

0	Year	Title of Newspaper Article	Key Words
1	January 6, 1952	Cave Creek Control Dam New 'Weak, Rotten,' Phoenix Mining Man Charges - Hokett Cites Flood Peril (& Picture)	X Weak, Rotten Condition, Cave Creek Control Dam, W.G. Hokett, Leaky Condition, Mining Lease, last August, Water 4- to 50 Feet Deep, Half Mile Wide, Letter Ignored, October, United States Senator Carl Hayden, Arizona, Custodian, Built 1922, Salt River Water Users Association, Constructed, Stop Big Floods, Three Pictures, Running Water, Cracks, Dam is Water Logged, Watched, Inspected Dam, Lies Upon Patented Minneapolis Mining Claims, Judge James R. Armstrong, St. Paul Claim, Mined Ore Under Dam, Heavy Rains, Aug. 30th, 1951, Filled Dam, Leaked, Lease Expired, Water Soaked Leaky Condition
4	September 3, 1962	Indian Bend's Plan Revised	X Revised Plat, U.S. Corps of Engineers, Boundary Restrictions, Indian Bend Wash, Indian Cove Subdivision Tables, Colonel John Lowry, Head of Maricopa County Flood Control District, Planned, Location Flooded Numerous Times, Routing of Proposed Channel, Flooding, Spring Runoffs, Heavy Rainfall Periods, Replat Outside Indian Bend Channel
6	December 5, 1962	U.S. Engineers Okay Channel For Area Here	X U.S. Army Corps of Engineers, South Pacific Division, Construction, \$7.2 Million Channel, Flood Control Measure, Protect, City of Scottsdale, Washington, D.C., Board of Engineers for Rivers and Harbors, Concrete-lined Channel, Seven Miles Long, Arizona Canal, Salt River, Indian Bend Wash
7	December 6, 1962	Indian Bend Wash - Army Oks Channel Project	X U.S. Army Corps of Engineers, Construction, \$7.2 Million Indian Bend Wash Channel, Flood Control Measure, Protect, City of Scottsdale, Washington, D.C., Board of Engineers for Rivers and Harbors, Concrete-lined Channel, Seven Miles Long, Arizona Canal, Salt River, Indian Bend Wash, North and South, Hayden and Miller Roads, North of Tempe, Tempe Officials Protested, Divert Floodwaters, Salt River, Flood Damage in Tempe, City Attorney James R. Holman, Maricopa County Flood Control Advisory Board, Construction, Levee, Primary Flood Area, Mesa Sewage Treatment Plant, 40th Street, Phoenix, John C. Lowry, Chief Engineer, Maricopa County Flood Control District, County-wide Flood Control Program
5	December 17, 1962	Ground Water Levels Show Further Decline in Area	X Ground Water Levels, Decline, Spring 1961 to Spring 1962, Arizona, Mesa, Chandler, Tempe, Annual Report on Ground Water in Arizona, U.S. Geological Survey, Arizona State Land Department, U.S. Department of Interior, Summary, Analysis of Hydrologic Data, Decline, Salt River Valley, Santa Cruz Basin, Safford, Duncan Basins, Downward Trends, Since Early 1940's, Spring of 1957, Spring of 1962, Recharge of Ground Water Reservoirs, Pumpage, 1961, Irrigation, Crops
2	December 18, 1962	How Wide Does The Gila Roll?	X Flood Control Channel, Gila River, Confluence, Salt River and Gillespie Dam, Maricopa County Flood Control District, Bond Issue, U.S. Army Corps of Engineers, Clearing 2,000-foot Wide Channel, Salt Cedars, Similar Growth, Taxpayers, Maricopa County, Maintenance, Federal Government, Water Conservation, Well, Buckeye District, 500-foot Channel, As Effective, Storm, Arizona, Arizona Game and Fish Department, Sole Opponent, Dander, Wildlife, Taxes
31	January 1, 1963	Supervisors Okay Tempe Site for County Hospital	X Maricopa County Board of Supervisors, City of Tempe, 90-acre Site, Papago Park, \$12 Million Maricopa County General Hospital, No Cost, U.S. Bureau of Land Management, Delay Selection, Two Months, Central Phoenix
32	January 1, 1963	Flood Control, Other Items Studied by House Group	X Agriculture and Irrigation Committee, State House of Representatives, HB 220 Concerning Flood Control, Tempe, Effect on Salt River
3	January 3, 1963	Salt River Flood Plan Talk Due - Council to Meet With Officials	X Tempe, Maricopa County Flood Control Program, Salt River Project, Mayor Bernard Caine, Salt River Channel, Member's of County's Advisory Board, City Officials, Interested Parties, Plan for Indian Bend Wash Project, Drainage for Paradise Valley, Scottsdale Area, Levee Planning, East and West Hayden Butte, Valley, Countywide Bond, Army Engineers, Federal Aid
20	January 3, 1963	Salt River Flood Plan Talk Due - Council to Meet with Officials	X Tempe, Maricopa County Flood Control Program, Salt River Project, Mayor Bernard Caine, Salt River Channel, Tempe, County's Advisory Board, City Officials, Indian Bend Project, Drainage, Paradise Valley, Scottsdale, Levee Planning, Channel, Hayden (Tempe) Butte, Valley, Maricopa County Flood Control District, Finance, Army Engineers, Federal Aid
30	January 4, 1963	County Flood Control Project id Outlined For Council Thursday - Protection of Tempe is Issue - City to Foreword Suggested Planning	X Tempe, Flood Control Construction, Salt River Channel, Maricopa County Flood Control Advisory Board, U.S. Army Engineers, Hearing, Proposed County Flood Control Projects, Col. John Lowry, Manager, Mrs. Ruth O'Neal, Maricopa County Board of Supervisors, L. Alton Riggs, Councilman John Moeur, Francis Cocke, Jim Holman, City Attorney, Indian Bend Wash Flood Control Channel, Tempe Delegation, Salt River, South bank, Town
34	January 26, 1963	On Behalf of Tempe- Letter Makes Flood Control Suggestions	X City of Tempe, Maricopa County Flood Control Advisory Board, Mayor Bernard Caine, Councilman John Moeur, Attorney Jim Holman, Francis Cocke, Flood Control Advisor, Letter to the Board, January 23, 1963, Board of Directors, Flood Control District of Maricopa County, Comprehensive Flood Control Program, December 18, 1961, November 20th and 28th, 1962, Objects,
12	February 5, 1963	Avondale 6 Mo. Revenue is \$182,627	X Revenues, Expenditures, City of Avondale, Water Revenue, Sanitary Sewer Revenue, Adopted Resolution 94, Preliminary Flood Control Plan, Maricopa County Flood Control District, Agua Fria, Salt and Gila Rivers be Properly Channeled, Accommodate Increased Water Flow, Levees, Constructed, Protect City Sewage Plant, Col. John C. Lowry, District Flood
13	February 7, 1963	Avondale Sets Conditions - Flood Control Plan Okd	X Avondale City Council, Preliminary Flood Control Plan, Maricopa County Flood Control District, Agua Fria, Salt and Gila Rivers, Properly Channeled, Increased Water Flow, Levees, Built, Sewage Plant
36	February 19, 1963	Flood-Control Accord Delayed	X Proposed Agreement, U.S. Soil Conservation Service, \$14.2 Million in Flood-control Construction, County Board of Supervisors, City of Tempe, Maricopa County, Ask Congress for Funds, Build Levees, Mesa, Pinal County Boundary

0	Year	Title of Newspaper Article	Key Words
37	February 22, 1963	Col. Lowry Says Little Chance for Dam in Weeks Wash	X Chief Engineer, General Manager, Maricopa County Flood Control District, Build Dam, Section 15, Apache Junction, Col. John C. Lowry, Half-mile Long, 50-foot High Earthen Retaining Wall, Weekes Wash, Richard Damiano, Ed Tomas, Property Owners, Area, Proposed Dam, Structure, Built, Soil Conservation Service, Flood Control Projects, Maricopa County, Protested, SCS Plan, County-wide Project, Congress, Funds, Sentiments of Property Owners, Proposed Damsite, Weekes Wash Dam, Pinal County Residents, Palm Springs, Maricopa County Supervisors, Dam, Flood Bluebird Mine, Only Tourist Attraction, Protect Property
16	March 1, 1963	Usery-Superstition Area Flood Control Plans OK'd	X Maricopa County Board of Supervisors, Approved, Agreement, U.S. Soil Conservation Service, Federal Approval, Flood Control Projects, Usery-Superstition Watershed, Eastern Maricopa County, Three Projects, Levees, Protect, South, East of Mesa, Tempe City Attorney, Countywide Flood Control Program, Donald Meyers, Flood Control District Attorney, Flood Control District Advisory Board, Federal Participation, Congress, Construction, John Lowry, Flood Control Engineer, Pinal County Board of Supervisors, East Maricopa, Queen Creek, Mesa-Tempe Soil Conservation District, Buckhorn-Mesa, Apache Junction-Gilbert, Williams-Chandler Watershed
33	March 13, 1963	2 Flood Projects Backed	X Flood Control Projects, Winslow, Scottsdale, Army Engineers Board of Rivers and Harbors, Sen. Carl Hayden, Scottsdale Project, Channelization of Indian Bend Wash, Arizona Canal, 7 Miles South, Salt River, Hayden, Miller Roads, Diversion Levee, Little Colorado River, Ice House Wash, Congress, Funds, Arizona Flood Control Officials
8	July 10, 1963	Approval Urged for Watershed	X Reps. John J. Rhodes, Morris K. Udall, Approval, Buckhorn-Mesa Watershed Project, House Agriculture Subcommittee, Watershed-flood Control Project, Maricopa, Pinal Counties, Federal Money, Apache Junction-Gilbert, Williams Filed-Chandler, Queen Creek Flood Control Complex, Whitlow Ranch Dam, Completed on Queen Creek, Superior, Dikes, Channels, Gather Floodwaters, Salt River Valley, Gila River, Flood Protection, Subcommittee Under Rep. W.R. Poage, Topography, Dangerous Flash Floods, Rainstorms, Drench Mountains, Walls of Water, Without Warning, FVU Committee and Senate Agriculture Committee, Maricopa County, Board of Supervisors, Maricopa County Soil Conservation District, Mesa-Tempe Soil Conservation District, East Maricopa County Soil Conservation District, Queen Creek Soil Conservation District, Protection to Mesa, Apache Junction, Gilbert, Williams Air Force Base, General Motors Proving Ground, Agricultural Land
35	August 1, 1963	Dam in Box Canyon	X Boss Luke White, Round-Up Club, Revival, Dam in Box Canyon, Delbert Kirby, Recreational Director, Maricopa County Officials, Hal Warner, Maricopa County Flood Control District, Money, Build U.S. Department of the Interior, City Attorney Frank Stanlis, Secretary of Interior Stuart Udall, Appropriated by Congress, Arizona, Warren Kelly, Arizona Game and Fish Commission, Reuben Stifel, John Burden, Tom Wilmeth, Bill Bass, Andy Hervey, Carl Brost, R.D. McIntosh, Carl Beillen, Don Kerr, John McCarroll
11	August 6, 1963	Flood Photo - Youngsters...	X Hatcher Road Between 16th and 19th Avenues, Water Playground, Rainstorm
10	August 23, 1963	Chamber Takes Stand on Flood Problem	X Flood Damage, Apache Trail, Action, Prevent Additional Flooding, Chamber of Commerce, Lee Olson, Heavy Rains, Damaged Property, Federal Officials, Congressional Representatives, Potential Danger, Major Rainstorms
9	August 24, 1963	Youth Washed Into Culvert - Moyers Survives Terrifying Experience (& Picture)	X Cloudburst, Apache Trail Area, Mesa, James Moyers, Miss Linda Teague, Storm, Apache Trail Boulevard, 85th Street, Swallowed Up, Whirlpool of Muddy Water, Swept Out of Sight, Sewer, Under Highway, Culvert, Huge Downpour
15	September 5, 1963	Who Says There Are No Real Rivers on Desert? (& Picture)	X Hassayampa River Aflow, Palo Verde-Hassayampa Rd., Wet Banks, Mud Encrusted Underbrush, River, Full Flood, Bridge
14	October 5, 1963	Flood, Hail, Rain, Wind - Upper End of Harquahala Valley Has Heavy Damage to Lettuce, Millet, Cotton, Ditches	X Harquahala Valley's North End, Rain, Flood, Hail, Wind, Sept. 9, Lettuce Destroyed, Cotton, Top Crop Knocked Off, Millet, Big Tool Sheds, Blown Away, Roads, Washed Out, Damage, Concrete Ditches, Joe Martori's Buckhorn Ranch, Break, Replaced, Buckhorn, Brunt of Storm, Jackson & Perkins, J.A. Wood Farm, Calzona Farms, Mary E. Steve Martori, Salt River Valley, Salt River, Buckhorn Ditch, Charles Softley, Water Coursing Through Ditches, Spill Out, Wash Away Berm, Unsupported Concrete, Pouring Rain, Holes, Gahi Millet Fields, Hammered By Hail, J&P Work Crews, Muck, Sheep Belly-deep in Water, High Concrete Wall, Blown Over or Washed Over, Cyclonic Wind, Road Damage, Repairing Underground Telephone Cable, Dikes and Channels, D.A. Dobkins, Flood Control Division, Soil Conservation Service, Phoenix
21	October 19, 1963	Man, What A Storm! - Whole State Hit - Scottsdale Ok, But Maryvale's A Mess Again (& Picture)	X Wind, Dust Rain, Valley, Scottsdale, Flooded Streets, Scottsdale Rd., Indian School, Hurricane Mona, Coast of Mexico, Arizona, Downpour, Maryvale, Heavy Flood Damage, Cloudy Skies, Scattered Rains, Heaviest Rainfall, Payson, Sky Harbor Airport, Phoenix, 32nd Avenue, West Camelback, Rainfall, 25th Street and Bellview, Seventh Street and Baseline, Cordes Junction, Mesa Experimental farm, South Tempe, Winds Up to 43 Miles per Hour, 50 Miles per Hour, North Scottsdale-Cave Creek Area, Power Failures, Trees Blown Down, Crops, Three Persons Killed, Rain Slick Roads, Dirt Roads, Unsafe, Rains Closed Grand Avenue at Glendale, Peoria Underpass, 91st Avenue, Indian School to McDowell, Van Buren, Agua Fria River, Cave Creek Road, Bell Road, Luke Air Force Base, Flooding, Phoenix-area Homes, 17th Street and Yavapai, Gila Bend, Maverick, Prescott, Flagstaff, McNary, Tucson, Venice, Four-inch Deep Water
22	October 19, 1963	Barry's Rally Rained Out	X Sen. Barry Goldwater, Rain, First Rain, More Than a Month, Senate Subcommittee, Studied, Central Arizona Project, Legislation Approve It

0	Year	Title of Newspaper Article	Key Words
25	October 28, 1963	County Oks \$115 Million Flood Plan	X Countywide Flood Control Program, \$155 Million, Maricopa County Board of Supervisors, Public Hearing, Proposed Survey, Data, Topographical Map, John Lowry, Chief Engineer, General Manager, Maricopa County Flood Control District, County Bond Issue, Federal Government, 30 Flood Control Projects, Northwest Phoenix, August Suffered Heavy Flood Damage
27	October 29, 1963	New Taxes Studied By Flood Unit	X Voters, Bond Issue, Comprehensive Flood Control Program, Flood Control District Engineer, John Lowry, \$115 Million Program, Board of Supervisors, Federal Government, Central Arizona Project, Right-of-ways, CAP, CAP Funds, Used Jointly, Cut Down Local Cost
24	October 30, 1963	Indian Bend Flood Control Work - Possible Within A Year	X Flood Control Work, \$9 Million Lower Indian Bend Channel, Scottsdale, Maricopa County Flood Control District, One of 19 Recommended Projects, \$115.4 Million Countywide Flood Control District, Board of Supervisors, Public Hearing, Indian Bend Project, Construction, Indian Bend Wash, Development, Concrete-lined Channel, Seven Miles, Arizona Canal to Salt River, Scottsdale Road, Federal Government, Col. John Lowry, General Manager, Chief Engineer, Secretary of Defense, Bureau of Budget, Congress, Sam Tucker, Former Phoenix City Engineer, Flood Control Advisory Committee, Right of Way Obtained, Maricopa County, Bond Issue, Barney Burns, Chairman, Flood Control District Formed in 1959, Flood Control District Levy, Into Effect in 1960-61, \$130,000 from Tax, Operating Expenses, Staff, Reports, Feasibility Study, Maxwell Dam, Salt River Channelization
18	November 1, 1963	County to Study Need of Water Supply Zone	X Water Replenishment Zone, County's West Basin, M.E. Salsbury, County Flood Control District Chief Engineer, Zone Established 1954, July 1, 1964, Re-established, West Basin Water Association, Board of Supervisors, Burton W. Chace, Kenneth Hahn, Los Angeles, Segundo, Manhattan Beach, Inglewood, Hermosa Beach, Redondo Beach, Hawthorn, Lawndale, Torrance, Gardena, Rolling Hills, Rolling Hills Estates, Palos Verdes Estates, Underground Supplies, Buy Imported Water, West Coast Basin Barrier Project, Fresh Water Supplies, Waste Water, Hyperion Outfall Plant
19	November 1, 1963	\$70 Million Flood Control Plan Okayed by Board	X \$70 Million, Flood Control Project, U.S. Corps of Engineers, Approved, Maricopa County Board of Supervisors, \$115 Million Countywide Flood Control Program, North, Northwest, County, Protected, Flood Damage, System of Dams, Cave Creek, Skunk Creek, New River, Dreamy Draw, Diversion Channels, Agua Fria River, Deer Valley, Federal Funds, Maricopa County
26	November 1, 1963	Board Gets Flood Plan From Army	X U.S. Army Corps of Engineers, County Board of Supervisors, \$70 Million Flood Control Program, Five-Phase Program, Chiefly Phoenix Area, Construction, Channel, Indian Bend Wash, Scottsdale Area, Arizona Canal, Salt River, Cave Creek, Skunk Creek, New River, Dreamy Draw, Diversion Channels, Deer Valley Divert Residual Cave Creek and Deer Valley Flows, Channel Improvements, Agua Fria River, Gila River, Glendale-Maryvale Area, Flood Waters, Damage in August, Dam, Diversion Channel, South Phoenix, Flood Control Storage, Maxwell Reservoir, U.S. Bureau of Reclamation, Granite Reef Dam, Indian Bend Wash Upstream, Detention Basin, Cave Creek Dam, Bell Road, Cave Creek Channel, 40th Street
17	November 6, 1963	County Flood Control Plan Includes Mesa Area Work	X Maricopa County Board of Supervisors, Public Hearing, Proposed Comprehensive Flood Control Program, 28 Separate Projects, Three Priority Groups, Federal Government, Maricopa County Flood Control District Advisor Board, District Engineer, Engineering Studies, Barney Burns, Board Chairman, Bond Issue Election, Mesa Area, 15 Projects, Structures, Earthen, Construction, Buckhorn-Mesa Retarding Structures, Mesa, Chandler, Gilbert, Earthen Diversion Walls, Floodways, Debris Basin, Diversion Box, Floodwater For Irrigation, Apache Junction-Gilbert, Gilbert Mesa, Williams Field, Higley, Chandler Areas, Retarding Basin, Apache Highway, 4-mile Dam, Mesa-Chandler-Gilbert Floodways, 29-mile System, Emptying Into Gila River, Williams AFB-Chandler
28	November 7, 1963	Urgent Need for Flood Control At Indian Bend	X Harold R. Richard, Engineer, Maricopa County Flood Control District, Scottsdale Real Estate Board, Plans, Flood Control Indian Bend Wash, Phase A, Summer Rains in August 1943, Peak of the Flood, Flow of Flood Waters, Arizona Canal Breaking in 15 Places, Hayden Road, Indian School to McDowell Road, Flooded, Water for 3 to 5 Feet Deep, Homes in Overflow Area, Washington, Construction, Concrete-lined Channel, 7 Miles Long, Width 24 to 26 Feet, Below Natural Growth Level, Salt River, Bridges, Camelback, Indian School, Thomas, McDowell, Van Buren, Rights-of-way, Annual Maintenance
29	November 19, 1963	Before Board of Supervisors - Indian Bend Project Hearing Set Tomorrow	X Public Hearing, County Supervisors, Proposed \$115.4 Million County-wide Flood Control District, Scottsdale, Indian Bend Wash, Indian Bend Channel, Seven Miles, Arizona Canal, Indian Bend to Salt River, Scottsdale Road, Construction, Concrete-lined Channel, Flood Waters, Col. John Lowry, General manager, Chief Engineer, Maricopa County Flood Control District, 38 Acres for City Park, Cost, Federal Government, Rights of Way, Bond Issue, Study, Maxwell Dam, Salt River Channelization, Confluence of Verde and Salt Rivers, 107th Avenue, Country Club Drive, Mesa, Granite Reef Dam, 19 Projects, Three Groups, Areas Most Severely Damage in a Flood
23	January 2, 1966	Floodwaters Wreak Havock in the Valley (Pictures)	X Where Salt and Verde Met, Salt River, Verde River, Flooded Channel, Phoenix, Floodwaters, Banks, Heavy Damage, Salt River Valley, Arizona Public Service Co., Transmission Line, Downed 80-foot Steel Tower, Seventh Street, Undercut by Floodwaters, S. Central Avenue Bridge, Bridge Saggged, Supporting Pile Sank, 24th Street, Rooftop Rooster, Flood-submerged Home, Jack Rabbit Road, Southeast of Buckeye, Inundated, Gila River, Maricopa Freeway, Eroding South Approach, Maricopa Freeway Bridge, Landis Aerial Surveys, Tempe Bridge

FLOODING REPORTS
in the
HYDROLOGY LIBRARY

1943 Flood Report.....	80.8-00-1-08/43
Analysis of the Failure of Indian School Bridge.....	80.0-00-0-00/00
Assessment of Flood Damages Salt-Gila Aqueduct - Reach B...	80.4-00-9-10/84
Assessment of Flood Damages Salt-Gila Aqueduct - Reach B...	80.4-00-9-07/84
Arizona and WC New Mexico/November 1978-March 1979 Floods..	80.6-00-9-03/79
Compilation of Flood Data Maricopa 1965.....	70.6-00-1-06/67
Compilation of Flood Data for Maricopa 9/65-9/70.....	70.6-00-1-06/67
Compilation of Flood Data for Maricopa 9/65-9/70.....	70.6-00-1-12/72
Desert Floods/Southern Arizona Floods 9/62.....	80.5-00-1-09/62
Eastern Maricopa County Flood July 1984.....	80.9-00-9-07/84
Flood Aid and Damages.....	80.5-00-1-00/00
Flood Conditions Along Salt River.....	36.0-00-9-12/59
Flood Conditions Along Salt River.....	36.0-00-1-12/59
Flood Conditions Along Salt River.....	80.0-00-9-12/59
Flood Damage Report-December 1978 Flood.....	80.2-00-1-11/79
Flood Damage Report-December 1978.....	80.2-00-9-11/79
Flood Damage Report February 1979.....	80.2-00-9-02/79
Flood Damage Report SC Arizona & SW New Mexico.....	80.2-00-8-01/80
Flood Damage Report Glendale/Maryvale.....	80.2-00-9-06/64
Flood Damage Survey February 1980.....	80.2-00-9-02/80
Flood of June 22, 1972.....	80.2-00-9-06/72
Flood August 1963 Prescott, Arizona.....	80.6-00-1-08/63
Flooding in East Maricopa County.....	32.9-00-9-08/88
Flooding in Eastern Maricopa County/1984.....	80.9-00-9-07/84
Flooding Problems of 8/28/88.....	80.9-00-9-09/88
Floods of December 1965 - January 1966 Salt-Gila.....	80.0-00-9-12/65
Floods of October 1983 in Southeastern Arizona.....	80.5-00-1-03/89
Harquahala Valley Flood 9/24-26/76.....	04.3-00-1-11/76
Harquahala Valley Flood September 1976.....	04.5-00-1-11/76
North Mountain Flood of August 1943.....	80.8-00-1-08/43
Phoenix Flood Damage Survey February 1980.....	80.2-00-9-02/80
Phoenix Flood Damage Survey February 1980.....	80.2-00-9-04/81
Report of Flooding Near 32nd Street and the Arizona Canal.....	80.9-00-1-08/86
Report of Flooding Near 32nd Street and the ACDC.....	80.9-00-9-08/86
Report on Flood of June 22, 1972.....	80.2-00-9-06/72
Report on the Arizona Floods December 16-20, 1978.....	80.7-00-9-05/79
Report of Flood Conditions at Phoenix Summer 1951.....	80.5-00-9-00/51
Storms, Floods, and Debris Flows/Arizona and Southern California.....	80.0-00-0-00/00
Storms in the Phoenix Metro Area.....	80.5-00-1-00/00





C-LINE #52584
35MM PRINTS



GREAT FLOOD OF 1890
ON SALT RIVER

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Great flood of 1890 on Salt River ↗



1890 Flood

GREAT FLOOD OF 1890
ON SALT RIVER.

Salt

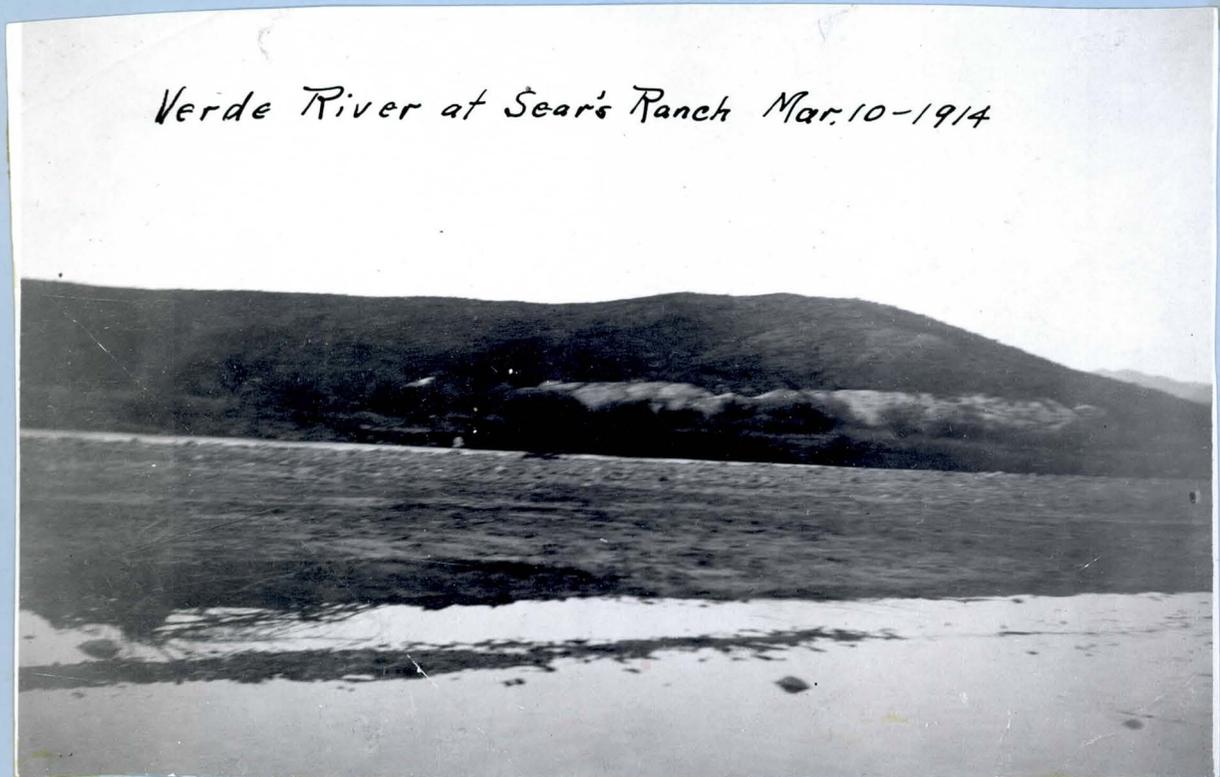






March 10, 1914

Verde River at Sear's Ranch.







Looking N.E. upstream from Camp #2 of Power
Canal Survey. Crosssection ± 9000 sq. ft.
Average observed velocity of surface = 14 ft p. s. =
say 100,000 to 125,000 c.f.s.



Camp No 2 Looking upstream, Verde at flood. 25' Rise Feb 9, 1920.

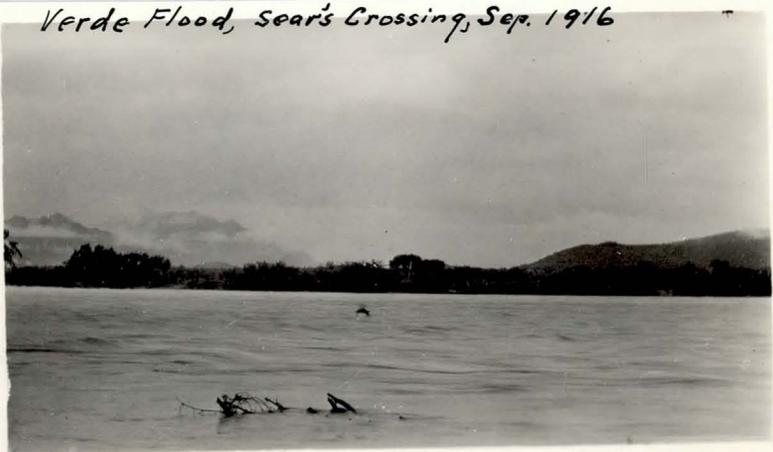
Verde flood, Sear's Crossing
Looking NE upstream from Camp #2 of Power Canal Survey

Verde Flood, Sear's Crossing, Sep. 1916



09/00/16 Verde Flood, Sear's Ranch
09/00/16 Verde Flood, Sear's Crossing

Verde Flood, Sear's Crossing, Sep. 1916



Verde at Flood Sep. 1916
Sears Ranch



Verde at Flood
Sept 1916, at
Sear's Ranch
800 wide

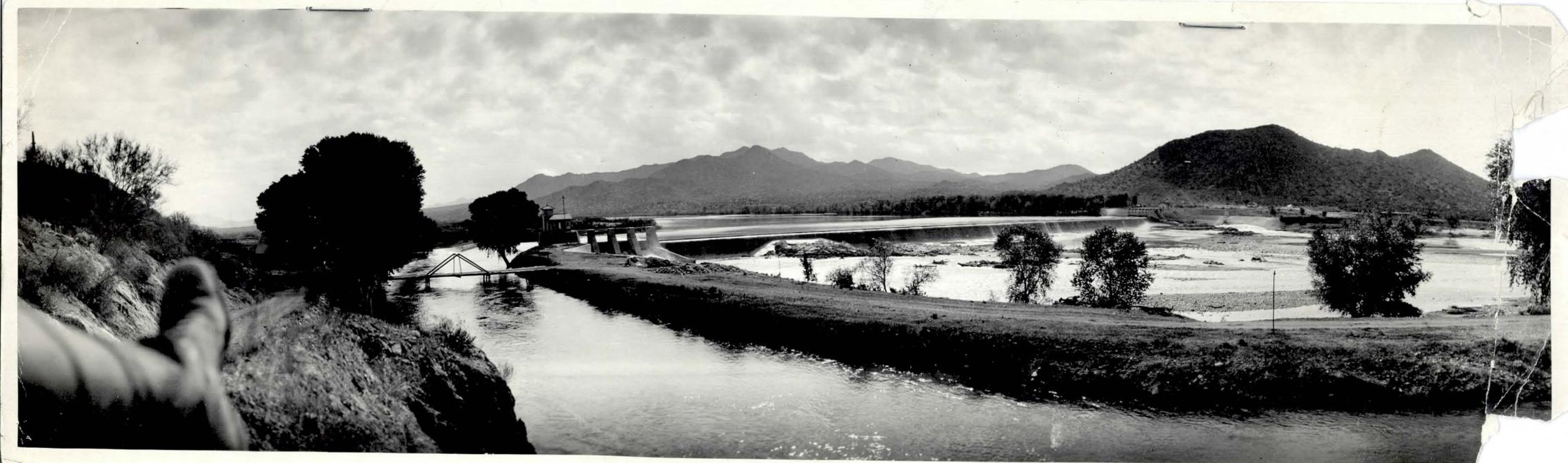
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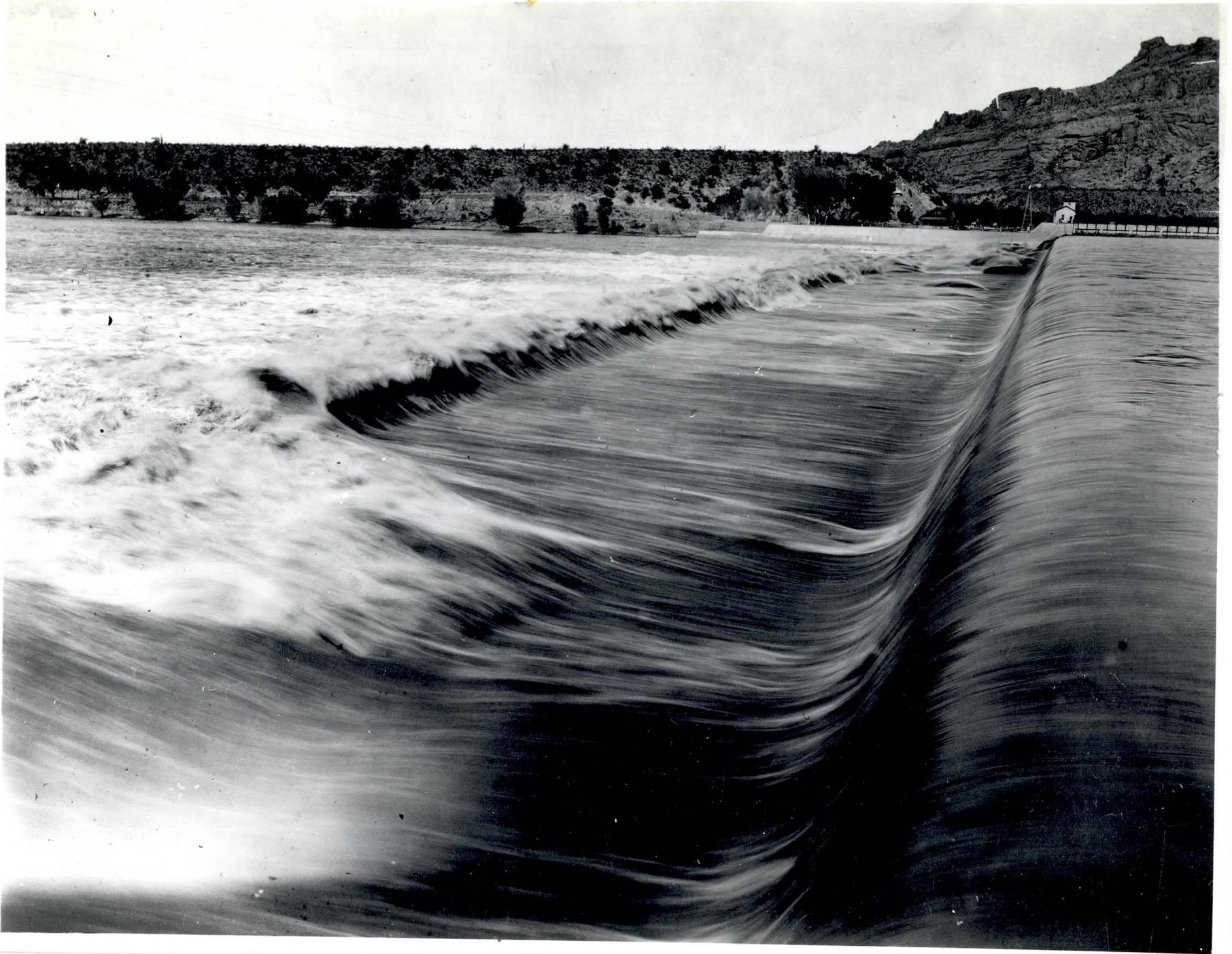
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1920 - Granite Reef



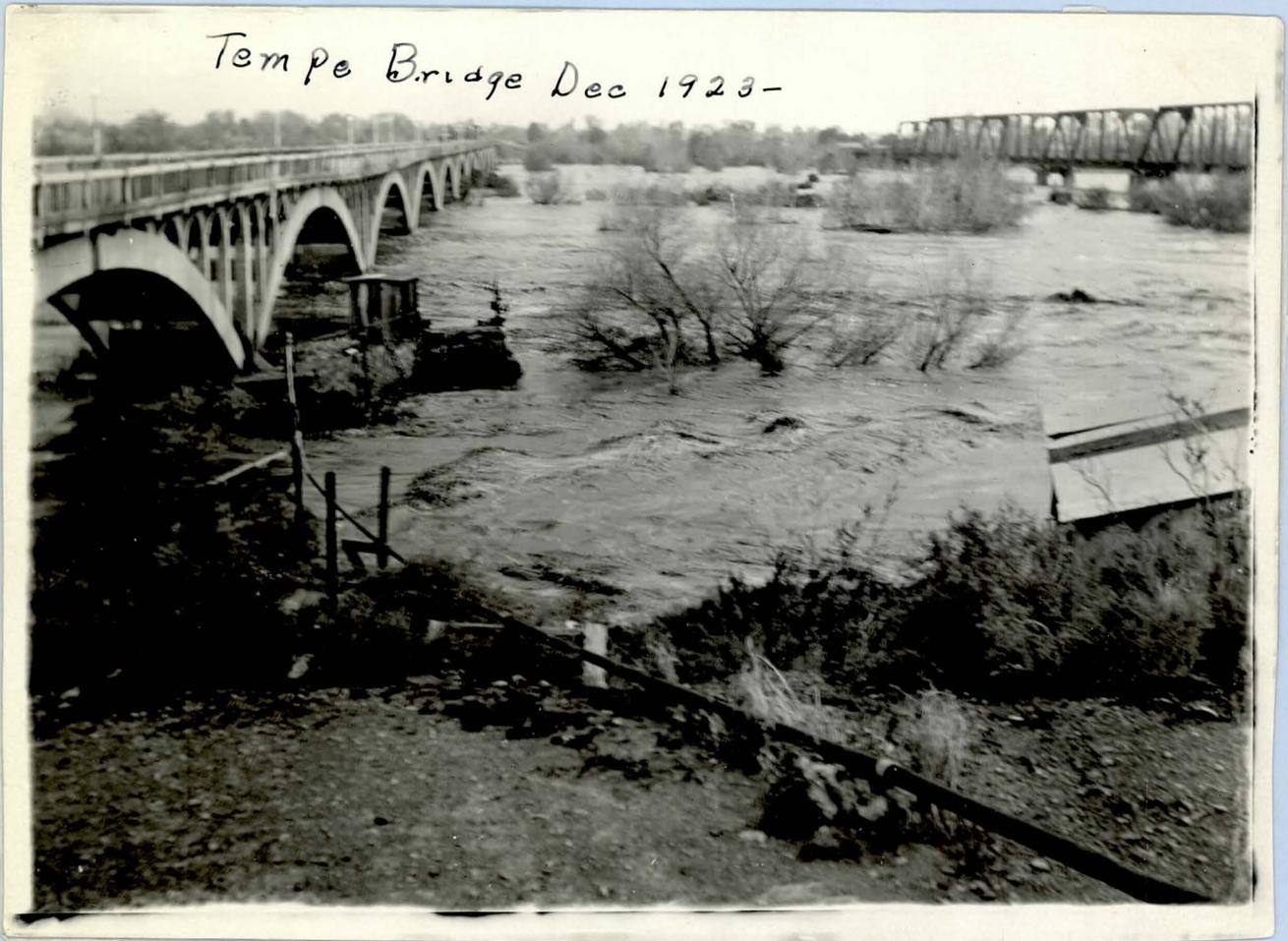


2/21/20 Granite Reef Dam - Salt River



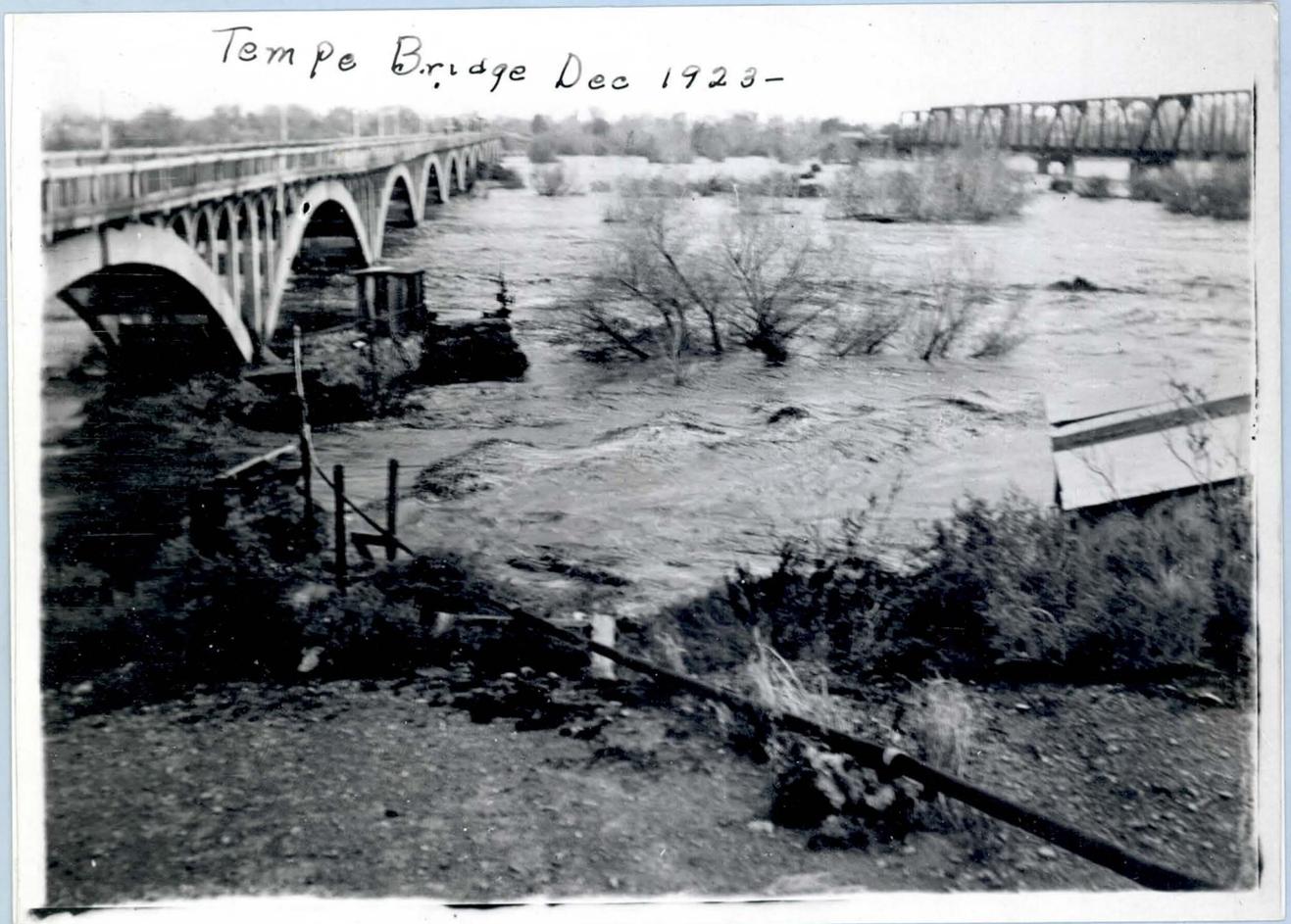


Tempe Bridge December 1923



Tempe Bridge December 1923

Salt River



Verde Flood coming down Salt River
at Central Ave. Bridge, Phoenix, Dec. 1923



Verde Flood coming down Salt River
at Central Ave. Bridge, Phoenix, Dec. 1923

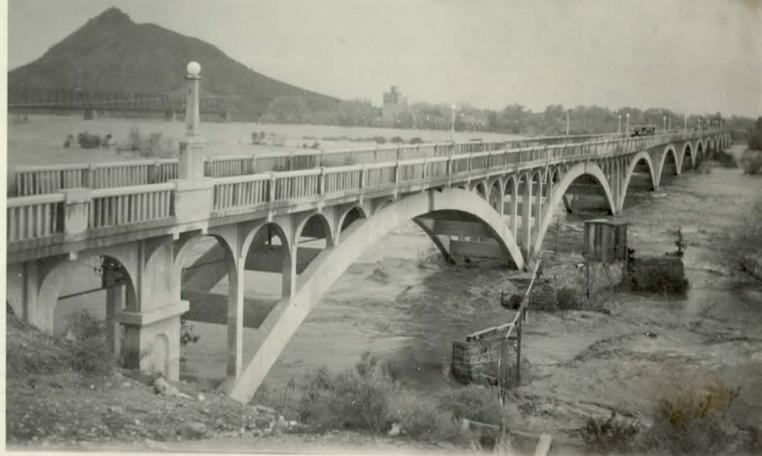


12/00/23

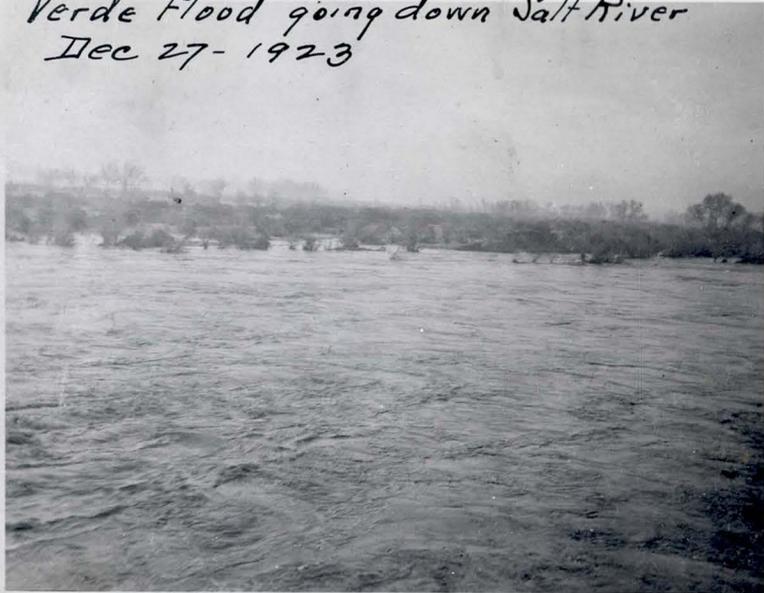
Verde Flood at Tempe Bridge



Verde Flood at Tempe Bridge
Dec - 1923



Verde Flood going down Salt River
Dec 27 - 1923

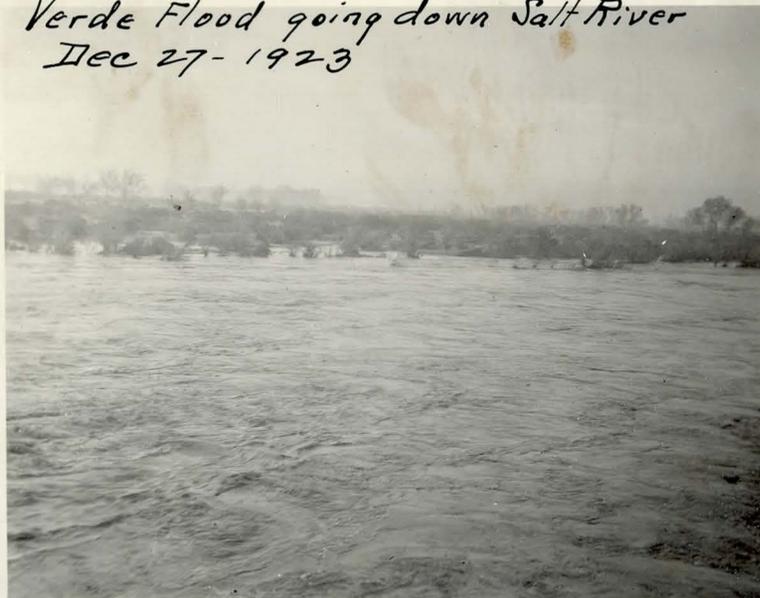


12/27/23

Verde Flood going down Salt River



Verde Flood going down Salt River
Dec 27 - 1923





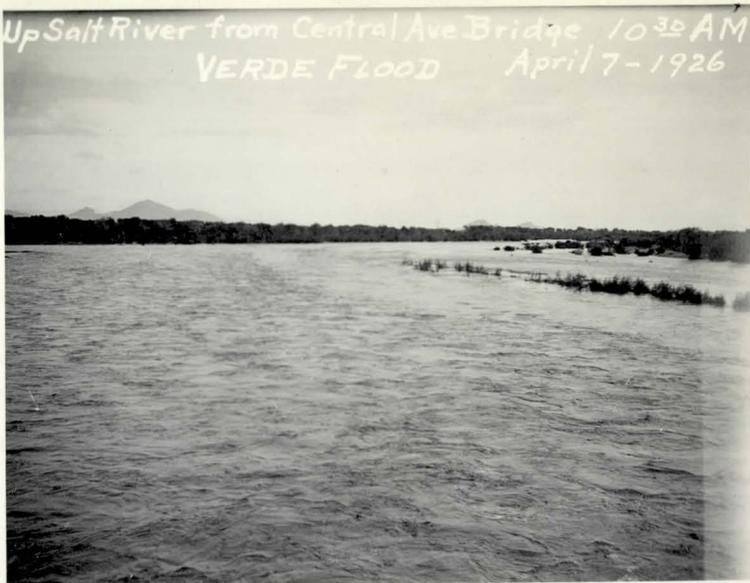


o Salt River from Central Ave Bridge 5:30 P.M.
VERDE FLOOD April 7, 1926



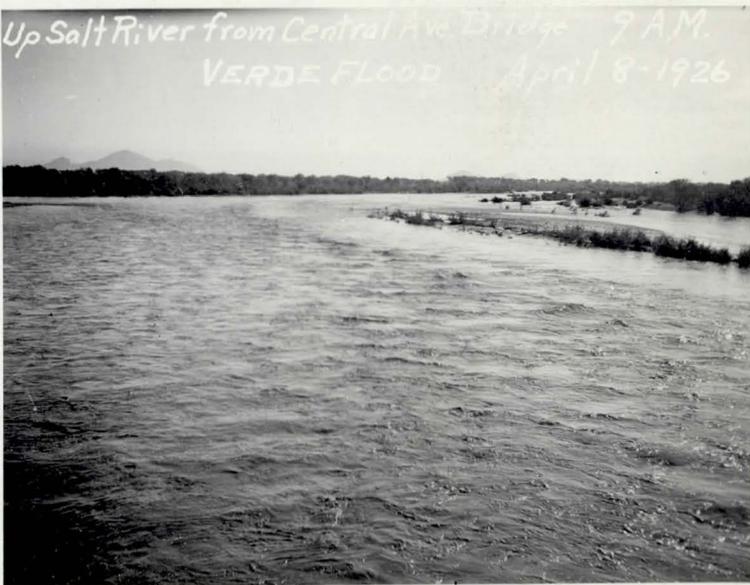
04/07/26 Up Salt River from Central Avenue Bridge 10:30 a.m.
04/07/26 Up Salt River from Central Avenue Bridge 5:30 p.m.

Up Salt River from Central Ave Bridge 10:30 AM
VERDE FLOOD April 7-1926



04/08/26 Up Salt River from Central Avenue Bridge 9:00 a.m.
04/08/26 Down Salt River from Central Avenue Bridge 9:00 a.m.

Up Salt River from Central Ave Bridge 9 AM
VERDE FLOOD April 8-1926



Down Salt River from Central Ave. Bridge April 8th 1926, 9⁰⁰ A.M.





Up Salt River from Central Ave. Bridge April 7th 5:30 PM
1926



Up Salt River from Central Ave Bridge April 7th 10:30 AM.
1926

04/07/26 Up Salt River from Central Avenue Bridge 10:30 a.m.
04/07/26 Up Salt River from Central Avenue Bridge 5:30 p.m.



Down Salt River from Central Ave. Bridge April 8th 1926, 9:00 A.M.



Up Salt River from Central Ave. Bridge

04/08/26 Up Salt River from Central Avenue Bridge 9:00 a.m.
04/08/26 Down Salt River from Central Avenue Bridge 9:00 a.m.

Up Salt River from Central Ave. Bridge 5:30 P.M.
VERDE FLOOD April 7-1926



04/07/26 Up Salt River from Central Avenue Bridge 10:30 a.m.
04/07/26 Up Salt River from Central Avenue Bridge 5:30 p.m.

Up Salt River from Central Ave. Bridge 10:30 AM
VERDE FLOOD April 7-1926



04/08/26 Up Salt River from Central Avenue Bridge 9:00 a.m.
04/08/26 Down Salt River from Central Avenue Bridge 9:00 a.m.

Down Salt River from Central Ave. Bridge
VERDE FLOOD 9⁰⁰ AM April 9-1926



Up Salt River from Central Ave. Bridge 9⁰⁰ AM.
VERDE FLOOD April 9-1926





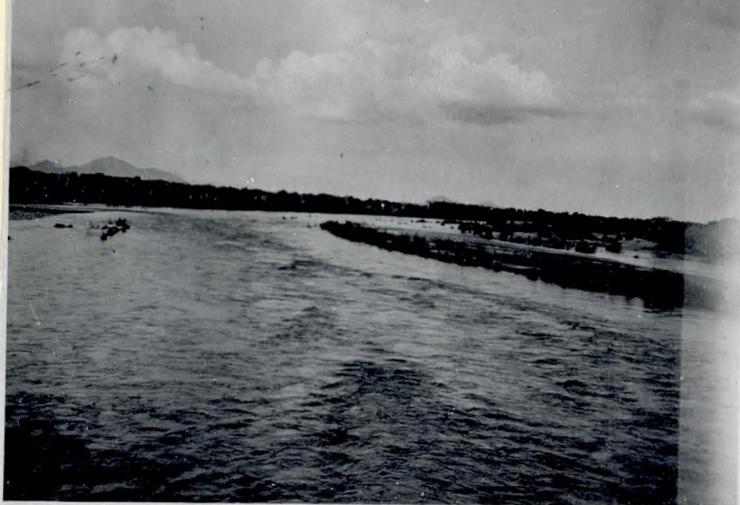
Salt River from Central Ave. Bridge, April 7th 5:30 P.M.
1926

Up Salt River from Central Ave. Bridge 5:30 P.M.
VERDE FLOOD April 7-1926



04/07/26 Up Salt River from Central Avenue Bridge 10:30 a.m.
04/07/26 Up Salt River from Central Avenue Bridge 5:30 p.m.

Up Salt River from Central Ave. Bridge 5:15 P.M.
VERDE FLOOD April 9, 1926

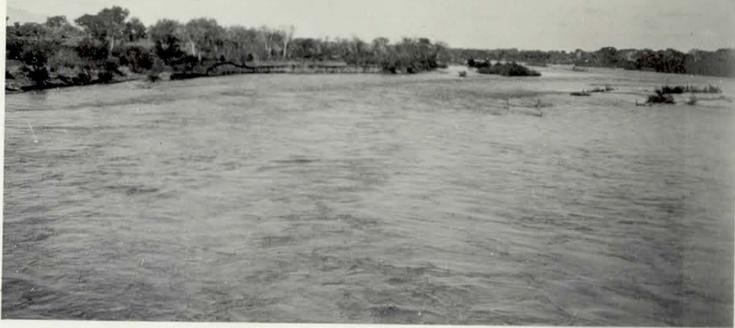


04/08/26 Up Salt River from Central Avenue Bridge 9:00 a.m.
04/08/26 Down Salt River from Central Avenue Bridge 9:00 a.m.

Down Salt River from Central Ave. Bridge 5:15 P.M.
VERDE FLOOD April 9-1926



Down Salt River from Central Ave Bridge
VERDE FLOOD 9⁰⁰ AM April 9-1926



Up Salt River from Central Ave. Bridge 9⁰⁰ AM.
VERDE FLOOD April 9-1926



Down Salt River from Central Ave Bridge 5¹⁵ P.M.
VERDE FLOOD April 9-1926



Up Salt River from Central Ave Bridge 5¹⁵ P.M.
VERDE FLOOD April 9, 1926



48252# ENL-C
28MM 981112
STIMBA MNSB

Up Salt River from Central Ave. Bridge 5:30 P.M.
VERDE FLOOD April 10-1926



Up Salt River from Central Ave. Bridge 9:00 AM.
VERDE FLOOD April 10-1926



Verde Flood 2:30 P.M. Apr. 13-1926
Upstream



Verde Flood Apr. 13, 1926
Down Stream





Up Salt River from Central Ave. Bridge 9⁰⁰ AM.
VERDE FLOOD April 10-1926



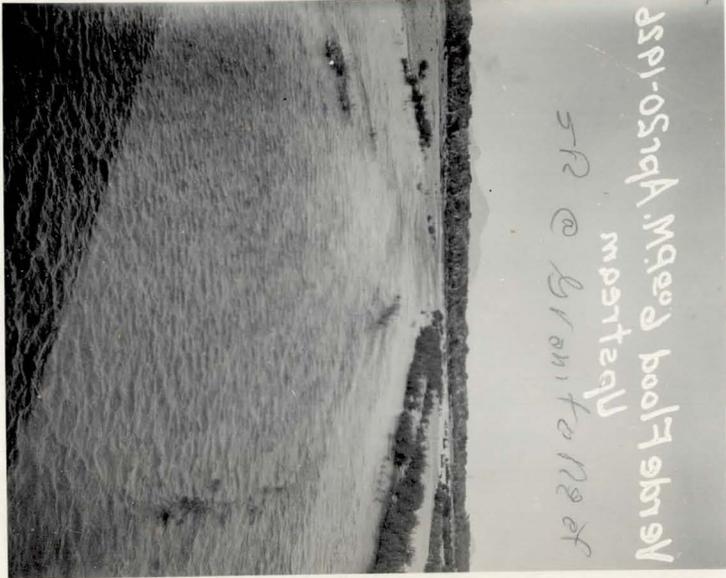
Verde Flood PM Apr 11-1926
Upstream



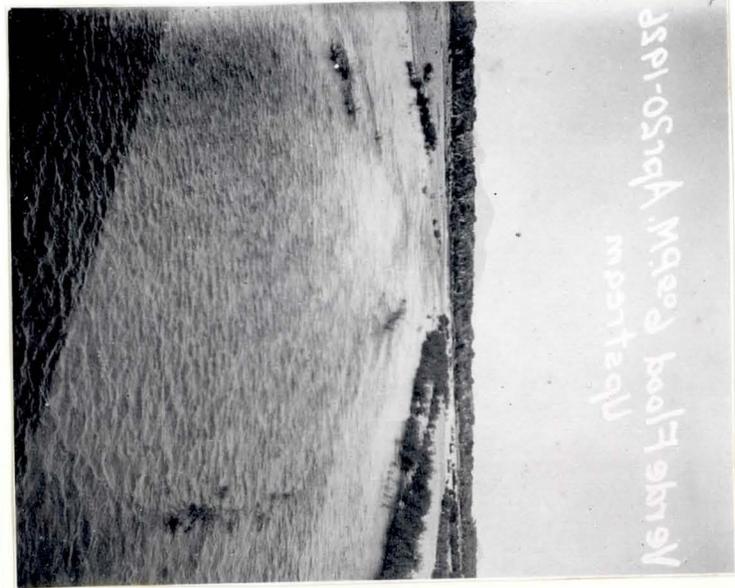
Verde Flood 5⁰⁰ P.M. Apr 14-1926
Upstream.



Verde Flood 5⁰⁰ P.M. Apr 14-1926
Upstream.



Verde Flood 5⁰⁰ P.M. Apr 14-1926
Upstream.



Verde Flood 5⁰⁰ P.M. Apr 14-1926
Upstream.





after passing dam



Verde flood, at Central Ave. Bridge, Apr. 5-1929

04/05/29 Verde flood at Central Avenue Bridge

C-LINE #52584
35MM PRINTS

after passing dam



Verde flood, at Central Ave. Bridge, Apr. 5-1929







*At New River Bridge Looking downstream, Sat 10³⁰ AM, Feb 14-1931
Bartlett & Bowers.*



*At New River Bridge Looking downstream, Sat 10³⁰ AM, Feb 14-1931
Bartlett & Bowers.*

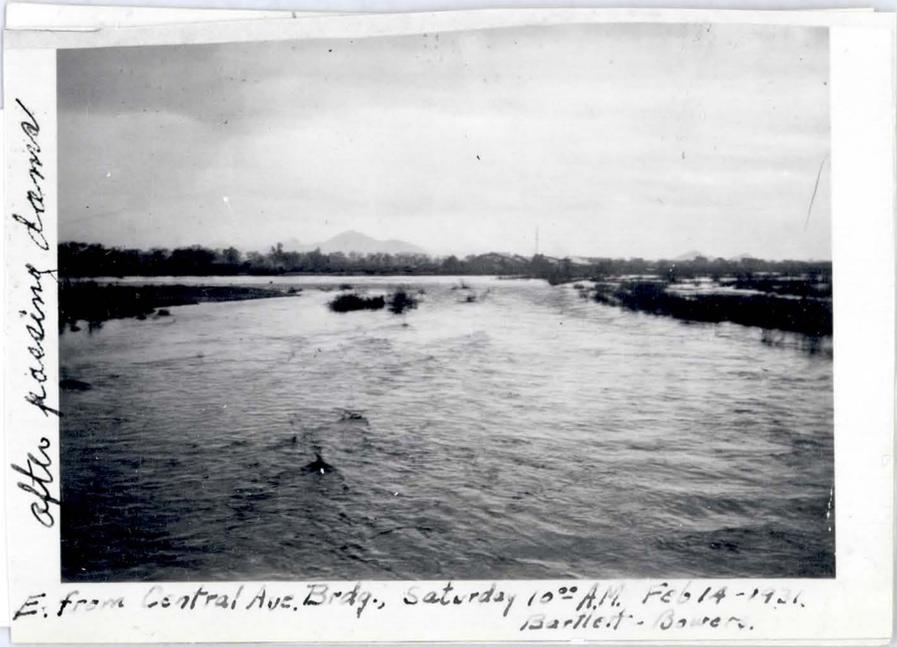


New River, Friday 3³⁰ PM Feb 13-1931





02/13/31 Salt River
02/14/31 Salt River



after passing dams

*E. from Central Ave. Bldg., Saturday 10⁰⁰ AM, Feb 14 - 1931.
Barlett - Bowers.*

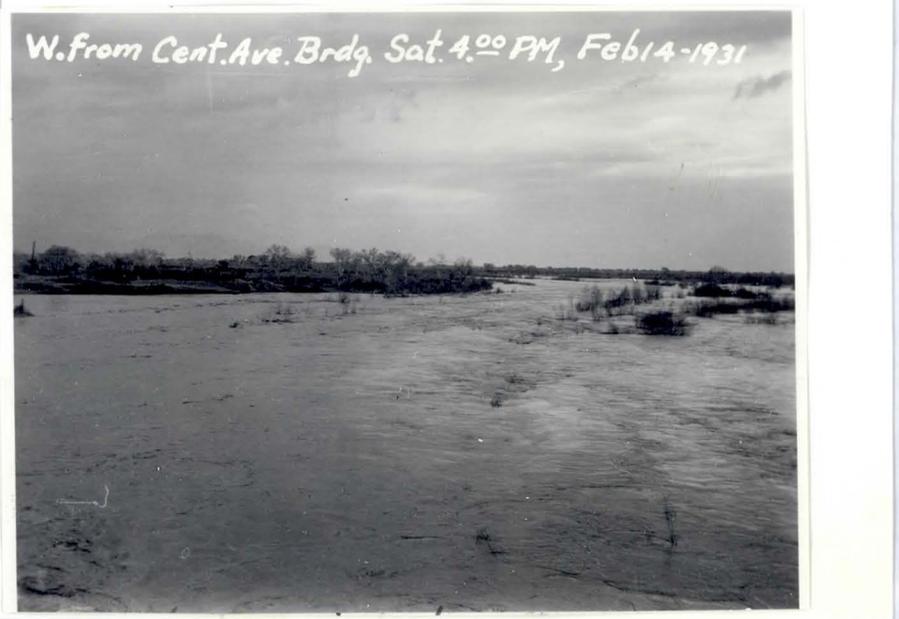
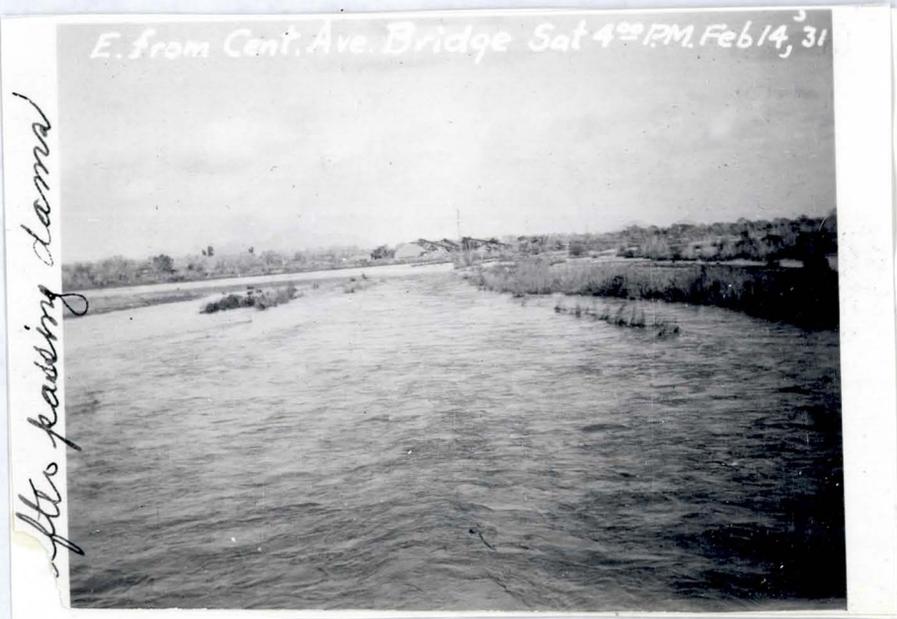


after passing dams

*E. from Central Ave. Bldg., Friday 4⁰⁰ PM Feb 13 - 1931
Barlett - Bowers.*



02/13/31 Salt River
02/14/31 Salt River





after passing dam

E. from Cent. Ave. Bridge Sat 4:00 PM, Feb 14, 31

W. from Cent. Ave. Brdg. Sat. 4:00 PM, Feb 14-1931



after passing dam

02/14/31 West from Central Avenue Bridge 4:00 p.m. ↑
02/14/31 East from Central Avenue Bridge 4:00 p.m. ↓

E. from Cent. Ave. Bridge Sun 9:30 AM, Feb 15-1931

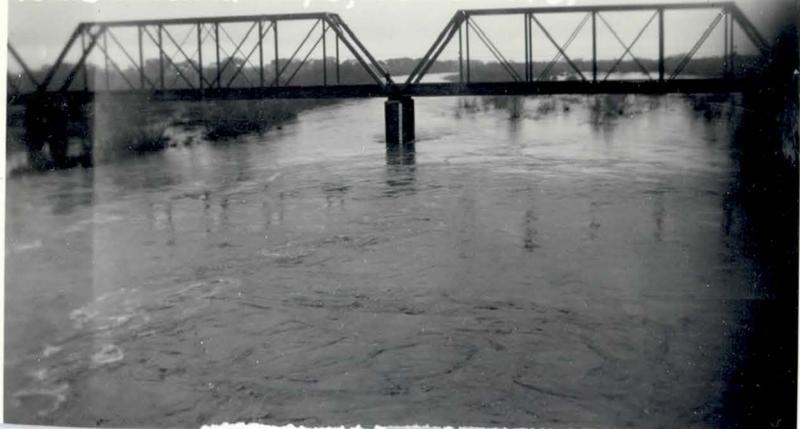


E. from Cent. Ave. Bridge, Sun 9:30 AM Feb. 15-1931



48252# EMIL
27189 MM3E

Verde Flood at Tempe, Feb 15-1931



E. from Cent. Ave. Bridge, Sun 2⁰⁰ P.M., Feb 15, 1931.

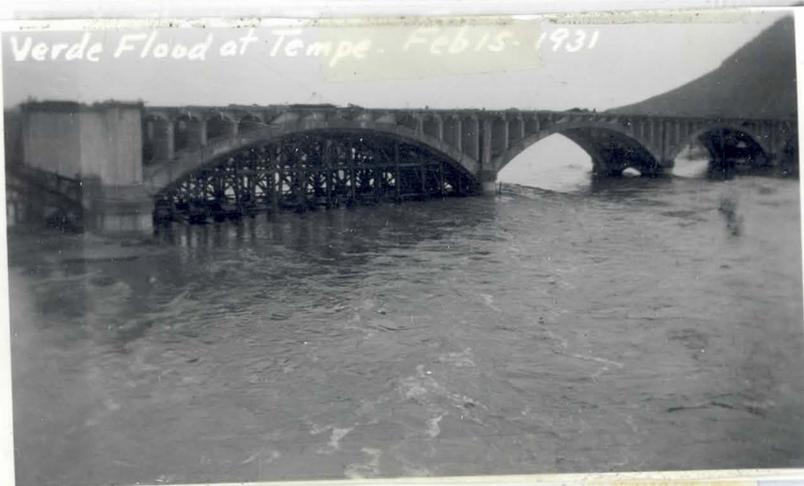
SR



Verde Flood at Tempe Feb 15-1931



Verde Flood at Tempe. Feb 15-1931



Verde Flood at Tempe, Feb 15, 1931



E. from Cent. Ave. Bridge, Sun 2⁰⁰ PM, Feb 15, 1931.



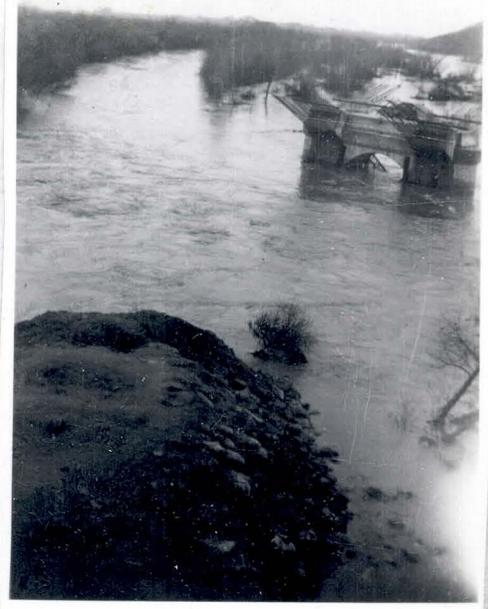
Verde Flood at Tempe Feb 15, 1931



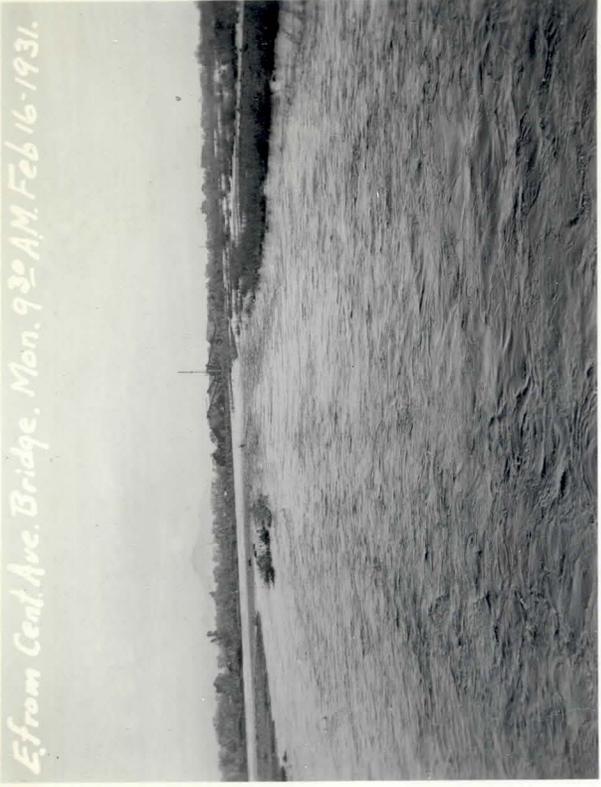
Verde Flood at Tempe - Feb 15 - 1931



Verde Flood at Tempe Bridge
Sunday P.M., Feb 15-1931



E from Cent. Ave. Bridge. Mon. 9:30 AM. Feb 16-1931.

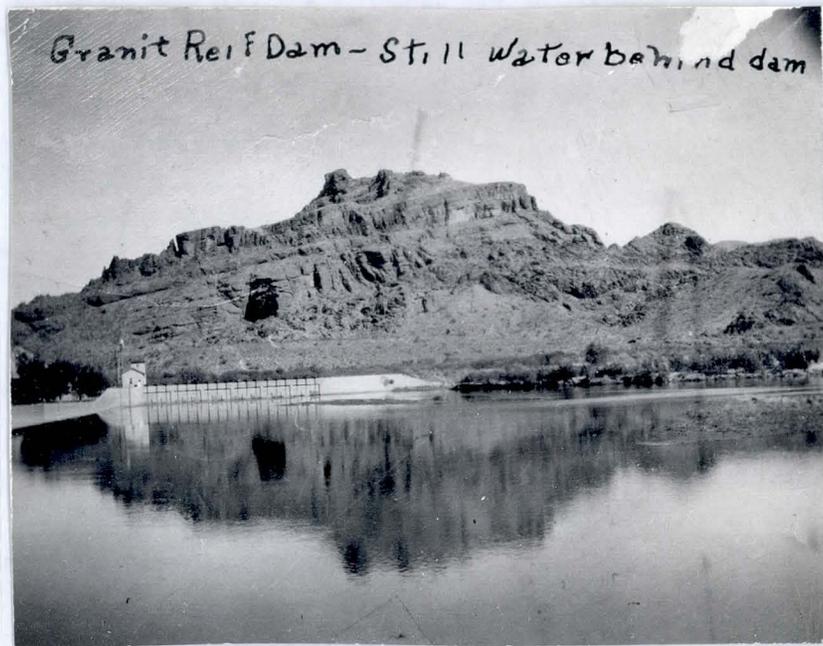


35MM BYMIL2
C-FINE #25284





C-LINE #52584
35MM PRINTS



"Verde Flood," passing Tempe Butte, Looking N
Feb 10 - 1932



02/10/32 Verde flood looking NE from Tempe Butte 10:30 a.m.
02/10/32 Verde flood passing Tempe Butte, looking north

"Verde Flood," looking N.E. from Tempe Butte.
10³⁰ a.m. Feb 10 - 1932

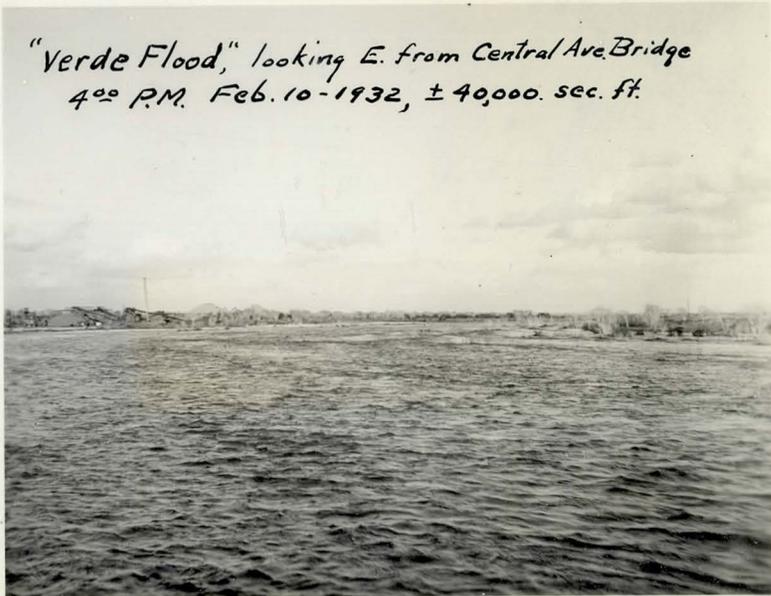


2-10-32
"Verde Flood"



02/10/32 Verde flood looking east from Central Avenue Bridge
02/10/32 Upstream from Central Avenue Bridge + 40,000 cfs

"Verde Flood," looking E. from Central Ave. Bridge
4⁰⁰ P.M. Feb. 10 - 1932, ± 40,000 sec. ft.



"Verde Flood," passing Tempe Butte, Looking N
Feb 10 - 1932



02/10/32 Verde flood looking NE from Tempe Butte 10:30 a.m.
02/10/32 Verde flood passing Tempe Butte, looking north ↙

#1



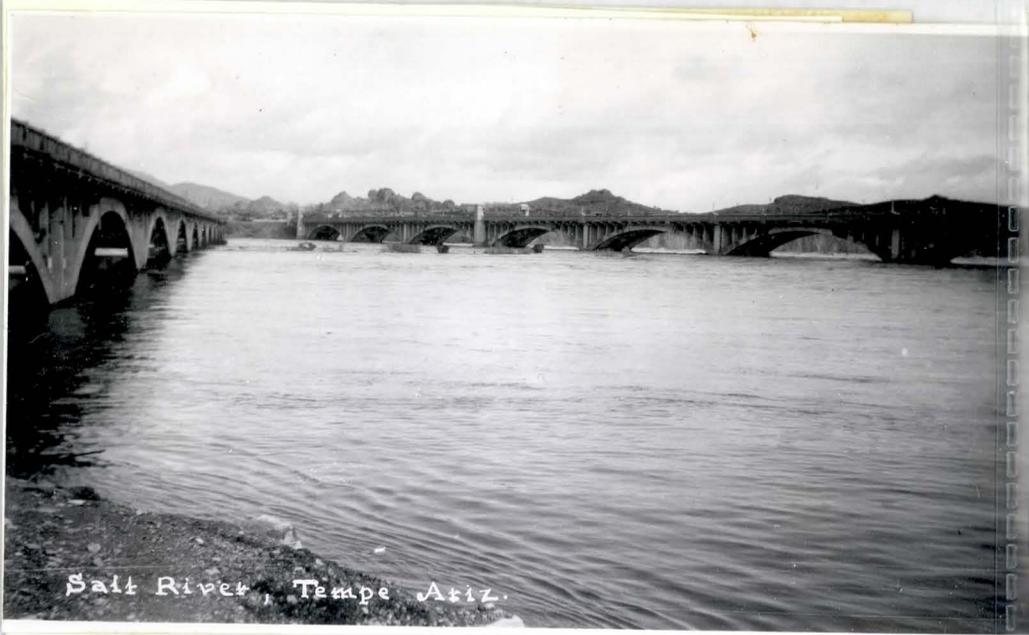
"Verde Flood"



02/10/32 Verde flood looking east from Central Avenue Bridge
02/10/32 Upstream from Central Avenue Bridge + 40,000 cfs ↙

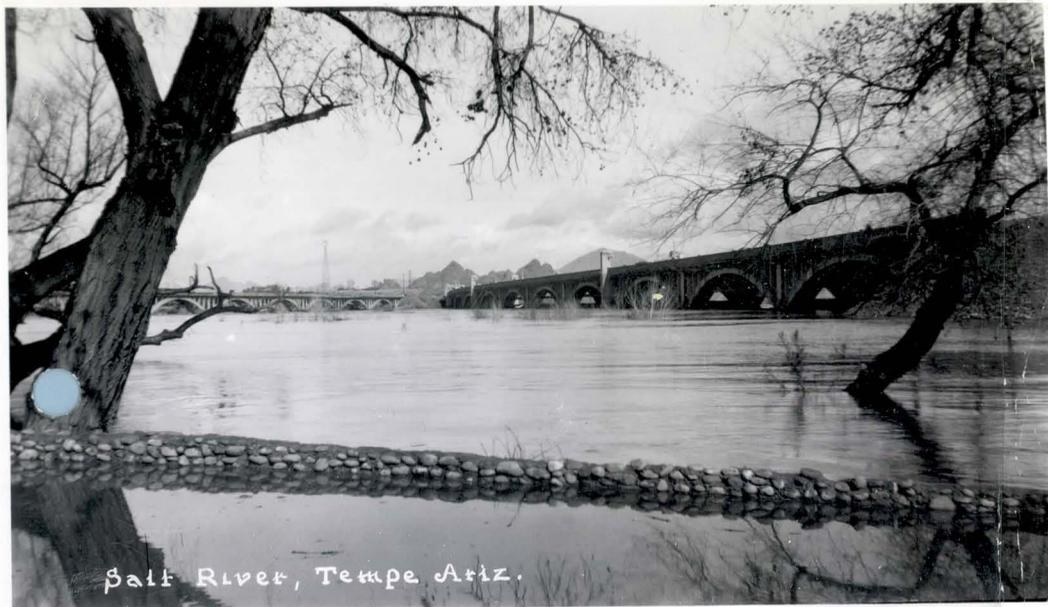
#1





Salt River, Tempe Ariz.

02/10/32 At Tempe Bridge



Salt River, Tempe Ariz.

"Verde Flood," at Tempe Bridge, Looking N.W.
10:30 a.m. Feb 10-1932.



02/10/32 Upstream from Central Avenue Bridge
02/10/32 Verde Flood at Tempe Bridge Looking N.W. 10:30 a.m.



48222# ENL-G
27199 AMMAE







Gilbert - September 1933



Gilbert-September 1933





Agua Fria River at "O" Avenue
Aug. 16, 1935



08/16/35 Agua Fria River at "O" Avenue

Agua Fria River at "O" Avenue
Aug. 16, 1935



08/16/35 Agua Fria River at "O" Avenue

Agua River at "O" Avenue
Aug. 16, 1935.





NEW RIVER
8/17/35

*New River at "O" Avenue
Aug. 17, 1935.*



*New River at "O" Avenue
Aug 17, 1935.*







October 2, 1941

GILA RIVER

Business damage, Duncan (high water mark on door)



October 2, 1941

GILA RIVER

Residential damage, Duncan.









1943 Flood in Gilbert



1943 Flood in Gilbert



1943 Flood in Gilbert



1943 Flood in Gilbert



1943 Flood in Gilbert





Agua Fria 1951
Road Crossing



1951 Road crossing at Agua Fria



8/3/51 Fence post in left foreground shows depth of water at Avondale crossing and Agua Fria River.



8/3/51 Avondale crossing, Highway 80 Agua Fria River in flood



CA

AGUA FRIA RIVER

8/3/51

Another usually dry river, here is the Agua Fria at the Southern Pacific R.R. crossing at Avondale. All desert newcomers wonder why we have those bridges over dry riverbeds. This is the reason. This is also the reason for this proposed flood control program. Est. 40,000 CFS.





Flooded house in Avondale - 1951



Flooded House in Avondale - 1951



8/3/51 Flooded labor camp at Avondale Arizona
Water came from Agua Fria River and local drainage.







1951 Goodyear flood



1951 Goodyear flood



C-LINE #52584
35MM PRINTS



Goodyear - August 30, 1951

Goodyear Aug 30th
1951



Litchfield Park - 1951



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



Litchfield Park farm area - August 1951





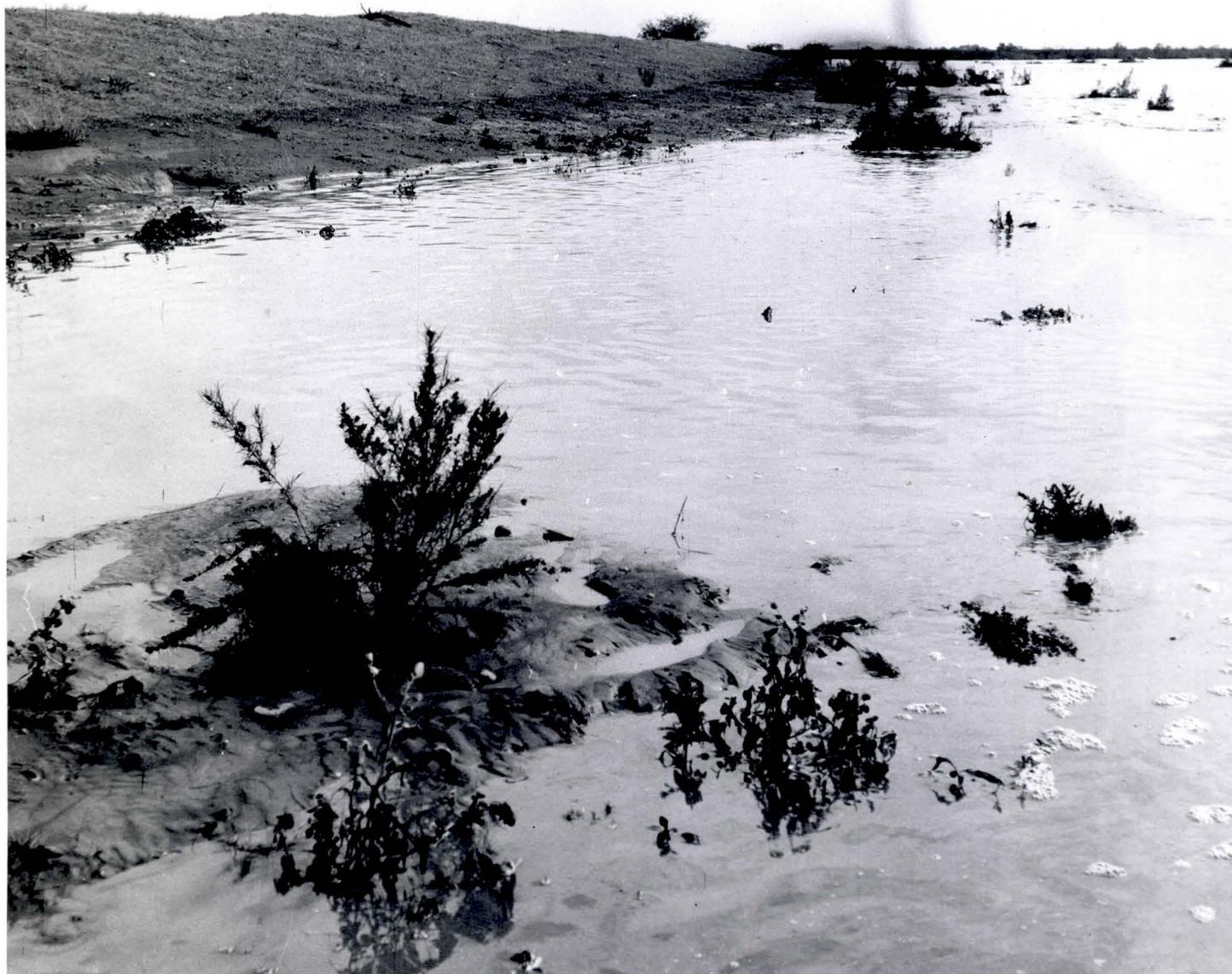
1951 #3 Luke Air Force Base - Sand bagging the flood channel to hold back flood water

Litchfiled Park area - August 1951





8/3/51 Dike at Wayne Thornburg's on east side of New River at "J" Avenue -
dike subsequently failed.







Cave Creek Control Dam Now 'Weak, Rotten,' Phoenix Mining Man Charges

Hokett Cites Flood Peril

By Giles Wright

Los Angeles Examiner Staff Correspondent

PHOENIX, Jan. 5. — Concern over the "weak, rotten condition" of Cave Creek Control Dam 24 miles north of here was expressed today by W. G. Hokett, 2322 North Ninth street.

In fact, because of the dam's "leaky condition" he has refused to renew a mining lease on some of his land below the dam.

The condition became more apparent last August, he said, when water "40 to 50 feet deep, a half mile wide and several miles long" backed up behind the dam.

LETTER IGNORED—

In October he wrote United States Sen. Carl Hayden of Arizona telling of the dam's condition, but he received no answer, he said.

Custodian of the dam, built about 1922, according to Hokett, is the Salt River Water Users Association.

The Examiner queried the association concerning its view of the dam's condition in the light of the criticism, but no answer of any kind has been forthcoming.

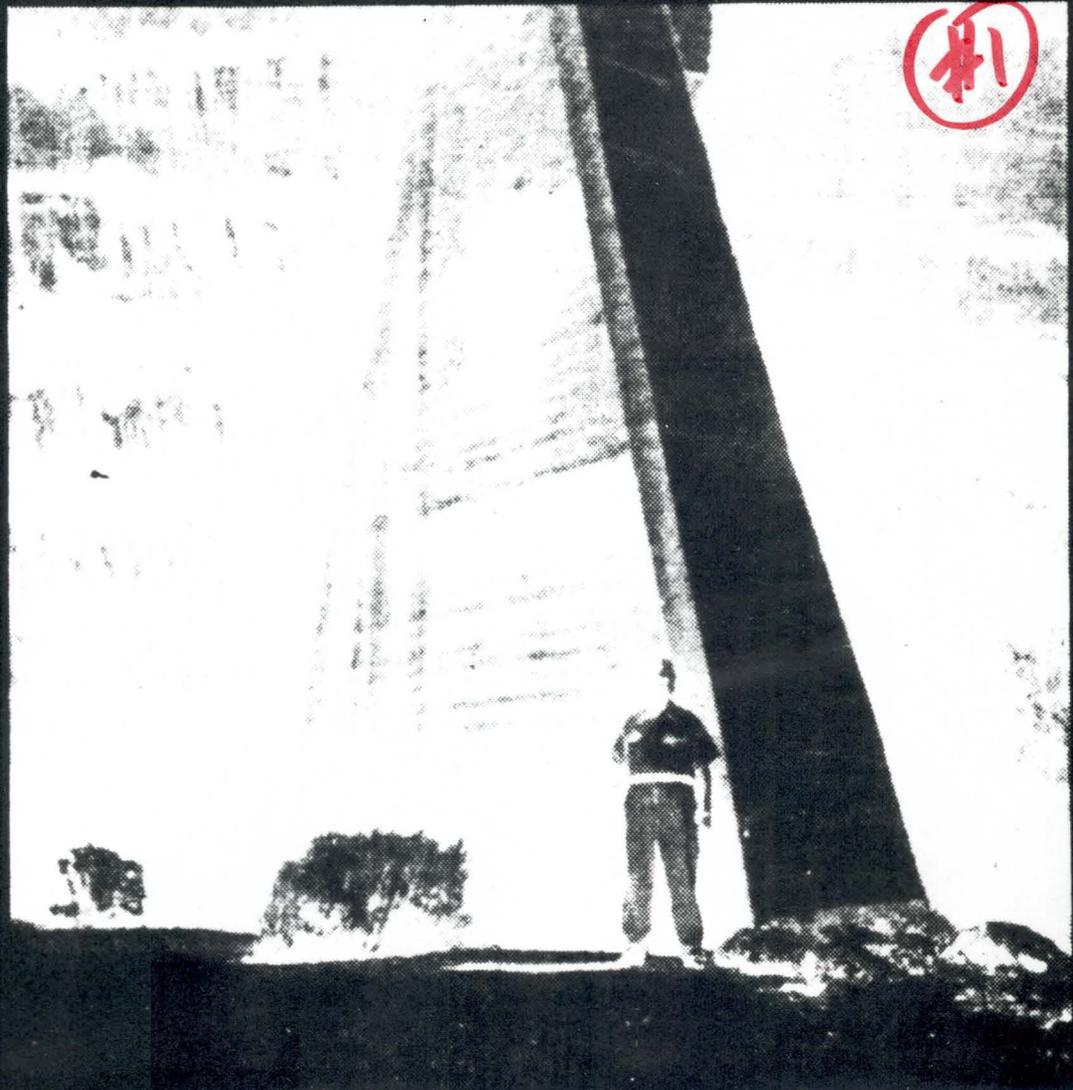
The dam was constructed, Hokett said, to stop the big floods that formerly occurred on the northwest side of the city.

THREE PICTURES—

When writing to Senator Hayden, Hokett said he enclosed three pictures showing the face of the dam. His letter said, in part:

"The dark spots on the face of the dam is running water coming through the cracks; this dam is water logged, perforated and leaks like a sieve from top to bottom and from one end to the other end.

"I have probably watched and inspected this dam more than anyone else, because the west end of the Cave Creek Flood Control Dam lies upon a part of the patented Minneapolis Mining Claims (which I own) and the strike of these veins—that are located upon said Minneapolis Mining Claims—have a course which required



FILES REPORT — W. G. Hokett stands in front of Cave Creek Control Dam, 24 miles north of Phoenix, which he says is in

"weak, rotten condition." Dark spots on the face of the dam are made, he says, by leaking water. Dam, he declares, "leaks like a sieve."

their development under the dam structure.

"Judge James R. Armstrong and his associates, who had a lease to develop the mine, visited the office of the state highway engineer and the assistant attorney general approximately last July."

Judge Armstrong informed the state officials of their lease on the Minneapolis claim and also the St. Paul claim and "asked if they had any objections if his company mined out the ore under

the dam," the letter stated, adding:

"They advised him they had no objections, but the heavy rains came approximately August 30th, 1951, and filled the dam, and it leaked more than I have ever seen it leak before.

LEASE EXPIRES—

"Judge Armstrong's, and his associates', lease on the mine expired September 15, 1951, and he 'phoned me long distance

for a longer lease, but I was afraid to give it to him due to the water soaked, leaky condition of the dam, as blasting close to it, I believed, would probably cave it in."

Hokett said that it was his personal opinion, "based on observation of this dam—with a few more heads of water like that of last summer (August, 1951), it won't be able to stand much longer."

That is the position of Hokett.





Spring of 1953 (approximate)
New River at Glendale Avenue (before bridge)
(bridge built Oct. 15, 1960)









1954 - Queen Creek Flood



1954 - County road south of Higly.





10/30/59 9:00 A.M.
Intersection Scottsdale R. & Salt River

9:00 A.M. E 10-30-59 3.



Intersection Scottsdale Rd. & Salt River

10/30/59 11:30 A.M.
Shea Blvd west of Scottsdale Road

11:30 A.M. W 10+30-59 14.



Shea Blvd. - ~~East~~ West of Scottsdale Road

10/30/59 9:00 A.M.
Intersection Scottsdale Road & Salt River



10/30/59 9:00 A.M.
Intersection Scottsdale Road & Salt River



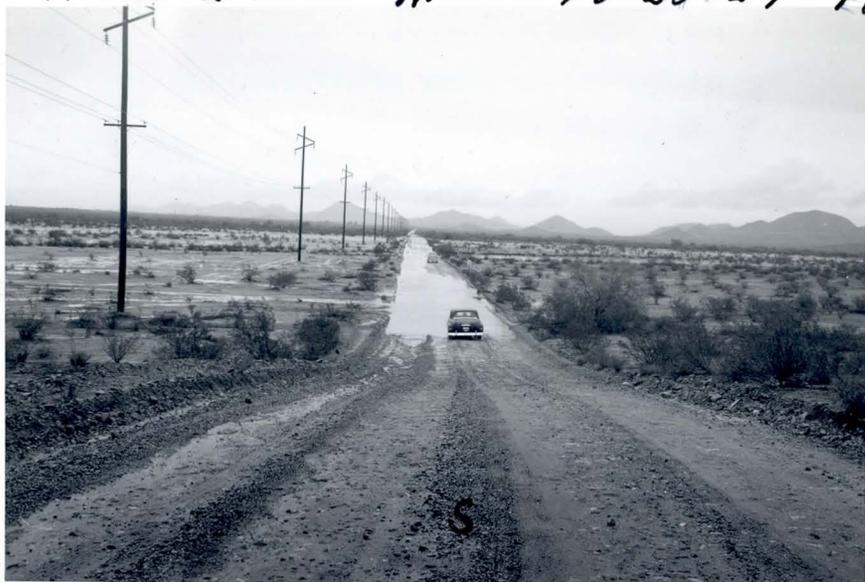
10/30/59 11:45 A.M.
Bell Road - East channel of Cave Creek Wash



10/30/59 11:45 A.M.
Bell Road - West channel of Cave Creek Wash



12:00 AM N. 10-30-59 18.



N. 7th St. - 1 Mile South of Bell Road

E

S

10/30/59 North 7th Street-1300' south of Bell Road 12:00 p.m.
10/30/59 North 7th Street-1 mile south of Bell Road 12:00 p.m.

12:00 PM S 10-30-59 17.



N. 7th st. - 1300' South of Bell Road

E

W

2:00 PM W 10-30-59 21.



New River & Glendale Ave

N

E

10/30/59 Glendale Avenue and New River 2:00 p.m.
10/30/59 New River and Glendale Avenue 2:00 p.m. ↘ ↙

2:00 PM W 10-30-59 20.



Glendale Ave. & New River

S

N

E

2:00 PM - 10-30-59 N 23.



W
N @ Glendale Ave. - Looking North AT New River

2:00 PM S.S.W. 10-30-59 22.



5
New River E Glendale Ave

10/30/59 Glendale Avenue looking north at New River 2:00 p.m.



10/30/59 Tempe Bridge looking southeast



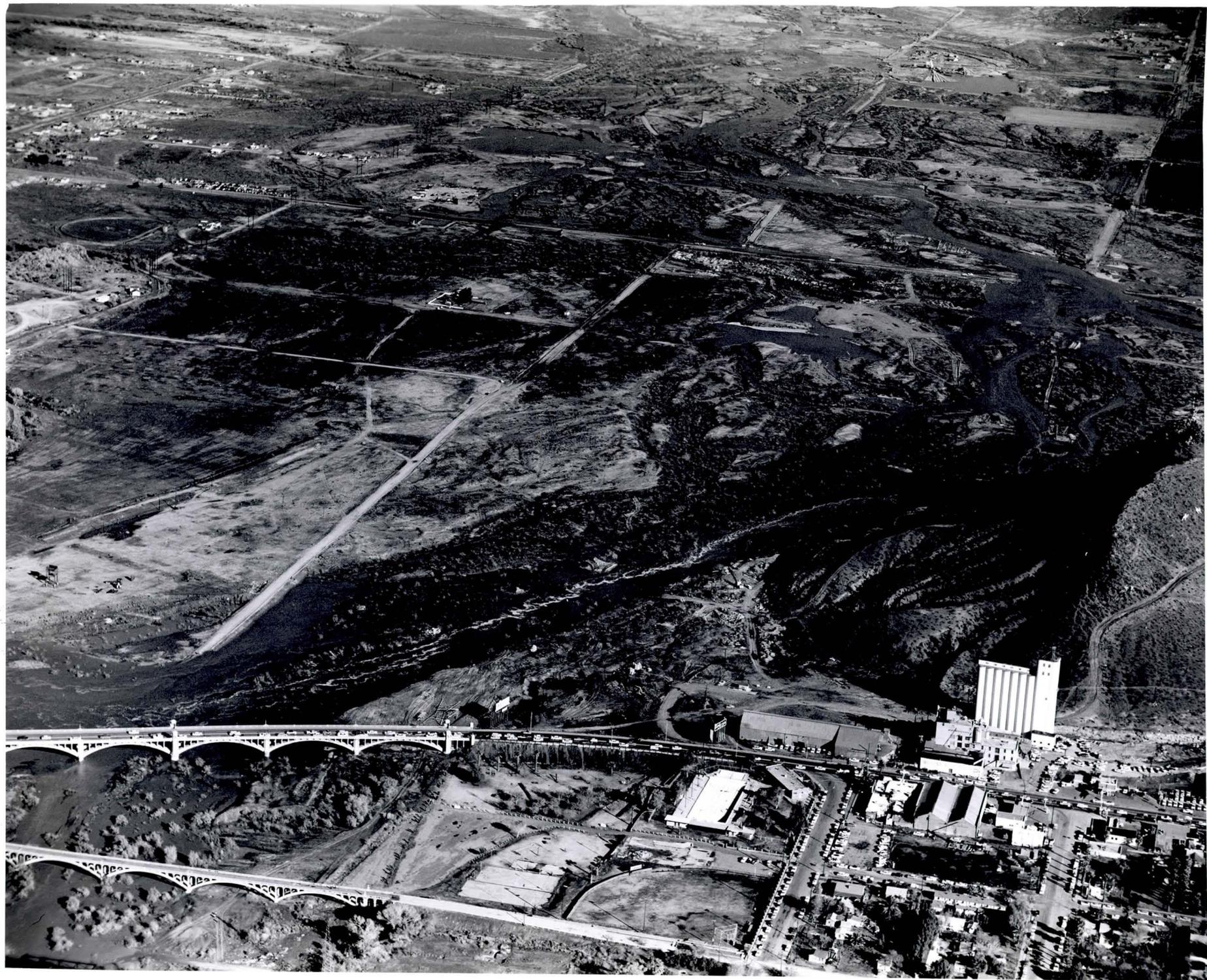
24th Street looking southeast



16th Street looking southeast



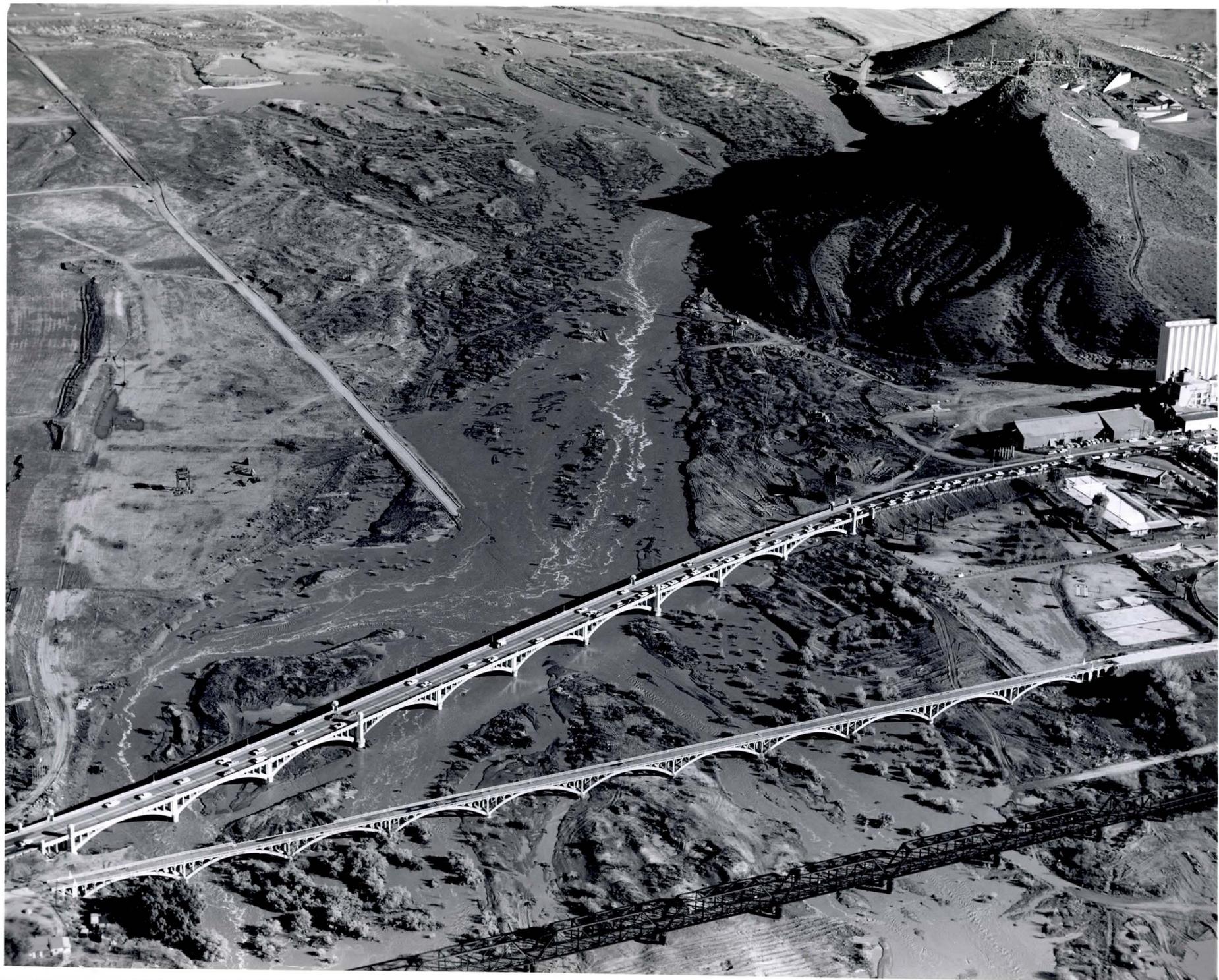
Tempe Bridge looking nearly east. About 5,000 cfs flow at picture time. Max 7,500 cfs before picture.



Tempe Bridge looking nearly south



Tempe Bridge looking southeast



December 1959 - Country Club Drive north of Mesa







NEW RIVER

Showing obstruction left
under bridge affecting
flows.

These have been removed
by Highway Dept.

12/1960



New River of Glendale Ave

Glendale Avenue Bridge &
New River.







Gila 3/16

X2

The Phoenix Gazette

Eugene C. Pulliam, Publisher

"Where The Spirit Of The Lord Is, There Is Liberty"

II Corinthians 3: 17

PAGE 6

TUESDAY, DECEMBER 18, 1962

How Wide Does The Gila Roll?

The question of a flood control channel in the Gila River between its confluence with the Salt River and Gillespie Dam may be Waterloo for the Maricopa County Flood Control District. It strikes us as extremely doubtful that the people will ever approve a suggested bond issue if present tentative plans are not modified.

The U.S. Army Corps of Engineers, upon the planning of which the district relies heavily, is insisting upon clearing a 2,000-foot wide channel through the salt cedars and similar growth in the Gila river bed. The cost to the taxpayers of Maricopa County would be an estimated \$210,000 immediately, another estimated \$53,000 annually for maintenance, and an additional estimated \$20,000 annually until the sum of \$825,000 should have been repaid to the federal government.

The actual costs probably would be far higher, considering the history of such estimates.

The \$825,000 figure, incidentally, represents what the Army Engineers say would accrue to Maricopa County in value of water conservation. It is based on a figure of \$8 per acre foot of water. The

going price from existing wells in the Buckeye district is around \$3.50 per acre foot.

More to the point, however, is a very grave question about the necessity of the extremely costly program. There is a sound body of opinion that a 500-foot wide channel would be every bit as effective for flood control as a 2,000-foot channel, at a fraction of the cost. In fact, there is some question whether any channel at all would actually ever justify its cost, considering the basis upon which it has been pictured as "necessary." The planning is predicated upon a storm equal to the worst ever known in Arizona, but spread over more territory and falling upon ground already so saturated that it could not hold more moisture.

The Arizona Game and Fish Department has been pictured as being the sole opponent of the wide channel because of danger to wildlife. Taxes being what they are, we suspect a lot of ordinary citizens may be more extreme than the game department in their opposition if a look of empire building begins to develop in the flood control picture.

The need doesn't justify waste.

#3

Salt River Flood Plan Talk Due

Council To Meet With Officials

Tempe and the proposed Maricopa County Flood Control program will be discussed at a special council meeting Thursday (tonight) at 7:30 p.m. at city hall. Additionally, the agenda calls for consideration of the city's contract with Salt River Project and announcements of appointments to various city boards and commissions.

Interested citizens are welcome to attend, it was reported from the office of Mayor Bernard Caine.

Regarding flood control, especially plans for the Salt River channel near Tempe, members of the county's advisory board, city officials and other interested parties will discuss the situation with the council. Tempe has been represented at several meetings on the matter to date.

Prime concern to the city is the plan for the Indian Bend project, drainage for Paradise Valley and the Scottsdale area. Next is the levee planning for both the north and south sides of the channel, east and west of Hayden (Tempe) Butte.

Biggest expenditures are
(Continued on Page 3)

Salt River

(Continued from Page 1)

planned at the far northern end of the Valley, according to announced plans of the leaders of the tax-supported Maricopa County Flood Control District. In fact, a major, county-wide bond election may be held in the near future to finance the project in conjunction with Army Engineers and federal aid.

TEMPE DAILY
NEWS 1-3-63



24

Indian Bend's *Scottsdale Property* Plan Revised

Sept 3, 1962

A revised plat to conform with U.S. corps of engineers boundary restrictions in the controversial Indian Bend Wash is scheduled for discussion at a session of city council tomorrow night at 8 p.m. at city hall.

Indian Cove subdivision was tabled August 14 after Colonel John Lowry, a Scottsdale resident and head of the Maricopa County Flood Control District, revealed that the subdivision was planned in a location that had flooded numerous times in the last 20 years.

He also outlined the routing of a proposed channel which would solve the problem of the wash's flooding during spring rainoffs and other heavy rainfall periods.

The Indian Cove developers were granted permission to re-plat their subdivision outside the boundaries of the Indian Bend Channel.



Ground Water Levels Show

Mesa Tribune

12-17-62

Further Decline in Area

#5

Ground-water levels in most of the major irrigated basins in Arizona — including the Mesa-Chandler-Tempe area — continued to decline in the period from spring 1961 to spring 1962, according to the "Annual Report on Ground Water in Arizona."

The report was prepared by the U.S. Geological Survey in cooperation with the Arizona State Land Department and has been released by the U.S. Department of the Interior.

The report is a summary and analysis of hydrologic data collected under the statewide ground-water survey from spring 1961 to spring 1962. It emphasizes ground-water conditions in the highly developed agricultural areas.

Greatest decline in the ground-water level was found in the Salt River Valley and lower Santa Cruz basin, the report says. Small rises in water level were noted in the Safford and Duncan basins.

In the Mesa area, water level fluctuations ranged from a rise of two feet to a decline of 20 feet. For the most part larger declines were in the area northeast of Mesa where pumping is concentrated.

The declines were least near Tempe and south of Chandler, the report notes. The overall downward trend of the water levels

in the area has continued since the early 1940's.

During the five-year period from the spring of 1957 to spring 1962 the water table declined more than 60 feet in Mesa and about 30 feet in Tempe.

Declines throughout the rest of the area were progressively less about 10 feet south of Chandler dur- to the south and measured ing the five-year period.

In the spring of 1962 the depth to water below the land surface was about 310 feet northeast of Mesa, about 155 feet near Chandler, about 235 feet at Mesa and less than 80 feet at Tempe.

The report says that vast reserves of ground water are being depleted because the current annual rate of recharge to ground-

water reservoirs is negligible in comparison to the large amounts of ground water withdrawn each year.

The pumpage of ground water in Arizona in 1961 amounted to about 4.7 million acre-feet — slightly more than in 1960.

The Salt River Valley and lower Santa Cruz basin accounted for about 75 percent of the total amount of ground water pumped in the state.

Although the use of ground water for municipal and industrial purposes is increasing, more than 90 percent of the ground water used in 1961 was for irrigation of crops, the report says.

Copies of the full report are available at the Arizona State Land Department, 422 State Office Building, Phoenix.



Salt

WZ

The Phoenix Gazette

Eugene C. Pullam, Publisher

"Where The Spirit Of The Lord Is, There Is Liberty"

II Corinthians 3: 17

PAGE 6

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Scottsdale Progress
**Indian Bend's
Plan Revised**

Sept 3, 1962
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He also outlined the routing of a proposed channel which would solve the problem of the wash's flooding during spring rainoffs and other heavy rainfall periods.

The Indian Cove developers were granted permission to re-plat their subdivision outside the boundaries of the Indian Bend Channel.

Scottsdale Progress
**U.S. Engineers
Okay Channel
For Area Here**

12-5-62
The U.S. Army Corps of Engineers, South Pacific division, today recommended construction of a \$7.2 million channel as a flood control measure to protect the City of Scottsdale and adjacent areas.

The favorable report on the project was based on a public hearing held at Phoenix, Dec. 9 and has been sent to Washington, D.C., for review by the board of engineers for rivers and harbors. The board must give approval before construction is authorized.

The concrete-lined channel would be about seven miles long and would connect the Arizona channel with the Salt River along Indian Bend Wash.

Further written communications by interested parties may be sent to the board of engineers in time to reach it by January 4. The South Pacific division said these communications should not repeat material previously presented at the public hearing, the United Press said.



#7

INDIAN BEND WASH

Army Oks Channel Project

The U.S. Army Corps of Engineers Wednesday recommended construction of the controversial \$7.5 million Indian Bend Wash channel as a flood control measure to protect the city of Scottsdale.

The favorable report on the project has been sent to Washington, D.C. for review by the Board of Engineers for Rivers and Harbors. The board must give approval before federal funds can be authorized for construction. The report was based on a public hearing held in Phoenix Dec. 9, 1959.

The proposed concrete-lined channel would be about seven miles long and would connect the Arizona Canal with the Salt River along Indian Bend Wash. The wash runs north and south between Hayden and Miller Roads, east of Scottsdale and north of Tempe.

A spokesman for the engineers corps said written recommendations by interested parties may be sent to the Board of Engineers in time to reach it by Jan. 4, 1963. The spokesman said these communications should not repeat material previously presented at the public hearing.

At the hearing, Tempe officials protested that the channel would divert floodwaters into the Salt River at such velocity that it could cause flood damage in Tempe.

Tempe City Attorney James R. Holman said Wednesday the city council has recommended to the Maricopa County Flood Control Advisory Board that high priority be given

to construction of a levee along the south side of the primary flood area. He said the recommendation calls for the levee to run from the Mesa sewage treatment plant to about 40th St. in Phoenix.

"It is estimated that about 40,000 cubic feet of water will spill from the channel at peak use," Holman said. "While some steps are being taken to slow and partially control this flow, it still presents a threat to Tempe."

"We would have no great objection to the flood channel if we are assured of the protection of a levee, however," he said.

John C. Lowery, chief engineer for the Maricopa County Flood Control Dist., said the Army Engineer Corps is considering a project to clear the Salt River bed, adding channels and levees in necessary spots.

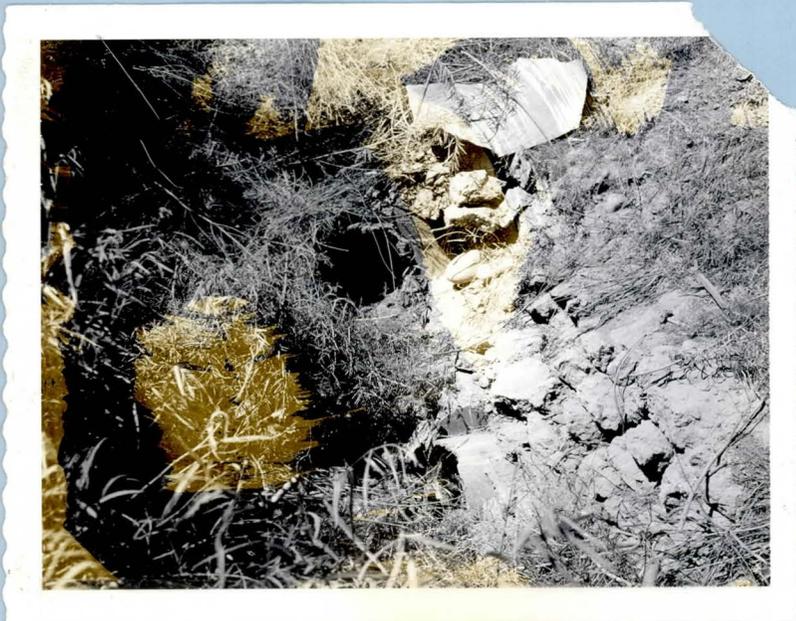
"The Indian Bend Channel is only part of an extensive county-wide flood control plan," Lowery said.





48TH STREET DRAIN
1963

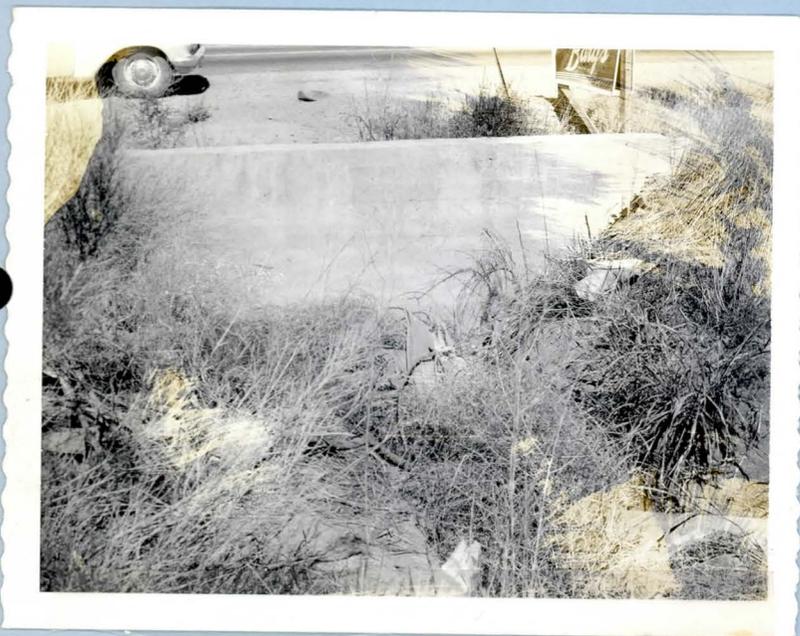
Looking west from 48th
Street down the Drain.



Drain ditch at 48th
Street looking south,
east side of street.

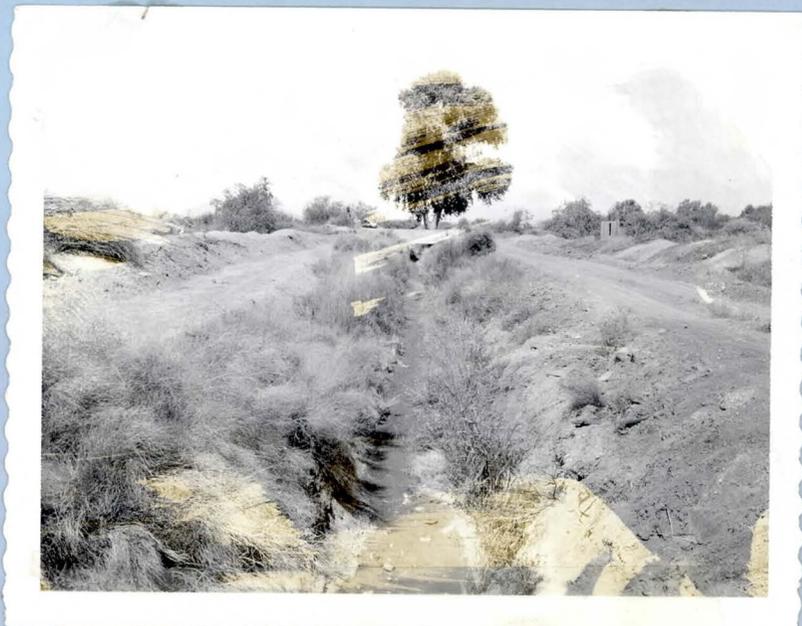
48TH STREET DRAIN
1963

Looking west from 48th St.
showing old flume.



Drain at 40th Street,
looking west from east
side of street.

Looking west down the
Drain from 40th Street.





Republic 7-10-63

Approval Urged for Watershed

WASHINGTON — Reps. John J. Rhodes, R-Ariz., and Morris K. Udall, D-Ariz., yesterday urged approval of the Buckhorn-Mesa Watershed project in testimony before a House agriculture subcommittee.

The Buckhorn-Mesa project is a part of a \$19.6 million watershed-flood control project in Maricopa and Pinal counties, of which \$11.5 million is to be federal money.

The over-all project combines Buckhorn-Mesa with two others, Apache Junction-Gilbert, and Williams Field-Chandler. All three are named for the principal areas they would protect.

Basically, all three projects are part of the Queen Creek flood control complex that also includes the Whitlow Ranch Dam, already completed on Queen Creek just below Superior. The three projects, through a series of dikes and channels, will gather floodwaters all across the east side of the Salt River Valley and convey them to the Gila River.

The two Arizona congressmen noted that in every instance, the benefits to be derived exceed by substantial amounts the cost of the flood protection.

THEY TOLD the subcommittee under Rep. W. R. Poage, D-Tex., that peculiar topography of the state creates dangerous flash floods from rainstorms that drench the mountains and send walls of water cascading into the valleys almost without warning.

After hearing the lawmakers, Poage's subcommittee approved Buckhorn-Mesa and recommended it to the full agriculture committee. If it is approved by the FVU committee and the Senate Agriculture Committee takes similar action, the project will be authorized without additional legislative action.

The two other parts of the project, Apache Junction-Gilbert and Williams-Chandler, are awaiting approval by the House and Senate public works committees, where they were sent because of technical elements placing them under that jurisdiction.

The Buckhorn-Mesa project has the sponsorship of the flood control district of Maricopa County, the board of supervisors of Pinal County, the Maricopa County Soil Conservation District, and the Mesa-Tempe Soil Conservation District. Involved in the project are 69,172 acres of land. The government's engineers have established a ratio of \$1.70 of benefits for every \$1 spent on the project.

THE APACHE Junction-Gilbert project involves 89,963 acres and is sponsored by the flood control district of Maricopa County, the board of supervisors of Pinal County, and the East Maricopa County Soil Conservation District. Engineers have predicted benefits of \$1.30 for every \$1 of cost.

The Williams-Chandler project, involving 154,976 acres, is sponsored by the flood control district of Maricopa County, the board of supervisors of Pinal County, the Queen Creek Soil Conservation District, and the East Maricopa County Soil Conservation District. Its benefits are estimated at \$1.60 for every \$1 of cost.

When completed over a four-year period, the three projects will afford protection to Mesa, Apache Junction, Gilbert, Williams Air Force Base, and the General Motors Proving Ground as well as thousands of acres of rich agricultural land.

#8

Youth Washed Into Culvert

Moyers Survives Terrifying Experience



SCENE OF NEAR TRAGEDY This is the culvert into which Jim Moyers plunged last Friday night in the huge downpour. Moyers, was standing on the northwest corner of 85th street and Apache Trail Boulevard when he was pulled suddenly into a whirlpool of muddy water which sucked him through the culvert, under the highway, and deposited him in the island between the eastbound-westbound highways. Moyers miraculously alive today, is at right.

The cloudburst which hit the west shoulder of the highway to Apache Trail area and Mesa go toward them. last Friday could have easily claimed the life of James Moyers, 18, of Gilbert. He was swallowed up in a whirlpool of muddy water and swept out of sight to the horror of the Teagues who were watching helplessly.

Moyers and his girl friend, Miss Linda Teague of 326 N. 85th Place at the Twin Knolls, had attended the showing of "The Great Escape" in Mesa.

Miss Teague's parents, Mr. and Mrs. T.C. Teague, intuitively feared for the young couple's safety and attempted to reach them at the theatre. The call was never completed, due possibly to the storm, so they started a trip to Mesa in the storm, traveling Apache Trail Boulevard, to intercept them.

At 85th street and The Trail, Moyers and Miss Teague found they could drive no further, so parked. Moyers, seeing the Teagues parked in the turnoff at 85th, stepped from the north-

west shoulder of the highway to go toward them. He was swallowed up in a whirlpool of muddy water and swept out of sight to the horror of the Teagues who were watching helplessly.

Moyers disappeared into the sewer, swept through it under the highway and was miraculously deposited in the area between the two (eastbound-westbound) highways.

As soon as the Teagues could reach him, they took him to Mesa's Southside District hospital for a check up. Outside of shock Moyers was declared okay. He remained in Mesa overnight with a relative of the Teagues since his parents in Gilbert were away at the time, vacationing in Mississippi.

Moyers graduated from Gilbert high school this past spring.

His comment on the experience - "I thought I was dead. What a horrible way to die!"

Friday, August 23, 1963

Chamber Takes Stand On Flood Problem

#10

A resolution expressing concern about the recent flood damage along Apache Trail plus a plea for action that steps be taken to prevent additional flooding was passed Thursday by the Chamber of Commerce.

The chamber action came after president Lee Olson had summarized several individual cases where the heavy rains last weekend had severely damaged local property.

At the next meeting of the

chamber board, it is expected letters will be authorized to impress upon local and federal officials, as well as congressional representatives, the severity of the local situation and the potential danger of even greater loss in the event of major rainstorms.

The chamber meeting Thursday at La Hacienda Steak House was attended by 20 persons, the largest crowd for any summertime chamber session.

In other matters considered, there was some discussion of the suggestion that the name of Apache Junction be changed to Apache. This idea was presented by Bill Burgdoff. Some members indicated the idea may have some merit, but several voices were heard in opposition. Since there appeared to be no strong feeling one way or another, no further action was taken on the proposal.

President Olson appointed Ken Miller as chairman of the nominating committee. Members named are Bill Haus and John Newman. The committee will nominate members to fill three positions on the board of directors that expire this year as well as a term being vacated by the resignation of Mrs. Jeanette Vehon Lake.

The directors whose three-year terms are expiring are: Dr. C. G. Newland, Lee Olson

and Jack Vineyard.

The nominating committee will propose at least two names for each post to be filled.

Olson reported to the chamber members that plans are now underway to reprint the Apache Junction "fact sheet."

He said the new version, with latest information and vital statistics reflecting the continued growth of the area, will be even larger and more complete.

Olson, who is a member of the Pinal County Development board, told the chamber that plans by that board had been completed for preparing a 16mm film extolling the virtues of Pinal county. He added that the script calls for Apache Junction to be featured in both the opening and closing scenes.

Filming is expected to start next month with the final version available for showing by Jan. 1.



#11

8-6-63

GAZETTE

Gazette staff photo by Dick Thomas

Youngsters today found Hatcher Road between 16th and 19th avenues a water playground after storm.



tations

#12

Avondale 6

Mo. Revenue

Is \$182,627

A summary of revenues and expenditures by the City of Avondale for the 6 months' period ended Dec. 31, 1962—presented to councilmen last night—shows the city with a total surplus of \$138,515.72.

REVENUES collected for the six-month period totaled \$182,627.40 as compared to expenditures of \$136,621.61, a difference of \$44,649. This, added to the surplus figure as of July 1, 1962—\$92,509.93—made up the \$138,515 total.

A breakdown of revenues collected showed \$46,689.18 from Circle Housing during the six months; \$39,483.78 in water revenue; \$19,629.26 in sanitary sewer revenue; \$6,586.69 in gas tax revenue and general fund, \$69,983.19.

COUNCILMEN at the meeting adopted a motion by Cecil Howe that assistant police chief Dewey Lee's salary be raised from \$420 to \$460 per month.

In other action the council: Adopted Resolution 94 approving the preliminary flood control plan of the Maricopa County Flood Control District on condition that the Agua Fria, Salt and Gila rivers be properly channeled so as to accommodate the increased water flow without danger to the city, that levees be constructed at the district's expense to protect the city sewage plant, and that care be taken to keep the program economical so as not to have it become an unbearable burden on the taxpayer.

COL. JOHN C. Lowry, district flood control engineer, met with the council at a special meeting held Thursday at 7 p.m., explained the program, and asked for the council's approval with such conditions as it felt necessary.

#13

AVONDALE SETS CONDITIONS *Gazette 2-8-63*

Flood Control Plan OKd

Special to The Gazette

AVONDALE — The Avondale City Council has conditionally approved a preliminary flood control plan proposed by the Maricopa County Flood Control District.

One council provisions was that the Agua Fria, Salt and Gila rivers be properly channeled to accommodate the increased water flow without danger to Avondale.

THE COUNCIL further asked that levees be built at district

expense to protect the Avondale sewage plant and that care be taken to hold costs down so the project does not become a burden on taxpayers.

In other business, the salary of Assistant Police Chief Dewey Lee was raised from \$420 to \$460 per month.

A financial report showed the City of Avondale had a surplus of \$138,515.72 for the six-months period ending Dec. 31, 1962.

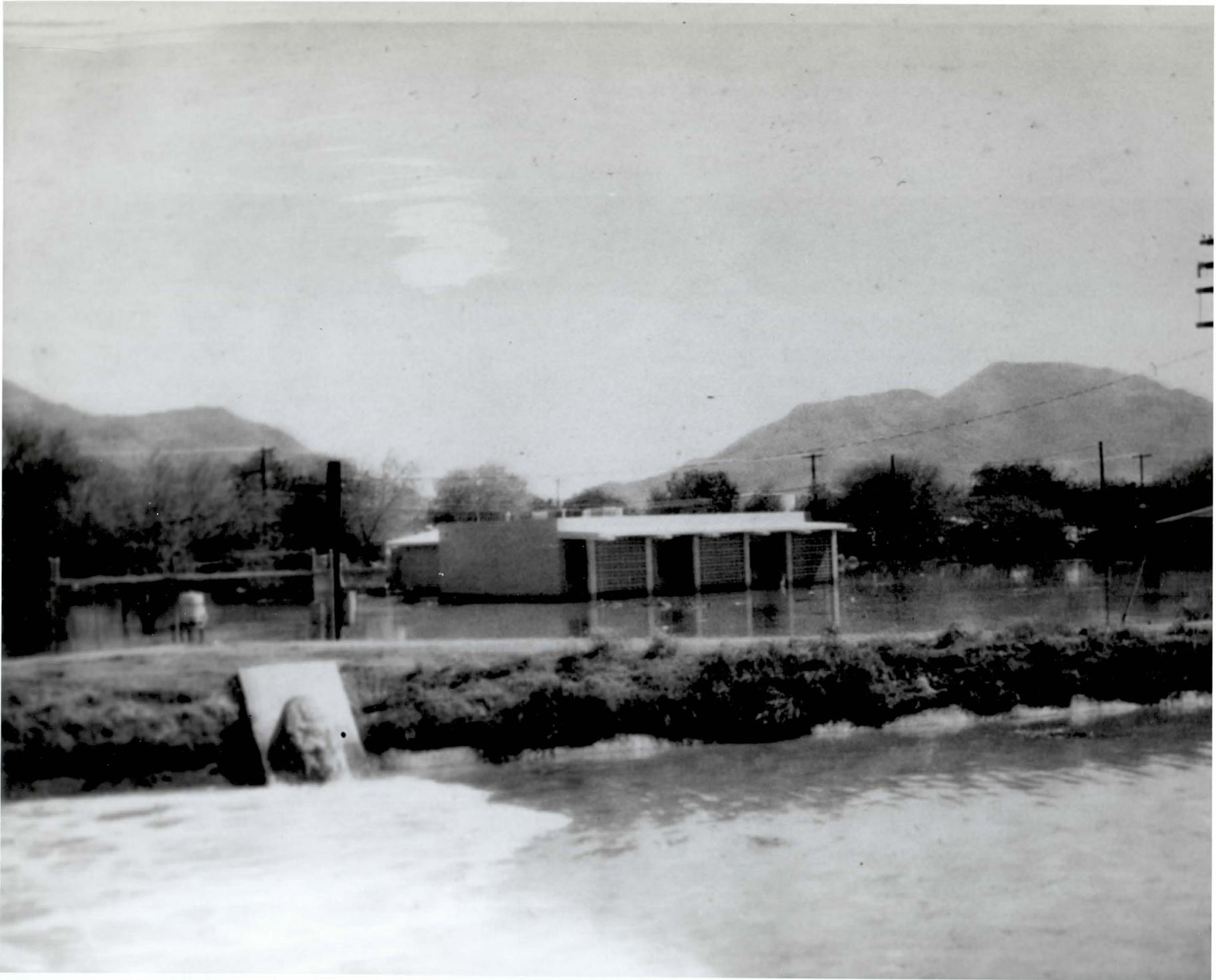
REVENUES for the six months totaled \$182,627.40 as compared to expenditures of \$136,621.61. The difference of \$44,649 added to the surplus of July 1, 1962, of \$92,509.93, made up the year's total surplus.

Principal items in the revenue were: \$46,689.18 from the Avondale Circle Housing project during the six months; \$39,483.78 in water revenue; \$19,629.26 in sewer revenue; \$6,586.69 in gas tax revenue; and \$69,983.19 from the general fund.



8/6/63 Taken just east of 19th Ave. above Arizona Canal showing extent of flooding.
Note water line on side of car.





8/6/63 Looking north across the Arizona Canal just east of 19th Ave. Note pump is taking water from flooded area. Approx. 30 homes were flooded in this area.



8/6/63 Looking west on Hatcher Rd. just east of 19th Ave. showing extent of
Flooded area above Arizona Canal.



8/6/63 Taken just east of 19th Ave. above Arizona Canal showing extent of flooding.
Note water line on side of car.





1963 - Cave Creek Dam



1963 - Cave Creek Dam



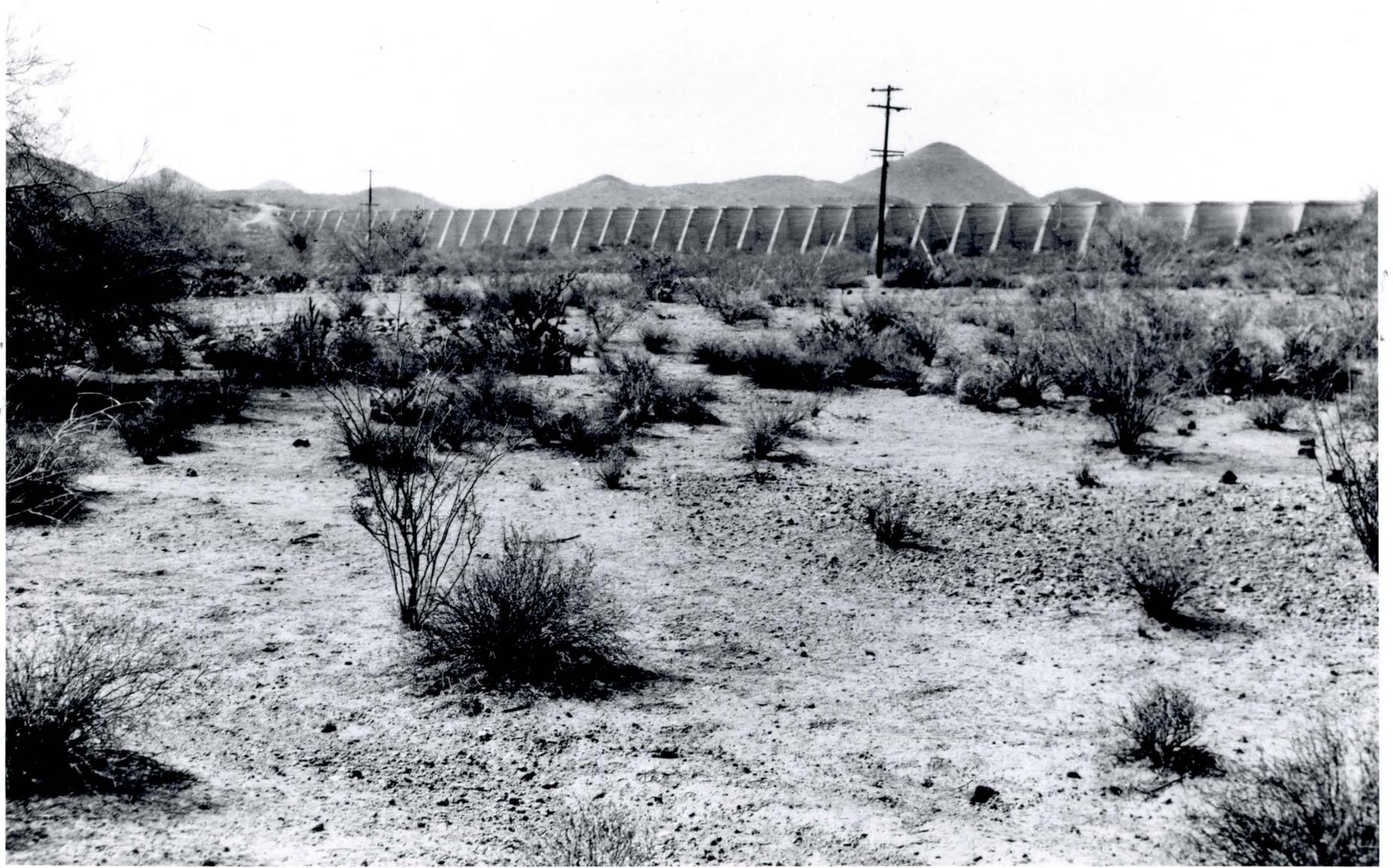
1963 - Cave Creek Dam



Cave Creek Dam 1963



Cave Creek Dam 1963



Cave Creek Dam 1963



Cave Creek Dam 1963



Cave Creek Dam 1963



Cave Creek Dam 1963



Cave Creek Dam 1963



FLOOD, HAIL, RAIN, WIND

Upper End Of Harquahala Valley Has Heavy Damage To Lettuce, Millet, Cotton, Ditches

HARQUAHALA Valley's north end got battered by rain, flood, hail and wind the night of Sept. 9. All within a few minutes as much as 1,000 acres of young lettuce was destroyed. Several hundred acres of cotton had the top crop knocked off and all the open cotton stained. Whole fields of millet, being grown for seed, will never be harvested. Two big tool sheds were blown away. Roads were washed out.

But the worst of all was damage to concrete ditches. On Joe Martori's Buckhorn Ranch, at least two miles of ditch must be replaced. A break of only a few feet means that the ditch must be rebuilt for a considerable distance, since concrete always sinks a little into the earth after getting "set" and it's impossible to get the earth under it compacted to exactly the right firmness for even settling.

Apparently Buckhorn got the brunt of the storm. One of the two blown-away sheds was there and the other was on the Jackson & Perkins place, just to the south. Steve Martori's Mary E, to the west of Buckhorn, and the J. A. Wood farm, to the east, were badly hurt. Calzona Farms shared in the losses, particularly lettuce.

This doesn't sound like very many farms, but Harquahala runs to big units. The Mary E, for instance, is 4,000 acres. Total acreage where major damage occurred is probably in the neighborhood of 20,000.

Some Lettuce Replanted

Steve Martori replanted 150 of his 250 acres of lettuce, though he is doubtful if the gamble will pay off. Every lettuce district aims at a particular market spot, and Harquahala's success depends on getting in just ahead of Salt River Valley. That replanted after the storm will be competing with Salt River and one or two other districts.

Joe Martori, who lost at least half of 400 acres of lettuce, decided to do no replanting. He was afraid he wouldn't get back the cost, which is \$21 an acre for seed alone.

Incidentally, the Buckhorn ditch losses would have been much heavier but for the presence of mind of Charles Softley, Martori's superin-

tendent. He saw that the water coursing through the ditches would spill out lower down and wash away the berm, so the unsupported concrete would break into innumerable pieces. So he went around with a sledge hammer in the pouring rain, knock-

FLOOD CONTROL

The latest Harquahala flood has speeded planning for a system of dikes and channels to protect the whole valley. D.A. Dobkins, head of the flood control division of the Soil Conservation Service at Phoenix, called on the Buckeye work unit for all information about the Sept. 9 disaster. Later he sent some of his technicians out to collect further details.

ing holes to let the water out where it would do the least harm.

The saddest sights are the Gahi millet fields, Buckhorn's and one or two others. Gahi stands seven or eight feet high, but not 25% of the stalks are standing today and the heads were hammered by hail. Other stalks are lying over, twisted and interlaced until no harvester could possibly handle them.

Bales from a stack of Jackson & Perkins hay were scattered over the countryside for half a mile. A week after the storm, J. & P. work crews were still shoveling muck out of ditches. The company's 750 acres of roses were not injured. But the Buckeye Valley News carried a picture of a band of sheep standing belly-deep in water that covered a J. & P. pasture. If the flood had risen a little higher, those sheep would have drowned.

A high concrete wall around J. A. Wood headquarters was either blown over or washed over. Chances are that the foundation was weakened by water, and the terrific force of a cyclonic wind did the rest.

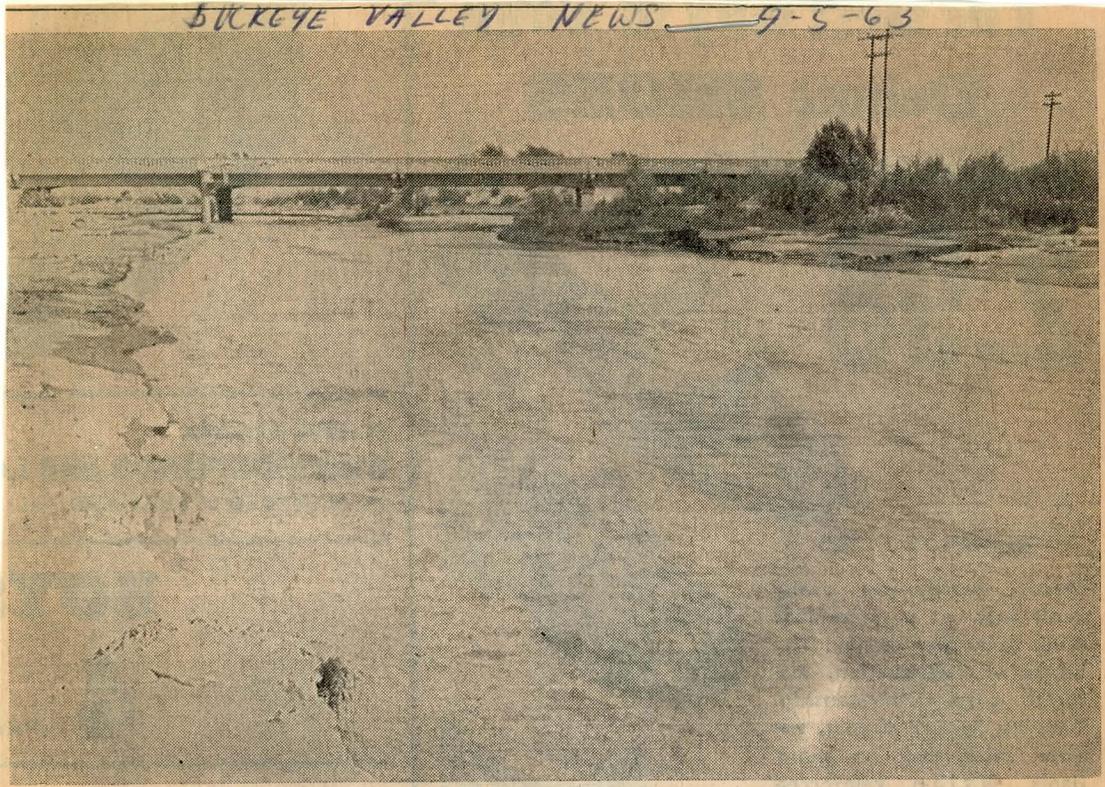
Road damage was not great but a county crew, repairing one break, cut an underground telephone cable. That inconvenienced the whole community for a number of hours.

#14



#15

BUCKEYE VALLEY NEWS 9-5-63



Who Says There Are No Real Rivers on Desert?

SIGHT SELDOM seen is the Hassayampa River aflow, but this was sight that greeted motorists on the Palo Verde-Has-

sayampa Rd. last weekend. Photo was taken Saturday morning. A day earlier, as wet banks and mud-encrusted un-

derbrush proved, the river had been in full flood, filling area from one end of bridge to the other.





PIMA ROAD SOUTH OF SHEA BLVD.
AUGUST 1, 1963



C-LINE #52584
35MM PRINTS



08/20/63 Off McHicken Dam



08/20/63 ↗ Debris in drainage channel at Northern Avenue
1/2 mile west of Litchfield Road
08/20/63 ↘ Looking north from Reems Road and Peoria Avenue



356





11/21/63 Peoria Avenue & New River looking northwest

Looking No. West New River, Nevada 11-21-63



Photo by Tony Lauer

New River & Peoria Ave. Looking north west.

11-21-63



Photo by Tony Lauer

New River

Peoria Ave. of New River

11-21-63



Photo by Tony Lawer





Maryvale 1963



35th Avenue 1963 Maryvale - Glendale



197





116

MESA TRIBUNE 3-1-63
**Usery-Superstition Area
Flood Control Plans OK'd**

The Maricopa County board of supervisors has approved an agreement with the U. S. Soil Conservation Service to seek Federal approval for three flood control projects in the Usery-Superstition watershed area in eastern Maricopa County, it has been announced.

The three projects, consisting chiefly of levees, are designed to protect the section of the county south and east of Mesa to the Pinal County line.

The supervisors postponed action Feb. 18 when the Tempe city attorney argued the agreement should not be entered into until a countywide flood control program is adopted.

Unanimous approval was voted Monday after an opinion from Donald Meyers, flood control district attorney, backed up the flood con-

trol district advisory board recommendation. Meyers said the agreement would not obligate county funds for the projects.

Work plan agreements are required before application can be made for Federal participation in flood control projects. If Congress okays the plans, the Federal government would pay the total cost of construction, an estimated \$11.4 million.

John Lowry, flood control engineer, said written approval of the agreements has been received from the Pinal County Board of Supervisors, and the East Maricopa, Queen Creek and Mesa-Tempe Soil Conservation Districts.

The three projects are known as the Buckhorn-Mesa, Apache Junction-Gilbert and Williams-Chandler watersheds.

County Flood Control Plan Includes Mesa Area Work

The Maricopa County Board of Supervisors will hold a public hearing Nov. 20 at 10 a.m. on a proposed comprehensive flood control program for the county that may cost an estimated \$115,000,000.

The program, with a total of 28 separate projects, is divided into three priority groups. The federal government would pay \$89,600,000 and the flood control district would pay \$25,800,000.

Supervisors tentatively adopted the program, in order to set the hearing date. The comprehensive plan was designed by the Maricopa County Flood control district advisor board and district engineer, based on independent engineering studies by area firms.

Barney Burns, board chairman, said that the first step calls for approval of the overall program. After that, cost would be estimated and a bond issue election called.

If the full program is approved, debt retirement would

be set up for a period of 10 to 20 years in an effort to hold flood control district taxes to a minimum, Burns said.

Projects affecting the Mesa area include one among the 15 projects of first priority and three of six in the second priority group. Seven more projects are in the third priority.

areas. The structures, earthen the construction of Buckhorn-Mesa retarding structures for the Mesa, Chandler and Gilbert areas. The structures, earthen diversion walls, would be 11 miles long with eight miles of floodways.

A debris basin and diversion box would be constructed to utilize floodwater for irrigation purposes.

In the second priority group is the Apache Junction-Gilbert structure for the Gilbert Mesa, Williams Field, Higley and Chandler areas.

It would provide a retarding basin south of Apache Highway with a 4-mile dam and 15 miles of floodways. The dam would provide 4,135 acre feet of storage with 3,960 acre feet reserved for flood control.

Also in the second priority

is the Mesa-Chandler-Gilbert floodways with a 29-mile system of channels eventually emptying into the Gila River.

Third project in the second priority is the Williams AFB-Chandler project with two retarding structures totalling nine miles in length and nine miles of floodways for the Williams Field, Higley and Chandler areas.

#19

\$70 Million Flood Control Plan Okayed by Board

A \$70 million flood control project proposed by the U.S. Corps of Engineers was approved yesterday by the Maricopa County Board of Supervisors.

The project is part of a \$115 million county wide flood control program scheduled for public hearing Nov. 20.

THE NORTH and northwest sections of the county would be protected from flood damage by the Army engineers' latest program. It would include a system of dams on Cave Creek, Skunk Creek, New River and Dreamy Draw; diversion channels in Deer Valley, and channel improvements along Cave Creek, Dreamy Draw, Skunk Creek, New River and the Agua Fria River.

Federal funds would cover \$59.7 million of the \$70 million project with the remainder coming from Maricopa County.

IN OTHER action the supervisors approved the call of spe-

cial school bond elections totaling \$6,620,000.

Scottsdale Public Schools asked for a \$5,880,000 bond election to be called Dec. 11. The bonds would be used to finance a new high school and a new elementary school, plus additions to existing facilities.

Paradise Valley High School District was authorized to call an election for the issuance and sale of bonds totaling \$740,000 for purchase of the present high school site and for addition to the school plant.

#18

County to Study Need of Water Supply Zone

Re-establishment of a special water replenishment zone in the county's west basin will be studied soon by M. E. Salsbury, County Flood Control District chief engineer.

The zone was established in 1954 and will expire July 1, 1964, unless re-established.

The West Basin Water Assn. advocates its continuance and the Board of Supervisors ordered the study.

Supervisors Burton W. Chace and Kenneth Hahn said the zone includes a small part of Los Angeles and all or part of El Segundo, Manhattan Beach, Inglewood, Hermosa Beach, Redondo Beach, Hawthorne, Lawndale, Torrance, Gardena, Rolling Hills, Rolling Hills Estates, Palos Verdes Estates and some unincorporated territory.

A 5-cent tax per \$100

assessed valuation is levied in these areas to finance the water conservation program to benefit the communities named.

The county still depends upon its underground supplies for more than half its daily water needs.

The replenishment program funds are used to buy imported water for the West Basin barrier program, for construction of the West Coast Basin Barrier Project to half further brine intrusion of fresh water supplies along the coast and to investigate reclamation of waste waters at the Hyperion outfall plant.



Salt River Flood Plan Talk Due

Council To Meet With Officials

Tempe and the proposed Maricopa County Flood Control program will be discussed at a special council meeting Thursday (tonight) at 7:30 p.m. at city hall. Additionally, the agenda calls for consideration of the city's contract with Salt River Project and announcements of appointments to various city boards and commissions.

Interested citizens are welcome to attend, it was reported from the office of Mayor Bernard Caine.

Regarding flood control, especially plans for the Salt River channel near Tempe, members of the county's advisory board, city officials and other interested parties will discuss the situation with the council. Tempe has been represented at several meetings on the matter to date.

Prime concern to the city is the plan for the Indian Bend project, drainage for Paradise Valley and the Scottsdale area. Next is the levee planning for both the north and south sides of the channel, east and west of Hayden (Tempe) Butte.

Biggest expenditures are
(Continued on Page 3)

Salt River

(Continued from Page 1)

planned at the far northern end of the Valley, according to announced plans of the leaders of the tax-supported Maricopa County Flood Control District. In fact, a major, county-wide bond election may be held in the near future to finance the project in conjunction with Army Engineers and federal aid.

TEMPE DAILY
NEWS 1-3-63

#20



SALT RIVER FLOODING CROSSING AT COUNTRY CLUB DRIVE

8-17-63



Beavers Rip 40-20 In Mud; D

Scottsdale Daily Progress

ARIZONA'S FASTEST GROWING NEWSPAPER

30c Per Week — 10c Per Copy

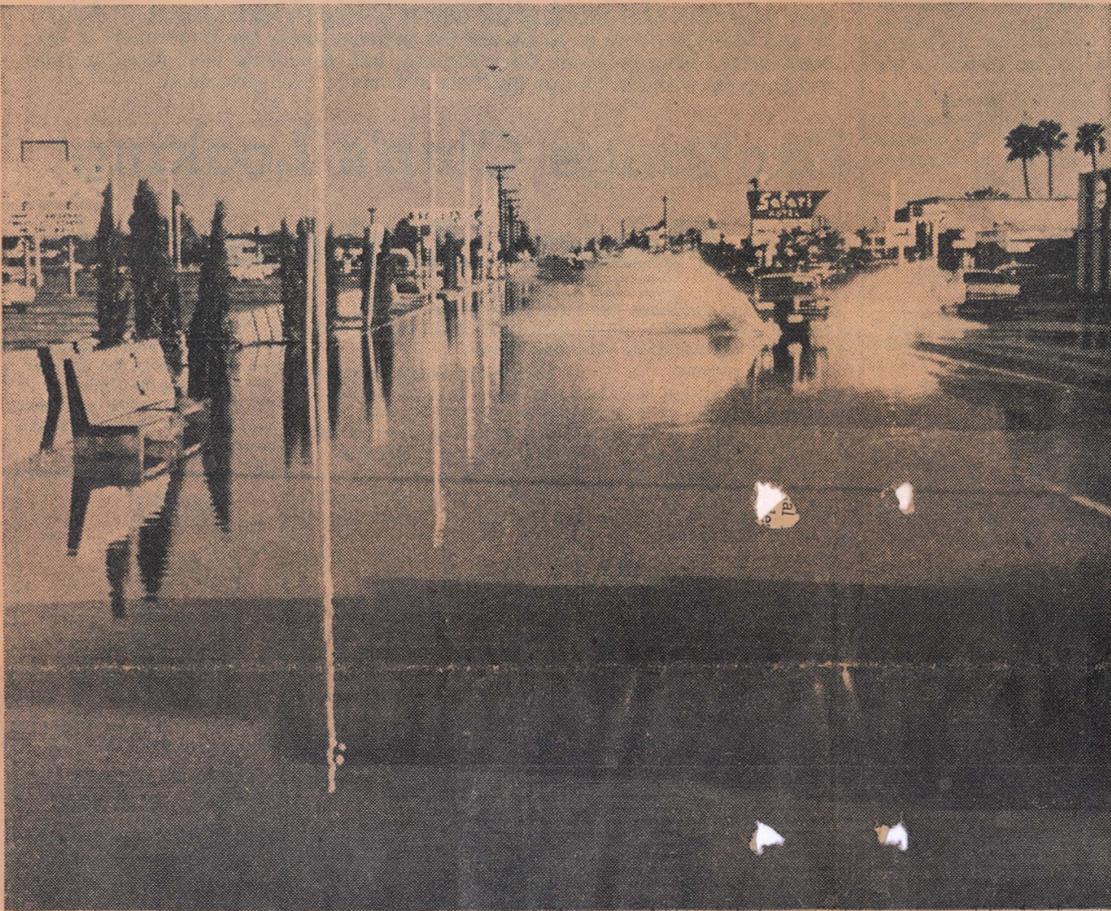
SCOTTSDALE, ARIZONA, SATURDAY, OCTOBER 19, 1963

Vol. III — No. 211

(X21)

Man, What A Storm!

WHOLE STATE HIT



VENICE? — Nope, you're looking north on Scottsdale Rd. from Camelback at 7:30 a.m. today, with streetlight poles reflected like streaks of light in

the four-inch deep water that covered the thoroughfare. Only shallow-draft, flat-bottomed craft allowed. No power boats.

Progress Photo. by George Adams

Scottsdale OK, But Maryvale's A Mess Again

Wind, dust and then rain — tons of it — hit the Valley last night and early today.

Scottsdale saw its share of flooded streets, but police reported none were blocked although several were covered with water as early morning motorists sprayed their way up and down Scottsdale Rd. and along Indian School.

The wind and the rain were the last gasp of hurricane Mona, that started its assault this week along the coast of Mexico.

Few areas in Arizona escaped the downpour.

On the west end of the metropolitan area, Maryvale, already dealt heavy flood damage earlier this season, was reported hit heavily again.

Continued cloudy skies with scattered rains were expected this afternoon with a clearing trend forecast in the northwest.

The heaviest rainfall reported by a regular station was 1.65 at Payson. Sky Harbor Airport at Phoenix had 1.42.

At 32nd Avenue and West Camelback in Phoenix, rainfall measured 1.85. Other reports included 1.70 at 25th Street and Bellview, 1.68 at Seventh Street and Baseline, 1.50 at Cordes Junction, 1.14 at Mesa Experimental Farm and 1.07 in south Tempe.

Winds up to 43 miles an hour were reported at Sky Harbor Airport and of more than 50 miles an hour in the north Scottsdale-Cavecreek area.

Power failures were numerous and trees were blown down, but law enforcement authorities said no heavy damage was reported except to crops. Loss estimates were not available.

Three persons were killed in traffic crashes that were at least partly blamed on rain-slick roads.

Many dirt roads around the state were considered unsafe for driving.

Rains closed Grand Avenue at Glendale Avenue in Phoenix, the Peoria underpass, 91st Avenue from Indian School to McDowell, Indian School and Van Buren at the Agua Fria River, Cave Creek Road, Bell Road, and all roads to Luke Air Force Base except U. S. 80.

Some flooding was reported in Phoenix-area homes, especially in the vicinity of 17th Street and Yavapai, police said.

The Phoenix rain brought the area's total for the year to 6.51 inches, three-quarters of an inch above normal.

Other rainfall reports around the state in the past 24 hours included 1.15 at Gila Bend, 1.52 at Maverick, .72 at Prescott, .59 at Flagstaff, .81 at McNary, and .45 at Tucson.

School

\$\$ Aid

F

'We Must C



Progress Photo by Hunter Gooch

NDOZA
s a dodge

Attacks tegy

missiles in Cuba was only a feint
ance, said a refugee attorney from

, 63, said the missiles put in Cuba
ates by kindling this country's fear

refugees from using this country
as a base from which to strike
Castro forces in their homeland.

He said the United States has
missed several opportunities to
drive Castro out.

Barry's Rally Rained Out

PHOENIX (UPI)—Sen. Barry Goldwater, R-Ariz., a prime prospect for the Republican presidential nomination, only had time for a few jabs at the Kennedy administration before rain dispersed his audience here Friday night.

The conservative senator said he believed the great issues of the presidential campaign

the first rain in more than a month.

Goldwater charged President Kennedy has "no determination to end spending, while cutting taxes." He predicted at the present rate the national debt would grow by \$20 billion by next year.

The Arizonan told the Repub-

lican rally he expected the senate subcommittee that studied the Central Arizona Project legislation would approve it, and that the bill would be presented before the House by next year. Goldwater also said he believed the subcommittee had conducted all the hearings necessary on the project.



Sheinwold

BRIDGE

Ice Skater Does Fancy Head Work

By ALFRED SHEINWOLD

It isn't true that you must always return the suit your partner has led. For example, you may not have a card of his suit. Or you may be taken suddenly ill in the middle of the hand and go off to the hospital without returning any card at all. A note from your doctor will clear your good name. A third possibility is that you may decide to use your brains.

South dealer
Both sides vulnerable

NORTH
♠ J 10 9
♥ A 9 6
♦ 8 4 3
♣ J 10 7 2

WEST EAST
♠ K 8 3 2 ♠ 7 6
♥ J 8 4 3 ♥ K 10 7 5 2
♦ K J 7 2 ♦ 10 9 6
♣ 5 ♣ A 6 3

SOUTH
♠ A Q 5 4
♥ Q
♦ A Q 5
♣ K Q 9 8 4

South West North East
1 ♣ Pass 2 ♣ Pass
3 NT All Pass
Opening lead — ♦ 2

West opened the deuce of diamonds, and South won with the queen. Declarer led a club to dummy's jack and returned a club. East took the ace, and West discarded the deuce of spades.

East was perfectly healthy. In fact he was Peter Pender, a celebrated athlete who con-

ducts an ice-skating school in Vancouver when he isn't winning bridge championships. Healthy or not, Pender did not return a diamond.

Instead, Pender got off thin ice by returning the only card that could defeat the contract. It's easy to find if you're looking at all four hands, but Pender worked it out by logic.

West's opening lead was very informative. The deuce of diamonds was evidently fourth-best. Since West could not hold any diamond lower than the deuce, West started with only four diamonds.

Surely West would have led from a five-card suit if he had held one. When West showed up with only one club, it was clear that he had four clubs in each of the other suits.

If West had four hearts, South had only one heart. Clearly hearts was the suit to attack. Since South's singleton heart might be the queen, Pender returned the king of hearts.

This demolished poor South. He had only eight tricks at best. When he tried a spade finesse, the opponents ran the rest of the hearts and collected a two-trick penalty.

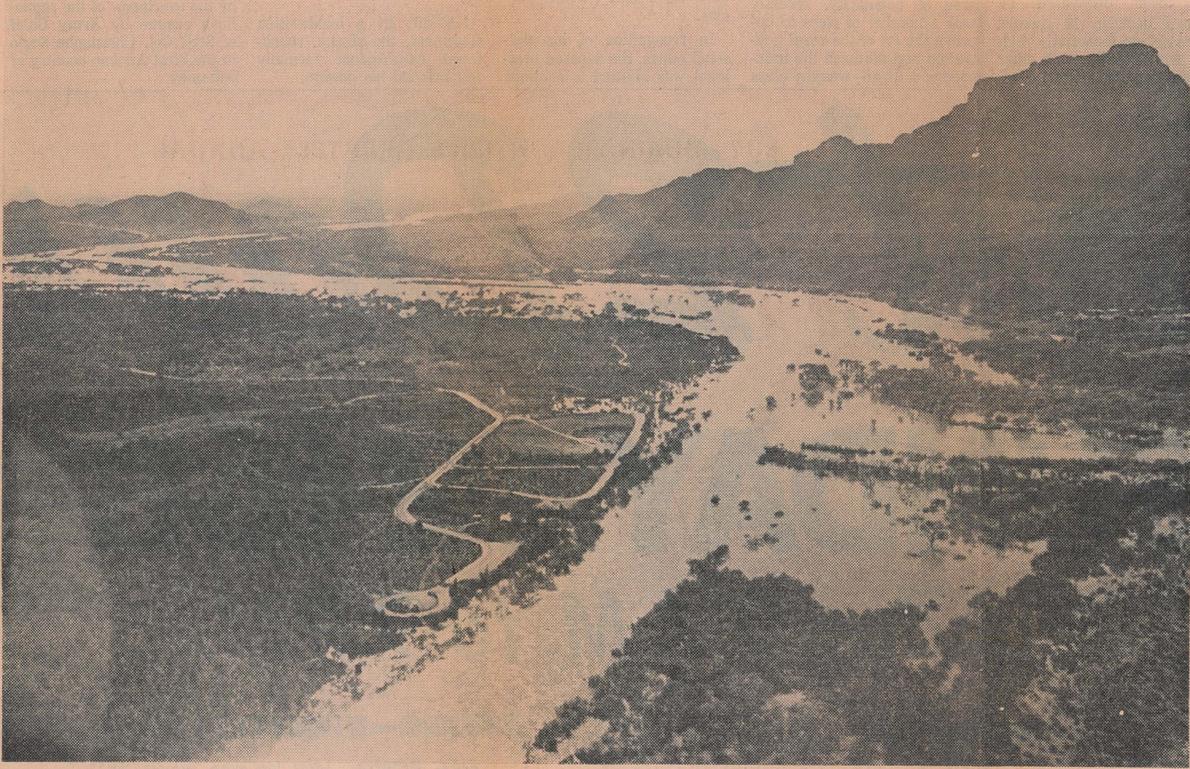
If East had returned a diamond, South could have afforded the spade finesse. The defenders would take only two diamonds, a club, and a spade.

CROSSWORD PUZZLE

Answer to Yesterday's Puzzle

#23

Floodwaters Wreak Havoc in the Valley



WHERE THE SALT AND VERDE MET — Already overloaded Salt River, bottom, is joined by Verde River, at right. The combination dumped 79,000 cubic feet of water per second into the

flooded channel that curves away at top toward Phoenix, forcing the floodwaters out of the normal banks and causing heavy damage when it reached the Salt River Valley.

Republic Photo by Jack West



TOWER DOWN — A crew from Arizona Public Service Co. untangles a 230,000-volt transmission line from a downed 80-foot steel tower at Seventh Street and the Salt River. Tower toppled Friday after its 15-foot concrete base was undercut by the floodwaters.

Arizona Public Service Co. Photo



VIEW FROM THE TOP — This is how the collapsed southbound lane on the west side of the S.

Central Avenue Bridge looked yesterday afternoon. Bridge sagged when supporting pile sank.

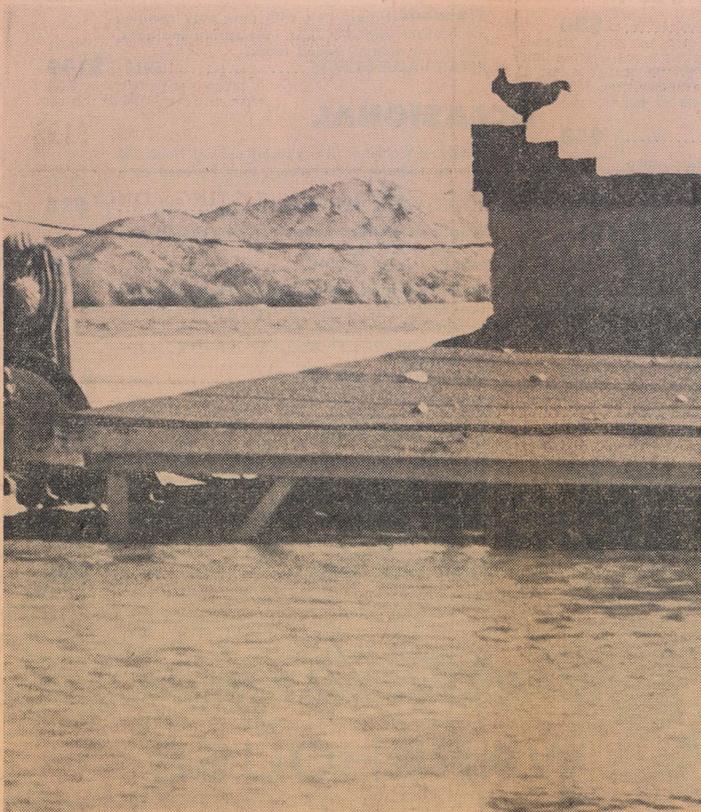
Republic Photo by John Polich



ROAD IN POOR SHAPE — Holiday sightseers yesterday were watching more water come down the Salt River than most had ever seen before. This

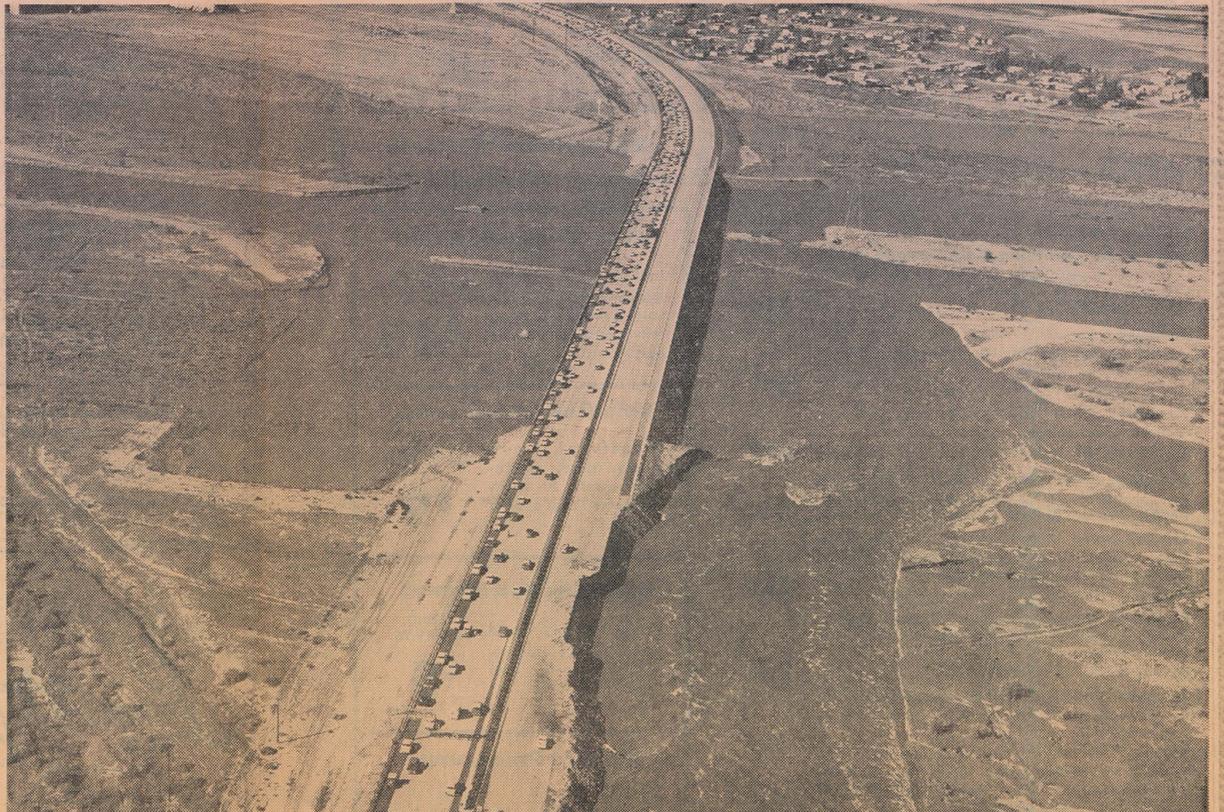
group is standing on 24th Street, looking south across what was a busy artery early Friday morning.

Republic Photos by Ludwig Keaton



ROOFTOP ROOSTER — This is how a rooster atop the roof of a flood-submerged home greeted the New Year yesterday on Jack Rabbit Road, about 7 miles southeast of Buckeye. Four other homes in the area were similarly inundated by floodwaters from the Gila River.

Republic Photos by Pete Marinovich



MARICOPA FREEWAY — This shows the eroding south approach to the Maricopa Freeway Bridge, looking from the northwest, yesterday afternoon. This was one of 75 aerial shots taken of the flooding

along the Salt River by Landis Aerial Surveys. This bridge was one of the two road crossings of the river still open in the Valley yesterday, the other being the Tempe Bridge.

Photo by Landis Aerial Surveys of Phoenix

INDIAN BEND FLOOD CONTROL WORK --

Scottsdale Progress
10-30-63

Possible Within A Year

224

Flood control work may begin in about a year on a \$9 million lower Indian Bend channel in Scottsdale, officials of the Maricopa County Flood Control District said Tuesday.

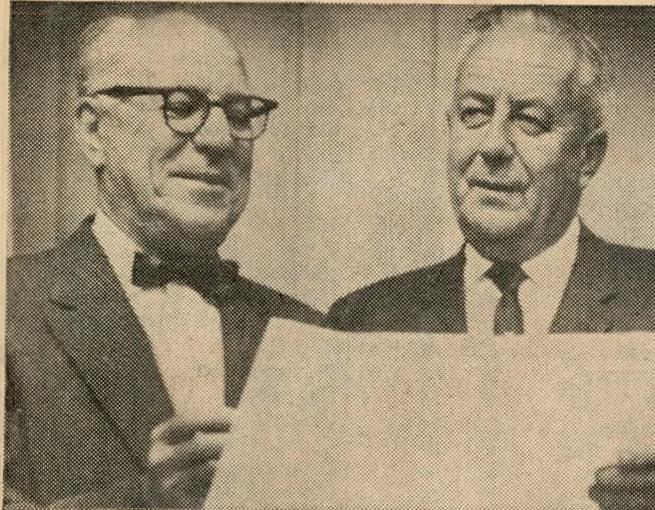
The channel, one of 19 recommended projects included in a proposed \$115.4 million county-wide flood control district, was reviewed at a press conference at county administrative offices.

The board of supervisors Tuesday also set a public hearing Nov. 20, on the flood control program.

The Indian Bend project directly affects Scottsdale since its construction would open up between four and six square miles of land in the Indian Bend Wash for development. The concrete-lined channel would run seven miles from the Arizona Canal at Indian Bend to the Salt River, one-half mile east of Scottsdale Road.

Total estimated construction cost of the channel is \$9,020,000. The flood control district will pay \$1,770,000 of the amount and the federal government, \$7,250,000 if the project is approved.

Col. John Lowry, of Scottsdale, general manager and chief engineer for the district,



Progress Photo

LOUIS JURWITZ, left, chairman of the citizens committee for the County Flood Control District and Col. John Lowry, of Scottsdale, chief engineer for the program, study a map of the county-wide district.

said the Indian Bend channel project is now before the secretary of defense. From there it will go to the bureau of the budget, then to Congress.

Lowry and Sam Tucker, former Phoenix city engineer and outgoing member of the flood

control district advisory committee, said the Indian Bend project is the furthest advanced of all the district projects. Tucker said it's possible it may get final approval within a year.

Construction can't begin on the project until the right of way is

obtained by Maricopa County.

The federal government is paying for all construction costs of the proposed project and the flood control district for right of way, relocation of utilities and maintenance.

After the public hearing next month, study will begin on method of financing the project. The district board of directors, which is the county board of supervisors, will most likely decide on a bond issue to pay the county's share.

If the board of supervisors approves the comprehensive plan after the public hearing, cost will be estimated and a bond issue election probably called.

If the full program is approved, debt retirement would be set up for a period of from 10 to 20 years in order to hold the flood control district taxes to a minimum, according to Barney Burns, chairman of the board of supervisors.

If the Indian Bend Channel is approved before the district financing program is approved, Tucker said, it may be possible to arrange local interim financing so that the project won't be held up.

The flood control district was formed in 1959. A flood control district levy of two cents per \$100 of assessed valuation went into effect in the 1960-61 fiscal year.

The \$130,000 annually realized from the tax is for operating expenses for Lowry and his staff and for voluminous reports compiled in making the three-year feasibility study.

Other projects affecting the Scottsdale area are the Maxwell Dam and the Salt River channelization.

#25

Gazette
10-28-63

County OKs \$115 Million Flood Plan

A countywide flood control program, estimated to cost \$115 million, was tentatively adopted today by the Maricopa County Board of Supervisors.

A public hearing on the proposal was scheduled for 10 a.m. Nov. 20 in the supervisors' meeting room at the county annex, 3325 W. Durango.

A proposed survey of portions of the flood district to obtain data for a topographical map was approved on recommendation of John Lowry, chief engineer and general manager of the Maricopa County Flood Control District.

The county's share of the cost, estimated at \$20 million to \$25 million, would be financed by a county bond issue. The balance would be paid by the federal government.

The program would include about 30 flood control projects throughout the county, including areas of Northwest Phoenix which in August suffered heavy flood damage.

Board Gets Flood Plan From Army

#26

Journal - Nov 1, 1963
By JOYCE TRENT

The U.S. Army Corps of Engineers has asked the county board of supervisors to approve a \$70 million flood control program it plans to submit to Congress.

The five - phase program developed by the corps would benefit chiefly the Phoenix area. The government would pay \$59,700,000 and the county the rest.

The plan includes construction of:

A channel along Indian Bend Wash passing through the Scottsdale area from the Arizona Canal to the Salt River.

A system of dams on Cave Creek, Skunk Creek, New River and Dreamy Draw. Diversion channels in Deer Valley to divert residual Cave Creek and Deer Valley flows to Skunk Creek; and channel improvements along Cave Creek, Dreamy Draw, Skunk Creek, New River and Agua Fria River to the Gila River.

Channels in the Glendale-Maryvale area, where flood waters did an estimated \$3 million worth of damage in August; and a dam, diversion channel and channel improvement in the South Phoenix area.

The flood control storage area in Maxwell Reservoir now under consideration by the U.S. Bureau of Reclamation and channel improvements along the Salt River from Granite Reef Dam to the Gila River.

A channel along Indian Bend Wash upstream from the Arizona Canal.

Essential parts of the second phase of that program include:

A detention basin on Cave Creek about two miles downstream from the existing Cave Creek Dam.

A detention basin on Skunk Creek about seven miles north of Bell Rd.

A detention basin on Dreamy Draw; improvement of the Cave Creek channel for a distance of about three miles; improvement of Dreamy Draw channel; a diversion channel about one mile north of Bell Rd. from 40th St. to Skunk Creek.

(Continued on Page 8A)

New Taxes Studied By Flood Unit

#27

Journal
10-29-63
By JOYCE TRENT

If voters fail to approve a bond issue to finance the comprehensive flood control program the county could increase property taxes to meet the cost, it was reported yesterday.

This was one of two alternative methods proposed by Flood Control District Engineer John Lowry during a press conference on the \$115 million program. The program, tentatively adopted by the Board of Supervisors Monday, comes up for hearing Nov. 20.

The favored method of raising the \$25 million, which would be the county's share of the project, Lowry emphasized, would be through the bond issue.

This would make funds immediately available, whereas an increased tax rate would bring in only small chunks at a time.

The second alternative, although less feasible, Lowry said, would be to ask the federal government for a loan.

If voters would approve a bond issue, the debt retirement would be set up for a period of from 10 to 20 years, keeping the flood control district taxes at a minimum, Lowry reported.

One factor which enters into the cost of the flood control program is the role of the Central Arizona Project. Many of the right-of-ways that the CAP will need are the same right of ways that the flood control district will need for its program.

If the CAP program is carried out as planned the right-of-ways will be purchased with CAP funds but used jointly for the CAP and the county flood control project. This would cut down on the local cost considerably, Lowry said.

Also to be considered is whether the county goes ahead with the entire program or a list of priority projects. That has not yet been determined.

#28

URGENT NEED FOR FLOOD CONTROL AT INDIAN BEND

Harold R. Richard, engineer with the Maricopa County Flood Control District, this week told the Scottsdale Real Estate Board of the plans for flood control along the Indian Bend Wash. He laid out the details of Phase A of Maricopa County's flood control plans at the Tuesday morning breakfast meeting of realtors.

Mr. Richard said that the largest flood in recent years on the Indian Bend Wash was the result of the summer rains in August 1943. At the peak of the flood, flow of the flood waters was 15,000 cubic feet per second and this resulted in the Arizona Canal breaking in 15 different places. If this amount of flood waters were to enter the area again it would result in Hayden Road, from Indian School to McDowell Road and the cross streets, being flooded with water from 3 to 5 feet deep.

With 9 percent of the area now residential and carrying 48 percent of Scottsdale's dollar evaluation, this could result in \$4 million worth of damage. Engineers of the Flood Control District estimated that there are 1000 or more homes in the overflow area. This area, which is some 31,000 acres, varies in width from 5,000 feet at the Arizona Canal to 2,000 feet at McDowell Road. Only 40 percent of the overflow area is undeveloped, thus the large dollar volume damage possible. Mr. Richard added that this area has built up residentially in just the past 10 years, which would account for the last large flood not doing the dollar damage that it would today.

Major Plan Outlined

The flood control plan for the area, known as Phase A, has been approved locally and is in Washington awaiting final approval. It will be a \$9 million project with Maricopa County's share amounting to about \$1 1/2 million. The major portion of the plan calls for the construction of a concrete-lined channel, 7 miles long and varying in width from 24 to 26 feet. It would be located below the natural growth level and would run from the Arizona Canal to the Salt River. The channel would carry 40,000 cubic feet of water per second and would be crossed by bridges at Camelback, Indian School, Thomas, McDowell and Van Buren. There would be an energy dissipator located where the waters would enter the Salt River so that there would be no danger of flooding there.

Maricopa County would have to acquire the rights-of-way for the channel and the annual maintenance of it would be up to the county. It would eliminate 96 percent of the total potential damage to the area, some \$530,000 per year.

In answer to the query as to the starting date for the project: Once approval is received from Washington, Mr. Richard said that, barring unforeseen complications, the plan, Phase A, could not be started before July, 1965 - the earliest possible starting date.

BEFORE BOARD OF SUPERVISORS

Scottsdale Progress 11-19-63

#29

Indian Bend Project Hearing Set Tomorrow

By HUNTER GOOCH
Progress Staff Writer

A public hearing will be held at 10 a.m. tomorrow by the county supervisors on a proposed \$115.4 million county-wide flood control district which includes one major project in Scottsdale — Indian Bend Wash.

The hearing room is at 3325 W. Durango Road.

The \$9 million Indian Bend channel would run seven miles from the Arizona Canal at Indian Bend to the Salt River, one-

half mile east of Scottsdale Road.

Construction of the concrete-lined channel would open between four and six square miles of land in the wash for development.

Construction is prohibited in the wash now because of the possibility of flood waters, said Col. John Lowry, of Scottsdale, general manager and chief engineer for the Maricopa County Flood Control District.

(The city council last night heard a proposal from the city manager to acquire some 38

acres in the wash for a city park.)

The \$9 million channel is one of 19 recommended projects in the project, the cost of which would be shared by the federal government and the county. The county would pay for required right of way, estimated to cost a maximum of \$25 million, with the federal government paying the rest of the bill.

The purpose of tomorrow's hearing is to determine the taxpayer attitude toward the huge project.

If there is no serious opposi-

tion, the supervisors are expected to call a bond issue to finance the county portion of the work.

The supervisors haven't committed themselves to a bond issue for county financing but this is the most talked of method of payment. Study will begin on the financing if the hearing indicates public support.

The Indian Bend channel is the furthest advanced of the district projects.

Lowry said it may get final approval within a year.

But construction can't begin

on the project until the right of way is obtained by Maricopa County.

Other projects affecting the Scottsdale area are the Maxwell Dam and the Salt River channelization.

The Maxwell Dam would have a capacity of 860,000 acre feet with 672,000 reserved for flood waters.

The construction site is just below the confluence of the Verde and Salt Rivers.

The Salt River channelization involves dredging a channel

from 107th Avenue east to Country Club Drive, Mesa, and clearing to Granite Reef Dam two miles downstream from the confluence of the Salt and Verde Rivers.

The 19 projects are divided into three groups. The first group, including the Indian Bend channel, is given first priority. The Maxwell Dam and Salt River Channelization projects are in group three. Priority was established by determining which areas would be most severely damaged in a flood.



#39

1-4-63

County Flood Control Project Is Outlined For Council Thursday

Protection Of Tempe Is Issue

City To Forward Suggested Planning

Tempe suggestions as to flood control construction along the Salt River channel through the city should be written to the Maricopa County Flood Control Advisory Board — right away — and forwarded to the U.S. Army Engineers for consideration.

That was more or less the outcome of a hearing on proposed county flood control projects held Thursday night by the city council whose guests included two members of the advisory board of the district as well as

Energetic new Mayor Bill Cowger sent a delegation, headed by Judge Marlowe Cook, another new Republican, up to Minneapolis to invite the International Association of Chiefs of Police to hold its next convention in Louisville. The Mayor of St. Louis had sent a tape recording of his invitation. "I was too busy working up my speech to make a tape recording," Judge Cook told the Reliance convention, and proceeded to sell the merits of Louisville so effectively that the police chiefs, has with an expenditure of \$900,000, will hold their next meeting in

Supervisors Okay Tempe Site For County Hospital

#31

Maricopa County Board of Supervisors Monday formally voted to accept the offer of the City of Tempe of a 90-acre site in Papago Park for location of the proposed \$12 million Maricopa County General hospital.

The city offered the site to the county at no cost. Transfer of the site from Tempe to the county must be approved by the U.S. Bureau of Land Management but no problems in obtaining the approval are expected since the land is already classified for public use.

County Supervisors, acting on the report of a nine-member hospital site committee which had reviewed 79 proposed locations before recommending the Tempe property, voted approval in spite of pleas of three physicians to delay official selection of a hospital site for at least two months until a study of central Phoenix locations could be made.

#32

Flood Control, Other Items Studied By House Group

By FLORENCE ROTH

The Agriculture and Irrigation committee of the State House of Representatives met at 8:30 a.m. Monday and again at 1 p.m., Tempe legislator Jim Holley, reports.

Appearing before the group in the morning were the proponents of HB 157 which pro-

poses a State Department of Agriculture. The opponents were heard in the afternoon. No action was taken by the committee.

Other matters before the group concerned HR12 (held in committee); HB 247 and HB 257 returned for consideration of the House. Also HB 220 concerning flood control, held in committee. This bill is of more than passing interest to Tempe because of its effect on Salt River properties.

The House convened at 10 a.m. and adjourned about 1 p.m. There was a full calendar of bills. Some were passed and sent to the Senate and others sent to the Governor. Of interest was HB 200 creating an office of director of the budget. It was passed in the House 45-33 but it apparently faces tough opposition in the Senate.

HCR 20, a constitutional amendment recommending a change in the Board of Education, passed 50 to 28. SB 193 which forbids any county the right to split and was aimed at Cochise County, failed to carry the two third emergency vote which would have made it immediately effective.

The Ways and Means committee met at 9 a.m. and 2 p.m. They finally got their version of the tax equalization bill out with a "do pass" recommendation. The bill sent out, according to Holley, is extremely deficient and misleading.

Representative Holley said that "the bill as sent out is far from the final tax bill that will eventually be passed. We all hope the improvement will be vast." Holley urges that you keep your attention on this measure and offer your own hopes and suggestions.

#33

2 Flood Projects Backed

Republic Washington Bureau

WASHINGTON — Flood control projects at Winslow and Scottsdale which will cost more than \$11 million have been approved by the Army Engineers' board of rivers and harbors, the office of Sen. Carl Hayden, D-Ariz., announced yesterday.

The \$8.5 million Scottsdale project calls for the channelization of Indian Bend Wash from the Arizona Canal 7 miles south to the Salt River. Indian Bend Wash lies between Hayden and Miller roads in Scottsdale.

At Winslow, the proposed \$2,775,000 flood control projects involve building a diversion levee from a point southwest of the city's municipal airport east to the Little Colorado River and en-

larging the channel along Ice House Wash through the city. the public works committees of the House and Senate.

The proposed projects still must gain approval of three federal agencies before being submitted to Congress for funds to begin construction of the projects, officials said.

They said the rivers and harbors board's recommendation will go to the chief of the Army Engineers, then to the secretary of the Army and finally to the bureau of the budget before it is sent to

Arizona flood control officials reported they expect Congress to approve both projects this year as part of the omnibus rivers and harbors authorizing legislation.

Once the projects gain this approval, however, another measure must be adopted by Congress appropriating the funds to carry out the projects.

MASS BY CARDINAL

LISBON (UPI)—Francis Cardinal Spellman of New York, on a visit to the pilgrim center of Fatima with 1,000 American pilgrims, will celebrate Mass in St. Domingos Church here tomorrow.

SINGER ELECTROLYT

#34

Letter Makes Flood Control Suggestions

The City of Tempe has filed with the Maricopa County Flood Control District's advisory board suggestions which, it thinks, will improve the set-up as well as provide additional protection for the city.

A letter, over the signature of Mayor Bernard Caine, went into the official record this week. It is now under consideration by the district planners.

Tempe representatives have attended many meetings and the advisory board presented the program "picture" to the council at a recent public meeting.

Principally, the local delegation which has attended most of the flood control sessions was made up of Councilman John

Moeur, City Attorney Jim Holman and Francis Cocke, flood control advisor to the city. Others also attended some of the meetings.

The letter to the board follows:

* * *
January 23, 1963
Board of Directors
Flood Control District
Maricopa County

RE: Comprehensive Flood Control Program
Gentlemen:

Copies of our letter to you of December 18, 1961, and our letters of November 20th, and 28th, 1962, to the Advisory Board are attached hereto, and, to avoid repetition, are made a part hereof.

The City of Tempe objects to the construction of the Indian Ben Wash Project, as contemplated in the December, 1962, Comprehensive Flood Control Program Report, before adequate protection is provided for the city of Tempe against the waters estimated to be discharged from Indian Bend Wash when added to the estimated standard project flood waters of Salt River.

As shown in the Corps of Engineers' Indian Bend report dated April 15, 1962, (Appendix 2, Plate 3), the waters of Indian Bend Wash, as they approach Salt River, are to be confined between levees beginning about Van Buren Street and projecting at almost right angles out into the estimated Salt River standard project flood path for about 2,000 feet, at heights of up to sixteen feet above ground level. The tops of these levees at their south ends are to be built to elevation 1173 feet above sea level, allowing the recommended three feet of freeboard (see Corps of Engi-

neers report, Gila and Salt Rivers, Dec. 4, 1957, page 31) above the estimated Salt River standard project flood elevation at that point, which is shown in the December Comprehensive report at approximately 1170 feet. (Flood Control District, Maricopa County Map 9.0-F, between pages 50b and 51 and Tempe Quadrangle, Topographic, U.S.G.S., 1951-52).

Certainly, if these Indian Bend Levees are planned to be built to withstand the estimated Salt River standard project flood waters at elevation 1170 feet at that point, Tempe is first entitled, in the reach of Salt River upstream from Tempe Butte, and on both the north and south sides of the river, to protection against the same flood waters (270,000 cubic feet per second at Tempe, Corps of Engineers' report, Gila and Salt Rivers, Dec. 4, 1957, page 31), when forced around the south end of the proposed 2,000 foot jetties and augmented by the estimated 40,000 cubic feet per second discharge of Indian Bend Wash (Corps of Engineers Indian Bend Report, April 15, 1962, page 29). The theory has been advanced that it would be highly improbable that a major flood would occur on both Salt River and Indian Bend at the same time. However, studies of the time and intensity characteristics of the storms on which the design capacity of the proposed Indian Ben Wash improvement was based, and from which the Salt River standard project flood discharge volume was estimated, discount this theory if storms similar to those of 1916, 1938 and 1941 were to be centered over the east and west slopes of the McDowell Mountains and adjacent sub-areas to the south and east. (Corps of Engineers Indian Bend report, April 15, 1962, page 10; Corps of Engineers report, Gila and Salt Rivers, Dec. 4, 1957, Appendix 1-5 to 1-13, inclusive, and map of Topography Drainage Subareas, Appendix 1, Plate 1; Flood Control District Maricopa County Area Map).

Concerning the areas along Salt River below Tempe Butte, both in Tempe and in Phoenix, we call the attention of the Board to the three plans for the protection of these area considered by the Corps of Engineers in their report on the Gila and Salt Rivers, December 4, 1957, paragraphs 79 to 108, inclusive, pages 30 to 45. All three of these plans include the expenditure of \$2,330,000 for channel brush clearance, Gillespie Dam to McDowell Dam site. A comparison of the features on which the three plans differ follows:

Plan 1: Short Levees to cost \$1,240,000.

A 2,000 foot levee on the left or south bank of Salt River from Tempe Butte to the Southern Pacific Railroad bridge, and a 16,700 foot levee on the right or north bank from the railroad bridge to 40th Street, Phoenix. This is the plan recommended by the Corps of Engineers.

Plan 2: Short levees at \$1,240,000, plus flood storage to cost \$5,700,000.

Levees same as Plan 1, plus flood storage to be added to

terminal storage in the proposed McDowell reservoir, if and when built.

Plan 3: Long levees to cost \$8,660,000.

Levees about 10 miles long, from Tempe Butte on the left or south bank and from the railroad bridge on the right or north bank to 27th Avenue, Phoenix.

All of the levees considered in the three plans were to be built to withstand the estimated Salt River standard project flood.

The Corps of Engineers, in recommending Plan 1, stated that Plan 2, which relies on the addition of flood storage capacity to the terminal storage reservoir proposed at McDowell, could not be further considered until the terminal storage is provided and that the long levees of Plan 3, although providing complete protection against the standard project flood to abutting areas, were not economically justified at the time the Corps' study was made in 1957 (page 45).

However, in view of the extremely rapid development of the area during the last five years, we believe that another look at the long levee plan is now justified. For example, in the Tempe area, the construction of a levee along the south side of the proposed 2,000 foot primary floodway channel (Appendix 2, plate 6) from Tempe Butte to 48th Street, Phoenix, a distance of about 13,000 feet, would protect the Tempe area which the Flood Control District sought to zone as flood area during 1961. Construction of that portion of this levee lying upstream from the railroad bridge has already been recommended by the Corps of Engineers as part of Plan 1. The portion lying downstream from the railroad bridge would be opposite the proposed north bank levee recommended for construction as part of Plan 1. This levee could probably be constructed for not more than the \$1,240,000 estimated cost of the 18,700 feet of levees recommended in Plan 1, and would protect property conservatively worth \$26,000,000 (from study

by city of Tempe) from Salt River standard project floods estimated to occur about once in 165 years (page 15). It is obvious from these figures that the benefit-cost ration of the long levee in Tempe far exceeds that of the proposed Indian Bend improvement, which is estimated to cost in excess of \$9,000,000, and will afford about 96% of complete protection for property worth \$32,000,000 (1961) against Indian Bend standard project floods of 72,000 cubic feet per second estimated to occur about once in 435 years. (Corps of Engineers Indian Bend report, April 15, 1962, pages 25, 27, 14 and 11).

It is our firm belief that a 1963 appraisal of the property which would be benefited by the Plan 3 long levees, and which lies within the city limits of Phoenix, will reveal as favorable an increase as found in Tempe in the ratio of benefit to cost over the 1957 figure.

In its discussion of the Salt River channel, the December, 1962, Comprehensive Report, page 49, states that channelization and levee work to protect against the standard project flood in Salt River is impractical. Apparently, the Corps of Engineers does not agree with this statement, since it plans to begin construction about July, 1963, of the project (here designated Plan "a") which includes the short levees between Tempe Butte and 40th Street, Phoenix, at the same estimated cost, and therefore presumably built to the same specifications, as the levees considered and recommended in its 1957 report, designated Plans 1 and 2 above. These levees were to be built to withstand the standard project flood.

On pages 50 to 50b the Report outlines three other plans, designated "b", "c" and "d", for an excavated channel in Salt River for 27 miles, from Country Club Drive in Mesa to 107th Avenue, Phoenix, base on the addition of up to 672,000 acre feet of flood storage capacity to the 188,000 acre foot terminal reservoir proposed at the Me-

dowell site. Plan "b", based on controlled flood releases from the reservoir of 82,000 cubic feet per second would cost about \$2,222,000 per mile, and Plan "c", based on a release of 40,000 cubic feet per second, would cost about \$2,000,000 per mile. These costs are more than twice the estimated costs per mile of the long levees. Plan "d", which is the plan presently recommended by the Comprehensive Report, calls for a lined channel which would be unacceptable to owners of land having water right under the Salt River irrigation project for the reason that it would allow no recharge to ground water.

Before the Flood Control District commits itself to the construction of Maxwell Dam at the McDowell reservoir site to impound the tremendous volume of 860,000 acre feet of water at a point such a short distance upstream from the thickly populated areas of Salt River Valley, we believe consideration should be given to resulting loss of life and property in the event the dam should fail.

We therefore again urge reconsideration of the long levee system as the safest and most practical way of protecting against the standard project flood on Salt River.

On page 34 of the December, 1962 Comprehensive Report we note that the group of improvements proposed to benefit the north Phoenix area, to cost the staggering sum of \$38,593,000, and the Buckhorn-Mesa structures to cost \$7,429,000, are scheduled with Group I priority along with the proposed Indian Bend improvement, while works proposed to control heavy floods on Salt River appear in Group III. Pending the completion of our engineering and economic study of all of these proposed improvements, and a determination of their actual economic value to Maricopa County as a whole, the city officials of Tempe, being charged with the safety and also with the welfare of its citizens, have no choice but to oppose their construction until adequate protection is provided against standard project floods on Salt River, and adequate provision is made to take care of water to be discharged into Salt River from any of the proposed improvements, at low stage and at flood stage.

Sincerely,
BERNARD T. CAINE
Mayor

~~4/11/63~~

735

Indian Bend's *Scottsdale Propers* Plan Revised *Sept 3, 1962*

A revised plat to conform with U.S. corps of engineers boundary restrictions in the controversial Indian Bend Wash is scheduled for discussion at a session of city council tomorrow night at 8 p.m. at city hall.

Indian Cove subdivision was tabled August 14 after Colonel John Lowry, a Scottsdale resident and head of the Maricopa County Flood Control District, revealed that the subdivision was planned in a location that had flooded numerous times in the last 20 years.

He also outlined the routing of a proposed channel which would solve the problem of the wash's flooding during spring rainoffs and other heavy rainfall periods.

The Indian Cove developers were granted permission to replat their subdivision outside the boundaries of the Indian Bend Channel.

Fifteen local civic leaders called together by Boss Luke White of the Round-Up Club to discuss a revival of interest in a dam in Box Canyon four miles above town spent the hour from 10 to 11 a. m. Tuesday as follows: *Wickenburg Sun 8-1-63*

(1) Heard Delbert Kirby, local recreational director, say that Maricopa county officials are unanimously in favor of a dam on the Box to provide a large recreational area for the county.

(2) Heard Hal Warner, member of the Maricopa County Flood Control District say that while his organization has prepared an estimate of the cost of such a dam as around six million dollars, the money to build it would have to come from the U. S. Department of the Interior.

(3) Heard City Attorney Frank Stanlis say that while his close friend Secretary of the Interior Stuart Udall might favor the dam, the money would have to be appropriated by Congress and Arizona already has more than its share of federal money appropriated for recreational purposes.

(4) Heard Warren Kelly of the Arizona Game & Fish Commission say that while his organization strongly favors a dam in the Box it couldn't possibly afford to build it on an annual budget of around 1 1/2 million dollars.

(5) Heard Boss White say, "It looks like we're spinning our wheels; meeting's adjourned."

Attending were Kirby, Warner, Stanlis, Kelly, Reuben Stifel, John Burden, Tom Wilmeth, Bill Bass, Andy Hervey, Carl Brost, R. D. McIntosh, Carl Beillen, Don Kerr and John McCarroll.

#36

2-19-63

The Phoenix Gazette

Flood-Control Accord Delayed

Action on a proposed agreement with the U.S. Soil Conservation Service, calling for \$14.2 million in flood-control construction, has been postponed by the county board of supervisors at the request of the City of Tempe.

Tempe representatives told supervisors yesterday that the county should not initiate any agreement for individual flood control work until a countywide program has been adopted. A proposed plan providing for several flood control projects throughout Maricopa County has been approved by flood control district

officials and submitted to the supervisors for adoption.

The proposed agreement would authorize the conservation service to ask Congress for funds to build

levees and other flood control projects in the county to protect the area extending east and south of Mesa to the Pinal County boundary.

August 14, 1963

Tempe
House near 4th &
Ash. Wster was
6"-12" deep inside





APACHE SENTINEL 2-22-63

#37

Col. Lowry Says Little Chance For Dam In Weekes Wash

"If I had property in section 15, I'd build a house there."

That was the assurance given by the chief engineer and general manager of the Maricopa county flood control district that proposals to build a dam in section 15 northeast of Apache Junction would never be acted on.

Col. John C. Lowry was the special guest speaker at the chamber of commerce board of directors meeting to discuss in detail a proposal that would result in a half-mile long, 50-foot high earth retaining wall across Weekes Wash not from from Apache Junction.

Col. Lowry's comments were directed mainly at Richard Damiano and Ed Tomas, property owners in the immediate area of the proposed dam who would be directly affected if the structure were built.

A tentative work plan by the Soil Conservation Service for a series of flood control projects for Maricopa county includes this one whose location has been protested by Damiano and Tomas along with other local residents. They have been circulating petitions urging fresh consideration of the site.

As a result of the strong reassurances from Lowry that the work plan was by no means the final plan, the pair said after the meeting they would make no further public protests of the plan.

"We have accomplished our aim," said Damiano, "of calling attention to the way this particular dam site fails to meet the public need."

As Col. Lowry told the chamber directors and several others present, the SCS plan is merely a starting program, which, when approved by all the sponsors of the county-wide project, will be submitted to Congress.

Congress will first be asked for funds to draw detailed plans of the several flood con-

trol structures. At that time, exact locations will be determined, said Lowry, and all factors taken into consideration.

He said that among the major considerations would be the sentiments of the property owners upstream from any proposed dam site. If 50 per cent of them oppose location then, under the law, the dam would not be built.

The flood control expert further cast serious doubt on the possibility that the Weekes Wash dam would ever be built as part of the Maricopa county flood control program.

He said such a project would mostly benefit Pinal county residents in the Apache Junction area--mainly Palm Springs and that he "could not in good conscience ask the Maricopa county supervisors to approve underwrite the land acquisition and maintenance costs in a project where Maricopa residents would get no benefit.

Lowry emphasized that there was no questioning of the other proposed dam in Pinal. This one, called the "Apache Junction" dam, would be located north and west of the Junction proper. While it would afford important flood protection to the business and residential area in Pinal westward from the Junction, it would also serve key flood control purposes in Maricopa.

As to re-locating the Weekes Wash dam in the event the project does go through, Lowry said a far more feasible site would be about a mile and a half upstream. However, he pointed out that a dam there would flood the Bluebird mine. This mine, however, is no longer used commercially and is only a tourist attraction.

In summary, Lowry pointed out to the group:

"The flood control district is not in the business of destroying property but its purpose is the protection of property."

WEEKES WASH
RAIN OF AUGUST 2, 1963, 3:00 P.M.



Upper reach of Weekes Wash crossing
Apache Trail
Depth 6", Width 15', Velocity 5ft/sec



Upper reaches of Weekes Wash
Depth 2', Width 20', Velocity 10ft/sec



Upper reach of Weekes Wash crossing
Apache Trail
Depth 18", Width 35', Velocity 8ft/sec



Upper reach of Weekes Wash crossing
Apache Trail
Depth 2', Width 40', Velocity 8ft/sec



Crest of rain water in Weekes Wash
reaching Apache Trail



Weekes Wash crossing Apache Trail
Depth 18", Width 100', Velocity 8ft/sec