Department of Public Safety, 50 Accidents, Rick Knight, Spokesman Said, Slick Streets, Death of Motorcyclist, Brian S. Ackley, Alexander Ciurana, Debbie Johnson, Phoenix Police Detective Leo Spelopoulous, Capt. David Kraig, Randa Westmark, Biltmore Investors Bank, Paul McClellan, Debbie Latimer, Boat, Floodwaters, 18th Avenue and McDowell Road, Water Sloshing, Nancy Faggan, Sandbags, Phoenix Fire, Seventh Street and Peoria Avenue, Indian School Road, 35th Avenue
48	1992 July 25	Rescued Man: 'Thank God for Adrenaline'	x Cascading Water, Toward Jason Henley's Neck, Small Branch Paloverde Tree, Flooded Arroyo, Tatum Boulevard and McDonald Drive, Paradise Valley
49	1990 August 15	More Rain Likely to Drench Valley - Flooded Streets Create Commuter Nightmares (& Pictures)	x Heavy Rains, Soak the Valley, Flooding Houses, Closing Roads, Weather Forecasts, Unstable, Moist Air Mass, Low Pressure, Moisture, National Weather Service Meteorologist Bob Wilt, Rain, Flooded Roads, Claudia Schnable, American Red Cross, Julian Thompson, North Phoenix, Drive Across, Running Waters, Skunk Creek, Pinnacle Peak Road, 35th Avenue, Car Stalls, Thompson Pulled to Safety, Car
49	1990 August 15	Monsoon Called Wettest Valley Has Seen in 6 Years	x Wettest Monsoon Season, Dumped, Rainwater, Going Strong, Puddles, Valley, Phoenix's Wettest in 6 Years, Craig Ellis, Meteorologist, National Weather Service, Shifty Winds, Creating Monsoon, Arizona
50	1963 August 17	Floods Force Scores to Flee Their Homes; Glendale Youth Killed - More Storms Predicted Here (& Picture)	x Torrents, Flood Water, Valley, Homeless, Dead, Flash Thunderstorms, U.S. Weatherman, Flood, Damage, Homes, Businesses, Northwest Phoenix, Glendale, Subdivisions, Knee-deep and Higher, Muddy, Boat, Jeep, Rescues, Globe, Prescott, Mike Leija, Electrocuted, 59th Avenue and Grand, High Voltage Pole Leakage, Storm, Sheriff's Capt. Robert Heck, Flood the Worst, 67th Avenue and Indian School, Salvation Army, Rescue Station, 32nd Avenue and Campbell, Sky Harbor, Phoenix, August Record, 3.07 Inches, 1943, Tolleson, Paradise Valley, Luke Air Force Base, 35th Avenue and West McDowell, Phoenix Post Office, Phoenix Indian School, Prescott, San Manuel, Kelvin, Wickenburg, Hassayampa River, Carefree, Scottsdale, Sunset Drive, 6300 Block, Flash Flood Inundated
50	1963 August 17	Flood Fails to Dampen Junket	x Arizona House Speaker W.B. Barkley, Glendale, Flood, Westside Area, Sky Harbor Airport

0	Year	Title or Newspaper Article Title	x Photograph's Key Words - Event
51	1993 January 11	Flood-control Measures Work 'Fantastically' in First Major Test	x New Waddell Dam, Arizona Canal Diversion Channel, Channelization, Levees, Flood-control Dams, Rain Monitors, Reinforced Bridges, Stanley Smith, Acting Chief Engineer and General Manager County's Flood Control District, Verde River, Salt River, Floods, Ravage Valley, 1978, 1979, 1980, Floods from Winter Weather, Huge Runoffs, Torrential Rains, Rivers and Washes, Water Flowing Into Valley on Way to Colorado River, Yuma, Gila River, Salt River Biggest Feeder, Verde Feeds Into Salt, Agua Fria Meets Gila, salt River Project, SRP Dams, Catch and Store Water, Roosevelt, Stewart Mountain, Horseshoe and Bartlett, Heavy Rains, Prescott, Verde Valley, Sedona, Runoff, Dan Phillips, Supervisor of Water Resources, Dick Perreault, Chief of Planning, Flood in 1980, Two Bridges Left Intact, Traffic Was a Nightmare, New Bridges, Tony de al Cruz, Street Maintenance Superintendent, Phoenix, 35th Avenue Bridge, Chuck Morfoot, Spokesman for Federal Bureau of Reclamation, Lake Pleasant, 17 Mile Stretch, Arizona Canal, 40th Street and Camelback Road to 75th Avenue and Bell Road, Skunk Creek Wash, Water From Storm Drains, Cave Buttes Dam, New River Dam, Adobe Dam, Dreamy Draw Dam, Holly
52	1972 June 34	Boil Water, Flood Areas Told (& Pictures)	x Maricopa County Health Department, Paradise Valley, Scottsdale, Flooded Areas, Boil Drinking Water, Contamination, Flooded Septic Tanks, Infiltrated Wells, Dr. Ellis D. Sox, Deputy Director, Water Samples, North, Bell Road, West, 40th Street, South, Indian School Road, East, Pima Road, Phoenix City Water, Food, Spoiled, Public Sewers, Avoid Danger, Hyperchlorinate, National Weather Service, Tornado, William Jett, Russ Kress, 16th Street and Camelback, Karen Hanson, 24th Street, Steve Ziegler, Flood Waters, 65th and Shea, Susan Parker, Sandy Berlin, Camelback and 24th Street
53	1972 June 24	Indian Bend Wash (Aerial Picture)	x Floodwaters, Indian Bend Wash, Salt River, Scottsdale, Flood's Peak
53	1972 June 24	Flood Loss in County Put at \$46 Million (& Picture)	x Glendale, City Manager Stanley Van de Putte, Mesa, Chandler, Tolleson, Litchfield Park, Phoenix, Interstates 10 and 17, Reopened, Grant Street Overpass, Dirt Accumulations, Scottsdale and Phoenix, Emergency Shelter, Salvation Army, Chuck Smith, San Francisco, Small Business Administration, John Seeley, Washington, Disaster Regions, Eloy, Maricopa, Tornados, CBA, Agricultural Crops, Gerald Lindsey, County Executive Director, Agricultural Stabilization and Conservation Service, Chandler, Queen Creek and Laveen Areas, Cotton, Hail, Farmer, Power Restored, Rebuild and Repair, Construction Industry, Hallcraft Subdivision, 62nd Street and Shea, Southern Arizona Bank, Home Improvement Loans, Storm Victims, James S. Douglas
53	1972 June 24	Family the Lost House in Flood is Swamped with Offers of Help (& Picture)	x Ruel A. Sports Family, Lost Its Home, Flood Victims, Flooded, 3 Feet of Water, Arizona Canal Broke, Mud-splattered Home, Don Gaertner, Maryvale, Flood and Tornado Victims, Mrs. Donna Frisby, Salvage Food
53	1972 June 24	Camp-outs New Life-style (& Picture)	x Mrs. Major, Without Electricity, Aaron Hecht, "Camping Out", Mr. and Mrs. Dick Robinson, Arizona Public Service Co., Replace Underground and Overhead Cables, Desert Cove
54	1980's Early 1990's Date Unknown	53rd Avenue and Glendale	x Street Flooding
55	1980's Early 1990's Date Unknown	54th Avenue and Glendale	x Street Flooding
56	1980's Early 1990's Date Unknown	55th Avenue and Glendale	x Street Flooding
57	1960's Late or 1970's Date Unknown	Downtown Phoenix	x Street Flooding
58	1960's ? Date Unknown	Old Cross Cut Canal	x Cleaned of Vegetation
59	1997 April 29	Old Cross Cut Canal - FCD 95-08	x View from Top of Thomas Road Box Looking South, Concrete Box Invert
60	1996 November 26	Old Cross Cut Canal	x Construction
61	1998 January 23	Old Cross Cut Canal - FCD 95-09	x Looking South form STA 93-00 Str B/Fill of Box Walls for the Last 150 LF IS in Progress, Looking South - Last Section of Box Culvert Completed
62	1997 August 12	Old Cross Cut Canal - FCD 95-08	x Phase II Looking North from McDowell, Phase II Transformers and Panels at Virginia and Palm Lane
63	1990 August 14	East Mesa	x Flooding in East Mesa Neighborhood on August 14, 1990 at Intersection of Glenmar and Balsam Roads
64	1990 July 24	Indian Bend Wash	x IBW in Scottsdale Flows with Stormwater Runoff from July 24, 1990. Construction of the IBW was a Cooperative Effort Between the CORPS of Engineers, the City of Scottsdale, Local Developers and the Flood Control District of Maricopa County
65	1990's Date Unknown	Queen Creek	x Earth Fissure Erosion Repair
66	1990's Date Unknown	Cave Buttes Vicinity	x Flooding

0	Year	Title or Newspaper Article Title	Photograph's Key Words - Event
67	1931 February 13	New River Bridge Looking Downstream	X Unknown Crossing in February 1931 Flood
68	1990 August 14	East Maricopa Floodway (EMF)	X Near Power and Elliott Roads Flooding
69	1993 January 9	Adobe Dam	X With Water - Aerial View
70	1993 January 9	Holly Acres Levee/ 115th Avenue / Gila River	X Holly Acres Levee at 115th and Gila River Looking at North Bank
71	1983 October 1983	Interstate 10 and the Gila River Bridge	X Collapsed During Monsoon
72	1993 January 11	Agua Fria River at Camelback Road Bridge Crossing	X Flooding
73	1967 December ??	New River West of 91st Avenue on Peoria	X Flooding - Washed Out Road
74	1990's Date Unknown	New River Dam	X Aerial Picture
75	1993 January 9	New River Dam	X Water Behind Dam
76	1993 January 9	New River Dam	X Close Up View of Water Behind Dam
77	1985 ? Date Unknown	New River Dam	X Ground View
78	1990 December 21	Salt River West of 48th Street	X ADOT Channelization (on South Bank Looking West)
79	1990's Date Unknown	Salt River	X Normal Condition and Storm Flows
80	1980 February ?	Salt River	X Flooding , Bridge Partially Collapsed
81	1993 January 9	Salt River at Mill Avenue	X Flooding , Bridge Partially Collapsed
82	1905 April 14	Salt River Looking Toward Tempe Butte	X From North End of S.P. Bridge Showing S.F. RR Bridge Wrecked in Flood of Night of April 12, 1905
83	1980's or 1990's Date Unknown	CAP East Side of Valley	X Aerial View
84	1984 Date Unknown	CAP Canal Breaks	X Break and Downstream Break
85	1984 Date Unknown	Power Road and Apache	X Flooding
86	1984 Date Unknown	102nd Street and Illini	X Flooding
87	1984 Date Unknown	72nd Street and Inverness	X Flooding
88	1984 Date Unknown	McDowell and Recker	X Flooding
89	1984 Date Unknown	96th Street and University	X Flooding
90	1984 Date Unknown	Location Not Given	X Storm Erosion
91	1993 March 12	New River - BLM Property	X SCS Emergency Work at New River Photos from 3/12/93 and 4/29/93
92	1993 March 12	New River - Downes Property	X SCS Emergency Work at New River Photos from 3/12/93 and 4/29/93
93	1990's Date Unknown	New River	X Normal Condition and Storm Flows
94	1993 January 21	New River Channel South of Olive	X Flooding
95	1990 August 15	New River Upstream of Grand Avenue	X New River is Channelized to Handel Flows from this Point South to where it Enters the Agua Fria River Near Camelback Road.
96	1974 July 11	McMicken Dam Outlet Channel at Grand Avenue	X Repairing of a Broken Sensor Tube
97	1975 March 19	McMicken Dam Catwalk 3 Miles North of Greenway	X Picture Shows the Need for Repair, Work Team, Completed, Finished Product
98	1975 March 19	McMicken Dam Catwalk 3 Miles North of Greenway	X Not Safe to Walk On, Repairs Have Been Made
99	1975 November 19	McMicken Dam Outlet Channel at Grand Avenue	X Repair Work, Grand Avenue Bridge, Before, After
100	1993 January 11	Skunk Creek at 83rd Avenue	X Top of Bridge Looking SW (Agua Fria Expressway Bridge)
101	1990's Date Unknown	Skunk Creek at I-17	X Flooding
102	1990's Date Unknown	Skunk Creek at I-17	X Flooding
103	1990's Date Unknown	Skunk Creek at I-17	X Flooding
104	1967 December ??	Skunk Creek and 83rd Avenue	X Sandbars Across 83rd Avenue South of Greenway, Car Overturned
105	May 19, 1905	Cave Creek Wash at Roosevelt Avenue	X Cave Creek Wash Flowed from the North all the Way Through Phoenix. In 1921 Cave Creek Wash Flooded the State Capitol. The ACDC will Intercept Future Flood Waters for Cave Creek at 23rd Avenue and Peoria, Carrying them Safely to Skunk Creek and Ultimately to the Gila River
106	1993 January 9	Old Cave Creek Dam	X Floodwaters, Looking East
107	1967 December ??	Cave Creek at Thunderbird	X Flooding, Washed Out Road

0	Year	Title or Newspaper Article Title	Photograph's Key Words - Event
108	1990's Date Unknown	Arizona Canal Diversion Channel Project Reach 4	X Before and After Pictures
109	1990's Date Unknown	ACDC Reach 1 West of Cactus Looking West	X Transition Site from Trapezoidal Section to Earthlined
110	1993 October 8	Arizona Canal Diversion Channel Dedication Invitation	X Dedication Invitation and North Yard Employees
111	1993 Date Unknown	Arizona Canal Diversion Channel	X Landscaping
112	1993 Date Unknown	Arizona Canal Diversion Channel	X Landscaping
113	1993 Date Unknown	Arizona Canal Diversion Channel	X Landscaping
114	1972 June 22	Arizona Canal	X Map Showing Flooded Areas after Breaks in Canal
115	1990's Date Unknown	10th Street Wash	X Echo Lane, Steep and Unprotected Side Slopes, Capistrano Homes Development, Reach is Above 100-Year FEMA Floodplain and Has Capacity of Convey 100-year Runoff Within Banks
116	1990's Date Unknown	10th Street Wash	X North of Mountain View, Thick Vegetation in the Wash, Diana Avenue, Erosion on the Banks and Channel Bottom from High Velocities
117	1990's Date Unknown	10th Street Wash	X North of Mountain View, East Cell of CBC at the Crossing, Debris Gets Transported in the Wash and the Sediment that is Deposited
118	1990 August 14	43rd Avenue Bridge Across ACDC	X Flood Waters
119	1993 January 21	ACDC West of Thunderbird	X Flooding
120	1943 August 3	7th Avenue South of Northern	X Flooding Vicinity of Arizona Canal, Lateral 12 Spillway Flood Waters form Break East of Lat. 12 - 1:00
121	2000 September 1	Wickenburg	X Flooding
122	1972 January 1	Phoenix - Vicinity of McDowell and 12th Street	X Flooding
123	2000 August 8	ACDC	X After Flooding
124	1998 February 24	Spook Hill	X Flooding
125	2000 July 26	Indian Bend Wash - McKellips Lake Park	X Picture of Park
126	1959 March 23	Arizona Governor Paul Fannin Signs Senate Bill 204	X Empowers Arizona Counties to Establish Flood Control Districts, Nick Udall, Attorney and Former Phoenix Mayor, Fred Glendening, Maricopa County Engineer, Henry "Hank" Shipley, Salt River Project, Governor Fannin, Sam Tucker, Phoenix City Engineer
127	1959 Date Unknown	Goodyear Blimp	X Goodyear Blimp, Henry "Hank" Shipley, Salt River Project, Unknown Person
128	2007 May 31	Apache Lake	X Picture Taken from Apache Trail
			X

Sunso8 Dam - Wickensburg

8/24/92

#1



#2



June 22, 1972 -- Home near 38th St. and Camelback Rd.

where the Arizona Canal overtopped.

#3

ACDC W. of 43rd Ave

January 21, 1993



#4

ACOC W. of 43rd Ave.

JANUARY 21, 1993



#5 Gilbert Flooding

1930's



#6 CAVE CREEK + AZ Canal
Spill ways
March 4, 1978



North

March 4, 1978 -- The Gila River floods Holly Acres at 123rd Ave. and Southern.



7
#



#8 F&D Advisory Board



#9

July 24, 1992

Floodwaters were measured in feet in this west Phoenix area near the Grand Canal and Indian School Road.

#10

July 24, 1992



Backyards flooded as stormwater ponded up against the Grand Canal in west Phoenix on July 24, 1992.

July 24, 1992

#11



Indian Bend Wash lives up to its name on July 24, 1992, as seen here looking upstream from Shea Boulevard west of 56th Street.

7 24 '92

#12

32nd STREET +
Missouri

199? DATE UNKNOWN



AZ. Canal, vicinity
of Lafayette St.

Looking W.

6/22/72

#13



#14
4300 Ave / ALTA VISTA RD.
(S. of Southern)
Residential Flooding
August 14, 1990



#15



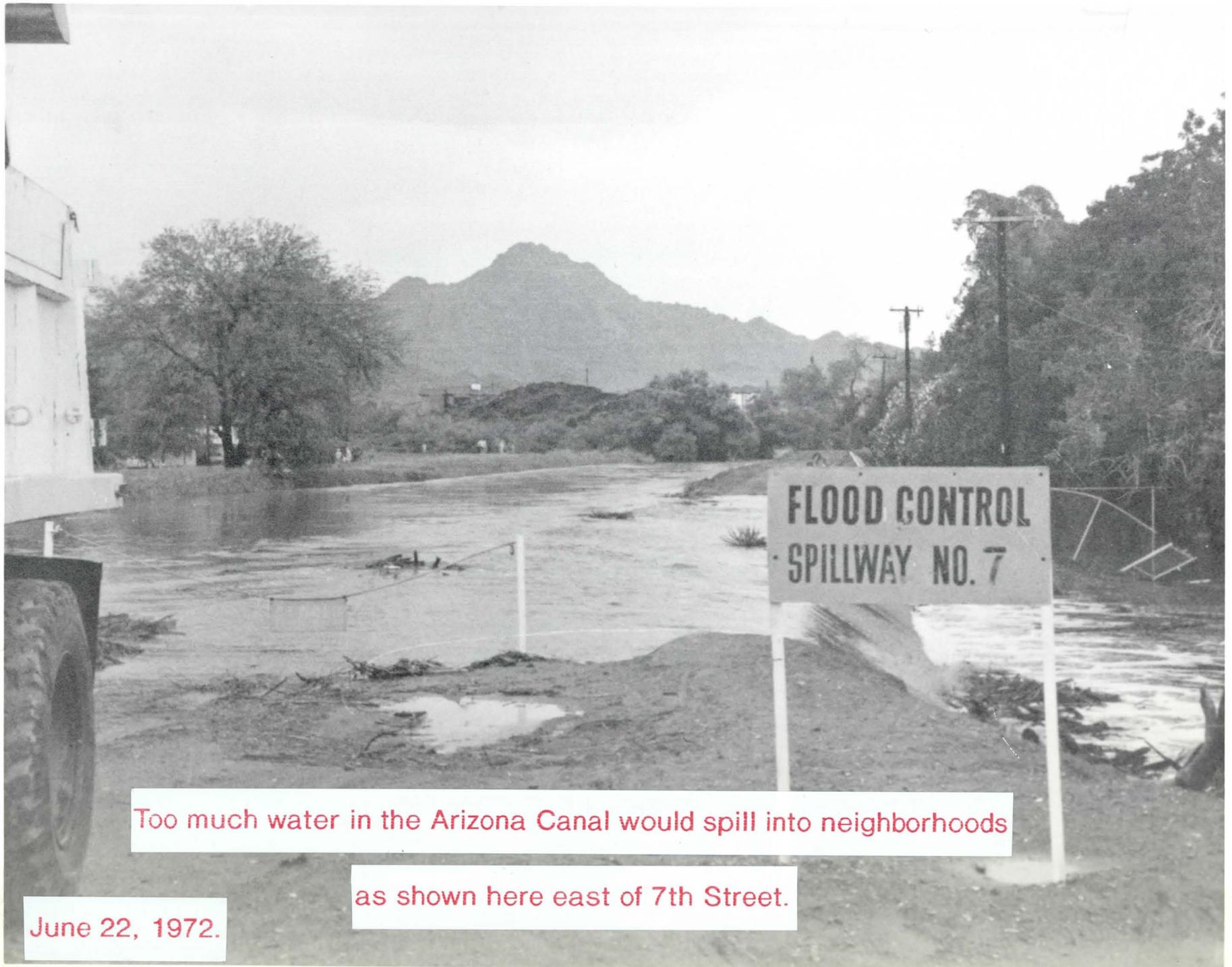
August 1963 -- Vicinity of 67th Ave. and Grand Canal

(#16) ACDC above Shunk Creek
Looking up stream about
75th Ave. N. of Greenway
August 15, 1990



#17 Gillespie DAM 2:00pm
January 24, 1993
Q = 65,000 CFS



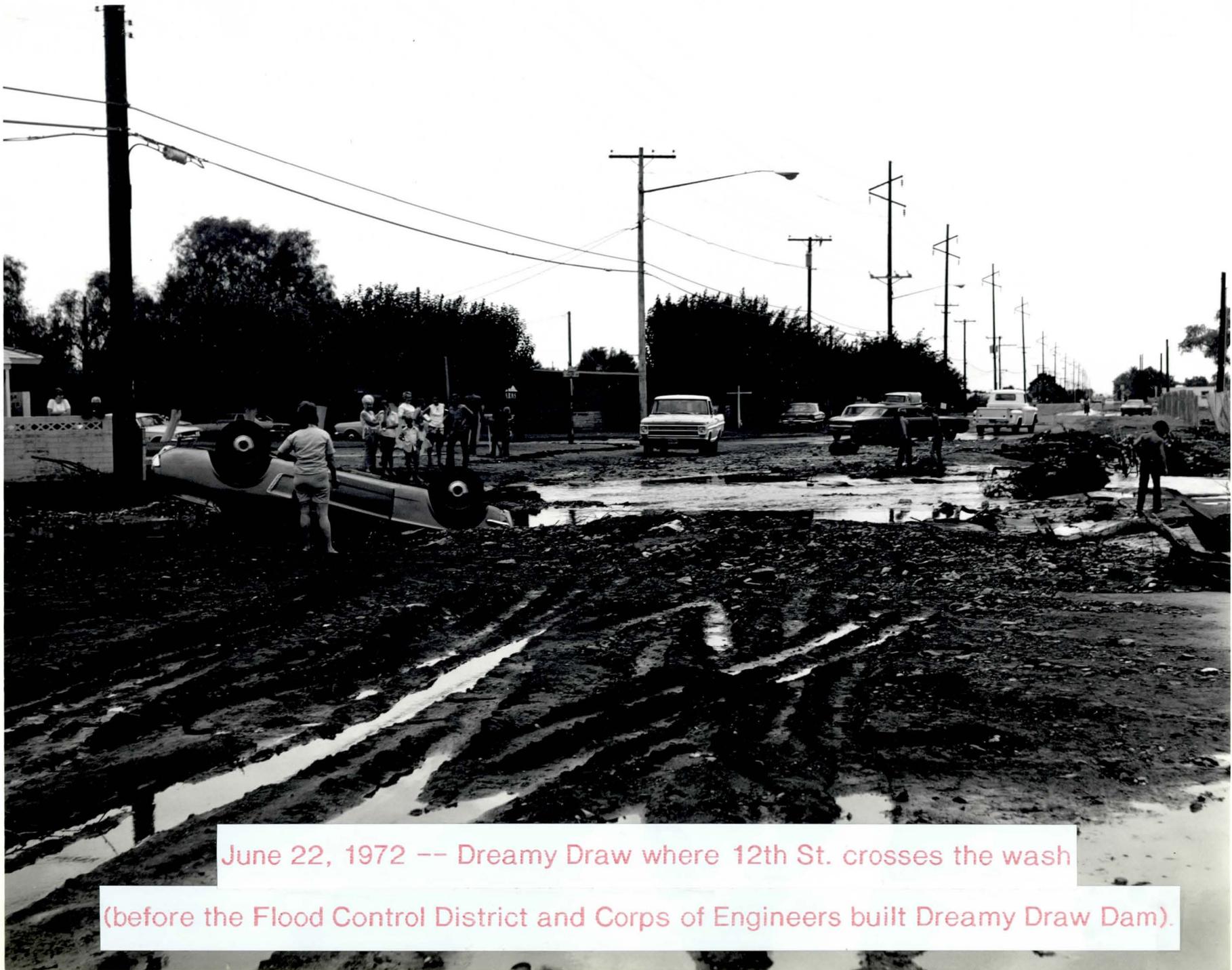


Too much water in the Arizona Canal would spill into neighborhoods

as shown here east of 7th Street.

June 22, 1972.

81#



June 22, 1972 -- Dreamy Draw where 12th St. crosses the wash

(before the Flood Control District and Corps of Engineers built Dreamy Draw Dam).

#19

#20



June 22, 1972 -- Downtown Phoenix.



June 22, 1972 -- Flooded I-17 looking south toward Buckeye Rd. overpass.

#21

#22



June 22,

Picture taken in July 1972 near downtown Phoenix, Arizona that shows the flooding of Interstate 17, looking north towards Grant Street exit.

JUNE 22,
Picture taken in July 1972 near downtown Phoenix, Arizona that shows the flooding of Interstate 17, looking south towards Buckeye Road. The pump station at near left is covered by the flood waters.



A soil technician examines grasses in a District wetlands area near the confluence of the Agua Fria and Gila Rivers. Federal law mandates that whenever a project disturbs wildlife habitat, the agency must mitigate that disturbance, sometimes by creating habitat elsewhere. Some 3200 trees were planted by the District, and we will nurture and operate the site.



#23
About 1990's

#24 1951 August 3

#24



Storm runoff inundates farm areas throughout the Litchfield Park area.

54

#25

1951 August 3



A car is stranded on Litchfield Avenue.
(Range 3N-1W Section 3 and 4)

(#26) 199? ACOC/Glendale



#27 199? Board of Supervisors



#28
1980's



#29

SALT RIVER /
19th Avenue Bridge
Looking North at
South End of Bridge
1980's DATE UNKNOWN

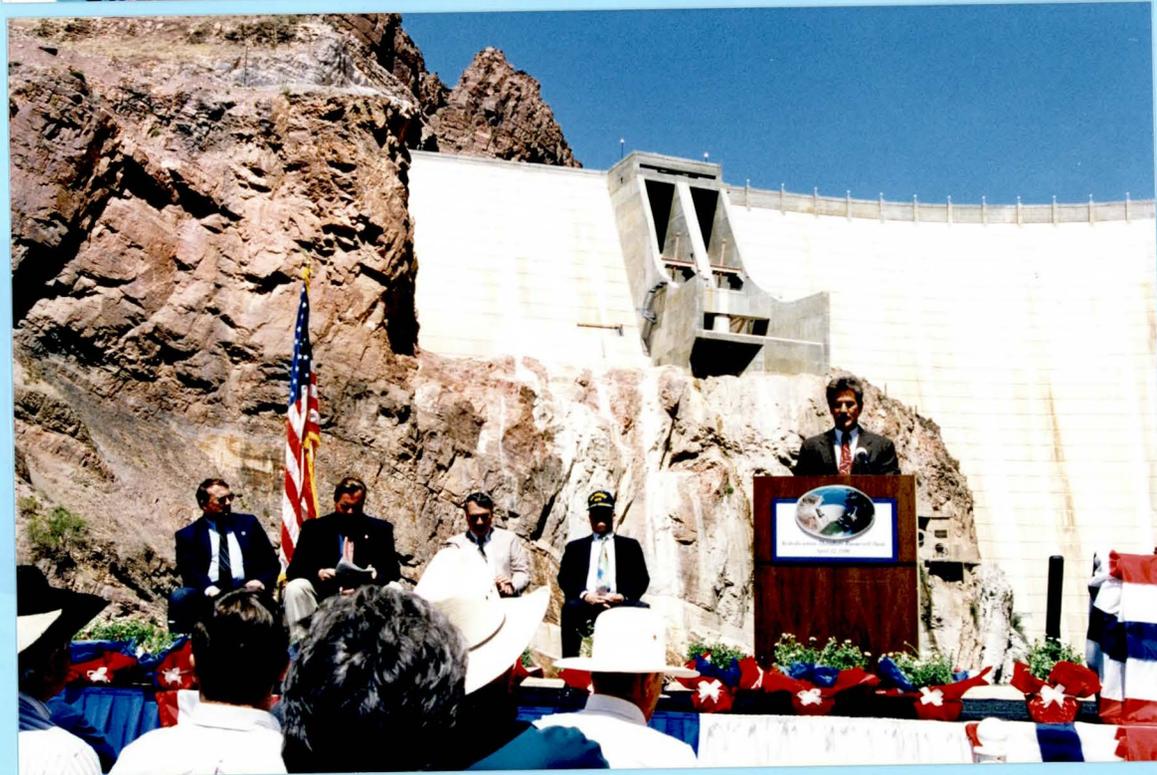
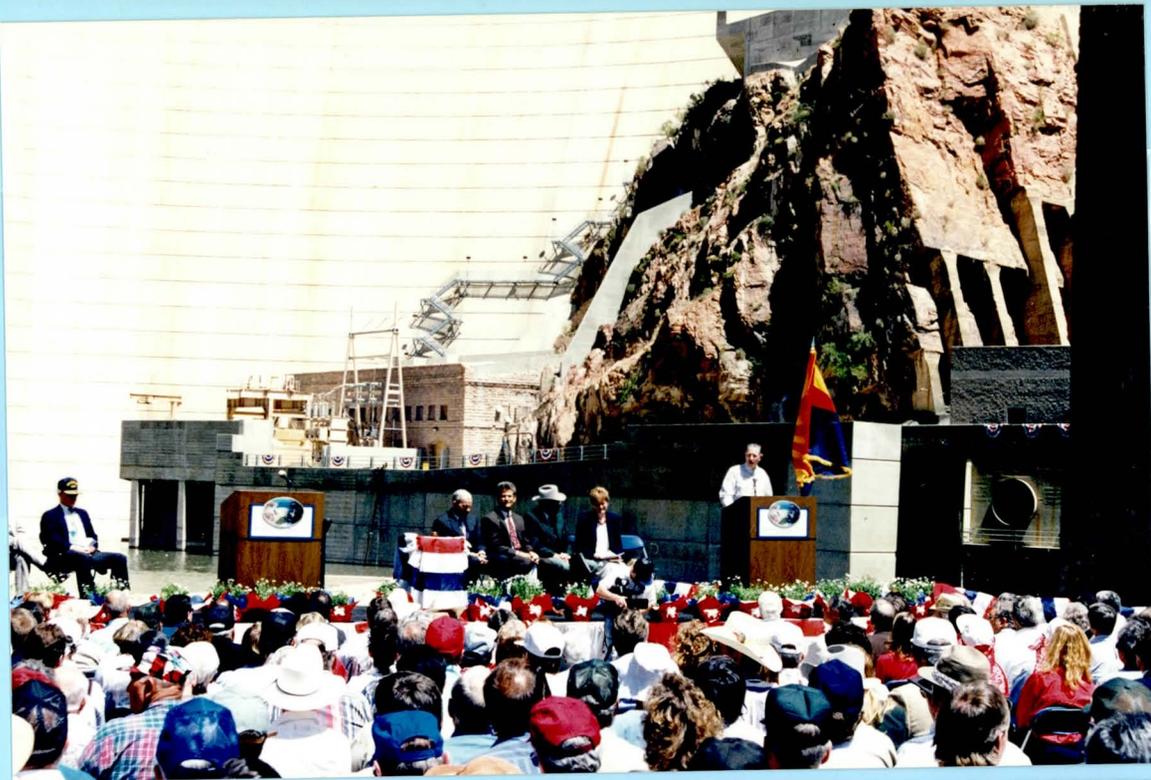


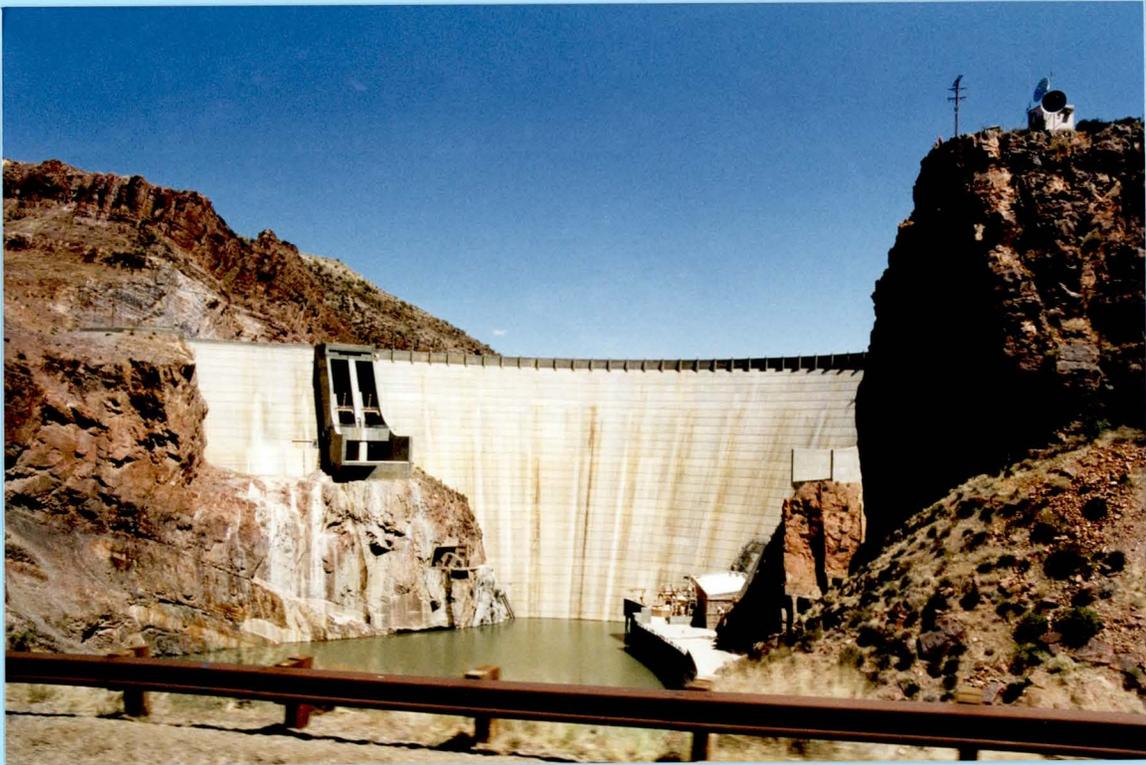
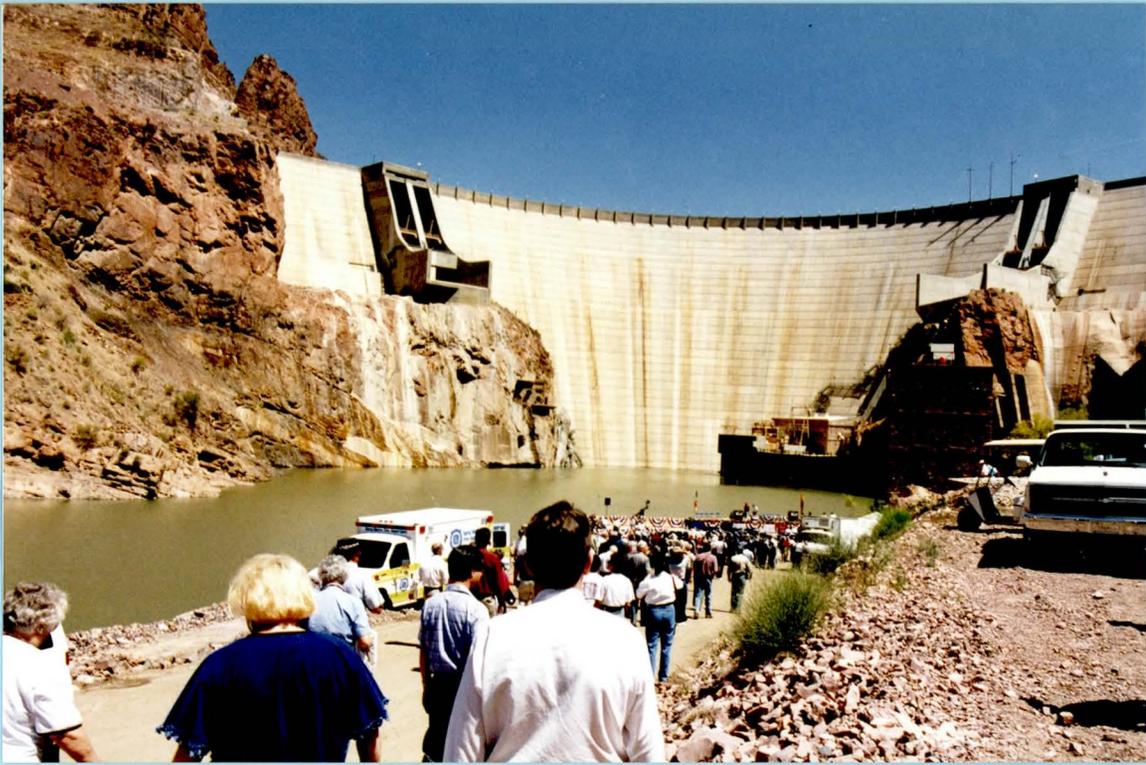
(#30) DATE / Location - Unknown
Historic Flooding Photo

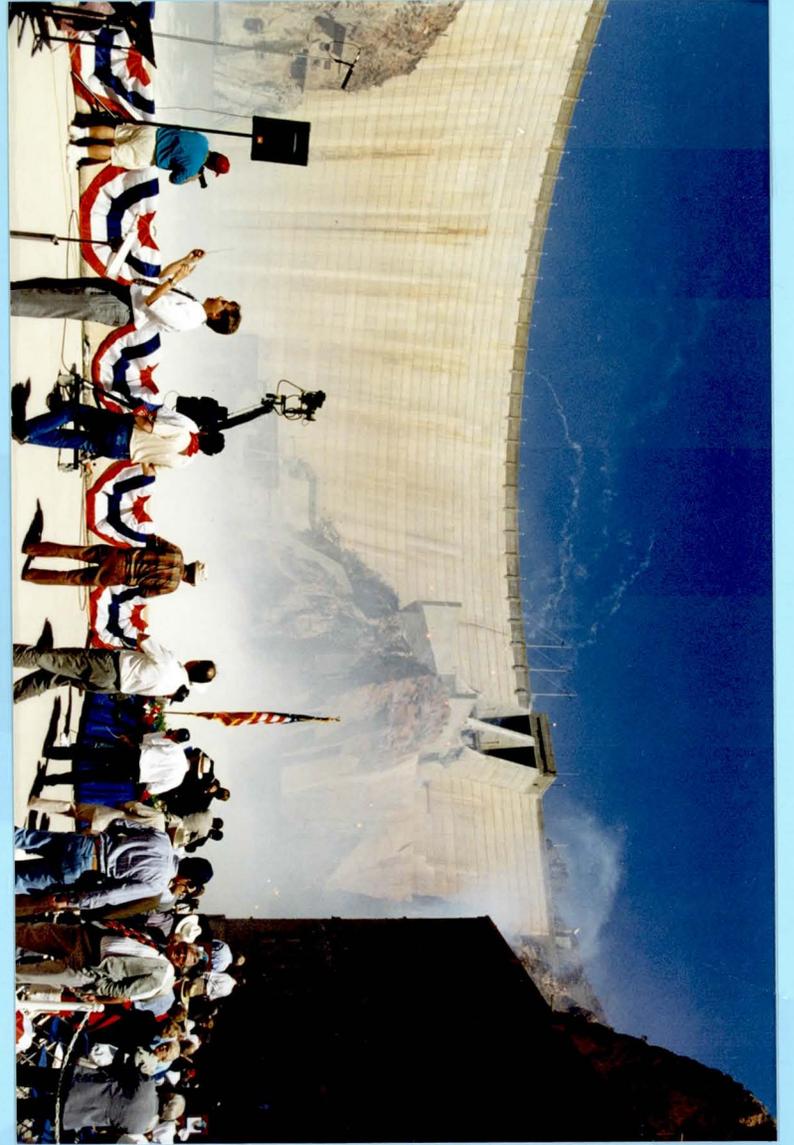


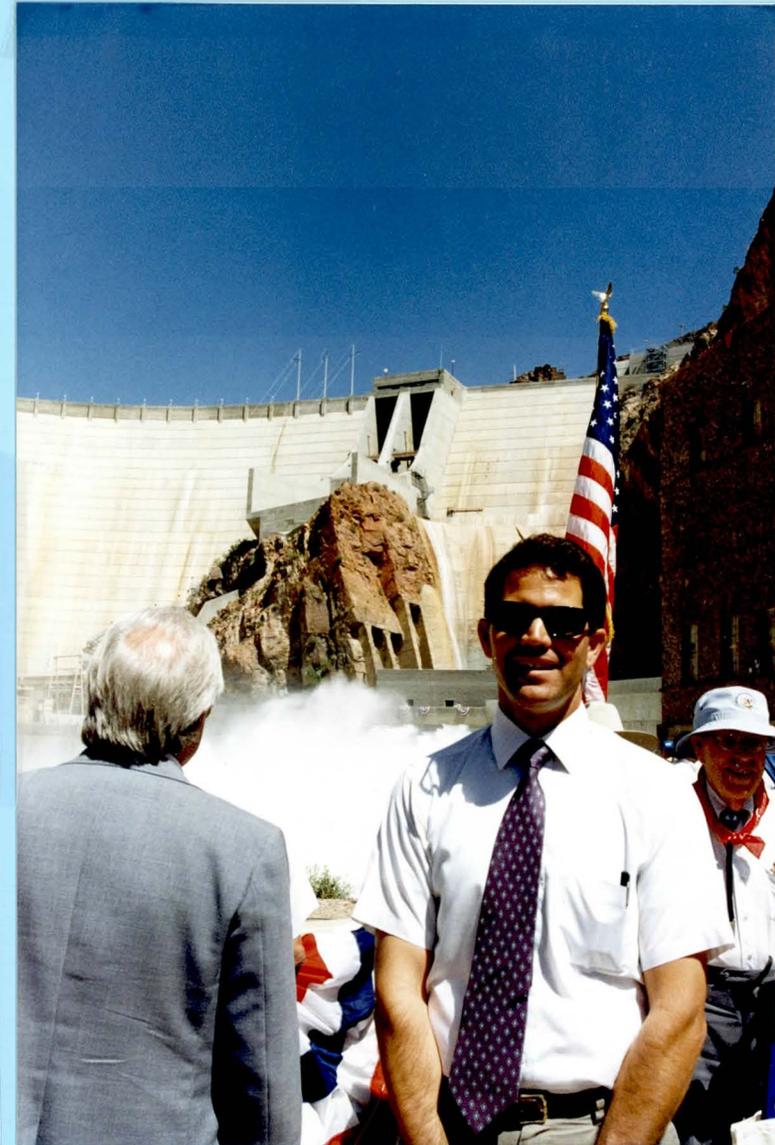
#31 Roosevelt Dam
Dedication Photos
April 12, 1996

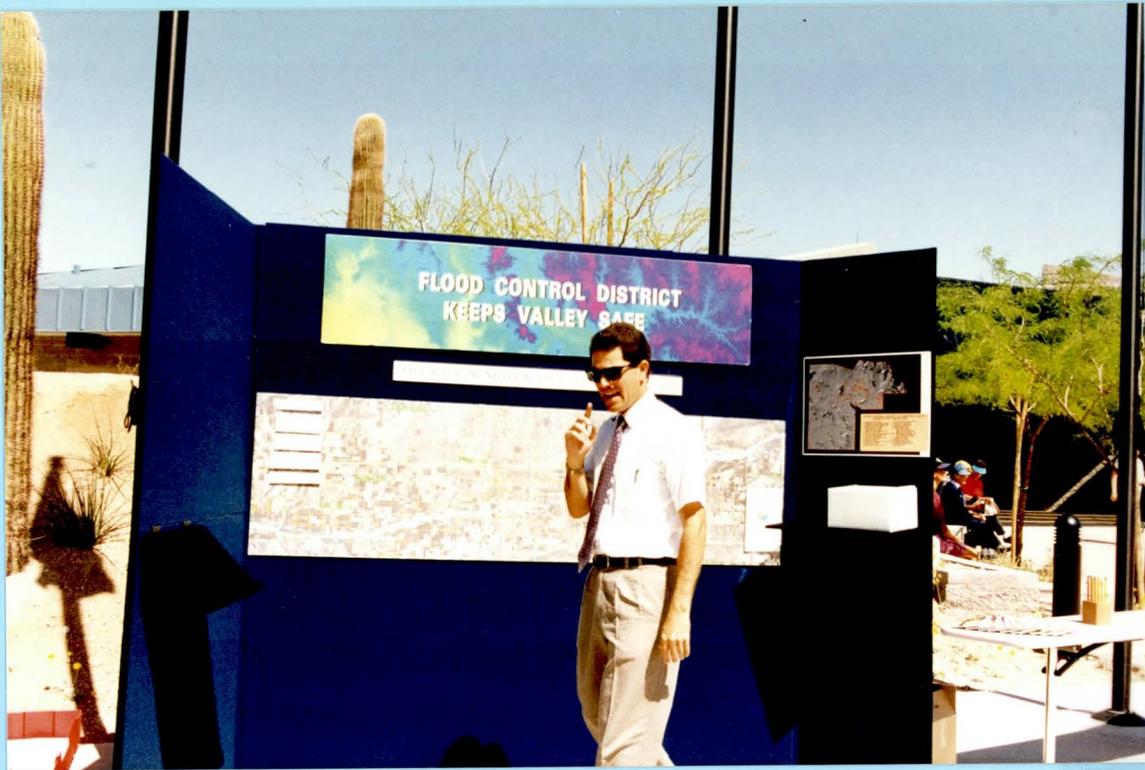


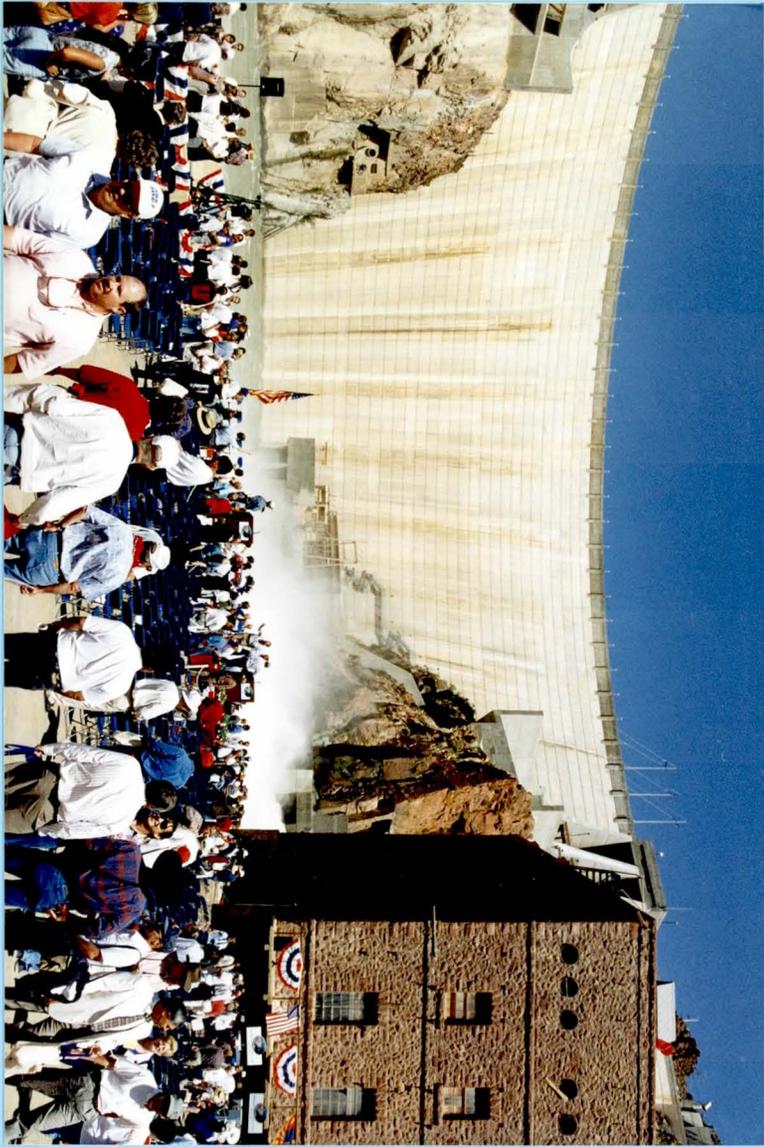
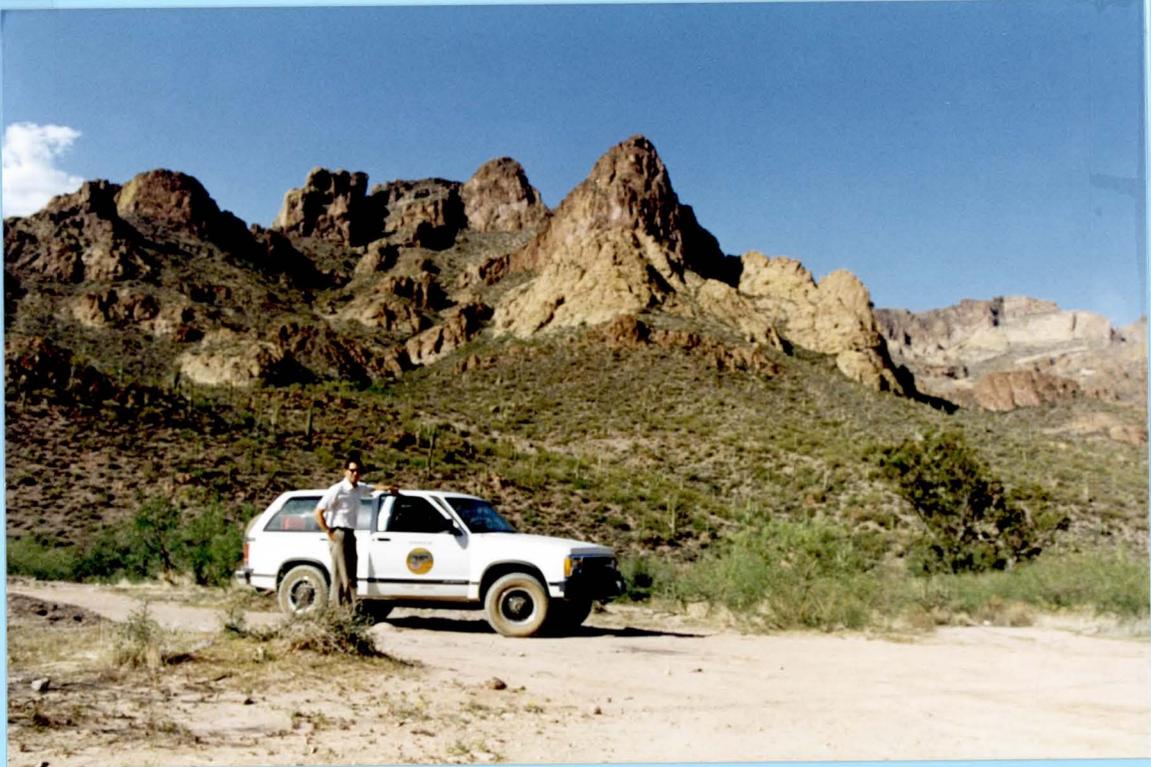












#32 Powerline Dam
Ground breaking
March 17, 1967

Photo No. 1 & 1A

Back Row

Martin Tony	Engineer in charge of Dams, State of Arizona
Jim Pulice	William Pulice Construction Co.
Robert Cavallo	Ass't. State Administrative Officer, SCS
Estill Osborn	Supervisor Pinal County
Donaldson Riddle	Construction Engineer, SCS

Front Row

Hugh Nichols	Citizens Advisor F.C.D. of M.C.
J. J. Turner	State Engineer, SCS
William Pulice	William Pulice Construction Co.
Louis Jurwitz	Citizens Advisor F.C.D. of M.C.
John C. Lowry	Contracting Officer F.C.D. of M.C.
George M. England	Project Engineer, SCS
Walter White	Supervisor East Maricopa S.C.D.

Final Inspection
Powerline Dam at
Railway Structure

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Subject	<u>Railway Structure</u>	Official Number	
Where		Taken By	<u>Ken [unclear]</u>
		When	<u>3/17/67</u>
		Series	

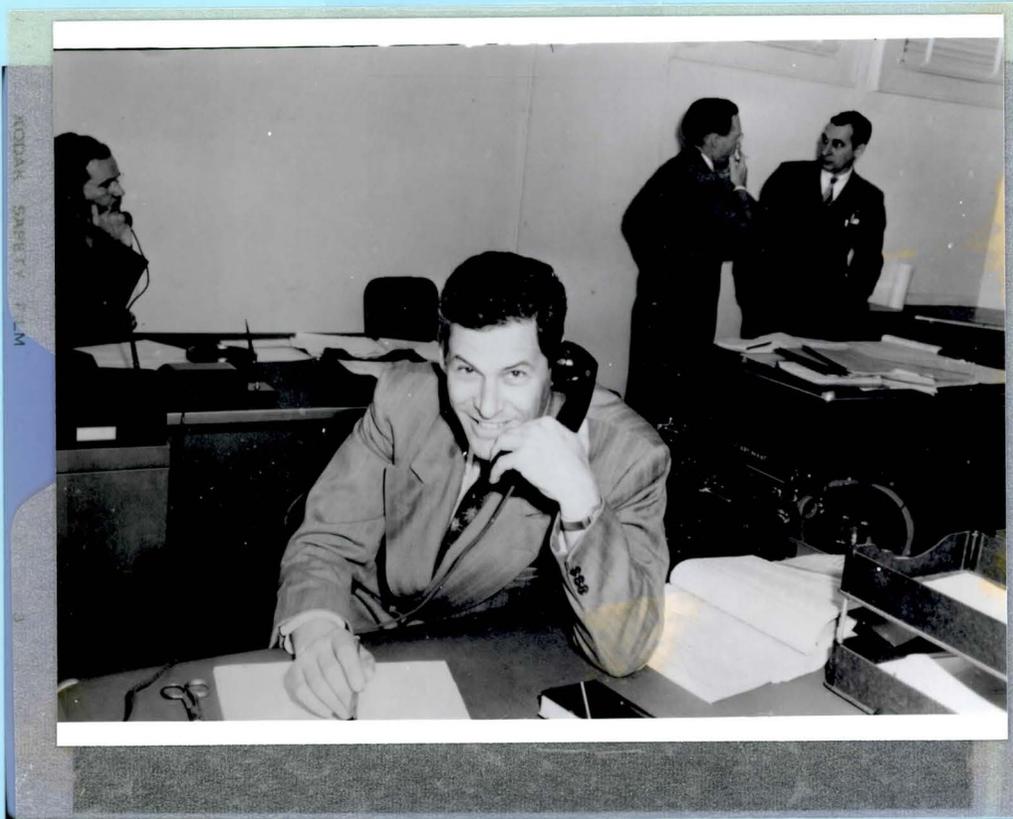
(State, County, SCD, Watershed)





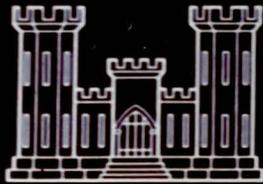








#33 Adobe DAM
Dedication
April 8, 1982



ADOBE DAM

Part of The
Phoenix, Arizona and Vicinity (including New River) Flood Control Project

DEDICATED THE 8TH DAY OF APRIL 1982

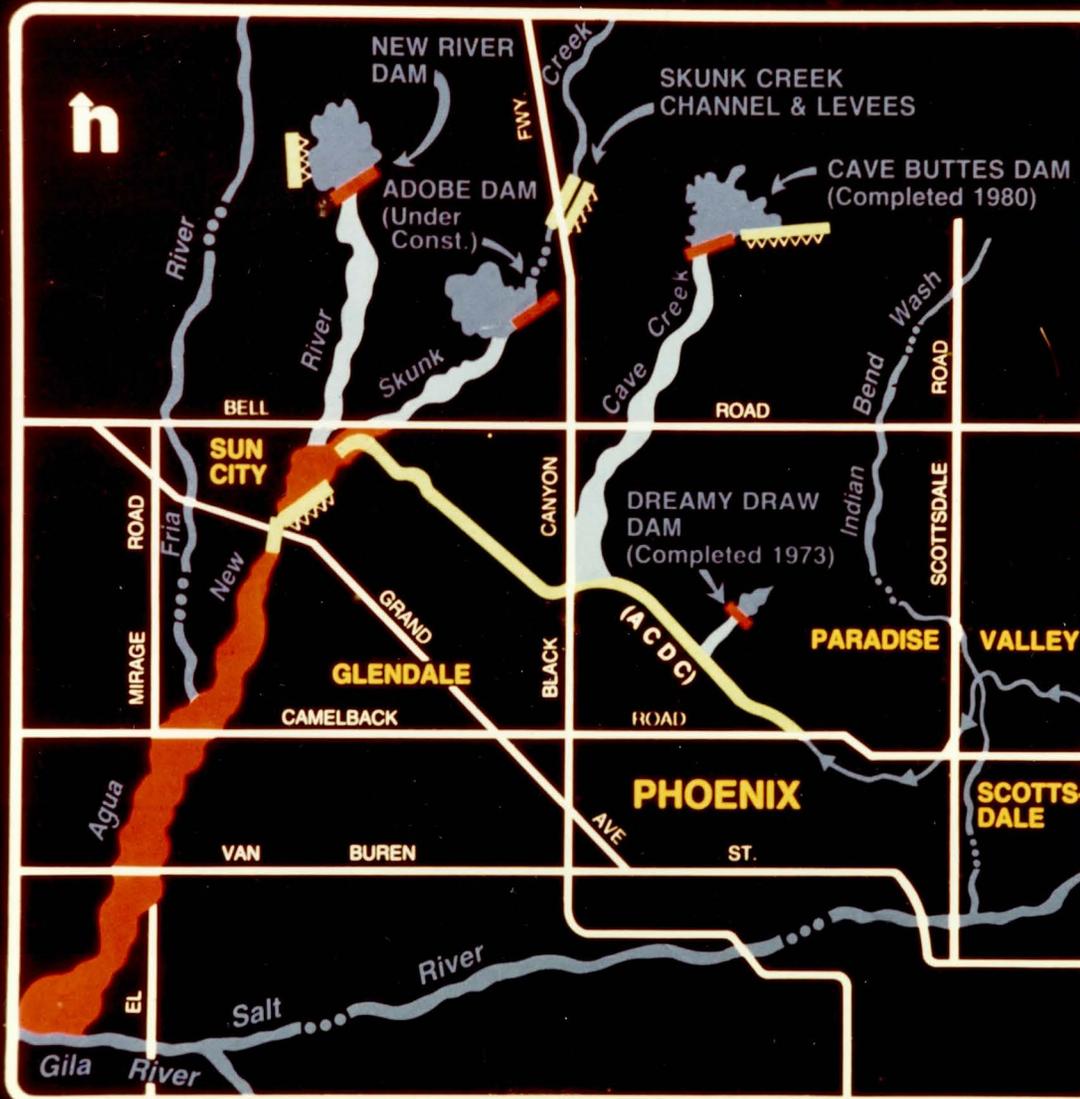
For The
**Flood Protection, Economic Growth, and Recreational Development of The
City of Phoenix and Maricopa County, Arizona**

Designed and Constructed by the
U.S. Army Corps of Engineers
BG Homer Johnstone, Jr.
Cmdr. South Pacific Division
Col. Paul W. Taylor
Cmdr. Los Angeles District

Congressman Eldon Rudd
U.S. House of Representatives
Mayor Margaret Hance
City of Phoenix

Sponsored and Operated by the
Flood Control District of Maricopa County
George Campbell, Chairman Board
Hawley Atkinson
Tom Freestone
Fred Koory, Jr.
Ed Pastor
Dan E. Sagramoso, Chief Engr & G.M.

Contractor: M.M. Sundt Construction Company



- LEGEND**
-  CHANNEL
 -  FLOWAGE EASEMENT
 -  LEVEES AND DIKE
 -  DAM
 -  100 YEAR FLOOD FUTURE CONDITIONS





**Phoenix, Arizona
& vicinity
(including New River)**

Flood Control Project





























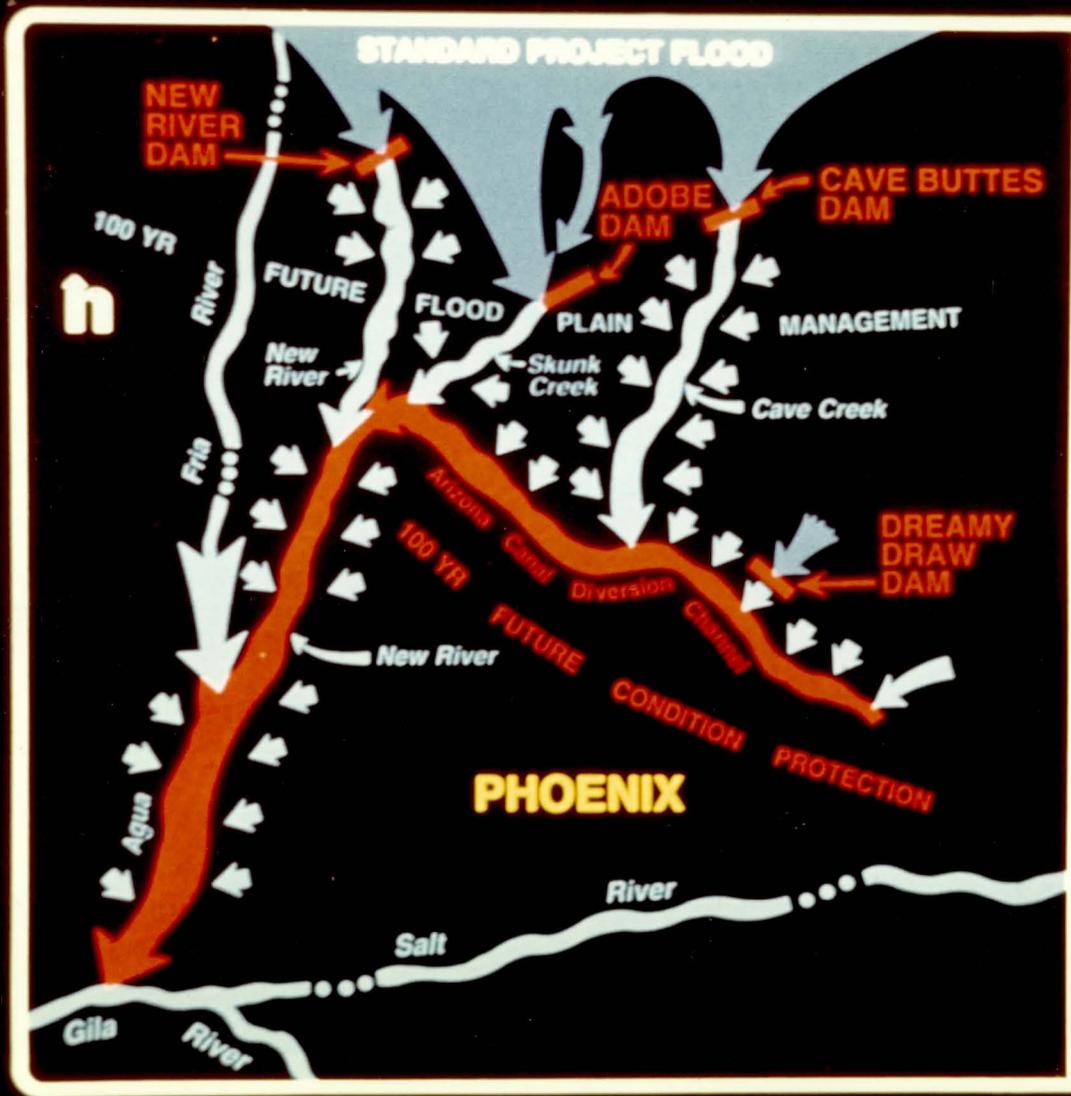












**PHOENIX,
ARIZONA AND
VICINITY
(INCLUDING
NEW RIVER)**

**FLOOD
CONTROL
SYSTEMS**

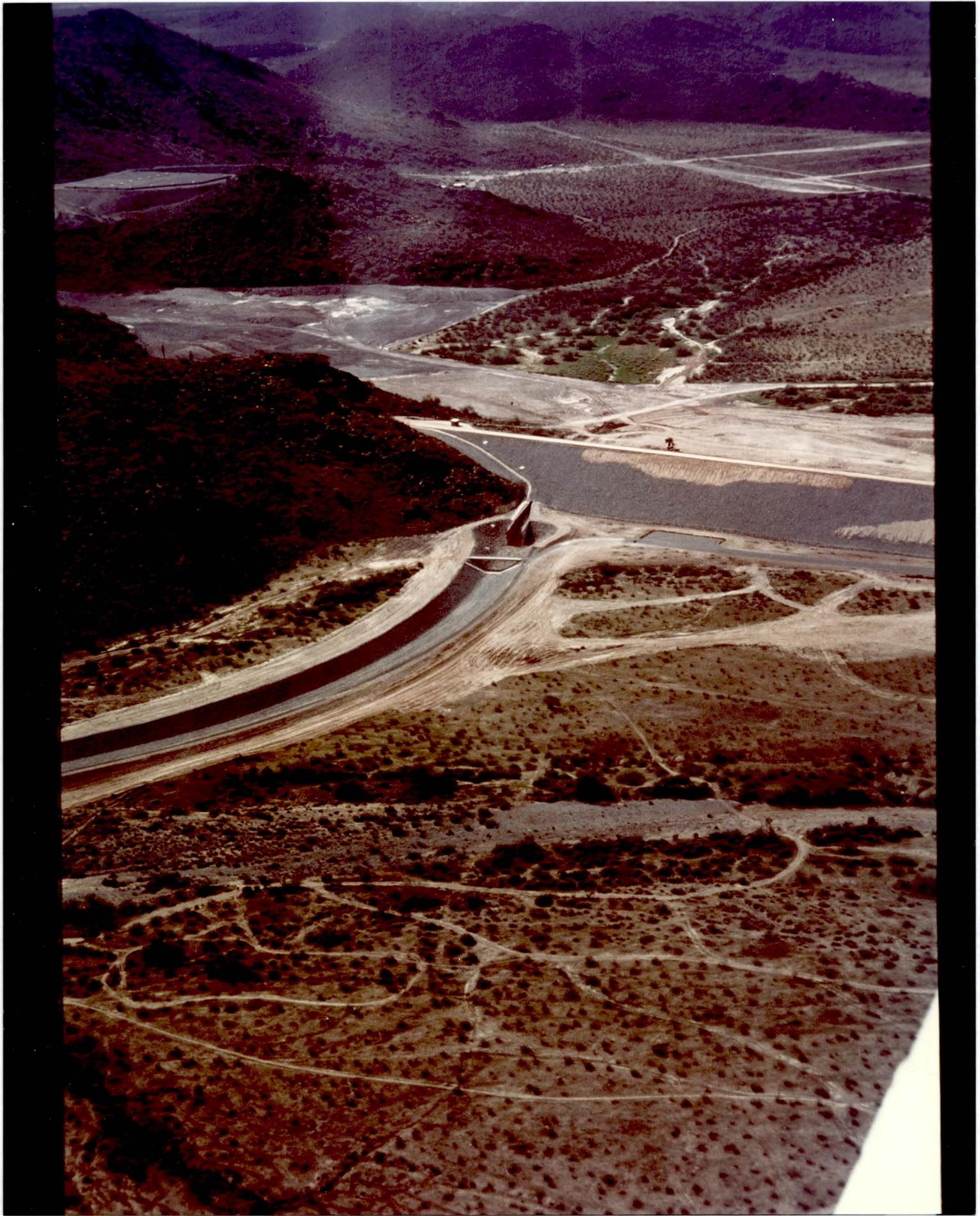


















Flooding in Alleyway - Phx.
Between Main Hospital Buid.

June 22, 1972

#34



#35

Luke AFB

Flooding

August 3, 1951



Road Flooding near Luke Field

August 3, 1951 - Highway patrolman being towed out of a hole washed in Litchfield Avenue at the south end of Luke Field.





N/E Corner, Luke Field 1951



Luke A.F.B.
1951



27

Luke

0000597

AUG 8 1951



59

Litchfield Rd 1951

AUGUST 1951

LUKE } LITCHFIELD FLOODING

Litchfield Rd August 1951

FLOOD CONTROL DISTRICT
of
MARICOPA COUNTY
4701 East Washington
Phoenix, Arizona



Lake Mead

U. S. AIR FORCE PHOTO
LAKE A. F. B.
STATE OF ARIZONA

APR 1951

Local Storage



59

Litchfield Rd 1951



45

OFFICIAL PHOTO

UNITED STATES AIR FORCE

0000597

Neg. No. G 127 A.E. Group

Date **AUG 3 1951**

Subject

RESTRICTED



Luke AFB, 1951



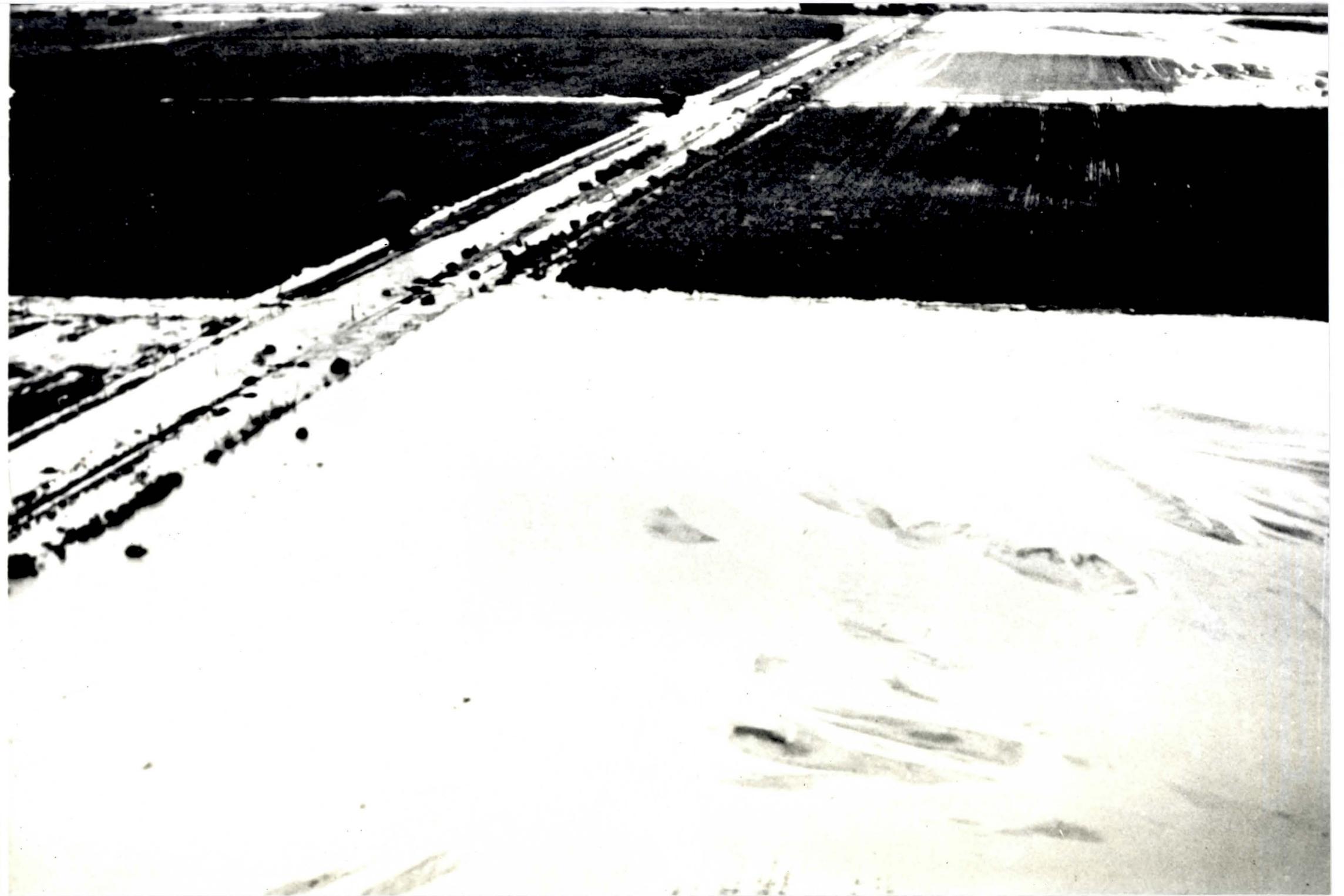
US Air Force Photo August 1951

Luke Air Force Base

U. S. AIR FORCE PHOTO
LUKE A. F. B.
GLENDALE, ARIZONA

NEG. # _____

DATE: 8/51



Flooded agricultural Land, 8/51
#2



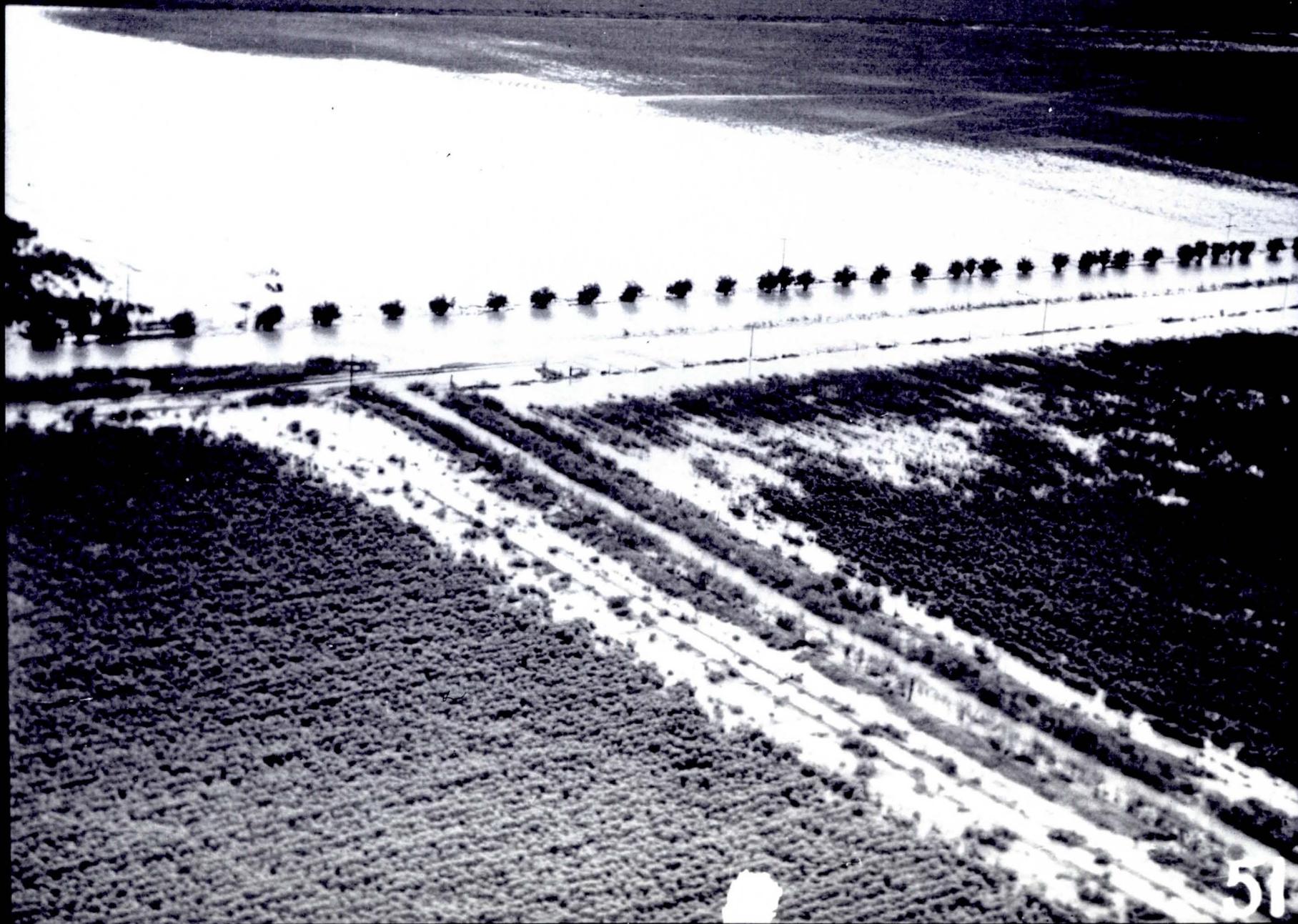
Luke A. F. B. 1951





Ditchfield Park.

Aug 1951



51



Goodyear Aug 30th
1951

Western Intersection
Litchfield Ave,
Goodyear 1951

#37

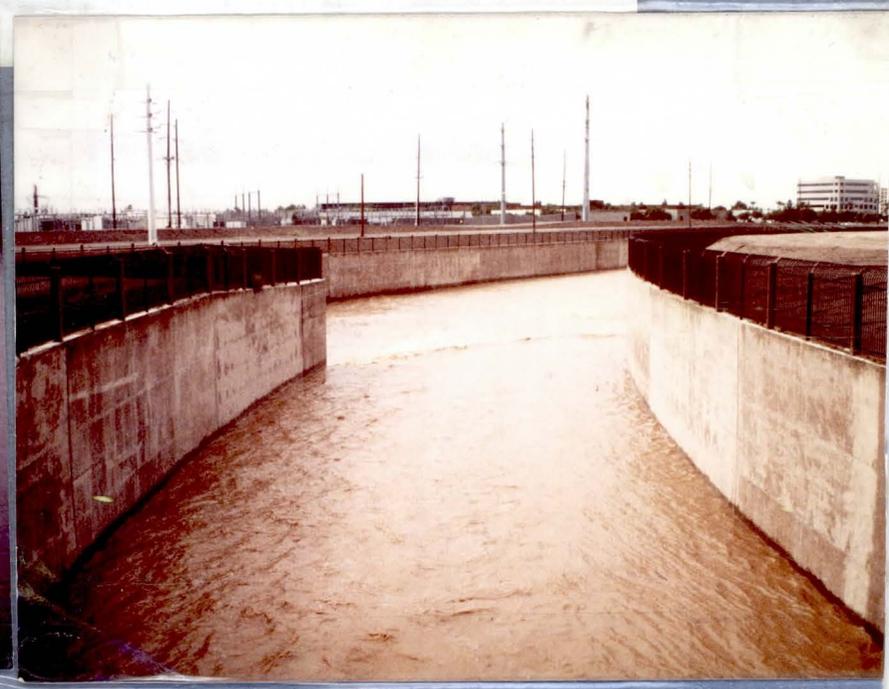


Cave Creek Sediment Basin

Top: Stormwater runoff flows into sediment basin in March 1991 storm event (left)

Bottom left: Outflow tower allows lower flows of stormwater to exit the sediment basin.

Bottom right: Channelized Cave Creek Wash flows safely into the Arizona Canal Diversion Channel, rather than overtopping the Arizona Canal and flooding streets and homes. Stormwater runoff is diverted to Skunk Creek and, ultimately, the Gila River.



Stormwater runoff

Stormwater
runoff March 1991

channelized Cave Creek
Wash

outflow tower and lower
flows of storm water

#38



A STORM DRAIN AT 35TH AVE. NORTH OF DUNLAP
OUTFALLS INTO THE ARIZONA CANAL DIVERSION
CHANNEL (ACDC) DURING HEAVY RAINS AUGUST 14,
1990. THE ACDC INTERCEPTS AND DIVERTS RUNOFF
THAT IN THE PAST HAS FLOODED MANY HOMES.



STORMWATER COLLECTS IN THE ARIZONA CANAL
DIVERSION CHANNEL AUGUST 15, 1990 AT 67TH AVE.
SOUTH OF GREENWAY ROAD. FLOWS AT THIS
LOCATION WERE ESTIMATED AT 4,000 CUBIC FEET
PER SECOND.

Arizona Canal Diversion Channel
August 1990

#40



RUNOFF FROM AN AUGUST 15, 1990 STORM TRAVELS DOWN SKUNK CREEK NEAR 75TH AVE NORTH OF GREENWAY. SOME OF THESE WATERS ARE FROM THE ARIZONA CANAL DIVERSION CHANNEL WHICH OUTFALLS INTO SKUNK CREEK UPSTREAM OF THIS PICTURE.

75th Ave North of Greenway
August 1990

#41



STORMWATER FROM THE 1990 LABOR DAY RAINS COLLECT BEHIND THE VINEYARD DAM LOCATED EAST OF WILLIAMS AIR FORCE BASE. BUILT IN 1968 BY THE SOIL CONSERVATION SERVICE, THE DAM COMBINES WITH TWO ADJOINING FLOOD RETARDING STRUCTURES (RITTENHOUSE AND POWERLINE DAMS) TO PROTECT PEOPLE AND PROPERTY TO THE WEST.

Labor Day Gains
1990

923118

CRESCENT

#42



FLOODING SOUTH OF SOUTHERN NEAR 43RD AVENUE
AS PHOTOGRAPHED ON AUGUST 14, 1990.

Flood Southern near
43rd Ave August 1990

#43



THE GUADALUPE CHANNEL BETWEEN SOSSAMAN AND POWER ROADS IN MESA AS SEEN ON AUGUST 14, 1990. THIS CHANNEL IS BEING IMPROVED BY THE DISTRICT TO BETTER CONVEY STORMWATER FLOWS.

Guadalupe channel between
Sossaman and Power Rd.

#1073

21

#44



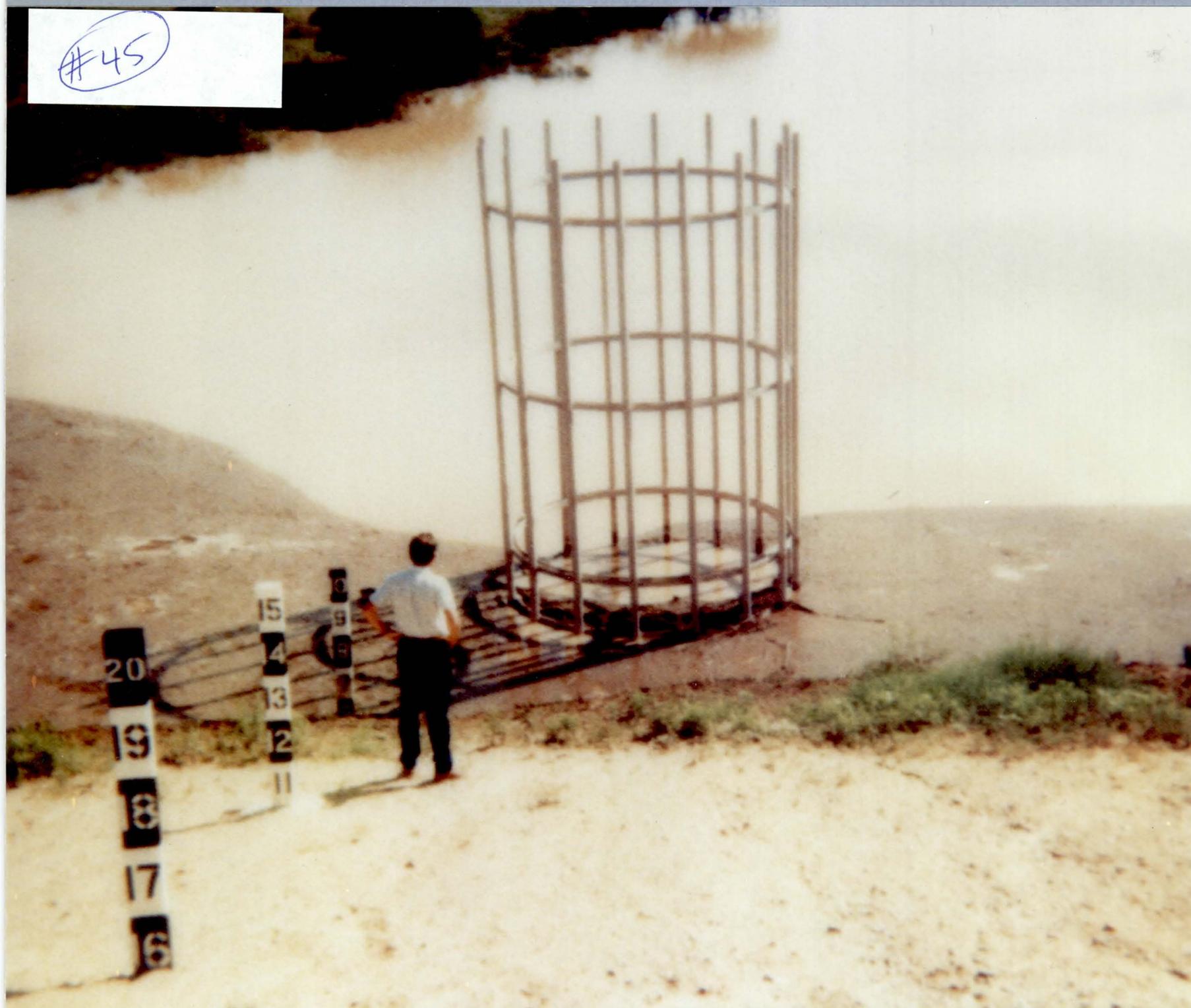
FLOODING IN LAVEEN AUGUST 14, 1990.

Flooding in Laveen August 1990

923118

#1073

#45



RITTENHOUSE DAM EAST OF WILLIAMS AIR FORCE BASE WAS BUILT IN 1969 AND COLLECTS RUNOFF WATER FROM A 51-SQUARE-MILE AREA AND CONVEYS IT NORTH TO ANOTHER FLOOD CONTROL STRUCTURE CALLED VINEYARD DAM. RITTENHOUSE DAM IMPOUNDED 6 FEET OF WATER DURING THE AUGUST 14TH AND 15TH STORMS.

Rittenhouse Dam East of Williams
Air Force Base 1969.

(#46) NEW CAVE BUTTES DAM
OLD CAVE CREEK DAM IN
BACKGROUND
1980



7-25-1992

Downpour deluges Valley



CARLOS SALCEDO/Tribune

Pat Thompson, 8, of Mesa tries to get a BMX bicycle out of a retention basin Friday at Mesa Drive and Jensen Road.

Heavy rains flood homes, block streets

By Patricia Likens
Tribune writer

A powerful series of thunderstorms drenched the Valley on Thursday night and Friday morning, flooding scores of people out of their homes, stranding motorists and knocking out power.

No injuries were reported, but firefighters braved raging currents to pull one couple from the top of their car in a flooded wash near Paradise Valley.

A flash flood watch remained until 9 p.m. Friday, and weather officials said a chance of thunderstorms will continue through today.

The brunt of Friday's storms hit the west side of the Valley, dumping as much as 6 inches of rain in some places.

At 27th Avenue and Camelback Road, 6.25 inches was reported, while 5.4 inches fell at 43rd Avenue and Thomas Road.

In the East Valley, 2.04 inches pounded Mesa, 1.5 inches was reported in Tempe, and 1.59 inches fell in Apache Junction. The total at Phoenix Sky Harbor International Airport was 1.8 inches, a record for the day.

The American Red Cross received 30 to



The Associated Press

Adam Flores, 18, looks over the contents of a vehicle that was swept away from a parking lot into the Indian Bend Wash in Scottsdale.

CLOSE CALL: Couple rescued from car that got caught in current / A12

STANDARD STORM PROCEDURE: It's time to learn what to do / B1

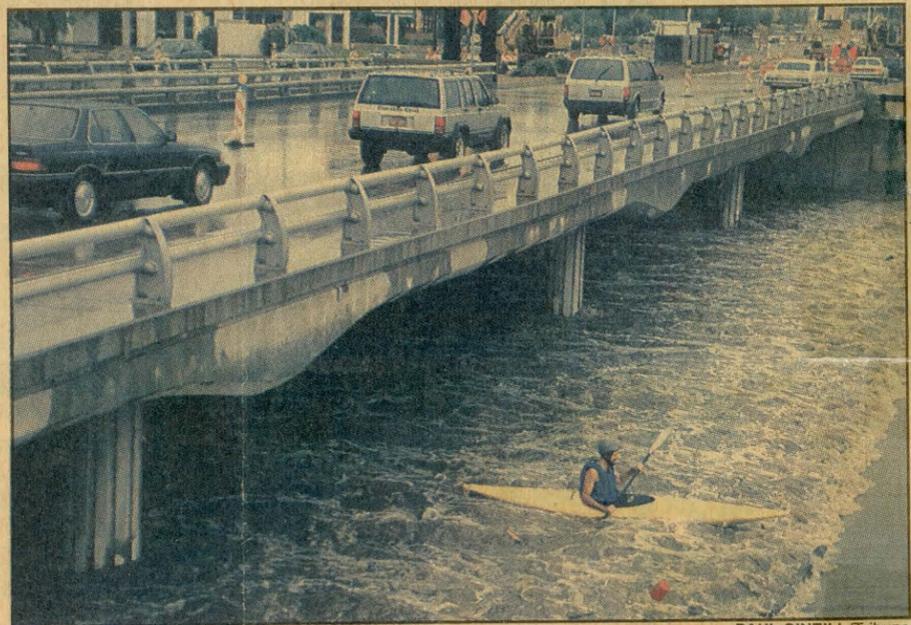
OVERFLOWING: Friday storms push yearly rainfall above average / B4

40 calls from people flooded out of their homes and set up an emergency shelter at 23rd Street and Camelback Road in Phoenix.

The storm knocked out power to about 14,000 homes, said officials from Salt River Project and Arizona Public Service, and fire and police officials were kept busy throughout the day with flood-related calls.

Part of the historic state Capitol, which was built atop Cave Creek Wash, was flooded during the day, and state agency directors were allowed to let employees go home early to avoid traffic jams in the flooded streets.

The roof of a Phoenix furniture warehouse caved in under the weight of accumu-



PAUL O'NEILL/Tribune

"You couldn't ask for better boating," Dan Langmade said as he kayaked through Indian Bend Wash on Friday.

lated water, but no injuries were reported.

In Gilbert, residents of a dozen below-ground apartments awoke to find ankle-deep water lapping at their beds, and offi-

cials at nearby Williams Air Force Base canceled flying operations after more than 2 inches of rain in seven hours flooded the

Please see **Flooding / A12**

#47

'Monsoon' wreaks havoc

7-25-1992



Victoria Buckner/The Arizona Republic

The storm Thursday night and early Friday sent a parked car into Scottsdale's Indian Bend Wash. A railing near Hayden and McDowell roads kept the vehicle from being swept away.

Flooding in Valley widespread

By Carol Sowers
The Arizona Republic

Like a sulky debutante, the heavy rain associated with the "monsoon" arrived late this year. But when she made her grand entrance Thursday night and early Friday, she was dramatic and dangerous.

The record storm, accompanied by lightning strikes and booming thunder, swamped homes and businesses, stranded motorists, collapsed a portion of the roof at a furniture store, knocked out telephones and electricity, and sent water raging down the usually dry Salt River bed.

The storm was partly to blame for the death of a motorcyclist whose motorcycle skidded on wet streets and slammed into a car. However, police say they believe the motorcyclist had been drinking before the accident.

A Phoenix garbage-truck driver was injured when a street near 42nd and Northern avenues collapsed beneath him.

Scattered showers are predicted for today, with partly cloudy skies Sunday. The monsoon is expected to return by Tuesday, forecasters said.



Paul F. Gero/The Arizona Republic

Linda Winkler, with her friend, Ron Welch (center) and her neighbor, Jason Buchanan, contemplates the flood damage at her home, near 67th Avenue and Indian School Road. With nowhere else to sit, Winkler's dog, Sister, plopped down Friday in Winkler's flooded yard.

The storm, which sent coffee-colored water roiling through streets, forced at least two stranded motorists to swim for their lives and stunned residents whose homes were awash in water.

"I'm just numb," said John Clark, whose Maryvale home was flooded with nearly a foot

of water Friday. "I don't know what to do. I hope God helps us through this."

The storm, which originated in northern Mexico, was escorted by light winds over the Phoenix area about 11 p.m. Thursday before dumping a record 1.66 inches of rain at Sky

— See VALLEY, page A2

MORE STORM COVERAGE

DAMAGE: Downpour floods homes in Valley, A3

FORECAST: What's in store for the next few days, A18

CARE: Protecting your plants from storms, D1

Rescued man: 'Thank God for adrenaline'

By Mark Shaffer
The Arizona Republic

As the cascading water inched up toward Jason Henley's neck, he could only hope that a small branch of a palo verde tree to which he was clinging wouldn't break.

The 18-year-old Phoenix man waited 20 minutes. Then 30 minutes.

Finally, emergency workers early Friday pulled Henley from a flooded arroyo near Tatum Boulevard and McDonald Drive in Paradise Valley.

"Thank God for adrenaline," he said. "I used every bit I had, and it almost wasn't enough. I could feel my fingers starting to slip."

Henley had taken note of the unusually

— See 'I HEARD,' page A18

More rain likely to drench Valley

Flooded streets create commuter nightmares

By THE PHOENIX GAZETTE

Heavy rains continued to soak the Valley today after drenching it all day Tuesday, flooding houses and closing roads.

Weather forecasts said to expect still more rain.

"It's still an unstable, moist air mass — low pressure and a lot of moisture," National Weather Service meteorologist Bob Wilt said this morning. "Those ingredients mean rain. There might be some drying in a few days, but it will be slow."

Flooded roads caused commuters nightmares, with many people saying it took double or triple their normal driving time to get to work.

Claudia Schnabl, a spokeswoman for the American Red Cross, said...

See ■RAIN, Page A12



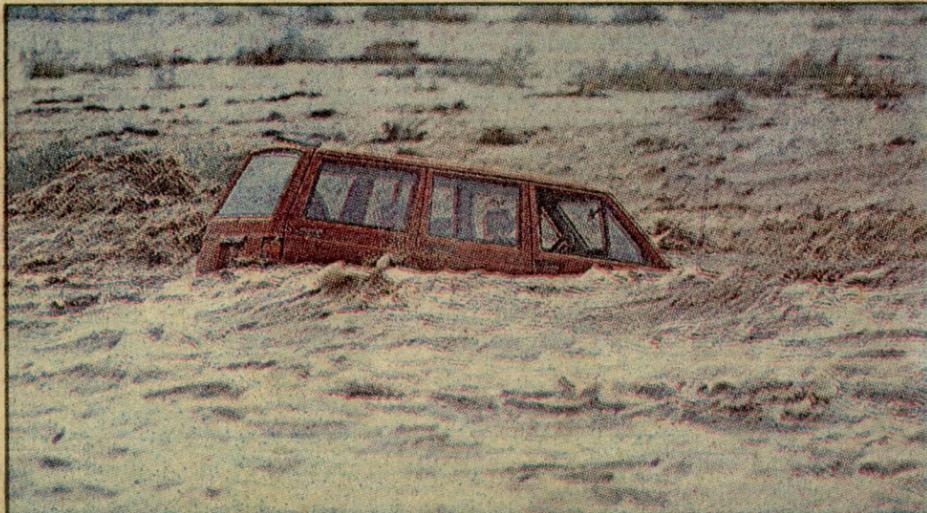
Tuesday's storm brought several rescues like this one: Julian Thomson of north Phoenix tries to drive across the running waters of Skunk

Creek at Pinnacle Peak Road near 35th Avenue, but his car stalls. Below, Thomson is pulled to safety before his car washes away.

Peter Schwepker / THE PHOENIX GAZETTE



About 25 minutes after Phoenix fire-fighters pulled Julian Thomson from his vehicle during Tuesday's flooding, it floats down Skunk Creek.



THE PHOENIX GAZETTE

August 15, 1990

Monsoon called wettest Valley has seen in 6 years

By Ryan Konig
THE PHOENIX GAZETTE

It could be the wettest monsoon season in years, and it has dumped enough rainwater on the city already to fill every building in Phoenix's skyline.

And the monsoon is still going strong with as much as four weeks to go before puddles are forgotten and winter residents begin returning to the Valley for its famous dry climate.

This summer's drenching appears to be Phoenix's wettest in six years, said Craig Ellis, a meteorologist with the National Weather Service.

Shifty winds get credit for creating a monsoon. For Arizona, the season generally begins in early July when

See ■WETTEST, Page A2

#49

#50

HOME
EDITION
★ ★ ★

The Phoenix Gazette

ARIZONA'S PROGRESSIVE NEWSPAPER

ON THE INSIDE

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Churches	7-9	Sports	13-15
Editorials	6	Theaters	11
Radio Log	10	Women	18-19

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Vol. 84, No. 4

10 CENTS A COPY

PHOENIX, ARIZONA, SATURDAY AFTERNOON, AUGUST 17, 1963

271-8000

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40 Pages

Floods Force Scores To Flee Their Homes; Glendale Youth Killed



Sunset Drive on west side in 6300 block today resembled river as flash flood inundated yards and sent water swirling into many homes.

More Storms Predicted Here

Cascading torrents of flood water swirled around the Valley overnight, leaving dozens temporarily homeless and one dead.

More flash thunderstorms were predicted by the U.S. weatherman.

THE FLOOD brought untold thousands of dollars of damage to homes and businesses.

Northwest Phoenix and Glendale apparently were hardest hit by spilling flood waters, several hundred subdivision homes being knee-deep and higher in water as muddy mop-ups began today. Some boat and jeep rescues were made by lawmen.

Globe and Prescott were among other cities sharply struck by heavy thundershowers.

Sixteen-year-old Mike Leija, son of Mr. and Mrs. Santos Leija, 6621 N. 59th Ave., Glendale, was electrocuted when he leaned against a utility pole about 3.20 a.m. today, at 59th Avenue and Grand, Glendale police reported. The high-voltage pole leakage was blamed on the storm.

Sheriff's Capt. Robert Heck declared the flood the worst in his 33-year recollection here.

HECK ESTIMATED a solid square mile was covered by wa-

FLOOD FAILS TO DAMPEN JUNKET

Arizona House Speaker W. B. Barkley, D-Maricopa, is a Glendale resident and was in the center of the flood west-side area this morning.

Barkley was due to take off at 8 o'clock from Sky Harbor Airport with a group of nine

Gazette staff photos by Roy Reynolds

P.M.

Monday

January 11, 1993

FINAL

PHOENIX GAZETTE

Flood-control measures work 'fantastically' in first major test

By Brad Patten
THE PHOENIX GAZETTE

Give thanks for the New Waddell Dam. Bow your head to the Arizona Canal Diversion Channel.

Include in your prayers a word about channelization, levees, flood-control dams, automated rain monitors and reinforced bridges.

Without them, you might not be reading the newspaper. Instead, you could be shoveling mud from your living room or be stuck in traffic.

In the past decade, flood-control officials from city, county, state and federal agencies have spent hundreds of millions of dollars for

ways to channel billions of gallons of water around the Valley during storms.

"It's worked fantastically, just as it had been designed," Stanley Smith, acting chief engineer and general manager for the county's flood-control district, said Sunday evening.

Last week's heavy rain — which pushed more than 100 billion gallons of water through the Verde River into the Salt River — provided the first major test of a variety of measures implemented in the wake of the floods that ravaged the Valley in 1978, 1979 and 1980.

Smith said most of the improvements in the past 15 years have been designed to manage

the floods from winter weather and huge runoffs north of the Valley. He said the flood-control district is still working to relieve pockets of flooding from torrential rains that usually occur in summer.

Where the flow goes

The measures were designed to control the huge amount of water that travels through the Valley via a dozen rivers and washes when rain and snow drench higher elevations.

To understand the improvements, you need to understand the Valley's water routes, which are not widely understood since they are usually dry.

The easiest way to visualize the system is to remember that water flowing into the Valley is on its way to the Colorado River at Yuma via the Gila River.

The biggest feeder to the Gila is the Salt River, the normally dry riverbed that winds from northeast to southwest through the center of the Valley. It joins the Gila on the west side.

Two north-south rivers meet the Gila and Salt. The Verde River feeds into the Salt northeast of Scottsdale, and the Agua Fria River meets the Gila on the southwestern edge of town.

Water flowing through the Salt in the eastern and central parts of the Valley is controlled by the Salt River Project.

Dams hold it back

Six SRP dams on the Verde and Salt rivers catch and store water coming from the 13,000-square-mile watershed in the central portion of the state.

Four of the dams are on the Salt northeast of the Valley, beginning with Roosevelt and ending with

Stewart Mountain. Two dams — Horseshoe and Bartlett — contain water on the Verde.

As the reservoirs behind the dams fill, SRP must release water into the Salt.

The huge volumes raging through the Salt — up to 124,000 cubic feet per second Friday and 63,000 cfs early today — were the result of heavy rains in the Prescott, Verde Valley and Sedona areas. Runoff from those areas flows to Horseshoe Lake, which has a capacity of 43 billion gallons, and to Bartlett Lake, which can hold 58 billion gallons.

"If the Verde lakes had been empty, we would have already filled those lakes up and would have been releasing more water," said Dan Phillips, supervisor of water resource operations at SRP.

At one point, a record of about 114,000 cfs was being released at Bartlett Dam. The maximum release at Roosevelt was about 20,000 cfs, Phillips said.

Better control

Roosevelt was 30 percent below capacity before the storm to accommodate construction. But Phillips said the work had little impact on the amount of water in the Salt since most of the volume came from Verde dams.

SRP is able to keep more precise control of releases because of improvements in the past decade.

One, a series of rain and stream gauges, sends rainfall amounts and stream speeds to SRP computers every 15 minutes via a satellite system.

That helps SRP hydrologists determine sooner and more precisely how much water they need to release, Phillips said.

Fortunately, the Salt River is able to accommodate more volume,

too, thanks to efforts over the past 10 years.

Some sections of the riverbed were widened. Others had levees built on one side or another. Parts were dug deeper by sand and gravel companies. Still others were "channeled" — where engineers improve flow.

"What we have done is controlled the river through designed levees and channels," said Dick Perreault, chief of planning for the flood control district.

Better bridges

It is also easier to get across the Salt.

After the flood in 1980, only two bridges across the Salt were left intact.

"Traffic was just a nightmare," Perreault said. "It took two or three hours just to cross the river."

Since then, more bridges were built and old ones were reinforced to withstand flows of 180,000 to 200,000 cfs.

"We've got basically new bridges all along the river," said Tony de la Cruz, street maintenance superintendent for Phoenix. "They were all reconstructed and reinforced."

Only one bridge in Phoenix — the 35th Avenue bridge — was closed Friday. There were no major traffic jams.

In the northern and northwestern parts of the Valley, residents can give thanks for canals and relatively new dams that divert water into the Agua Fria River.

The New Waddell Dam in the northwest Valley was finished less than three months ago.

Lake filling quickly

Good thing, too, because "the old dam is 5 feet under water right now," said Chuck Morfoot, spokes-

man for the federal Bureau of Reclamation, which runs the dam.

The heavy rain is helping accelerate the expansion of Lake Pleasant behind the dam. The lake will be four times its original size when filling is complete early next year.

Because the lake is being filled, no water was released into the Agua Fria.

"There probably would have been some flooding on the west side of town if we had been releasing water," Morfoot said.

In addition to the New Waddell, flooding in the central and west side of the Valley has been avoided by several flood-control dams and the Arizona Canal Diversion Channel.

The channel is the 17-mile ditch that runs alongside the Arizona Canal from 40th Street and Camelback Road to 75th Avenue and Bell Road, where it runs into the Skunk Creek Wash and eventually the Agua Fria.

A short section between 32nd Street and 40th Street is under construction. But the 16 completed miles are working.

The channel diverts water from several urban washes. It also captures large amounts of water from storm drains in Phoenix.

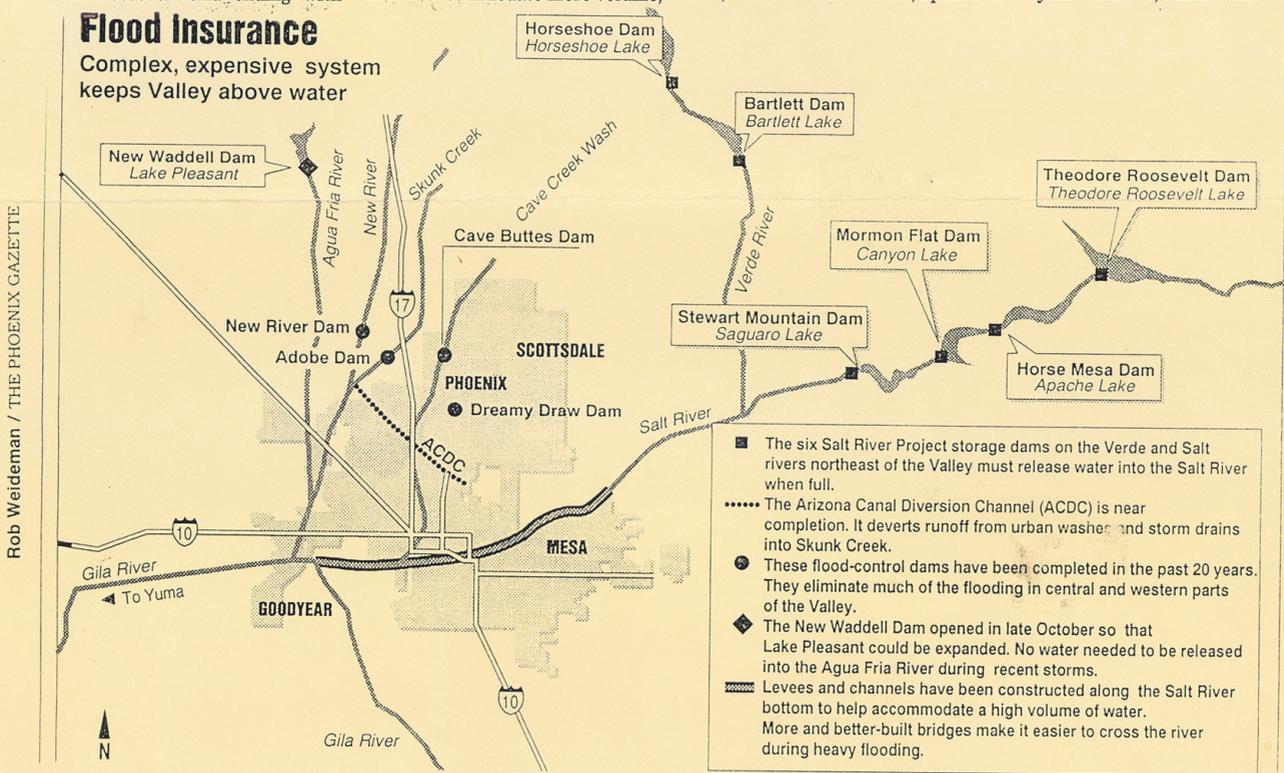
Smith credits the absence of flooding in central and west Phoenix to the channel and the 13-year-old Cave Buttes Dam. Cave Buttes has a capacity of about 15 billion gallons and was less than one-third full at its peak Friday.

Other dams relieving the strain were the New River Dam, built in 1985, Adobe Dam, built in 1980, and Dreamy Draw Dam, built in 1974.

Even one of the most flood-prone areas of the Valley, the Holly Acres area near the Salt River at 115th Avenue, survived thanks to a 7-year-old levee, Smith said.

Flood Insurance

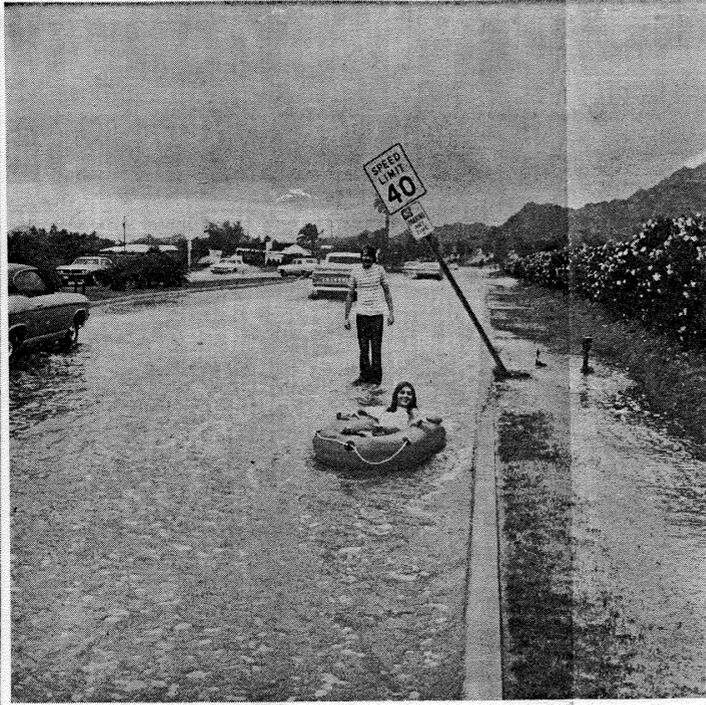
Complex, expensive system keeps Valley above water



#51



William Jett, left, and Russ Kress, direct traffic at 16th Street and Camelback



Karen Hanson uses raft to travel down 24th Street while Steve Ziegler watches

#52

Boil water, flood areas told

The Maricopa County Health Department yesterday warned residents of Paradise Valley, Scottsdale and other heavily flooded areas to boil drinking water because of possible contamination from flooded septic tanks and infiltrated wells.

Dr. Ellis D. Sox, deputy director, said water samples were being taken, but "we won't know what's in the water for a couple of days."

The health department's warning was especially for an area bordered on the north by Bell Road, on the west by 40th Street, on the south by Indian School and on the East by Pima Road.

But Sox added: "As far as we are concerned, anyone who is not on city of Phoenix water, should boil their water first." He said the warning was issued as a precaution to avoid outbreaks of diseases.

People living in areas affected by power outages of 12 or more hours should also guard against eating food that may have spoiled in refrigerators, he said.

"In some areas septic tanks are not connected to public

sewers," Sox said. "To avoid danger, we recommend as little use as possible of showers and toilets, to avoid contamination of wells and surface water."

Sox said the health department has ordered municipal water plants serving flooded areas to "hyperchlorinate" water for several days. "If people taste or smell chlorine in the water, they will know we are trying to protect them," Sox said.

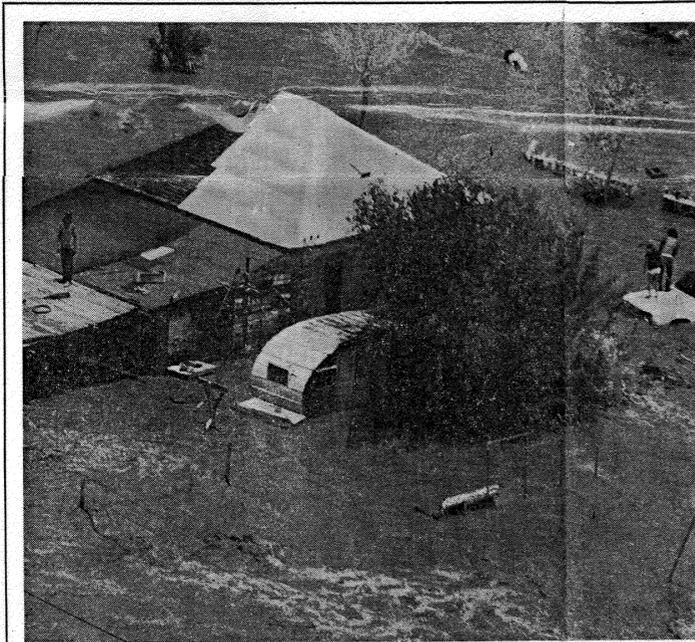
Meanwhile, the National Weather Service issued a checklist of things to do in case of a tornado:

—Seek shelter inside. Basements are safest. Lie flat in the nearest depression outside, if there is no time to escape.

—In homes without basements, take shelter in the smallest room with stout walls, or under heavy furniture.

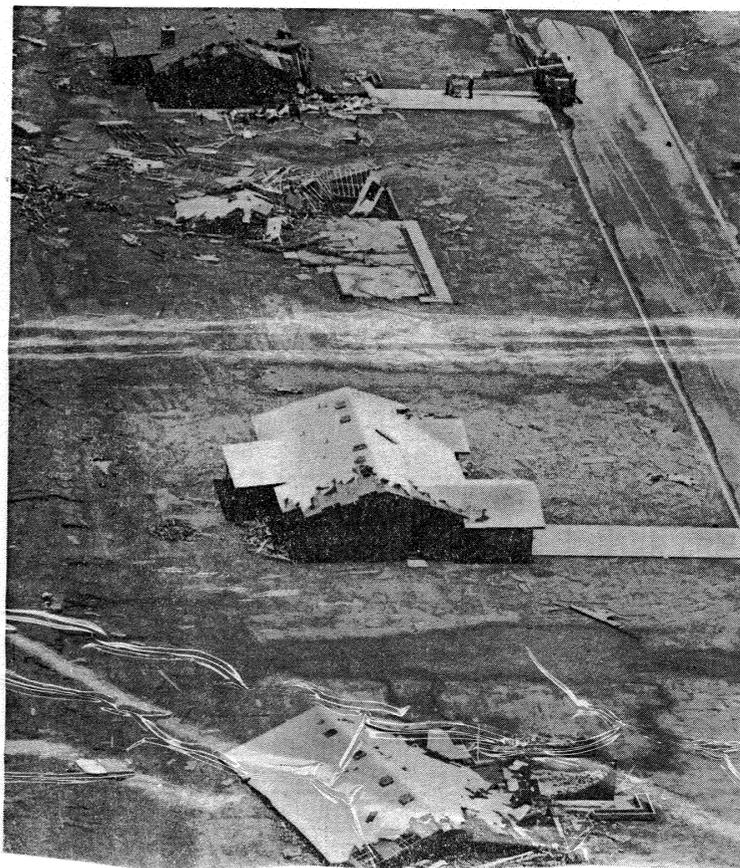
—Open windows partially on the side away from the storm's approach.

—Mobile homes, particularly vulnerable to overturning, should be abandoned in favor of some other shelter or a ditch.



Family stranded by flood waters stand on roof of house and car hood

Republic Photos by Lud Keaton, Earl McCartney, Nyle Leatham, John Willard
Roy Cosway, Vince Kermitz, Roy Molen, Mike Smith



Indian Bend Wash

Floodwaters flowing south in Indian Bend Wash toward the Salt River (bottom of photograph) cut a wide swath through Scottsdale in photograph taken during flood's peak Thursday morning from 6,000 feet by Jerry Landis of Landis Aerial Surveys. White lines show flood's extent.



#53

More about

Flood loss in county put at \$46 million

Continued from Page 1

estimated that about 10 homes were hit by the storms, and advised that citizens should limit their water consumption today and tomorrow.

"We'll be on wells because the Salt River Project is not sending water down the canals," he said.

GLENDALE — Public property damage, \$9,500. "This will be for equipment and street repairs," said city manager Stanley Van de Putte. "No people were displaced from their homes."

Mesa reported that storm damage was nominal, and outlying Chandler and Tolleson escaped flooding, except for a few streets. In Litchfield Park, 20 miles east of Phoenix, it didn't even rain.

By yesterday afternoon, all state highways in and out of the Phoenix metropolitan area were open, and Interstates 10 and 17 also had been reopened, with motorists advised to use caution under the Grant Street overpass because of dirt accumulations.

Rescue headquarters in Scottsdale and Phoenix were beginning to get their heads above water, figuratively, by yesterday. The key emergency shelter in north Scottsdale, Cocopah School, "worked out beautifully as an emergency center," said Maj. Robert Keene of the Salvation Army.

On Wednesday and Thursday, he said, about 1,500 meals were served to between 500 and 600 persons. Twenty families spent Thursday night there and "we're trying to relocate them now," he said. A medical team treated about 50 persons for "everything from a scratch to an ear infection," he said.

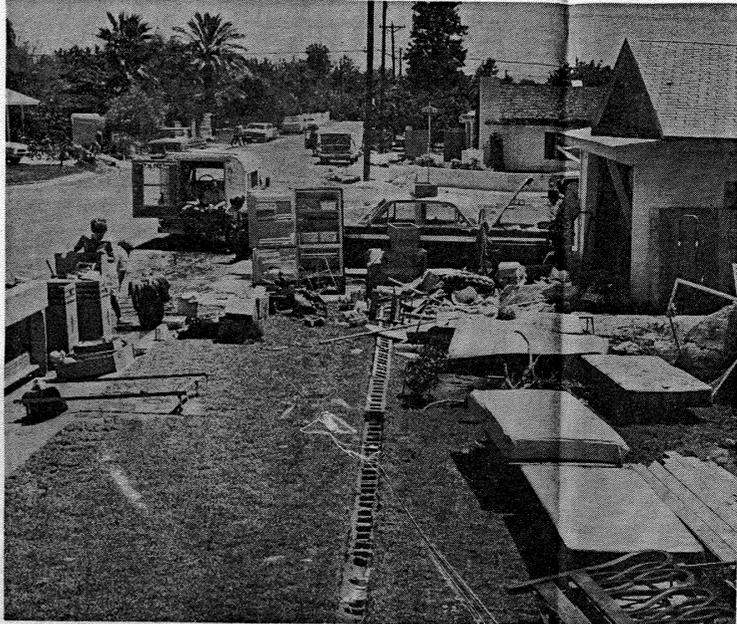
The Red Cross has converted its office at 1510 E. Flower to a disaster headquarters, according to spokesman Chuck Smith and will be open from 8 a.m. to 5:30 p.m. today and tomorrow. Five staff members arrived yesterday from San Francisco, he said, including a building specialist "who will help families whose homes need repairs."

"We're beginning to get into the rehabilitation phase now," said Smith.

At the Small Business Administration office, John Seeley said the staff still is waiting for Washington to declare natural disasters in all regions affected by the floods and in Elley and Maricopa, which were struck by tornadoes Wednesday.

These decisions are usually made "fairly rapidly," he said, either by the SBA director or the President.

Once disaster is declared, he said, "we'll be able to supply low-cost, long-term loans to businesses, homeowners



Leroy Whitaker family, 3738 E. Elm, moves household items from their home to front yard. The house was inundated for the third time in four years — this time by water that tore down a block fence.

and renters who suffered uninsured damage."

In the case of insured damage, he said, the SBA can advance funds against the insurance proceeds for the homeowner or tenant.

"We don't have any damage estimates in terms of specific dollars," he said. "I've been through a few of these situations and it takes a while to get a handle on the damage details."

It was too early yesterday to assess storm damage to agricultural crops.

"Reports are slowly filtering into this office," said Gerald Lindsey, county executive director of Agricultural Stabilization and Conservation Service.

"We've heard there was hail damage to cotton and grain crops in the Chandler, Queen Creek and Laveen areas," he said. The current tender stage of cotton, he said, makes it particularly

vulnerable to being clipped off at the stem by hail.

"The farmer must decide whether to take his insurance and plow the cotton under, or try to salvage the crop," he said. "If he decides to let it regrow, he'll have a late harvest."

In the urban areas, utility companies expected to have power restored to most stricken neighborhoods by this morning and homeowners were beginning to repair and rebuild.

The construction industry was hit by its own flood yesterday — a deluge of telephone calls from homeowners.

"We've gotten more than 1,000 calls in the last two days," said a roofing company spokesman. "Today our crews were driving through a Hallcraft subdivision at 62nd Street and Shea, just nailing on heavy construction paper for makeshift repairs."

Several roofing companies estimated

that many homeowners will have to wait at least a month and possibly longer to have a solid roof over their heads, because of the heavy demand.

"In some cases it's because we have to wait for the house to be re-built," said one. "We found at least one roof in Scottsdale in perfect condition, but it just didn't have a house under it anymore."

The Southern Arizona Bank announced yesterday that it was offering home improvement loans at a special preferred rate to storm victims.

"We are in the Phoenix and Scottsdale communities," said bank president James S. Douglas, "and we realize that unexpected expenses such as these can work a hardship."

Douglas said that the special loan rates would be available for rebuilding or remodeling at the SAB banks "until such time as conditions indicate that all of the damage has been repaired."

Family that lost house in flood is swamped with offers of help

The Ruel A. Sports family has lost its home but it is not homeless.

The flood victims have been offered aid from neighbors, friends, and a stranger who thought it was a "shame to see people out on the street."

The Sports home at 5001 N. 38th Place was flooded with as much as 3 feet of water Thursday, when the Arizona Canal broke. Anything that wasn't tacked to the wall was destroyed.

By Thursday night, a neighboring businessman offered them a free apartment, and by yesterday morning, a stranger offered a four-bedroom house. Friends on their street provided towels and soap. Mrs. Sports was able to salvage a few linens.

The five-member family has decided to stay in a two-bedroom apartment in the Oakwood Garden complex just two blocks from their mud-splattered home.

The house offer came from Don Gaertner, 8346 N. 57th Drive in Glendale, a retired Trans World Airlines pilot who said an empty house he owns in the Maryvale area was available free to the family "until they get their own house set up."

"We sure appreciated the offer," Sports said, "but the house is so far away and the apartment is right down the street. I told him we might still take him up on the offer if the apartment doesn't work out."

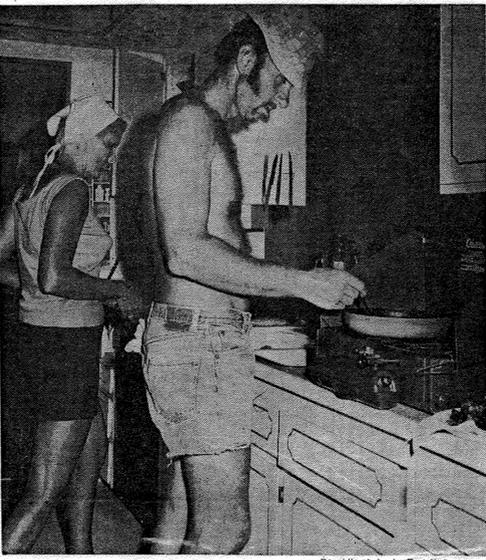
The family is among 275 flood and tornado victims living temporarily in 100 apartments in the complex at 5115 N. 40th St.

Yesterday the family was in the midst of reclaiming the home damaged by nature's fury. Mrs. Sports, her 16-year-old daughter, Rhonda, and a friend, Mrs. Donna Frisby, were in the kitchen trying to salvage food.

Her husband and neighbors were using a suction pump to empty water from the living room into the street.

Sports, director of the customs port of entry in Phoenix, said his main concern is whether the damage will be covered by insurance. He's not sure that a canal break is the same thing as a flood, but he has no flood insurance.

Rhonda's dog was concerned about the situation too. The only dry spot "Gypsy" could find was the top of the kitchen counter.



Mr. and Mrs. Jerry Major "get along" with camp stove

More about

Camp-outs new life-style

Continued from Page 1

beef on this street, and all that meat is spoiling."

Mrs. Major kept a jolly air about her, even though several windows were out in her house and the ceiling was weakened to the point of collapsing. But going without electricity means no air conditioning, and her 12-year-old daughter, Sandy, was complaining, "It's so hot."

"At least we've been so tired at night that the heat doesn't make any difference," Mrs. Major added. "We just conk out."

"Look at our neat lamp," Sandy chimed in as she held up a gas lantern that "we carry around the house at night for light."

The family's temporary refrigerator is an ice chest filled with commercially produced ice, which first cools soft drinks and then becomes the water supply.

"We let the ice melt and drink it," rather than boiling water from the tap to drink, Mrs. Major explained.

family were dealing with the situation by "camping out." A brick fireplace on the backyard patio was filled with pots and pans, rather than hamburgers or franks.

They, too, were complaining about the heat, and couldn't get any relief from their usually inviting pool, which is filled with shingles, boards and other debris dumped by the high winds that hit the area Wednesday night and Thursday morning.

Another alternative to the plight was being used by Mr. and Mrs. Dick Robinson, who were eating meals at the emergency relief center at Cocopah School.

"I sure hope they fix the electricity soon," she declared.

So do workers from Arizona Public Service Co., who have had to replace both underground and overhead cables.

Officials expect power to be restored in the area by the end of this afternoon. In the meantime, several residents on Desert Cove who weren't wiped out said they were "getting along OK."

But, as several confided, "every time I go into that bathroom I still flick on the light."



Mrs. Ruel Sports, left, and friend clean flooded kitchen

#54

53RD Ave + 61st Ave
Flooding
LATE 1980' / EARLY 1990's



WASHERS DRYERS

5323

MICRO
WAVE

RA

#55

5323 Ave + Glendale

Flooding
LATE 1980's / EARLY 1990's

CLOSED
Please Call Again

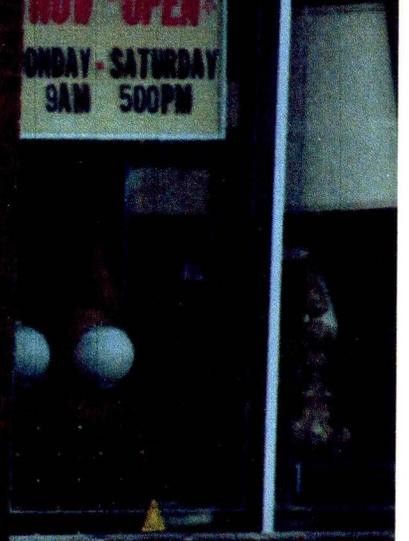
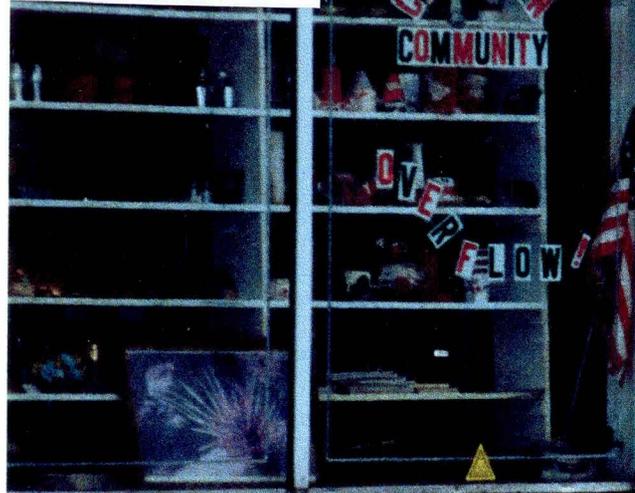
PUSH

Call 765-765

NOW - OPEN -
MONDAY - SATURDAY
9AM 500PM

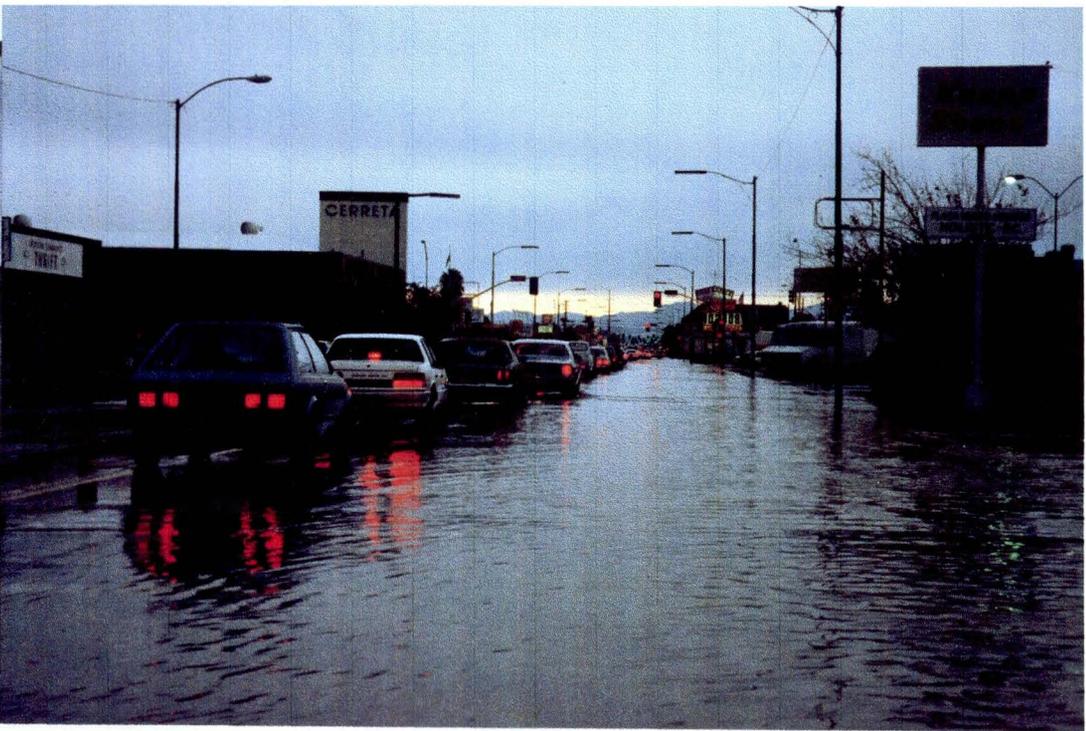
CHRISTIAN
COMMUNITY

OVER
FLOW





#56
53rd Ave + Glendale
Flooding
LATE 1980's / EARLY 1990's



#57

Down Town
Phoenix
Flooding
LATE 1960's OR 1970's



58

Old Cross Cut Canal
cleaned of vegetation
1960's?



#59



FCD #95-08 4-29-97
VIEW FROM TOP OF TITOMAS ROAD
BOX - LOOKING SOUTH.
OCCC





FCD # 95-08 APRIL 18, 1997
CONCRETING BOX INVERT —
OCCC

#60



ocac





0ccc



FCD# 95-09
Looking South from STA 93+00
STR B/FILL OF BOX WALLS
FOR THE LAST 150 LF IS IN
PROGRESS. OCCC



FCD# 95-09
LOOKING SOUTH - LAST SECTION
OF BOX CULVERT COMPLETED.
OCCC



#62



FED 45-08 phase II
LOOKING NORTH FROM
MCBOWELL.
OCCC *



FCD#95-08 Phase II
TRANSFORMERS AND PANELS
AT VIRGINIA AND PALM LANE.
OCCE

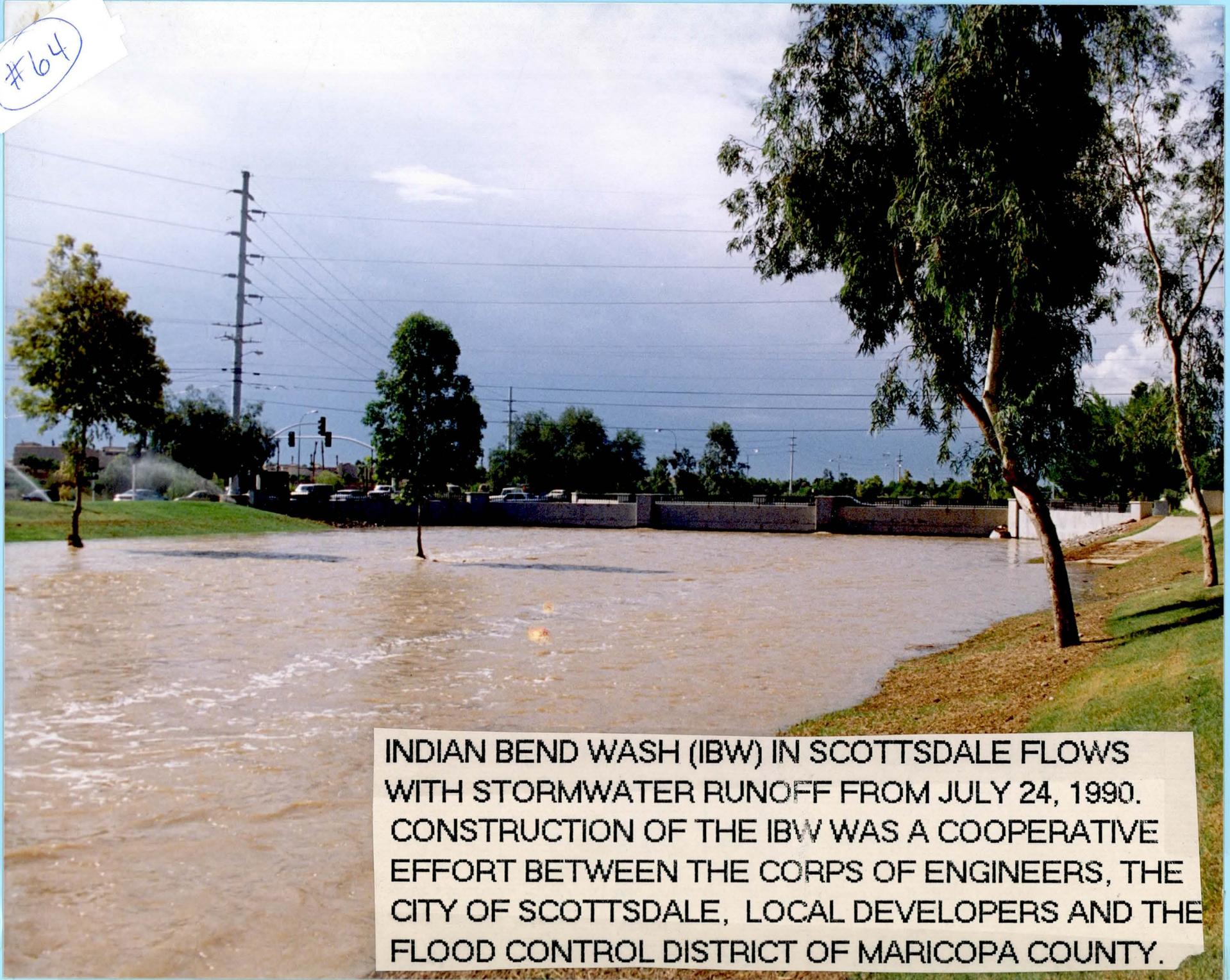


#63



FLOODING IN EAST MESA NEIGHBORHOOD ON AUGUST 14, 1990 AT INTERSECTION OF GLENMAR AND BALSAM ROADS.

#64



INDIAN BEND WASH (IBW) IN SCOTTSDALE FLOWS WITH STORMWATER RUNOFF FROM JULY 24, 1990. CONSTRUCTION OF THE IBW WAS A COOPERATIVE EFFORT BETWEEN THE CORPS OF ENGINEERS, THE CITY OF SCOTTSDALE, LOCAL DEVELOPERS AND THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.

#65 Queen Creek
Earth Fissure
Erosion Repair
About 1990's



(106) CAVE Buttes Vicinity
about 1990's Flooding



#67



At New River Bdy. looking down stream, Feb. 308 PM Feb 15-1931.
April 1931 - 105 10 20

New River ~~rages across Peoria Avenue west of 91st Avenue in the December 1967 flood, and at an unknown crossing in the February 1931 flood. The New River Dam, north of Jomax Road, was completed in 1985.~~

#68

EAST MARICOPA
Floodway Near
Power + ELLIOTT Rds
FLOODING

August 14, 1990



#69
ADOBE DAM
with water
Aerial View
JAN. 9, 1993



#10 Holly Acres
Level @ 115 AVE
& Gila River
Looking at N. BANK
1-9-93



#71 Interstate 10 + the
Gila River Bridge
collapse
1983 October 3



#12

Agua Fria River at
Camelback Road Bridge
Crossing

JAN. 11, 1993



#73



Looking SW

NEW River
WEST of 91st Ave. on Peoria
Washed out Road - Flooding

(#74) New River Dam
Aerial photo
1990's ??



#75

New River Dam
Water Behind Dam
January 9, 1993



#76

New River Dam
Close up view of
Water behind
Dam



#77 New River Dam
1985+ Ground View



#78) ADOOT Channelization of
SAGE RIVER West of 48th STR.
on S. BANK LOOKING WEST

Dec. 21, 1990



#79



SALT RIVER - Normal Condition



SALT RIVER - Storm Flows

(#80) Snake River
Flooding. Bridge partially
collapsed
Feb. 1980



2/80

Salt River - Hayden Bridge looking N.

#81 SALT River at Mill Avenue
Bridge partially collapsed
Jan. 9, 1993



#82

Looking toward Tempe Butte from north end of S.P. bridge showing S.F. R.R bridge wrecked in flood of night of Apr 12, 1905
Apr 14, 1905 #51



SALT DID FLOOD — Salt River at flood stage in the "big one" of 1905. Photo, property of Henry A. Salcido, 1720 Circle drive, was taken from the north end of the Maricopa and Phoenix Railroad bridge (now SP) and shows the Santa Fe bridge which was weak-

ened by the flood and collapsed as train moved north ward across it. It must be noted railroad crossing were only bridges. First highway bridge went in over 10 years later, present four-lane thoroughfare in mid 1930s.

RETURN
(LESS THAN 138,000 WHICH OCCURRED NOV. 1905)
LATEK DATA = 115,000 CFS (C/E REPORT 12/4/57)

#83 CAP EAST side of Valley
1980's or 1990's



#84 CAP Canal
Breaks

1984 Summer



Break in CAP Canal



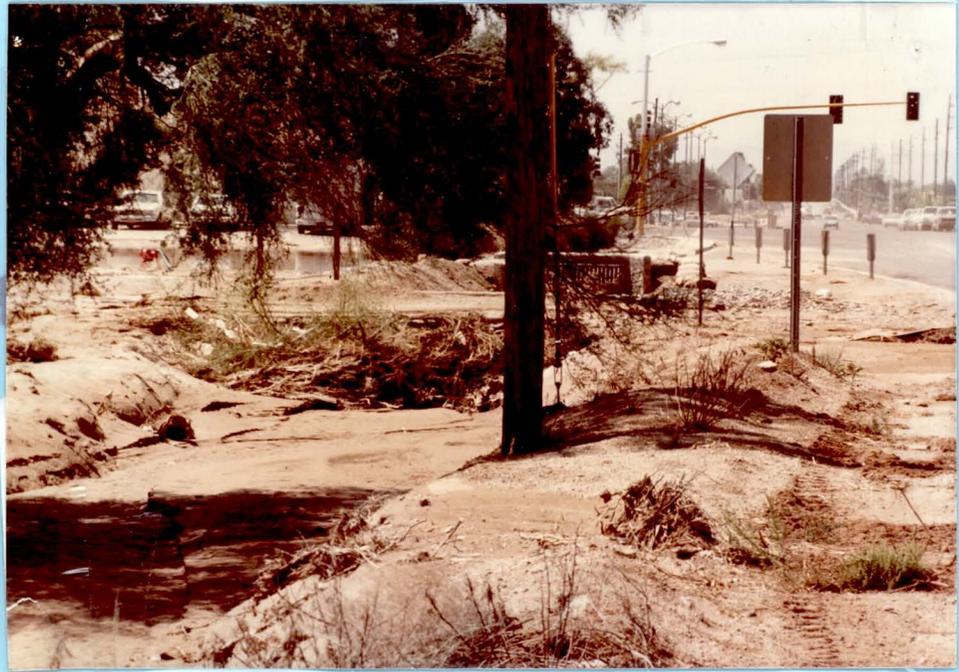
Downstream of CAP Break

#85

Summer of 1984



Power Road and Apache



Power Road and Apache

#86

Summer of 1984



102nd Street and Illini

#87

Summer of 1984



72nd Street and Inverness

#88
Summer of
1984



McDowell and Recker



McDowell and Recker

#89

Summer of 1984



96th Street and University



Near 96th Street & University



96th Street and University



96th Street and University



96th Street and University

Summer of 1984

#90



Storm Erosion



Storm Erosion

#91



BLM PROPERTY

SCS EMERGENCY WORK
at NEW RIVER

#92



DOWNES PROPERTY

SCS EMERGENCY WORK
at NEW RIVER

#93



NEW RIVER - Normal Condition



NEW RIVER - Storm Flows

#94 New River channel
So. of Olive
1-21-93

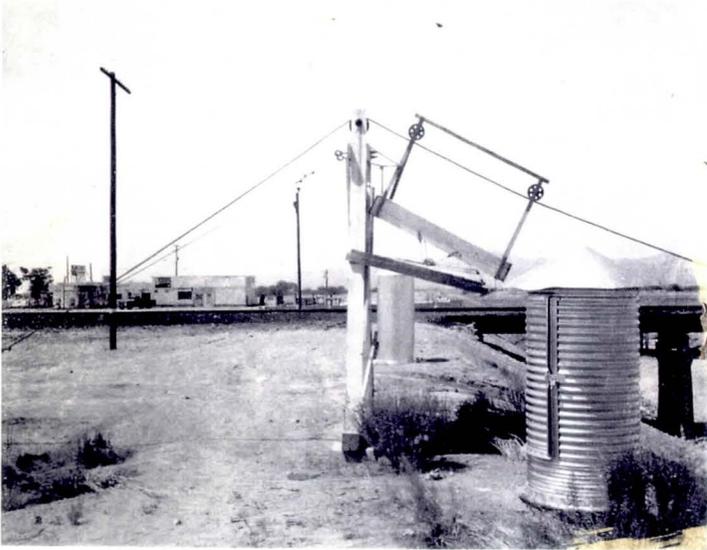


#95 New River upstream
Stormwater flows in N.R. upstream
of Grand Ave as seen on 8/15/90
N.R. is channelized to handle flows
from this point so. to where it
enters the Agua Fria River
near Camelback Road

August 15, 1990



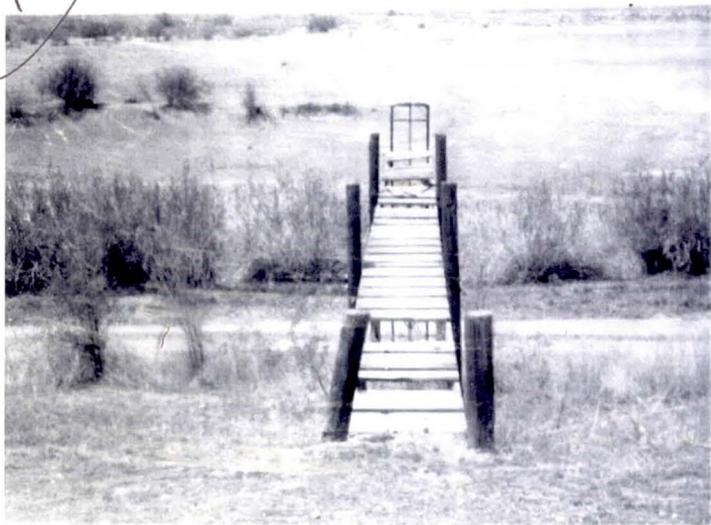
#96



7-11-74
McMICKEN DAM OUTLET CHANNEL AT GRAND AVENUE. REPAIRING OF A
BROKEN SENSOR TUBE.



#97



McMICKEN CATWALK 3 MILES NORTH OF GREENWAY. THIS PICTURE SHOWS THE NEED FOR REPAIRS.

CATWALK AT LEFT, AS REPAIRS ARE ALMOST COMPLETED. (BELOW)
3-19-75



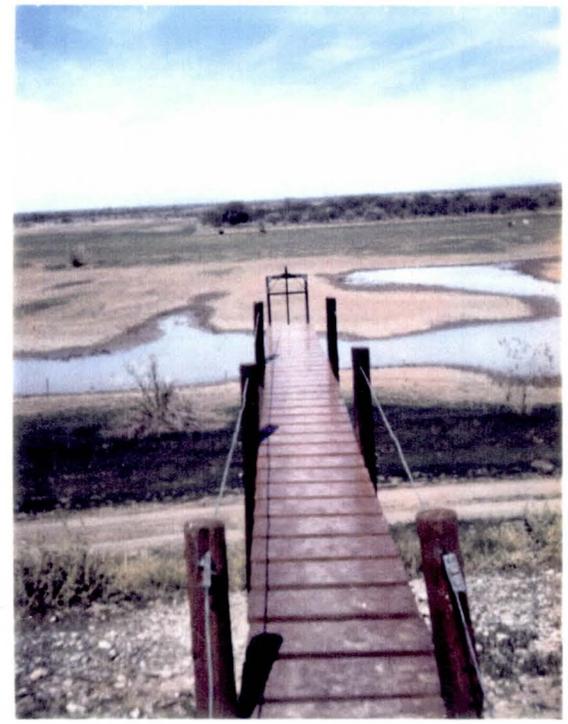
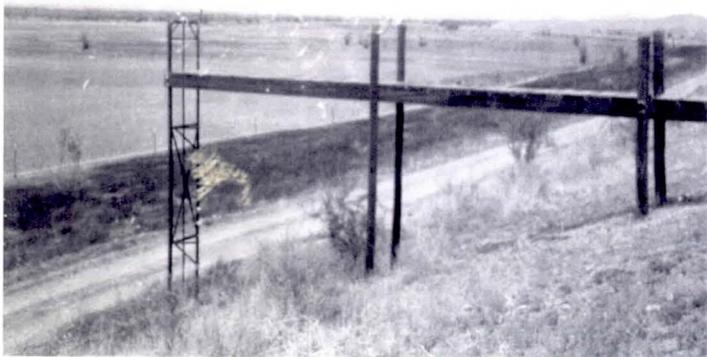
3-19-75
FLOOD CONTROL TEAM HARD AT WORK.



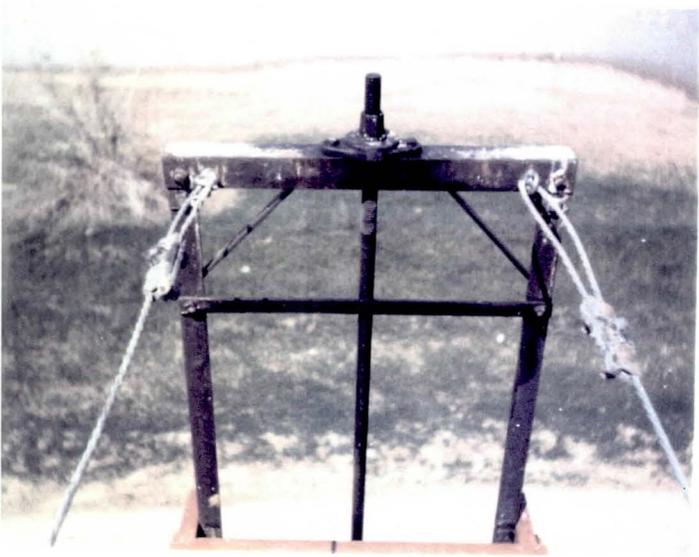
3-19-75
McMICKEN CATWALK 3 MILES NORTH OF GREENWAY. FINISHED PRODUCT.

#98

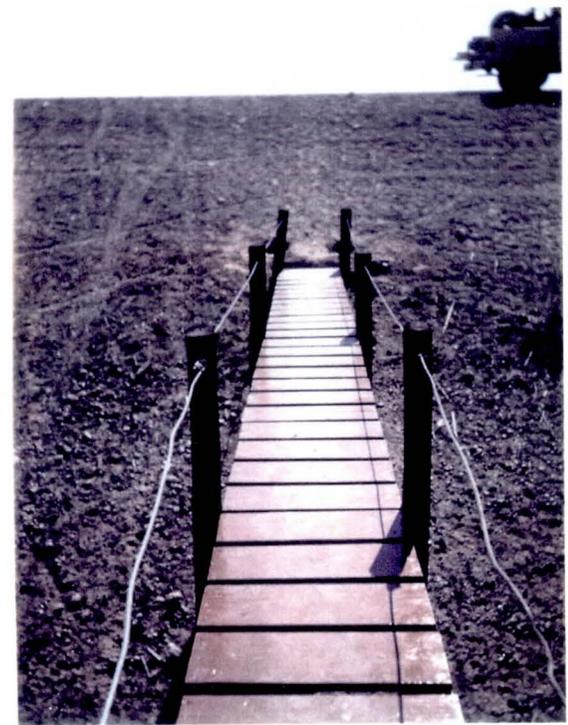
McMICKEN CATWALK 1/4 MILES
NORTH OF GREENWAY. NOT
SAFE TO WALK ON.



3-11-75
NORTH CATWALK AFTER
REPAIRS HAVE BEEN MADE.

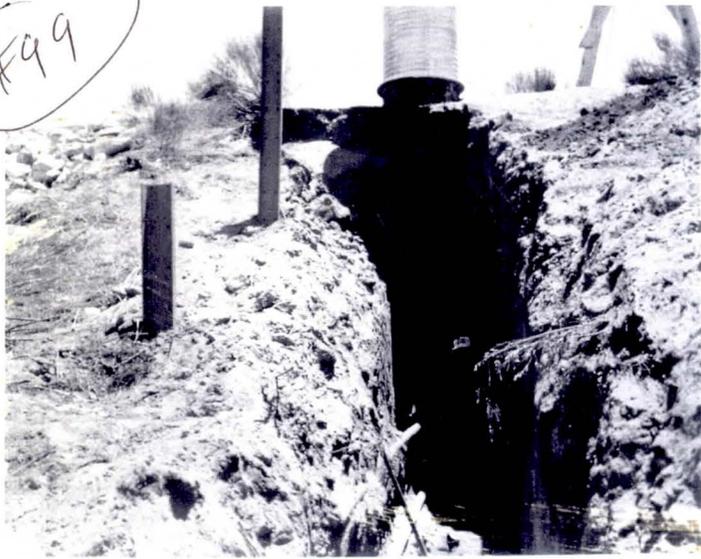


3-10-75
NORTH CATWALK AFTER REPAIRS
HAVE BEEN MADE.



3-10-75
NORTH CATWALK AFTER
REPAIRS HAVE BEEN MADE.

#99



7-11-74
repair work at McClintock dam out-
let channel at Grand Avenue.

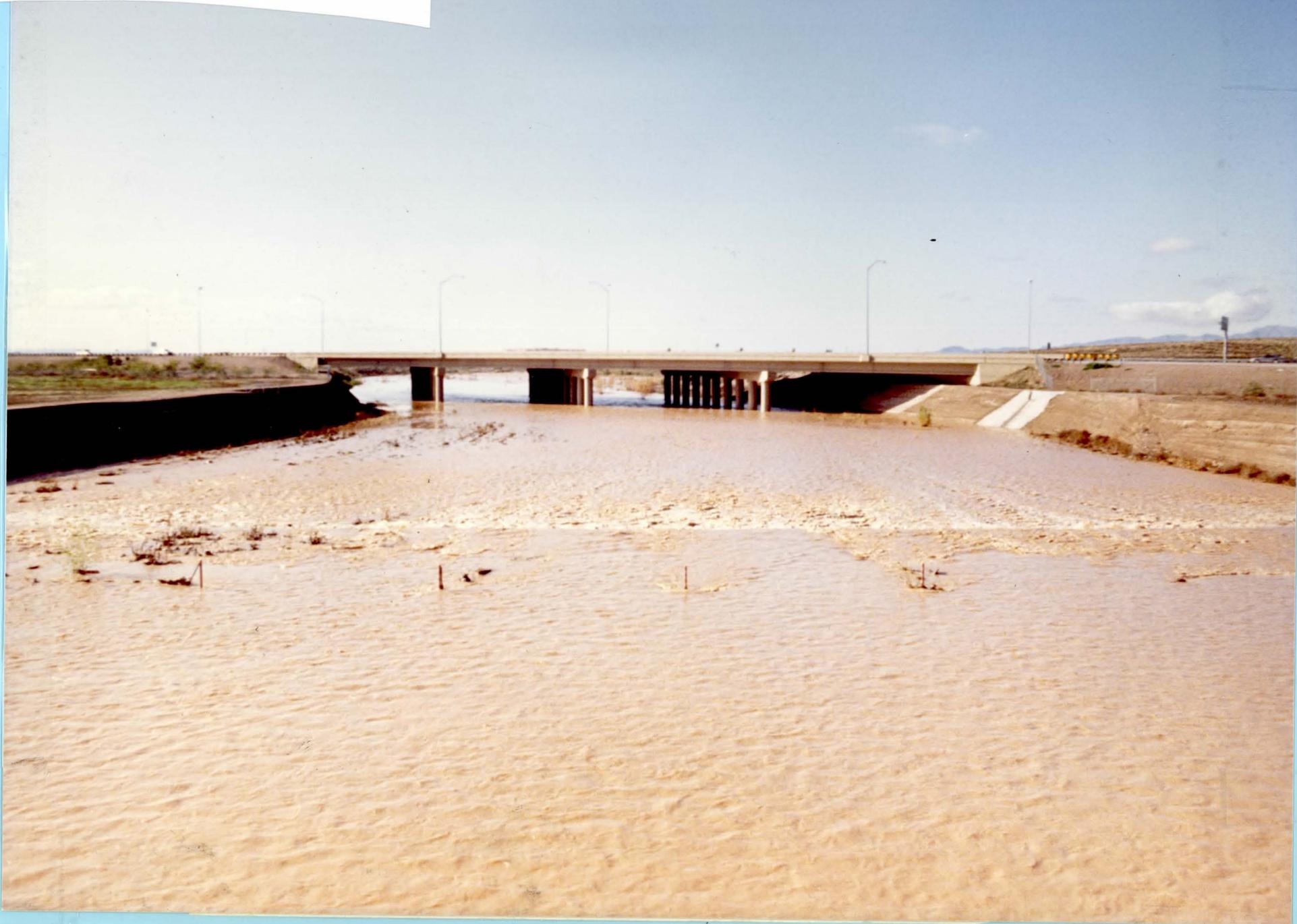
7-11-74
repair work at McClintock dam out-
let channel at Grand Avenue.
(below)



11-19-75
upstream 400' from Grand Avenue bridge.
(left bank) BEFORE

AFTER

#100 SKunk Creek at 83rd Ave
Top of Bridge looking SW
(Agua Fria Expressway Bridge)
Jan. 11, 1993



#101 Skunk Creek @ I-17

1990's - ?



(#102) Skunk Creek @ I-17

1990's - ?



#103 SKunk Creek @ I-17

1990's - ?



#104



Looking N

Skunk Creek forms sandbars across 83rd Avenue south of Greenway in the December 1967 flood. Adobe Dam on Skunk Creek, west of 43rd Avenue at Deer Valley Road, was completed in 1984.





#105

Cave Creek Wash flowed from the north all the way through Phoenix, shown here at Roosevelt Avenue in central Phoenix during a storm in 1966. In 1921, Cave Creek Wash flooded the state capitol. The Arizona Canal Diversion Channel will intercept future flood waters from Cave Creek at 23rd Avenue and Peoria, carrying them safely to Skunk Creek and ultimately to the Gila River.

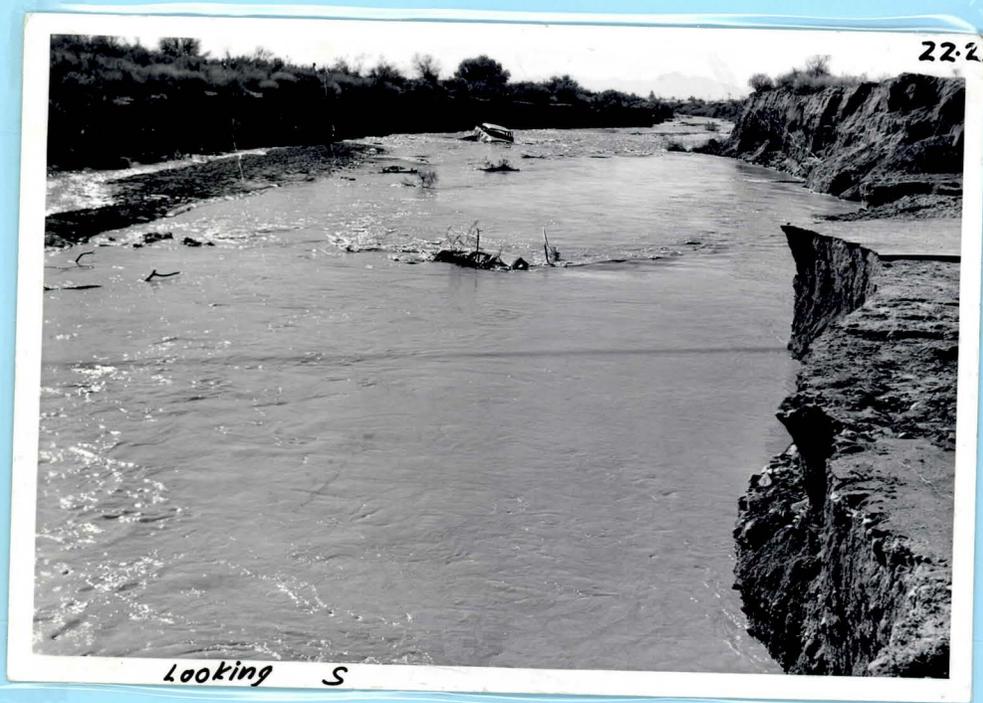


(#106) Old Cave Creek Dam
Looking East
Jan. 9, 1993

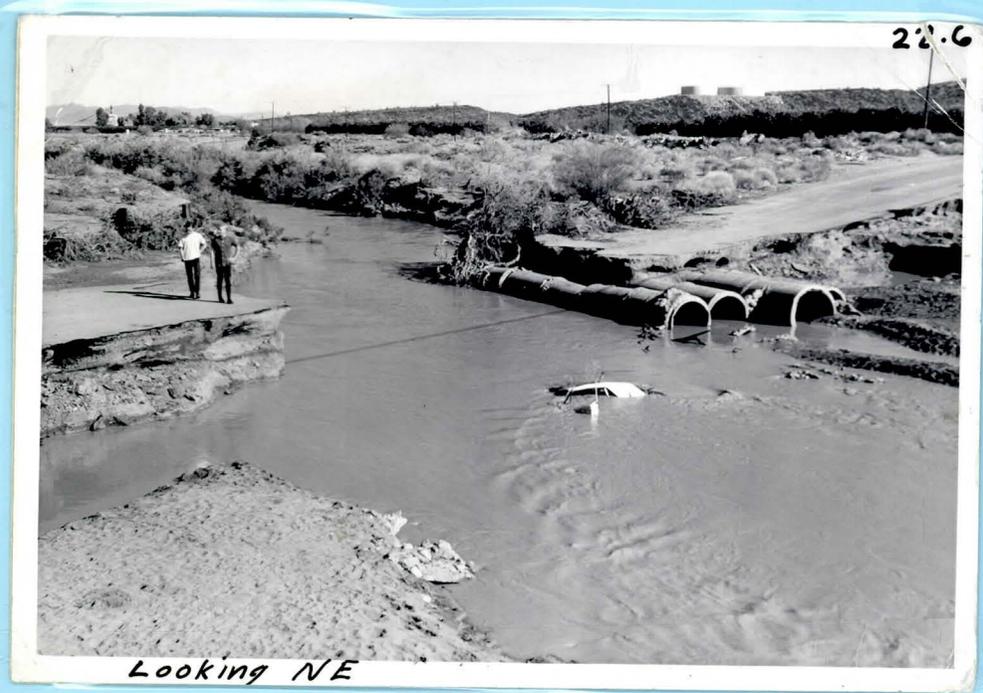


#107

CAVE CREEK at
Thunderbird
Flooding, Washed out Road
December 1967



Looking S



Looking NE

#108

Arizona Canal Diversion Channel Project Reach 4

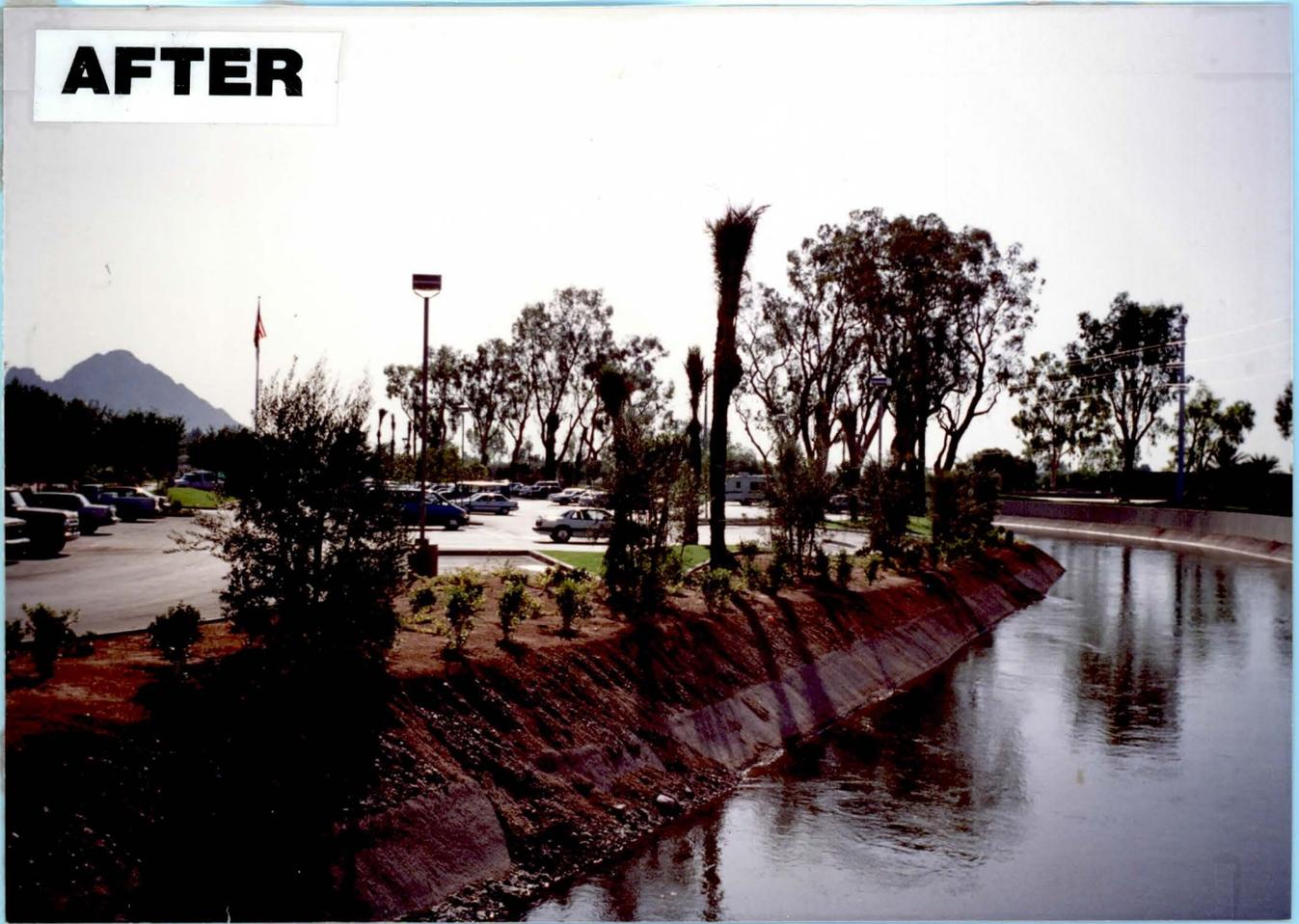
Description: Reach 4 is the final 4.2-mile section of a 16.5-mile-long drainage channel constructed along the north side of the Arizona Canal. Reach 4 is a rectangular concrete channel approximately 24 feet deep and 36 feet wide. It stretches from 12th street in Phoenix to about 40th Street in Paradise Valley.

Purpose: To provide flood protection to homes and businesses south of the Arizona Canal between 12th Street and 40th Street.

BEFORE



AFTER



#109

ACDC REACH 1 WEST OF
CACTUS LOOKING WEST.

1990's



110

Arizona Canal Diversion Channel

The Arizona Canal Diversion Channel, or ACDCh, is a 16.5-mile flood control channel that parallels the Arizona Canal on the north side. The channel diverts stormwater that formerly flooded large areas of metropolitan Phoenix. It now conveys these flows safely across the city to Skunk Creek.

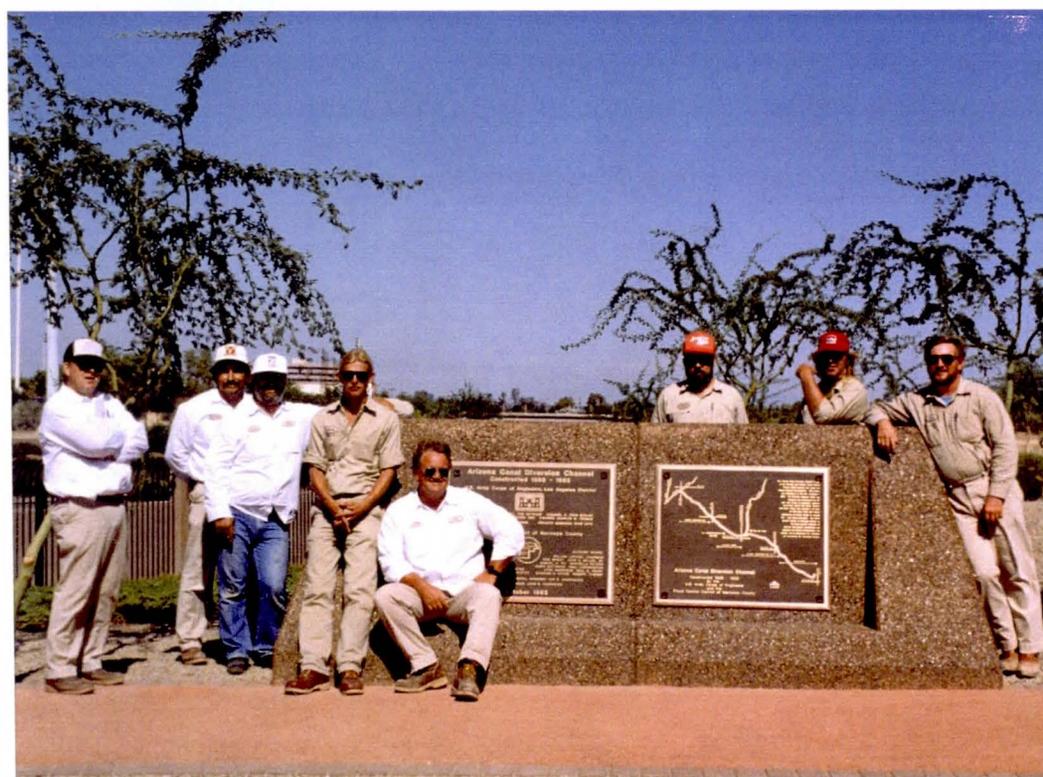
The channel is the final element of the Phoenix and Vicinity (including New River) Flood Control Project, authorized by Congress in 1965. The entire project includes four flood-control dams and channel improvements, and was designed and constructed by the U.S. Army Corps of Engineers in partnership with the Flood Control District of Maricopa County.

The District's responsibility includes obtaining all land and rights-of-way; relocating people, utilities, roads and bridges for the entire project; and maintaining and operating the completed project.

*The Maricopa County Board of Supervisors, as the
Flood Control District Board of Directors,
and the
U.S. Army Corps of Engineers
cordially invite you to a dedication ceremony for the
Arizona Canal Diversion Channel*

*Friday, October 8, 1993
9 a.m.*

*23rd Avenue and Mountain View, east of Cave Creek Wash
(see map, reverse)*



W/III
ACDC LANDSCAPING
1993





#112



#113





#114. ARIZONA CANAL MAPS
Showing FLOODED AREAS
AFTER BREAKS IN CANAL
June 22, 1972





#115

3. Location: 10th Street
Wash at Echo Lane facing DS
(south). Photo taken from
within the channel.

Notice the steep and
unprotected side slopes.



18. Location: Immediately US
(north) of private drive in
Capistrano Homes Development.
Photo taken from the bottom of
the 10th Street Wash.

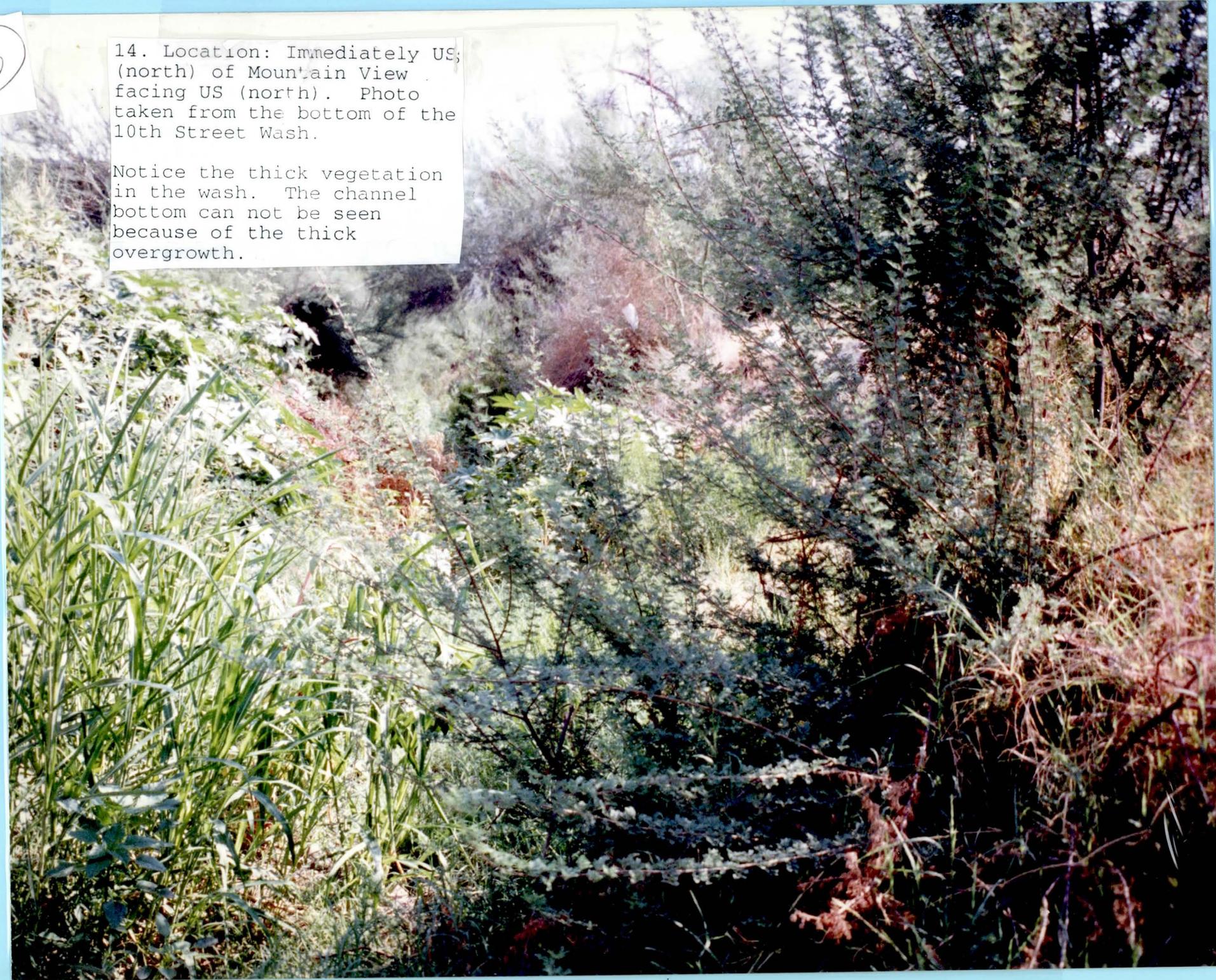
Notice the wide channel
section. This reach is above
the 100-year FEMA floodplain
and has the capacity to convey
the 100-year runoff within the
banks.



#116

14. Location: Immediately US;
(north) of Mountain View
facing US (north). Photo
taken from the bottom of the
10th Street Wash.

Notice the thick vegetation
in the wash. The channel
bottom can not be seen
because of the thick
overgrowth.



5. Location: 10th Street Wash at Diana Avenue facing DS (south). Photo taken from within the channel.

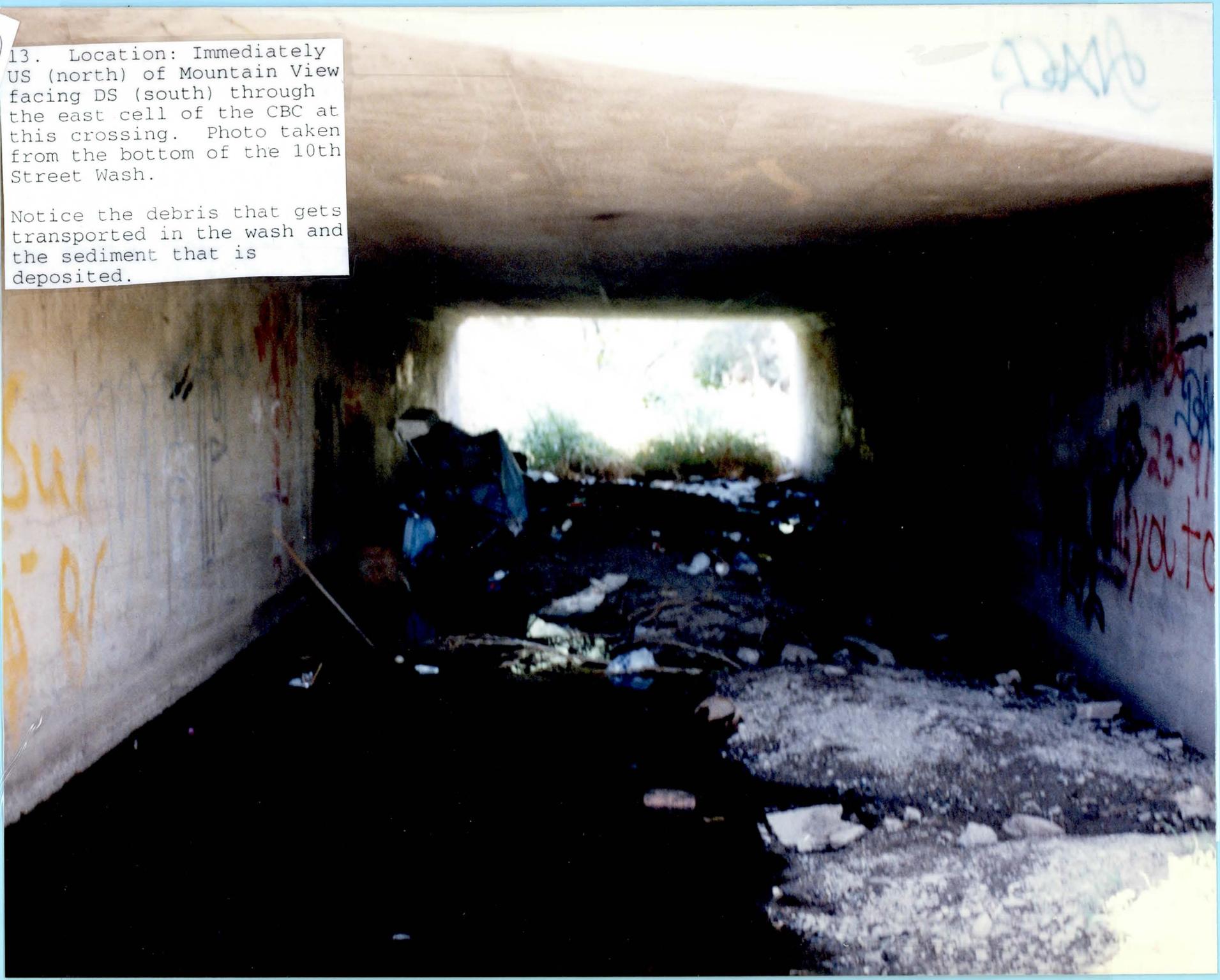
Notice the erosion on the banks and the channel bottom from the high velocities. Also notice the steep and unprotected side slopes.



#117

13. Location: Immediately US (north) of Mountain View facing DS (south) through the east cell of the CBC at this crossing. Photo taken from the bottom of the 10th Street Wash.

Notice the debris that gets transported in the wash and the sediment that is deposited.



16. Location: Immediately US (north) of Cheryl Drive facing US (north). Photo taken from the bottom of the 10th Street Wash.

Notice the wide channel section that the developer was required to construct. This reach is above the 100-year FEMA floodplain and has the capacity to convey the 100-year runoff within the banks.



#118



August 14, 1990 -- Arizona Canal Diversion Channel (ACDC) at 43rd Ave. crossing.

#119

ACDC west of
Thunderbird

1-21-93



#120



) Looking southwest from 7th Avenue south of Northern - Lateral 12 Spillw
flood waters from break east of Lat. 12 - 1:00 PM (8/3/43)

This yard on 7th Avenue south of the
Arizona Canal is flooded by an August
1943 storm.

#121

Wickenburg Flooding
Sept. 1, 2000



#122

Phoenix
Flooding

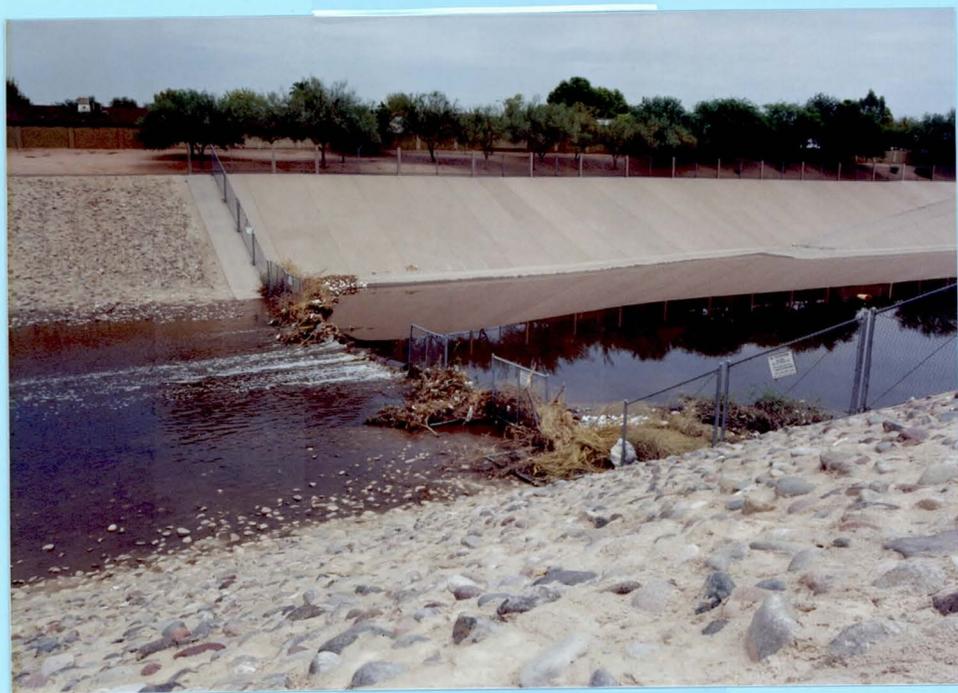
Jan. 1, 1972





#123

ACDC AFTER Flooding
August 8, 2000



(#124) Spook Hill
Flooding
Feb. 24, 1998



#125

Indian Bend Wash
McKellips Lake Park
July 26, 2000



#126

MARCH 23, 1959

**Arizona Governor Paul Fannin signs Senate Bill 204 which empowers
Arizona counties to establish flood control districts**

(From Left to Right: Nick Udall, attorney and former Phoenix Mayor; Fred Glendening, Maricopa County Engineer; Henry "Hank" Shipley, Salt River Project; Governor Fannin; Sam Tucker, Phoenix City Engineer)

#126



#127





#128 Apache Lake
picture taken from
Apache Trail
May 31, 2007

