

ECONOMIC COST OF FLOOD PLANS
NEWSPAPER & MAGAZINE ARTICLES

007.124

Library Call No. 007.124

0	Year	Title of Newspaper Article	x	Key Words
---	------	----------------------------	---	-----------

0 - First Column is for the assigned newspaper article numbered in red

Year - Articles are all sorted by year

Title of Newspaper Article – Name of article

X – Separator between columns

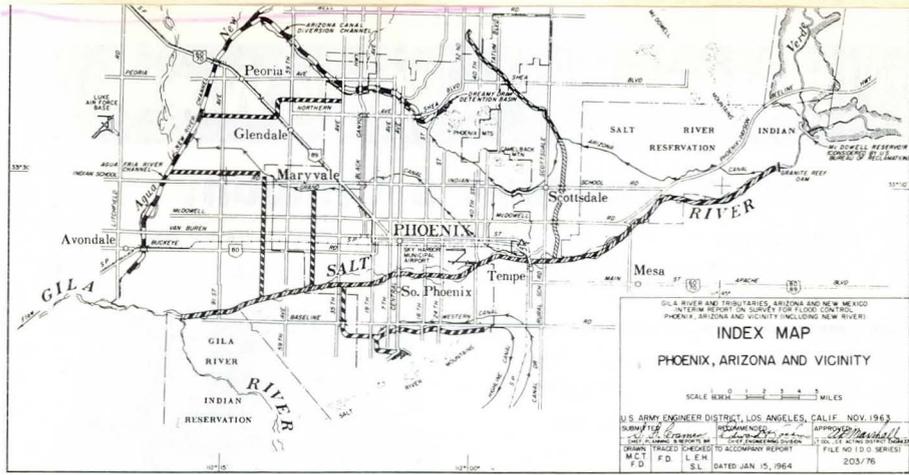
Key Words – Key words in article

0		Title of Newspaper Article	X Key Words
1	April 1, 1964	Arizona Flood Control Measures Important to Economy, Growth	X Phase B, Flood Control, Arid, Southern Arizona, Population, Economic, Growth, Corps of Engineers, Los Angeles District, Tucson Diversion Channel, San Francisco Office, Interim Report, Maricopa County Flood Control Project, Recommends, Four Dams, Detention Basins, Cave Creek, Skunk Creek, New River, Dreamy Draw, Diversion Channels, Union Hills, Arizona Canal, Channel Improvements, Agua Fria River, Federal Cost, Benefit-cost Ratio, United States, Lands, Easements, Rights-of-way, Construction, Maintenance, Relocations, Highways, Roads, Bridges, Utilities, Modifications, Damages, Secretary of Army, Encroachments, Improved Channels, Reduce, Flood-conveying, Storage Capacities, Water Rights Claims, Board of Engineers for Rivers and Harbors, Washington, Congress, Money Appropriation, Indian Bend Channel, Scottsdale, Clearing, Salt River, Granite Reef, Gila Bend, Maricopa County Flood Control District, Bureau of Reclamation, Maxwell Dam, Salt and Verde Rivers
2	December 10, 1964	Dick Lee's Arizona Afield - Wildlife Spokesmen Silenced at Hearing	X Col. Earl G. Peacock, U.S. Army Corps of Engineers, Gigantic, Flood-control, Water-conservation Project, Sportsmen-conservationists, Professional Wildlife Managers, State Game and Fish Department, U.S. Fish and Wildlife Service, Dr. Wendall Swank, Director, Arizona Game and Fish Department, Colonel Peacock, Wasting, Time, Phil Clemons, President, Arizona Game Protective Association, Geroge Wadding, AGPA, Chandler, 40 Miles of Gila River Bottom, Junction, Salt River to Gillespie Dam, Prime Wildlife Habitat, Dove-nesting Area, Maxwell Dam, Salt and Gila, Maricopa County Flood Control District, Clear, 2,000-foot Swath, 500-foot Clearing, Ample, Flood Control Program, Alleviate, Prevent, Damage, Farmers, Critical
3	December 11, 1964	Dick Lee's Arizona Afield - River Plan Should Concern Sportsmen	X Army Corps of Engineers, Conservationists, Sportsmen, Channeling, Clearing, Swath, 2,000-foot Wide, Salt and Gila Rivers, Maxwell Dam, Phoenix to Gillespie Dam, Gila Bend, Destroy, Sections, Dove-nesting Areas, Maricopa County Flood Control District, Col. John C. Lowry, Destroy, Wildlife Habitat, County, Keep it Clear, Salt Cedars, State Game and Fish Department, Critical, Letter, Dr. Wendell G. Swank
4	December 18, 1964	Flood Control That Isn't	X Tax-paying Public, Maricopa County, Arizona Game and Fish Department, U.S. Army Corps of Engineers, Bed of Gila River, Buckeye, 40 Miles West, Maricopa County Flood Control District, Despoliation, Wildlife Habitat, Defeat, Proposed Flood Control Bond Issue, County Flood Control Plan, Breeding Grounds, Whitewing Dove, Salt Cedars, River Bed, Game and Fish Department, Economic Loss, University of Arizona Survey
5	April 15, 1965	Penny-wise and Flooded Out	X Flood Damage, Minnesota River, Mankato, Minn., Flood Control Program, Corps of Engineers
7	April 18, 1965	Ben Avery - Flood Project Perils Good Dove Hunting	X Maricopa County Sportsmen, Flood Control Bond Issue, Preventing Destruction, Dove, Whitewing, Nesting Habitat, U.S. Army Corps of Engineers, Army Corps of Engineers, Phoenix Hearings, Rep. John D. Dingell, Sen. Paul Fannin, Senator Hayden, Board of Supervisors, Advisory Board of the Flood Control District, People, Tempe Area, Protests, 2,000-foot Wide Channel, Clearing, Gillespie Dam, 500-foot Channel, Floods, Salt Cedars, Reduce, Salt Content, Groundwater, Reduce Water Usage, Salvage Water, Water Level, Pumped, Below Roots, Cedars, BLM Land, U.S. Bureau of Interior Department, Maricopa County Board of Supervisors
6	April 18, 1965	Our New Age - Floods (Broacher)	X Ohio, Mississippi, Missouri Valleys, Dams, Storage, Widening Channels, Levees, Weather Bureau, Flood Plains, 1911, Yangtze River, China
8	April 26, 1965	Proposed Destruction -	X Destruction, Valley's, Dove Nesting Habitat, Controversial Flood Control Program, State game Department, Wildlife View, Audubon Society, Arizona, Means Quail Hunts
10	August 1, 1965	Flood Cleanup Tough Job (& Picture)	X Arizona, Flood Hazard, Arid Desert Valley, Flash Floods, Extensive Rain, Late Summer Storms, Homes, Small Lake, Water Damage, Extensive Destruction, Maryvale, Glendale, Sunnyslope, August Rains of 1962, '63 and '64, Valley Citizens, Summer Storm, Flood Damage, Molds, Mildew, Appliances, Heating Units, Windows, Carpets, Floors, Odors, August 1963 Flood Waters, Aerial Photo, 71st Ave. Grand Canal, Phoenix

0		Title of Newspaper Article	X Key Words
9	August 7, 1965	Apathy Reigns Supreme - Who Cares About Flood Control?	X Arizonans, New Residents, Interested, Flood Control, Maricopa County Flood Control District Bond Issue, Yuma County, Arizona Assn. of Soil Conservation District Supervisors, Show Low, Mogollon Rim, Jess Watt, Peoria, Max Pace, Chandler, Havoc, High Water, Desert Land, Flood Danger, Phoenix, Rain, Torrents, Warnings, Sudden, Intense Storms, Limited Area, Overload Drains, Ditches, 1891, Salt River, Missouri, Kansas City, State Land Commissioner Obed Lassen, Colorado, Arizona, Salt River Project's Reservoirs, Frank McElhaney, Wellton-Mohawk District, Arizona Storm, Arid Land, Precipitation, Measuring, Army Corps of Engineers, Clearing Channel, Lower Gila, Painted Rock, Living, Dry Stream Bed, Saltcedar Jungle, Yuma County, Flood Protection, Karl Abel, SCD Supervisors, New River SCD, Detention Dam, New River, Widen, Channel, Farms, Narrow Channel, D.A. Dobkins, Soil Conservation Service, Laws, Construction Cost, Federal Sources, Right-of-way, Safford valley, Magma Project, Florence Project, Vanar Wash, Harquahala, Buckeye, Construct Dams and Channels
11	August 22, 1965	\$700,000 Spent Preparing For Countywide Bond Vote - Flood Curb District Cost Ascertained	X Maricopa County Flood Control District, Countywide Bond Election, County, City of Phoenix, Federal Flood Control Aid, Flood Control Construction Projects, John Lowry, General Manager and Chief Engineer, Salaries, Office Supplies, Technical Studies, U.S. Army Corps of Engineers, Designing Flood Control Construction Projects, Building, Owns Land, Buy Rights of Way, Relocate Bridges, Utilities, Approved, U.S. Senate, Passed, House, Congress, 1966-67 Fiscal Budget, Two Phases, Scottsdale, Tempe, Phoenix, Protect, Floods, Phase A, Channelization, Indian Bend Wash, Arizona Canal, Salt River, Miller and Hayden Roads, Phase B, Four Dams, Two Channels, Northwest Phoenix, Glendale, Maryvale, Mayor Graham, Washington, Fred Glendening, City Public Works Director, City Manager Robert Coop, Supervisors L. Alton Riggs, Barney Burns
13	January 3, 1966	Flood Job Gets Guard 'Well Done'	X Arizona National Guardsmen, Flood Emergency, Floodwaters, Salt River Bottom, Evacuated, Families, Homes, Low Areas, Maj. Gen. Joe Ahee, Adjutant General, Arizona, Col. Felix J. Bertino, Chief of Staff, Governor Goddard, Phoenix-Maricopa County Civil Defense Emergency Operation Center, Papago Park, Lehi, Phoenix, Tempe, Mesa, Flood
15	January 3, 1966	State Cotton Crop Takes Beating From Heavy Rains	X Arizona's Cotton, Rot, Rains, State Entomologist W. T. Mendenhall, Crop Damage, Exceeded, Estimates, Muddy, Wet Weather, River Floodings
14	January 3, 1966	Flood Control Bond Vote Delayed Month (& Picture)	X Flood Control Bond Election, Postponed, Board of Supervisors, W. B. Barkley, Chairman, Maricopa County Citizens Flood Protection Committee (MCFPC), L. Alton Riggs, Chairman, Maricopa County Flood Control District, Elimination, Highwater Damage, Personal hardship, Rain-swollen Gila and Salt Rivers, Comprehensive Flood Control Project, Right-of-way, Roads, Bridges, Dams, Dikes, River Channel Improvements, Levees, U.S. Army Corps of Engineers, Soil Conservation Service, Flood Damage
12	January 3, 1966	Damage Heavy - Gravel Pits Resume Operations	X Valley, Sand and Gravel, Damage, Salt River, Don Rozma, Arizona Aggregate Association, Pits, Riverbed, Flooded, Stockpiles, Tanner Brother Construction Co., Lost Crusher, Flood, 40th Street, Jack Duncan, Metro-Rock Sand and Gravel Pit, Water, Backed Up, Dikes, Bob Evans, Cyr and Evans Construction Co., Tempe, Flooding Prevented, salt River Project (SRP), Spillway Gates, Open, Storm, Runoff, Union Rock and Material, United Materials, Mesa Sand and Rock, Arizona Sand and Rock, 18th Street, Seepage
16	January 13, 1966	2 Big Feedlots Leaving Valley	X Phoenix Area's, Feedlot Operations, Valley, Hughes and Ganz Cattle Co., 48th Street Operation, Queen Creek, Smith and Kelly Feed Co., Maricopa, Del Rio Cattle Co., 56th Street, Heavy Damage, Salt River Flooding, Bureau of Reclamation, Federal Land, William B. Swahlen Jr., State Livestock Sanitary Board, Buckeye, Tempe Homeowners, Tempe City Hall, C. A. Pugh, Assistant Bureau Director, River Bottom Land, Sand and Gravel, Central Arizona Project Construction, CAP, Tempe Mayor John C. Mouer, Robert Coop, Phoenix City Manager, Ralph A. Watkins Jr., Buckeye Development Corp., Brad Delano, Flooding, Ed Tovrea, T&C Cattle Co.
17	February 17, 1966	Water Under Bridge Carries High Price	X Water Under Bridge, \$24 Million, Arizona, Water Lost, Salt and Verde Watersheds, Orme Dam, Central Arizona Project, Confluence, Verde and Salt Rivers, Impounded, Floodwater, Trapped, Snow, Watershed, Joe Scott, Central Arizona Project Association, Reservoir, Salt River Project, Salt River Bed, Gradual Release, Siphoning, Pumping, Salt-Gila Aqueduct, Picacho Reservoir, Tucson Aqueduct, Pumping Plant, Downstream, Storage, Concrete Tunnel, Overflow Water, 1965 Flooding

0	Y	Title of Newspaper Article	X Key Words
18	February 23, 1966	Money for Flood Control Makes Interesting Reading	Maricopa County Flood Control District, Salaries, Professional Services, Rights-of-way, Flood Control Programs, 1964-65 Budget, Professional and Specialized Services, Surveyors, Lawyers, Appraisers, John Lowry, Flood Control Engineer, LeRoy Ohsoik, Assistant Flood Control Engineer, Jack Karie, Administrative Assistant, 11 Employees, Overtime, Extra Help, Employee Benefits, Telegraph and Teletype Services, Telephone, Liability Insurance, Memberships, Rents, Leases, Equipment, Transportation, Household Expenses, Construction Materials, Medial Dental, Laboratory, Office Expenses, Small Tools, Typist, Typewriter, Steno Chair, Filing Cabinet, Books. Periodicals, Social Security System, State Employee Retirement System
19	April 8, 1973	River Water to Cost \$9 Million in Lost Man-hours (& Pictures)	X Valley, Businesses, \$9.4 Million, Wages, Employees, Runoff, Swollen Salt River, Cross, Routes Flooded, Salt River Project, Releasing, Water, Reservoirs, Dry River Bed, Heavy Runoff, Watersheds, SRP, Frank Mangin, Industrial-development Office, Valley National Bank, Losses, Sales Tax Revenue, Shopping, Erosion, Damage to Farmland, Crops, Pollution, Dr. M.E. Bond, Director Arizona State University Bureau of Business and Economic Research, Adequate River Crossings, Howard Colquitt, Tempe Chamber of Commerce Manager, County Supervisor Chairman Henry Haws, Supervisors Bob Stark, Bob Corbin, Eldon Rudd, Joe Eddie-Lopez, City of Phoenix, Mayor John Driggs, Councilman Henry Broderson, John Katseses, Mrs. Margaret Hance, Armando de Leon, Calvin Goods, Ed Korrick, Only Three All-weather Crossings, Tempe Bridge, I-10, Central Avenue Bridge, Central Bridge, Deterioration, Two Culverts, Seventh and 16th Streets, Phoenix, Scottsdale Road, Water Levels, McDowell Road, North of Mesa, (Highway 87-93), Culvert on McDowell, Flooded 19 Times, ASU, Seventh Avenue Crossing, Flooding, Flowed, Gravel Pit, Union Rock and Materials Corp., Landis Aerial Survey, Alma School Road, Salt River Bed, Surplus Runoff, Snow Melt, Mountains
20	September 17, 1985	Speaks for Eagles	X U.S. Fish and Wildlife Service, Cliff Dam, Verde River, Arizona, Eagles, Sonoran Desert Riparian Community, Environmental Diversity, 1985 Breeding Season, Interior Secretary Donald Hodel, Not Flood Protection, Real Estate Development, Bridges, Channelized

Property of
 Flood Control District of MC Library
 Please Return to
 2801 W. Durango
 Phoenix, AZ 85009



Corps of Engineers, Los Angeles District, map showing the projects in Phase B, mentioned in the interim report.

Arizona Flood Control Measures Important to Economy, Growth

Flood control, even in an arid region such as Southern Arizona, becomes important in direct relation to population and economic growth.

Currently, the Corps of Engineers, Los Angeles District, is building the second stage of the \$9.8 million Tucson Diversion Channel under contract (March 1964 AC&E).

Last month the San Francisco Office of the Corps issued an interim report covering an important phase of the proposed \$105 million (previously estimated at \$115 million) Maricopa County Flood Control Project. (Dec. 1964 AC&E).

The report recommends construction of four dams and detention basins, one each on Cave Creek, Skunk Creek, New River, and Dreamy Draw; diversion channels at Union Hills and the Arizona

Canal; and channel improvements on Cave Creek, Dreamy Draw, Skunk Creek, New River, and Agua Fria River at a total estimated cost of \$70.8 million, of which \$59.68 million would be Federal cost. The Corps of Engineers states the project has a benefit-cost ratio of 3.0 to 1.

Local interests would: (1) provide without cost to the United States all lands, easements, and rights-of-way necessary for the construction and subsequent maintenance and operation of the project; (2) perform, without cost to the United States, all necessary relocations of highways, roads, bridges, and utilities, and all necessary street and highway modifications required in connection with the project; (3) hold and save the United States free from any damages due to the construction works; (4) maintain and operate all the works, after completion, in accordance with regulations to be prescribed by the Secretary of the

Continued on page 52

April, 1964

Arizona - N. Mex. Contractor Engineers, April 1964

51

Continued from other page

Flood Control

Continued from page 51

Army; (5) prevent any encroachment on the improved channels or within the detention basin areas that would reduce their flood-conveying or storage capacities; and (6) hold and have the United States free from all damages arising from water rights claims resulting from construction, maintenance and operation of the project.

With approval of the Board of

Engineers for Rivers and Harbors in Washington, the project would be submitted to Congress for authorization and money appropriation.

Previously approved by the Engineers are the Indian Bend Channel through Scottsdale, and clearing the Salt River from Granite Reef on the east to Gila Bend on the west. Congressional appropriations are contingent on the issuance of general obligation bonds by the Maricopa County Flood Control District in the ap-

proximate amount of \$18 million (as against a prior estimate of \$25 million).

The lower bond estimate results from the fact that the Bureau of Reclamation has indicated it would build Maxwell Dam at the confluence of the Salt and Verde Rivers, also because state lands could be used for rights-of-way in the east section of the county.

DICK LEE'S ARIZONA AFIELD**DICK LEE**

Wildlife Spokesmen Silenced At Hearing

Col. Earl G. Peacock, district engineer for the U.S. Army Corps of Engineers, said at Tuesday's hearing that the Corps is involved in a gigantic flood-control and water-conservation project here merely to help local interests solve their problems.

I think I should report that some "local interests" didn't get a chance to say anything at the hearing. There probably are a lot of local people who object to this highly questionable expenditure of the taxpayers' money, but those most concerned at the moment are the sportsmen-conservationists and the professional wildlife managers of the state game and fish department and the U.S. Fish and Wildlife Service.

Their spokesmen were summarily throttled at the hearing. Dr. Wendell Swank, director of the Arizona Game and Fish Department, but up a stiff argument. He got as far as the microphone and read the first paragraph of his seven-page statement before he was interrupted by Colonel Peacock and told that he was just wasting everybody's time.

AGPA Statement Refused

Dr. Swank was told he could submit his statement if he wished, but Colonel Peacock said it would get no mention in his report of the hearing. A statement from Phil Clemons, president of the Arizona Game Protective Association, went about the same route. George Wadding, AGPA vice president from Chandler, was refused permission to present the statement as part of the proceedings, but it was submitted to the colonel.

The basis for refusal to hear these opinions of the project was that they dealt with the entire plan, including the 40 miles of Gila River bottom from its junction with the Salt River to Gillespie Dam. This is prime wildlife habitat, and includes the country's best dove-nesting area.

The hearing was called to consider only that phase of the multi-million dollar project on the Salt River from the proposed Maxwell Dam to the confluence of the Salt and Gila. The audience was frequently reminded of that by Colonel Peacock. He

made several references to the dove habitat question, and obviously felt he had outmaneuvered the enemy.

He had, too, but there will come another day. Colonel Peacock said a public hearing will be held on the Gila River phase of the project.

That's something for sportsmen, game and fish officials and just plain taxpayers to remember. I suspect the Maricopa County Flood Control District — the local interest — and the Corps of Engineers would like to avoid a public hearing on that part of the proposal if possible.

Dr. Swank argued that the Salt and Gila sections of the project cannot be considered separately, and that the pattern set for the Salt River development will of necessity influence, if not dictate, what is done on the Gila below. This makes sense, and was not denied by anybody at the head table.

500-Foot Clearing Ample

The fuss, in case you haven't been reading this column and stories elsewhere in the newspapers, centers around the plans of the Corps of Engineers to clear a 2,000-foot swath down the Salt and Gila Rivers to Gillespie Dam. The game department, backed by sportsmen's organizations, insists a 500-foot clearing is ample, but the Corps of Engineers refuses to consider any reduction.

This is a powerful and arrogant federal agency which seems bent on cramming its costly project down our throats. It will succeed, too, if we don't muster a whale of a lot of opposition.

And I don't mean to convey the idea that sportsmen and state and federal wildlife agencies are opposed to whatever flood-control program is needed to alleviate or prevent damage farmers and other citizens are suffering or may suffer in the future. This, it seems to many of us, can be done adequately in a 500-foot clearing with proper channeling.

Some of the farmers who testified were quite critical of parts of the flood-control plan — and I suspect the farmers know more about the problem and how to correct it than the Corps of Engineers.

Wildlife
impacts

DICK LEE'S ARIZONA AFIELD



DICK LEE

The Army Corps of Engineers has scheduled a hearing Tuesday on a project which is of great interest to all citizens, but has an added significance for conservationists and sportsmen.

Some of you may not be aware of it, but the Corps has a vast multi-million dollar plan for conserving water and saving us from great floods in the future. The fact that a lot of us don't believe we are in any great danger of devastating floods means nothing to these guys—they insist on saving us anyway.

The project calls for channeling and clearing a swath at least 2,000 feet wide down the Salt and Gila rivers from the site of the proposed Maxwell Dam east of Phoenix to Gillespie Dam on the Gila River west of Gila Bend. This will destroy great sections of the country's best dove-nesting areas.

Hard To Justify Project

I have seen thick stacks of statistics and survey reports by which the Corps of Engineers justify this costly boon-doggle. I'll admit I couldn't digest all those figures — I didn't try very hard—but I was left with the impression the Engineers had to go to great lengths to justify the project.

Of course, the Corps is getting support from the Maricopa County Flood Control District, headed by Col. John C. Lowry. The colonel, I understand, is a former officer in the corps.

Not only will this project destroy much wildlife habitat, but it will cost the taxpayers of the county a bundle. The county must buy the land along the river which the Engineers want, and after the strip has been cleared it will be up to the county to keep it clear. Otherwise it will soon be covered again with salt cedars and other growth, just as it is now.

So, as taxpayers and sportsmen-conservationists you should be interested in that hearing, scheduled for 9:30 a.m. Tuesday at the County Health Department, 1825 E. Roosevelt. The state game and fish department has been extremely critical of the project from the start of the planning several years ago.

Incidentally, Tuesday's hearing is supposed to deal only with the section of the Salt River from the Maxwell Dam site to its junction with the Gila River, but this is only a small part of the overall project.

River Plan Should Concern Sportsmen

Phoenix Gazette

Dec. 11, 1964

Game Department Commended

I have a copy of a letter written to Dr. Wendell G. Swank, director of the game and fish department, by Dr. Frank J. Honsik, Phoenix physician and ardent outdoorsman. He and his 15-year-old son, Bruce, had just returned from the weekend special deer hunt in the Three Bar area.

They did not get a deer, but Dr. Honsik wrote that "we had a fine time indeed. This was largely due to the fine crew you had in the field. The trip was well worth it just to meet such men as Greg Massaro, Don Neff, Harley Shaw, Don Vance, Clay McCulloch and Ronnie Smith. To any sportsman deeply concerned for the future of Arizona's game and fish it is most gratifying to see the stature of these men and the fine caliber of the work they are performing.

"Successful game management, with the excellent results evidenced by the Kaibab herd and now on the Three Bar, should be valuable not only to the range and the wildlife concerned, but also educationally in making believers of some of us infidels. No doubt about it—the proof of the pudding is in the eating. On sober reflection, one must happily conclude that things are in capable hands."

Dr. Honsik is a man who never hesitates to say what he thinks. There have been times in the past when he didn't approve of game-department policy or of the actions of some of its personnel. So he criticized. Now he feels commendation is due and doesn't forget. Too many of us criticize freely but neglect to praise when praise is due.

Short Story Dept.

The winter dove season opens tomorrow and runs through Jan. 3, with a 12-bird daily limit and 24 in possession . . . David P. Scott and Lewis Funk of Phoenix supplied their neighborhood with venison. Funk killed a four-point buck in the Strip country and Scott a two-pointer in North Kaibab, then they went hunting on the Ute Indian Reservation in Southwest Colorado where each hunter is allowed three deer. There they bagged three more bucks apiece, while Scott's brother, Donald, took a buck and two does . . . Bud Bassett, state fisheries chief, said he would ask the Arizona Game and Fish Commission to raise the daily catfish bag and possession limit to 25 when it meets here tomorrow . . . Heavy runs of yellowtail, grouper and red snapper are reported from Guaymas, with everybody catching fish in that area of Gulf of California.

Flood Control That Isn't

The tax-paying public of Maricopa County may find itself owing a solid vote of thanks to the Arizona Game and Fish Department on account of a long struggle now nearing climax. The department is a pygmy in the contest; its opponent is the gigantic U.S. Army Corps of Engineers. The object of contention is the bed of the Gila River extending from Buckeye about 40 miles west.

The issue came up again at a public hearing this week on Maricopa County Flood Control District plans. Technically this stretch of river bed was not included in the area covered by the hearings, but actually it will remain a ghost at any flood control hearing until guarantees are given against despoliation of wildlife habitat.

The issue is so critical that it can, and possibly it should, bring about defeat of any proposed flood control bond issue unless it is first satisfactorily resolved.

The framework of the controversy is this: The Corps of Engineers, supported by the flood control district, proposes as part of a county flood control plan to clear all growth from a path almost a mile wide down the river bed. In doing so, it would destroy the major part of the breeding grounds of Arizona's greatest whitewing dove population, as well as the habitat of other game.

This is not a bleeding-heart issue, but a cold dollars and cents proposition. The Army Corps, although it started out claiming direct flood control benefits from the channel clearing, has now all but admitted that actual protection of property from possible floods is not at stake. It has switched, instead, to claiming benefits of \$3.5 to \$4 million, derived from water "saved" from use by the salt cedars and other growth in the river bed. There is considerable evidence that this is a thickly padded figure based on false premises, but that is another matter.

Data presented by the Game and Fish Department, on the other hand, reveal that the channel clearing would result in an economic loss to the county and state of \$317,000 a year from hunters only. A University of Arizona survey developed this figure. In this category of recreation alone, the clearing would cost Maricopa County more than \$15 million in the next 50 years — during which time any water saving, if it ever materialized, would probably have been made unimportant.

All this is without attention to the overburdening cost of clearing and then maintaining the channel, which would have to be borne by the county's taxpayers. The flood control authorities would do well to modify their ambitions.

ENGINEERING NEWS-RECORD

Vol. 174, No. 15

April 15, 1965

Number of copies printed in this issue 93,794

CONTENTS

LBJ Boosts Mekong River Plan.....	25
Nine States Had Half the 1964 Market.....	27
Contractor Tops Out VAB Steel.....	28
Road Scandals Spur New Laws.....	28
Road Men Confer on Quality Control.....	28
Builders, Planners Back Zoning Reform.....	29
Court Denies Firm's Design Preference.....	30
Appalachian Roads Pose Problems.....	31
Hardrock Boring Machine Fails to Drive Tunnel	32
Houston's Dome Must Be Blacked Out.....	32
FEATURES	
Highway Bridge Men Build a Tunnel for Water	34
Nashville's Priest Dam Will Reduce Flood Damage	38
Steel Trusses Brace Walls of Tower.....	40
INTERNATIONAL	
Pollution Threatens Rhine River Beauty.....	43
Precast Panels Double as Forms.....	45
Aid Banks Land \$115 Million for Power Jobs...	46
Japan's Road Program Links Up.....	48
FIELD AND OFFICE	
Synthetics Encase Heating System.....	50
RESEARCH AND DEVELOPMENT	
Airborne Laser Maps Terrain.....	57
PRODUCTS	
Manholes Raised in 30 Minutes.....	59
Three Cylinders Power Crawler.....	60
Ready-Mix Carrier Hauls 12 cu yd.....	60
Backhoe-Loader Operates Easily.....	62
Portable Units Process Aggregates.....	62
Electric Core Drill Has Adjustable Speed.....	64
Portable Tester Determines Sand Size.....	64
MEN AND JOBS	
Sam Wallace: Subcontracting Is Big Business...	70
Engineering Group Elects Nineteen New Members	72
F. S. Merritt Joins Consulting Firm.....	74
BUSINESS AND FINANCE	
Two Contractors Get Buy Offer.....	85
Aid Loan Debt Service Slows Growth.....	86
Federal Offices Request Halved.....	86
LABOR	
District 50: A Union on the Move.....	90
Reader Comment ... 8	Materials Prices ... 77
Washington Observer 23	Pulse ... 78
Unit Prices ... 76	Scoreboard ... 83
Editorials ...	104

Picture Credits

Cover, 34, 35, 36—ENR; 25—UPI; 31—Wide World; 39, 39—Corps of Engineers; 40—Dickey and Harleen Studios; 43—German Informaton Center; 45—Bob Acciaro; 50, 55—McGraw-Hill World News; 59 top—Rebman.

Back issues of ENGINEERING NEWS-RECORD are generally available for the previous six months. Semiannual indexes will be sent on request. ENGINEERING NEWS-RECORD is also indexed in the Applied Science & Technology Index, Business Periodicals Index and the Engineering Index

THE CONSTRUCTION WEEK

NEW TWIST IN CIVIL RIGHTS—The National Association for the Advancement of Colored People has asked the sponsor of a New York City apartment project—which may become the world's largest (ENR Feb. 18, p. 52)—to specify that contractors on the project cannot use exclusive union hiring halls. It claims that the local AFL-CIO building trades unions deny equal employment opportunity to Negroes and that state and local laws accordingly bar their use as the sole source of labor on public projects.

AGC PLANS HIGHWAY CONFERENCE—The Associated General Contractors of America plan a two-day "Highway Construction Conference" to be held in mid-July in Washington, D. C. The conference will be similar in format to AGC's previous federal contract conferences in Colorado Springs (ENR Sept. 27, 1962, p. 17) and New Orleans (ENR Nov. 19, 1964, p. 31). Possible topics include the construction guide specifications prepared by the American Association of State Highway Officials, changed-conditions clauses in state highway contracts and various labor problems.

MEN AGAINST THE PEACE—Builders of the 600-ft-high Portage Mountain Dam on British Columbia's Peace River have removed frost protection from existing earthfill and will resume construction Monday. Working around the clock, the contractor hopes to place 18.5 million cu yd of fill by October 30. Total volume of the dam will be 60 million cu yd.

PENNY-WISE AND FLOODED OUT—The \$10 million worth of flood damage caused by the rampaging Minnesota River last week at Mankato, Minn., could have been avoided for \$195,000. A \$2.5-million flood control program to protect the area was authorized in 1958, but local governments failed to guarantee their share of the project cost, \$195,000. Corps of Engineers planners shelved the project for "lack of local interest."

BAD LUMBER FINDS NEW MARKET—According to New York City building officials, mismarked and fraudulently upgraded lumber is increasingly moving into the city's five boroughs. Building officials in the nearby suburbs, alerted by disclosures of rascality in their own backyards (ENR Dec. 10, 1964, p. 28), have clamped down, forcing dealers in substandard material to find new outlets.

SURGERY SAVES TRANSIT PLAN—Washington's proposed 25-mile transit system won endorsement by the House District subcommittee. Much of the opposition to the plan disappeared when the system was cut in half after dying in the last session. Prospects are good for approval by the current Congress, although perhaps not until next year. The \$431-million project would include some 13 miles of subway.

OUR NEW AGE

— by —

ATHELSTAN SPILHAUS
DEAN, UNIVERSITY OF MINNESOTA
INSTITUTE OF TECHNOLOGY



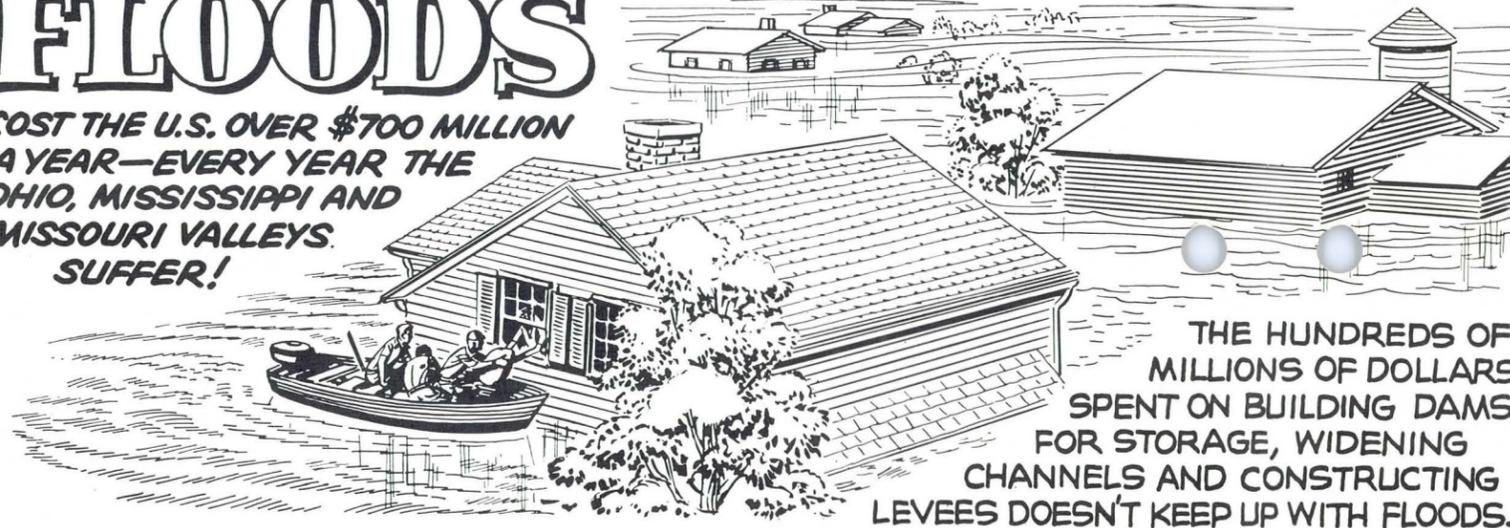
EARLY SETTLEMENTS WERE ON FLOOD PLAINS BECAUSE RIVERS WERE THE "HIGHWAYS," WATER WAS AMPLE AND SOILS FERTILE.



A FLOOD IN THE YANGTZE RIVER IN CHINA IN 1911 DROWNED 100,000 PEOPLE!

FLOODS

COST THE U.S. OVER \$700 MILLION A YEAR—EVERY YEAR THE OHIO, MISSISSIPPI AND MISSOURI VALLEYS SUFFER!

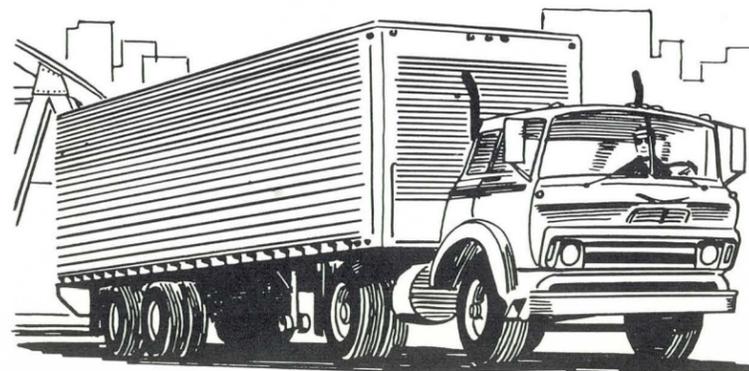


THE HUNDREDS OF MILLIONS OF DOLLARS SPENT ON BUILDING DAMS FOR STORAGE, WIDENING CHANNELS AND CONSTRUCTING LEVEES DOESN'T KEEP UP WITH FLOODS.



THE WEATHER BUREAU FLOOD WARNINGS SAVE LIVES AND LIVESTOCK BUT NOT PROPERTY!

MODERN WATER SUPPLY AND TRANSPORTATION NO LONGER REQUIRE CITIES TO GROW ON FERTILE FLOOD PLAINS.



ENGINEERING ALONE WILL NOT PREVENT FLOODS; FLOOD WARNINGS MOVE PEOPLE OUT—BUT DISASTER RELIEF MUST NOT MOVE THEM BACK IN—**NOR SHOULD CITIES BE ALLOWED TO GROW ON FLOODABLE PLAINS!**

Outdoors

Phoenix, Sunday, April 18, 1965

C-11



Ben Avery

Flood Project Perils Good Dove Grounds

MARICOPA COUNTY SPORTSMEN face the prospect soon of mobilizing forces to beat the proposed county flood control bond issue. It is the only means of preventing destruction of more than half of the dove and whitewing nesting habitat in the county.

This last-resort action has been forced by the U.S. Army Corps of Engineers which refused to allow sportsmen's groups, or the Arizona Game and Fish Department, to testify at Phoenix hearings on the proposed project.

And now I have a letter from Rep. John D. Dingell, of Michigan, who has taken the lead in the house to oppose destruction of the whitewing and dove habitat. And I heard from Sen. Paul Fannin, R-Arizona, who is trying to help us in the senate. I don't think Senator Hayden has had the problem laid clearly before him.

When Representative Dingell came out against the proposal he received letters of praise from Arizonans in all walks of life and yesterday all were getting personal replies.

Local Interests Are Snubbed

He pointed out that the Corps of Engineers had advised him the project would proceed only with the approval of local interests. The Army Engineers has refused to recognize any local interests except the board of supervisors and the advisory board of the flood control district. They have refused to listen to people of the Tempe area. They have refused to hear protests of sportsmen.

But every dog has his day, and when the board of supervisors goes to taxpayers with a bond election the people will have theirs.

Sportsmen and citizens of the Tempe area do not object to a sensible project. So far as the sportsmen are concerned, their main objection will be to the 2,000-foot wide channel clearing down to Gillespie Dam. The Army Engineers admit no more than a 500-foot channel is needed to handle floods. Some doubt if any clearing is needed because those salt cedars that are left actually would slow any flood and cause more of the water to soak underground to reduce salt content of groundwater.

Water Salvage Doubtful

Army Engineers try to justify the wide channel by arguing that clearing cedars would reduce water use and thereby salvage water. But they make no allowance for increased seepage into the underground that might result from having salt cedars, nor of the fact that in most cases the water level has been pumped far below roots of the cedars.

The wide channel would require the Arizona Game and Fish Department to surrender more than 3,000 acres of BLM land withdrawn for wildlife habitat. There is no doubt the game department will not do this, and it is doubtful if the U.S. Interior Department will go along with forcing them to give it up.

This is another issue the sportsmen must fight to the last ditch.

Why does not the Maricopa County Board of Supervisors see the sportsmen's side and make efforts to get the Army Engineers to change its plans? This would avoid a fight that is likely to defeat what otherwise could be a desired project.

THE ARIZONA REPUBLIC

Outdoors

Phoenix, Sunday, April 18, 1965

C-11



Ben Avery

Flood Project Perils Good Dove Grounds

MARICOPA COUNTY SPORTSMEN face the prospect soon of mobilizing forces to beat the proposed county flood control bond issue. It is the only means of preventing destruction of more than half of the dove and whitewing nesting habitat in the county.

This last-resort action has been forced by the U.S. Army Corps of Engineers which refused to allow sportsmen's groups, or the Arizona Game and Fish Department, to testify at Phoenix hearings on the proposed project.

And now I have a letter from Rep. John D. Dingell, of Michigan, who has taken the lead in the house to oppose destruction of the whitewing and dove habitat. And I heard from Sen. Paul Fannin, R-Arizona, who is trying to help us in the senate. I don't think Senator Hayden has had the problem laid clearly before him.

When Representative Dingell came out against the proposal he received letters of praise from Arizonans in all walks of life and yesterday all were getting personal replies.

Local Interests Are Snubbed

He pointed out that the Corps of Engineers had advised him the project would proceed only with the approval of local interests. The Army Engineers has refused to recognize any local interests except the board of supervisors and the advisory board of the flood control district. They have refused to listen to people of the Tempe area. They have refused to hear protests of sportsmen.

But every dog has his day, and when the board of supervisors goes to taxpayers with a bond election the people will have theirs.

Sportsmen and citizens of the Tempe area do not object to a sensible project. So far as the sportsmen are concerned, their main objection will be to the 2,000-foot wide channel clearing down to Gillespie Dam. The Army Engineers admit no more than a 500-foot channel is needed to handle floods. Some doubt if any clearing is needed because those salt cedars that are left actually would slow any flood and cause more of the water to soak underground to reduce salt content of groundwater.

Water Salvage Doubtful

Army Engineers try to justify the wide channel by arguing that clearing cedars would reduce water use and thereby salvage water. But they make no allowance for increased seepage into the underground that might result from having salt cedars, nor of the fact that in most cases the water level has been pumped far below roots of the cedars.

The wide channel would require the Arizona Game and Fish Department to surrender more than 3,000 acres of BLM land withdrawn for wildlife habitat. There is no doubt the game department will not do this, and it is doubtful if the U.S. Interior Department will go along with forcing them to give it up.

This is another issue the sportsmen must fight to the last ditch.

Why does not the Maricopa County Board of Supervisors see the sportsmen's side and make efforts to get the Army Engineers to change its plans? This would avoid a fight that is likely to defeat what otherwise could be a desired project.

Arizona Republic - April 26, 1965

The proposed destruction of the Valley's best dove nesting habitat in a controversial flood control program is being vigorously attacked by the State Game Department.

But avowed bird-lovers are strangely silent.

"RIGHT NOW," states an editorial in the current Wildlife View, "the Audubon Society in southern Arizona is busy worrying about the Mearns quail hunts. Department field studies have consistently shown little, if any, affect of hunting on overall quail populations, but the Audubon people apparently have more confidence in their own emotions than they do in the department's judgment.

"We suggest that with all their fussing and stewing over the 'danger' to the Mearns quail, they're merely pursuing imaginary dragons, while at the same time there's a whole herd of real-life, iron-footed smoke-belching, diesel-burning dragons all set to gobble up something of infinitely great significance.

". . . Ten years or so from now the white-winged dove population we've treasured for so long may be only a memory."

stress economic costs of flood control program (benefits to all)

Who Cares About Flood Control?

IT'S GOING TO take a big disaster, one that will destroy millions of dollars' worth of property and take many lives, to get the great majority of Arizonans even mildly interested in flood control.

Those new residents who have doubled the state's population in the last few years don't know what has happened in the past and pay no attention to the old-timers. If they listen at all they dismiss flood stories as big windies of the Hassayampa variety.

So it's going to be difficult, if not impossible, to get approval for the Maricopa County Flood Control District bond issue that is to be submitted this

fall at a special election.

It is proving difficult, if not impossible, to get a similar district for Yuma County even organized.

When the subject of flood control came up for consideration at the summer meeting of the Arizona Assn. of Soil Conservation District Supervisors, in Show Low, pessimism oozed all over the Mogollon Rim.

Jess Watt of Peoria, Max Pace of Chandler, and others who know from personal experience what havoc can be worked by high water in a desert land, didn't seem to think there was much chance for the Maricopa County bond issue. The people who have in-

tensified flood danger north of Phoenix, by building houses and laying pavements to shed the rain and send torrents coursing through the city, pay no attention to warnings and resent any suggestion that may raise their taxes. The same is true in other areas recently covered with subdivisions.

It Sounds Ridiculous

They don't realize, and won't believe, that sudden and intense storms can occur in a comparatively limited area, to overload drains and ditches and create raging torrents.

They won't believe, said Jess Watt, that in 1891 Salt River carried more cubic feet per second past Phoenix

than the Missouri ever carried past Kansas City.

State Land Commissioner Obed Lassen was the first to remark that the general public will never credit such improbable tales until it has a horrible example that will probably cost more than protection works. He hoped the example would cover only a small territory but it can be widespread, like the floods that recently devastated portions of Colorado. Lassen and everyone else in the room was absolutely sure that catastrophe will strike at the most unexpected time.

A big slice of the most densely populated heart of Arizona can be in terrible peril if the Salt River Project's reservoirs ever fill, and then a general storm comes.

Frank McElhaney of the Wellton-Mohawk District put his finger squarely on the main difficulty. Every few years, he said, there's an almost completely new set of people to convince — people who have never seen an Arizona storm and can't conceive that this arid land can ever have enough precipitation to be worth measuring. Unbelievers flock into the state faster than converts can be made.

The Army Engineer Corps, he said, has worked up a plan for clearing the channel of the lower Gila from Painted Rock down. Still, many persons living right on the dry stream bed and at the edge of the saltcedar jungles are doubtful that clearing will serve any useful purpose.

Everybody Yawns

McElhaney went on to mention other localities in Yuma County that need flood protection and declared that a county-wide flood control district like Maricopa County's is an imperative necessity. "But it's hard to get anyone interested," he concluded.

Karl Abel, new president of the SCD Supervisors and long-time chairman of the New River SCD board, remarked on how ideas and interests conflict when efforts are being made to get a flood project started. Right now a movement is under way to build a detention dam on upper New River and widen the twisted, partially choked channel. Everybody is agreeable to a wide channel for a certain distance below the proposed dam; below that there are farms right up to the river and those farmers don't want to give up any of their land for any broad channel. It's their opinion that a fairly narrow channel will be sufficient.

Two Routes To Control

Much of this discussion came after D. A. Dobkins of the Soil Conservation Service had explained the laws under which flood control works can be built. A district can be set up for a particular project to benefit a certain locality. Most of the construction cost comes from federal sources but the district must furnish rights-of-way and guarantee maintenance. Under this arrangement, extensive works now protect Safford Valley, and the almost-completed Magma project is another shining example. The Florence project is getting under way; Vanar Wash, Harquahala, Buckeye and others are well along in the planning.

Then again, there is the statute under which the Maricopa County Flood Control District is set up to plan and construct dams and channels and such to protect a number of communities. So far, only one county has taken this route and there is grave doubt that the financing will be authorized. Residents

(Please Turn To Page 25)

Floods

(Continued From Page 15)

where there is no flood peril object to paying higher taxes to benefit other parts of the county. And many, many who live right in the path of inevitable floods sincerely believe that a lot of calamity howlers are pulling their legs.

Once more, Land Commissioner Lassen made a powerful plea for a state water department, manned by engineers and exercising authority over surface streams, groundwater, flood control. Responsibility, he said, is now widely distributed among agencies and individuals, none with enough authority or backing to accomplish much of anything. Everybody admits that there ought to be such a department but no action is ever taken. Apathy reigns supreme.

AFR

Flood Cleanup Tough Job

Arizona Current 5-65

Many Arizona homemakers never dreamed of a flood hazard when they moved to homes located in an arid desert valley. But these residents soon discovered that flash floods and/or extensive rain from late summer storms periodically placed their houses in what appeared to be a small lake.

In the past families in counties throughout the state have been affected by water damage in varying degrees. Memories of the extensive destruction caused in Maryvale, Glendale and Sunnyslope areas due to the August rains of 1962, '63 and '64, are still fresh in the minds of Valley citizens.

Visions of wall-to-wall mud, ruined furniture and belongings, crop up with the slightest hint of a summer storm. These women admit that because they did not know how to go about repairing flood damage, the amount of household loss was higher than necessary. Following are some practical tips on counteracting water damage.

All reconditioning should be done as soon as possible. Molds and mildew should be removed with a chlorine compound; one cup of commercial chlorine solution to each gallon of water.

APPLIANCES — Disconnect all appliances and inspect before switching on. If damage is extensive, have an electrician check the entire wiring system and equipment for short circuits. Inspect and clean all electric motors before turning on. If the motor of a washing machine has stood in flood water, mud may have settled in it. Operated in this condition, it could be ruined.

HEATING UNITS — Clean stoves and furnaces before operating. Silt lodged in pipes or casings will stop air flow and start rust. If a hot water system is the source of heat, even the inside of the fire pot or box must be washed. Some small heating appliances may be all right to use after cleaning and drying completely.

WINDOWS — Raising windows to speed air circulation for thorough drying of soaked floors, etc., may be difficult if the sashes and frames are swollen. Don't force them up, you might break them. Instead, remove the side molding strips in front of the inside sash and then go outside and force the sash in. Allow the sash to dry thoroughly before fitting it back into the window frame.

CARPETS — Waterlogged rugs and carpets should be dried thoroughly before attempting to clean them. Then use a broom or vacuum cleaner to remove as much dirt as possible. The remainder of the cleaning process can best be done by a commercial cleaning establishment. If desired, some rugs can be sham-



A lot of cleanup work lay ahead for these families caught in the August, 1963 flood waters. Aerial photo was taken of the area at 71st Ave. and the Grand Canal, Phoenix.

poor at home. Work on a small section at a time, rinse thoroughly with clean water before lathering the next section. Place where it can dry quickly.

FLOORS — Floors that have warped or buckled should be taken up. Concrete floors usually just require a cleaning and deodorizing job. If floors and wooden furniture was wet for a short time, they probably only need to be dried thoroughly and waxed or

polished. Where water has stood for several hours, a refinishing job is needed. Warped items are usually too far gone for further use.

ODORS — The flood smell can be removed by scrubbing with hot, soapy water followed by a clear rinse to which sodium hypochlorite solution has been added. Commercial solutions available include, Chlorox, Purex, B-K Solution and others.

\$700,000 Spent Preparing For Countywide Bond Vote

Arizona Republic

8-22-65

Flood Curb District Cost Ascertained

By ROBERT J. EARLY

THE MARICOPA County Flood Control District has spent nearly \$700,000 in the past five years preparing for a \$22,670,000 countywide bond election, The Arizona Republic has learned.

This does not include funds the federal government has expended drawing flood control plans nor the \$3,000 to \$4,000 county and City of Phoenix officials have spent lobbying for federal flood control aid.

The funds spent so far by the flood control district were used to develop flood control construction projects, said John Lowry, general manager and chief engineer of the district.

THIS included, he said, salaries of district workers, office supplies, costs of technical studies and other expenses of operating the district.

The U.S. Army Corps of Engineers, however, will be responsible for designing the flood control construction projects and for building them.

The projects cannot be built unless the flood control district owns the land upon which they must be constructed.

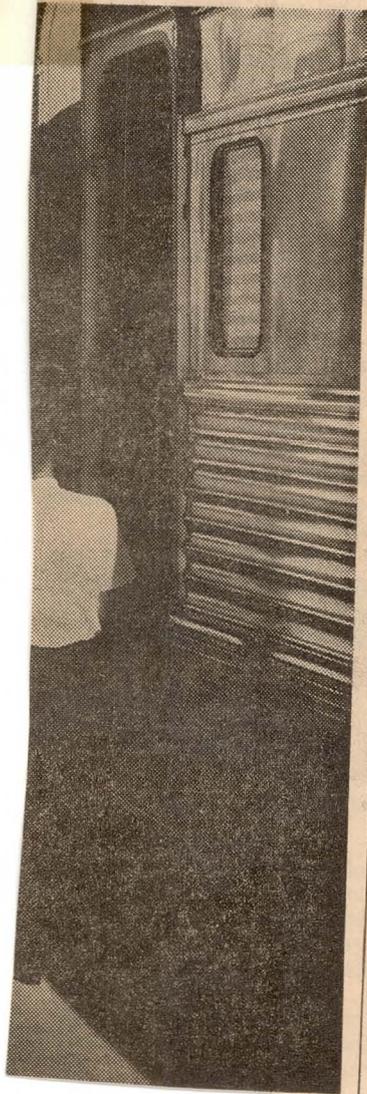
And this is where the county bond election comes into the picture. The district needs \$22.7 million to buy rights of way and to relocate bridges and utilities.

LOWRY SAID the first two phases of the proposed county flood control construction already have been approved by the U.S. Senate and are expected to be passed by the House this year.

This means that the corps of engineers will be asking Congress for funds in the corps' 1966-67 fiscal budget to carry out the design and construction, he predicted.

But the corps will not ask

(Continued on Page 2B, Col. 1)



Phy Jayette

DAMAGE HEAVY

Gravel Pits Resume Operations

The Valley's sand and gravel producers have not yet made a total assessment of damage done by Salt River, but most of them were at least in partial operation today.

Don Rozma, executive secretary of the Arizona Aggregate Association, said all pits in the riverbed were flooded, but most of the companies had stockpiles to keep them in operation for several days while they move to alternate areas.

THE BIGGEST problem, he said, was in moving materials across Salt River.

Tanner Brothers Construction Co. was one of the hardest hit by the flood. The firm lost a primary crusher in its pit on 40th Street, but it expected to have a portable unit in operation in the next few days.

Jack Duncan of Tanner Brothers said damage, including the loss of the crusher equipment, was estimated at \$225,000 at the company's Metro-Rock sand and gravel pit. Duncan said all equipment had been moved out, with the exception of the crusher, but water had backed up around dikes built to protect the property. The company, however, was back in operation today.

BOB EVANS, of Cyr and Evans Construction Co., Tempe, said his firm had lost about a \$70,000 stockpile of material, and he estimated that the total loss in time and material would amount to near \$100,000.

Evans added that he felt the flooding could have been prevented if the Salt River Project (SRP) had left spillway gates open after the initial release of water about two weeks ago. He said he had personally asked SRP officials to leave the gates open before the last storm hit, but had been told that the water would be needed if the new storm didn't provide any runoff. "I think they made a mistake," he declared.

OTHER COMPANIES—Union Rock and Material, United Materials, Mesa Sand and Rock and Arizona Sand and Rock — all reported water in their pits but no damage to equipment or to their concrete plants.

Arizona Sand and Rock reported that its pit at 18th Street was not directly in the river bed, and the only water collecting in it came from seepage.

★ ★ ★

Flood Control Bond Vote Delayed Month

A proposed \$22.7 million county flood control bond election today was postponed one month by the board of supervisors, and a Glendale man was named chief of a citizens' group to spearhead the bond vote, now set for March 8.

W. B. Barkley, a former mayor of Glendale and one-time speaker of the State House of Representatives was selected as chairman of the newly organized Maricopa Citizens' Flood Protection Committee (MCFPC).

L. ALTON RIGGS, chairman of the board of supervisors (which also acts as board of directors of the Maricopa County Flood Control District) said

ble an additional \$93 million in federal funds to finance the countywide project.

"More important, it should make possible the permanent future elimination of most of the high water damage and personal hardship, resulting from the rain-swollen Gila and Salt rivers," Riggs explained.

BARKLEY SAID that headquarters for the citizens' committee will be established tomorrow in offices at 2933 N. Central, and that he will appoint various subcommittee during the next few days.

He explained that the bond election date was changed and the committee was organized

Jack Williams
Hall Of Fame Honors Bowman

MEMO TO PHOENIX JAYCEES and their rodeo chairman, Wayne Watkins:

One of rodeo's greatest and most colorful heroes lives at Wickenburg.

In other states he is referred to as "Arizona's Greatest Everett Bowman"; and he is beyond doubt the oldest living all-around world champion of rodeos."

Bowman won his world championships in 1935 and 1937.

Recently he received an outstanding honor in Oklahoma City when he was made a life member of the Rodeo Hall Of Fame — the first time in history a living man has been so honored, according to our Wickenburg operator, Ray Loomis.

How about honoring him at your Rodeo of Rodeos this spring, fellows?

★ ★ ★

Comes now one John Girand with "Finagle's Laws divided thusly:

"Laws of Experiment" — Example: "If anything can go wrong with an experiment or test, it will."

"Laws of Mathematics" — Example: "In any collection of data, the figures that are obviously correct beyond all need of checking, contain the errors."

Other laws include: "Law of Systems," "Law of the Lost Inch," "Laws of Revision" and "Laws of the Universal Perversity of Matter." Example of the latter: "Any mechanical or electrical device is most likely to fail the day after the manufacturer's guarantee expires."

★ ★ ★

Add cold cures! Tangerine juice may help relieve the common cold. So say citrus experiment station scientists in Lake Alfred, Fla. Their analysis of tangerine juice shows a high content of Synephrine, a stimulant with decongestant properties.

A friend recently claimed that a spoonful of mustard will cure the common cold. Another swears a cold plunge every morning does the trick.

Among the classic cures is to retire with a pint of applejack and a hat. Put the hat on the bed post and drink the applejack. When you see two hats, you're cured.

If the cold can be induced to go into pneumonia, you have a chance to cure it. There is really no known medical cure for a cold; but the medical profession has a cure for pneumonia!

Oh, yes, a Salt River Valley physician recommends as a cough remedy this: Take a fresh grapefruit, quarter it, place in an enameled or glass cooking utensil, cover with water, boil for 20 minutes, strain, add two three tablespoons of honey and serve. The paragraph added that the preparation seems to relieve coughs and congestion due to chest cold.

★ ★ ★

Mrs. Peter (Floria) Longo created a cryptic combination of words when she wrote of North Viet Nam's President Ho Chi Minh's criticism of President Johnson thusly: "Ho say 'He menace!'"

★ ★ ★

"The only way to keep your health is to eat what you don't want, drink what you don't like, and do what you'd rather not!"

Mark Twain



WILLIAMS

Flood Job Gets Guard 'Well Done'

More than 400 Arizona Army National Guardsmen were back at their civilian jobs today after 56 hours of state duty in the flood emergency.

The guardsmen were called into duty by the state when floodwaters swirled down the Salt River bottoms.

DURING THEIR emergency duty, the 43 officers and 375 enlisted men evacuated families from homes in low areas, rescued persons stranded by the flood, assisted police in traffic control and performed other duties in support of civil authorities.

Maj. Gen. Joe Ahee, adjutant general of Arizona, commanded the guard's emergency force. He was assisted by Col Felix J. Bertino, chief of staff for the Arizona Army National Guard.

"I am proud to say that our troops performed so admirably that we were able to meet every request for support from civil authorities, General Ahee said.

THE GENERAL ordered troops released from state active duty at 9:50 a.m. yesterday after the flood had subsided. The guardsmen returned to their armories, restored equipment to battle-ready condition and then went home.

Units called to duty included:

From the First Howitzer Battalion, 180th Artillery — Headquarters Battery, Mesa, commanded by Capt. Bobby L. Nickell; Service Battery, Mesa, commanded by Capt. Edward E. Pomeroy; Battery C, Tempe, commanded by Capt. James H. Lewis and Battery A, Chandler, commanded by Capt. James H. Lewis and Battery A, Chandler, commanded by First Lt. Robert W. Taylor.

Maj. Chester A. Smith, battalion commander, directed the artillery task force.

From State Special Units — The 222nd Transportation Company (Light Truck) of Phoenix commanded by Capt. Michael Coffinger, a Tempe resident.

AFTER BEING alerted by Governor Goddard at 1:50



of the companies had stockpiles to keep them in operation for several days while they move to alternate areas.

THE BIGGEST problem, he said, was in moving materials across Salt River.

Tanner Brothers Construction Co. was one of the hardest hit by the flood. The firm lost a primary crusher in its pit on 40th Street, but it expected to have a portable unit in operation in the next few days.

Jack Duncan of Tanner Brothers said damage, including the loss of the crusher equipment, was estimated at \$225,000 at the company's Metro-Rock sand and gravel pit. Duncan said all equipment had been moved out, with the exception of the crusher, but water had backed up around dikes built to protect the property. The company, however, was back in operation today.

BOB EVANS, of Cyr and Evans Construction Co., Tempe, said his firm had lost about a \$70,000 stockpile of material, and he estimated that the total loss in time and material would amount to near \$100,000.

Evans added that he felt the flooding could have been prevented if the Salt River Project (SRP) had left spillway gates open after the initial release of water about two weeks ago. He said he had personally asked SRP officials to leave the gates open before the last storm hit, but had been told that the water would be needed if the new storm didn't provide any runoff. "I think they made a mistake," he declared.

OTHER COMPANIES—Union Rock and Material, United Materials, Mesa Sand and Rock and Arizona Sand and Rock—all reported water in their pits but no damage to equipment or to their concrete plants.

Arizona Sand and Rock reported that its pit at 18th Street was not directly in the river bed, and the only water collecting in it came from seepage.

★ ★ ★

Flood Control Bond Vote Delayed Month

A proposed \$22.7 million county flood control bond election today was postponed one month by the board of supervisors, and a Glendale man was named chief of a citizens' group to spearhead the bond vote, now set for March 8.

W. B. Barkley, a former mayor of Glendale and one-time speaker of the State House of Representatives was selected as chairman of the newly organized Maricopa Citizens' Flood Protection Committee (MCFPC).

L. ALTON RIGGS, chairman of the board of supervisors (which also acts as board of directors of the Maricopa County Flood Control District), said Barkley "is taking on a job of significance."

If the bond issue is approved, Riggs added, it will make possible

an additional \$93 million in federal funds to finance the countywide project.

"More important, it should make possible the permanent future elimination of most of the high water damage and personal hardship, resulting from the rain-swollen Gila and Salt rivers," Riggs explained.

BARKLEY SAID that headquarters for the citizens' committee will be established tomorrow in offices at 2933 N. Central, and that he will appoint various subcommittee during the next few days.

He explained that the bond election date was changed and the committee was organized "because we felt that the original Feb. 8 date did not provide sufficient time in which to inform the people of Maricopa County of the serious need for

★ ★ ★ ★

State Cotton Crop Takes Beating From Heavy Rains

A substantial amount of Arizona's cotton may rot in fields due to the recent rains, state entomologist W. T. Mendenhall reported today.

Despite early optimism on the part of growers, crop damage from rains exceeded all estimates, the entomologist reported.

"We have no figures yet on total loss," he said.

The rains knocked cotton to the ground, made some fields so muddy pickers or equipment couldn't enter them, kept many

immature bolls from opening, thus causing them to rot, and stained much cotton beyond reclamation, Mendenhall said.

The wet weather added to woes of the growers, who this season suffered from the worst pink boll worm blight in Arizona history. For many growers, however, cotton profits reach all-time highs.

"I don't believe the river floodings caused any significant crop damage," Mendenhall added.

in 1935 and 1937.

Recently he received an outstanding honor in Oklahoma City when he was made a life member of the Rodeo Hall Of Fame — the first time in history a living man has been so honored, according to our Wickenburg operator, Ray Loomis.

How about honoring him at your Rodeo of Rodeos this spring, fellows?

★ ★ ★

Comes now one John Girard with "Finagle's Laws divided thusly:

"Laws of Experiment" — Example: "If anything can go wrong with an experiment or test, it will."

"Laws of Mathematics" — Example: "In any collection of data, the figures that are obviously correct beyond all need of checking, contain the errors."

Other laws include: "Law of Systems," "Law of the Lost Inch," "Laws of Revision" and "Laws of the Universal Perseverity of Matter." Example of the latter: "Any mechanical or electrical device is most likely to fail the day after the manufacturer's guarantee expires."

★ ★ ★

Add cold cures! Tangerine juice may help relieve the common cold. So say citrus experiment station scientists in Lake Alfred, Fla. Their analysis of tangerine juice shows a high content of Synephrine, a stimulant with decongestant properties.

A friend recently claimed that a spoonful of mustard will cure the common cold. Another swears a cold plunge every morning does the trick.

Among the classic cures is to retire with a pint of apple-jack and a hat. Put the hat on the bed post and drink the apple-jack. When you see two hats, you're cured.

If the cold can be induced to go into pneumonia, you have a chance to cure it. There is really no known medical cure for a cold; but the medical profession has a cure for pneumonia!

Oh, yes, a Salt River Valley physician recommends as a cough remedy this: Take a fresh grapefruit, quarter it, place in an enameled or glass cooking utensil, cover with water, boil for 20 minutes, strain, add two three tablespoons of honey and serve. The paragraph added that the preparation seems to relieve coughs and congestion due to chest cold.

★ ★ ★

Mrs. Peter (Floria) Longo created a cryptic combination of words when she wrote of North Viet Nam's President Ho Chi Minh's criticism of President Johnson thusly: "Ho say 'He menace!'"

★ ★ ★

"The only way to keep your health is to eat what you don't want, drink what you don't like, and do what you'd rather not!"

Mark Twain



WILLIAMS

Flood Job Gets Guard 'Well Done'

More than 400 Arizona Army National Guardsmen were back at their civilian jobs today after 56 hours of state duty in the flood emergency.

The guardsmen were called into duty by the state when floodwaters swirled down the Salt River bottoms.

DURING THEIR emergency duty, the 43 officers and 375 enlisted men evacuated families from homes in low areas, rescued persons stranded by the flood, assisted police in traffic control and performed other duties in support of civil authorities.

Maj. Gen. Joe Ahee, adjutant general of Arizona, commanded the guard's emergency force. He was assisted by Col Felix J. Bertino, chief of staff for the Arizona Army National Guard.

"I am proud to say that our troops performed so admirably that we were able to meet every request for support from civil authorities, General Ahee said.

THE GENERAL ordered troops released from state active duty at 9:50 a.m. yesterday after the flood had subsided. The guardsmen returned to their armories, restored equipment to battle-ready condition and then went home.

Units called to duty included:

From the First Howitzer Battalion, 180th Artillery — Headquarters Battery, Mesa, commanded by Capt. Bobby L. Nickell; Service Battery, Mesa, commanded by Capt. Edward E. Pomeroy; Battery C, Tempe, commanded by Capt. James H. Lewis and Battery A, Chandler, commanded by Capt. James H. Lewis and Battery A, Chandler, commanded by First Lt. Robert W. Taylor.

Maj. Chester A. Smith, battalion commander, directed the artillery task force.

From State Special Units — The 222nd Transportation Company (Light Truck) of Phoenix commanded by Capt. Michael Coffinger, a Tempe resident.

AFTER BEING alerted by Governor Goddard at 1:50 a.m. Friday, General Ahee assembled key staff officers, ordered troop units mobilized and established a command post in the Phoenix-Maricopa County Civil Defense Emergency Operations Center in Papago Park, where civil officials had gathered to direct emergency operations.

Guardsmen manning big trucks evacuated 959 persons from both sides of flooded river in an area that extended from Lehi on the east to the westernmost edges of Phoenix. Later, when the threat subsided, the guardsmen returned many families to their homes.

Armories in Tempe and Mesa were utilized as emergency shelters during the first hours of the flood.

Arizona Army National Guard pilots from the 258th Infantry Brigade and the artillery battalion began flying rescue and observation missions at daybreak Friday.



W. B. BARKLEY

the comprehensive flood control project."

The county's \$22.7 million share of the over-all \$115.6 million flood control program would be used to purchase needed right-of-way, modify certain existing roads and bridges and establish dams, likes, river channel improvements and levies under supervision of the U.S. Army Corps of Engineers and the Soil Conservation Service.

FLOOD DAMAGE in this county totals more than \$9 million even in an 'average' year," Barkley said.

"Instead of this sum literally and figurately going down the drain, it will be saved. Moreover, the flood control program during the next decade will generate a welcome \$9 million, annually in new construction and hundreds of new jobs," Barkley said.

2 Big Feedlots Leaving Valley

By HOWARD ARMSTRONG

TEMPE — Two of the Phoenix area's largest feedlot operations said yesterday they will leave the Valley by summer, and a third hinted it may follow.

Hughes and Ganz Cattle Co. is rapidly phasing out its S.

48th Street operation in a move to Queen Creek. Smith and Kelly Feed Co., also on S. 48th, is moving to Maricopa. Del Rio Cattle Co. on S. 56th Street indicated it is seeking capital for a move.

All evacuated thousands of head of cattle and suffered

heavy damage to feeding pens during recent Salt River flooding. All also were targets of recent court action by Tempeans complaining against dust and odor.

THE ANNOUNCEMENTS made anticlimactic a meeting
(Continued on Page 14, Col. 2)

Rep-1-13-66

More About Feeders Quitting Valley

(Continued from Page 1)

here yesterday of federal, state and city officials convened to discuss the feedlot problem. But these additional developments came from the meeting:

—Both Tempe and Phoenix officials agreed to a "wait-and-see" period to give feeders time to work out their problems before taking action.

—Bureau of Reclamation spokesmen said leases of feedlots on federal land could be canceled if feeders are not conforming to state laws.

—William B. Swahlen Jr., State Livestock Sanitary Board member, said that in most cases feedlots are doing an acceptable job of controlling dust and flies but odor remains a problem.

—BUCKEYE businessmen urged feeders to look at their area if seeking a place to move.

—Tempe homeowners, too, said they would "wait and see" before pushing court complaints they have temporarily withdrawn.

The meeting at Tempe City Hall was requested by the Bureau of Reclamation. C. A. Pugh, assistant bureau regional director, explained that river bottom land is leased by some cattle feeders until 1973 but was originally set aside to provide free sand and gravel for Central Arizona Project construction.

The leases will not be renewed, Pugh said, and could be canceled if the CAP is authorized "soon" or if complainers can show that feeders are breaking laws.

TEMPE MAYOR John C. Moeur said: "We don't want to give the impression we're anti-industry. If feeders are phasing out on their own, the problem will solve itself."

But remaining feedlots should realize they are getting a last chance to shape up their operations, Moeur said.

Swahlen said the sanitary board has instructed veterinarians inspecting feedlots to make checks at night when, homeowners say, the dust and odor are worst.

Then, Robert Coop, Phoenix city manager, rose to speak.

"Phoenix has a real interest in this problem," said he, "especially the odor problem. We don't want you to think that we consider it just a Tempe problem."

"I'M SURE that Phoenix would never embark on a campaign to drive the feeders out, but, on the other hand, metropolitan development and the odor are not compatible. We don't want the odor."

Ralph A. Watkins Jr., Buckeye Development Corp. president, said:

"We're not here to proselyte

industry from Tempe but we're very eager to have feeders look at our sites."

Brad Delano of Del Rio Cattle Co., contacted after the meeting, said flooding cost his company "at least \$50,000."

Del Rio moved 4,000 head during the flood.

"We can't afford to move permanently," said Delano, "but we're entertaining the notion."

DELANO SAID he had no idea when the cattle would be moved back into the company's Tempe pens.

Jim Hughes of Hughes and Ganz said his company evacuated 11,700 head and does not plan to return them to Tempe.

"We may have a limited operation here until about June 15," said Earl Kelly of Smith and Kelly, "but we may be completely out in 30 days."

All three feeders said they would retain their federal leases to keep their feed mills operating in Tempe.

One Phoenix feeder, however, and a big one, said he has no plans to leave town. Ed Tovrea, partner in T&C Cattle Co., said:

"WE KNOW we must control the odor or get out. But barring more rain, we'll have our smells whipped in 60 days. Then, if they get odors at the airport, we can tell them, 'We told you all along you had other problems.'"

The Phoenix Gazette

VALLEY NEWS
FINANCIAL

○ 2-17-66

Section Two, Pages 21 to 36

Water Under Bridge Carries High Price

By **BILL WERLEY**
Gazette Staff Writer

Water under the bridge could have meant as much as \$24 million to Arizona.

That's the estimate of engineers and experts on the cash value of the water expected to be lost (800,000 acre-feet or more) from the December-June runoff on the Salt and Verde watersheds.

HAD ORME DAM — part of the Central Arizona Project — been constructed at the confluence of the Verde and Salt riv-

ers, it could have impounded all of the late December floodwater (400,000 acre-feet), plus all of the water now trapped in snow on the watershed (an estimated 824,000 acre feet), explained Joe Scott of the Central Arizona Project Association.

The reservoir behind Orme Dam would retain more than 1.3 million acre-feet of water — and if the overflow water from Salt River Project lakes could have been held behind Orme Dam, its estimated cash value would almost have paid off the total cost of the dam (\$31,865,000).

IT IS ESTIMATED that at least another 400,000 acre-feet of water may be lost down the Salt River by mid-April, although some engineers say this loss may exceed 600,000 acre-feet.

Orme Dam could have saved this water (with an average price estimated tag of \$30 an acre-foot). But even had the reservoir been unable to hold all the water, it was explained that Orme Dam could have prevented any major flooding in the Salt River bed.

THIS COULD have been accomplished two ways:

- Through a more gradual release of the water.
- Or, by siphoning off the water and pumping it into the proposed Salt-Gila aqueduct and then into Picacho Reservoir, then into Tucson aqueduct.

(Part of the Central Arizona Project construction plan calls for a pumping plant downstream from Orme Dam — both to lift water to the

Orme reservoir as needed for storage, and to siphon water into the Salt-Gila aqueduct by way of a concrete tunnel underneath the Salt River.)

Thus, it is observed that Orme Dam and the Central Arizona Project — if approved 15 years ago and now completed — could have saved all of the overflow water, and prevented the estimated \$10 million in damages from the late 1965 flooding of the Salt and Gila rivers.

More
about

Businessmen estimate \$9.4 million wage loss because of water in river

Continued from Page A-1

ists throughout the Valley loudly attest, is that city, county and state elected officials have failed to take virtually any significant action to provide access across the river when it is running.

On the county level, this includes County Supervisor Chairman Henry Haws and Supervisors Bob Stark, Bob Corbin, Eldon Rudd and Joe Eddie Lopez.

In the City of Phoenix, it includes Mayor John Driggs and Councilmen Henry Broderson, John Katsenes, Mrs. Margaret Hance, Armando de Leon, Calvin Goode and Ed Korrick.

At the state level, legislators from each district in the metropolitan Phoenix area hold the responsibility.

The situation at present has the Valley and its estimated 1,040,000 residents —

about 800,000 of whom own automobiles — with only three all-weather crossings over the Salt River.

And of the three — the Tempe Bridge, I-10 and the Central Avenue Bridge — the Central Bridge, is presently able to handle only half the traffic for which it was designed, because of deterioration.

For at least two days in the past 46 (April 1 and 2, when water released into

the river peaked at 22,000 cubic feet per second), these bridges and two culverts at Seventh and 16th Streets in Phoenix have been the only usable crossings.

A total of 23 roadways presently cross the river bed in the metropolitan area — 11 under the control of the county, nine controlled by the City of Phoenix, and three controlled by the state.

Virtually any flow at all in the river has closed the county's 11 crossings, all simply dips in the highway.

The lone exception is at Scottsdale Road, where a small detour bridge can be made operational to withstand up to 7,000 cfs.

Water levels in the most recent release have topped the 7,000 cfs level 21 times.

Of the three crossings controlled by the state — McDowell Road north of Mesa (Highways 87-93), I-10 and the Tempe bridge — the culvert on McDowell has been flooded 19 times since Feb. 21.

Mangin's formula in computing the amount of money lost to businesses in man-hour costs is based on estimates by city, county and state officials that 150,000 cars a day cross the river carrying workers to their jobs each day.

Traffic counts show that 100,000 cars daily pass over the Salt inside the City of Phoenix, with the remainder going by way of the Tempe Bridge and I-10.

Mangin's data indicate the average employe in the state works eight hours a day and 22 days a month, spends 2,112 hours on the job a year, and earns \$4,400 annually, or \$2.08 an hour.

Conservatively estimating work lost at a half-hour a day and counting 32 work days through Friday, he concluded that \$156,000 goes down the drain each day the 150,000 motorists are forced to creep to their jobs.

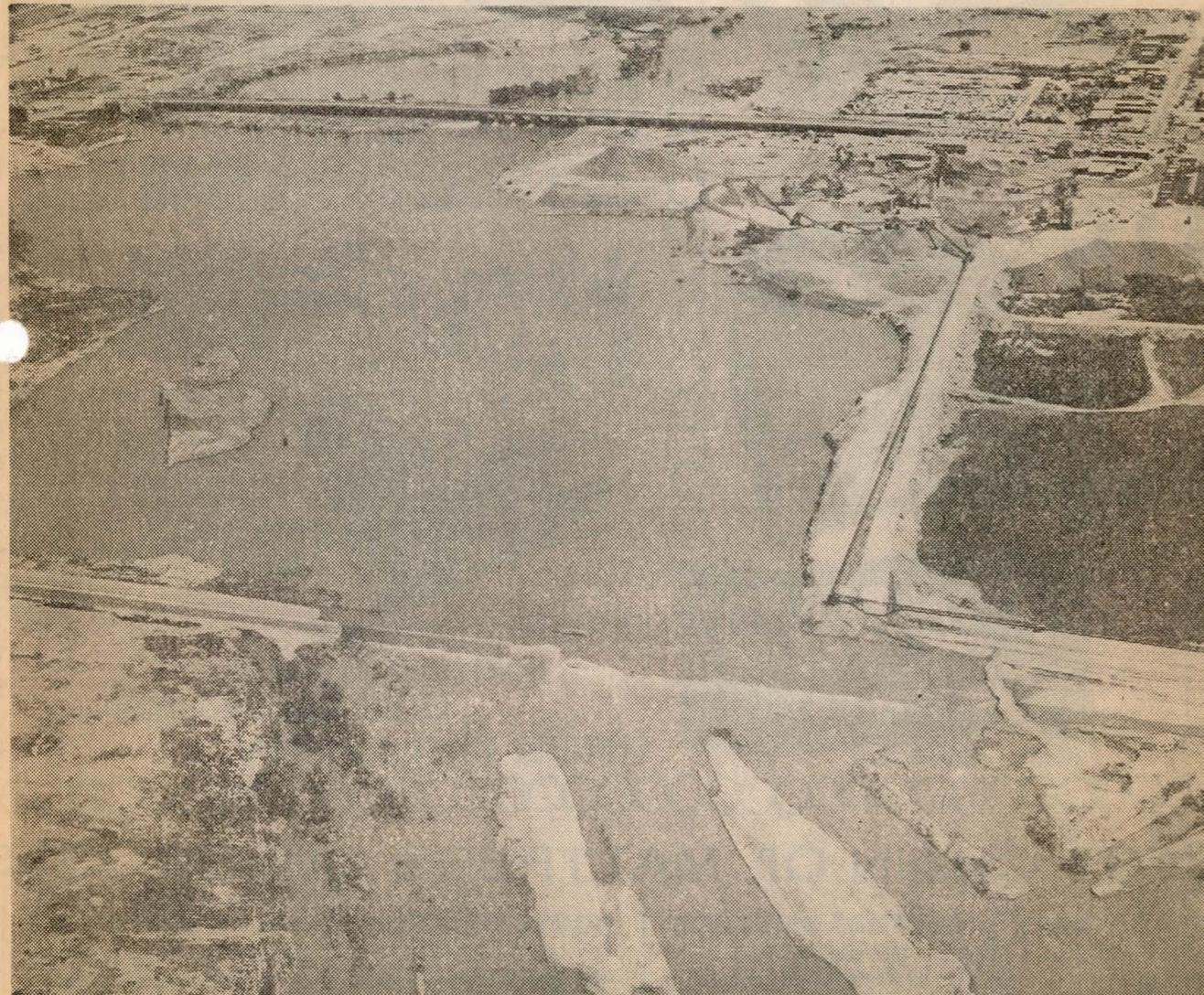
"I emphasize," Mangin added, "that these are approximate figures hastily

compiled and based on applicable statewide averages."

At ASU, Bond said he feels the estimate is "super safe," and probably does not take into account that the majority of the commuting workers are undoubtedly driving to jobs paying more than the "average" \$4,400 annual salary.

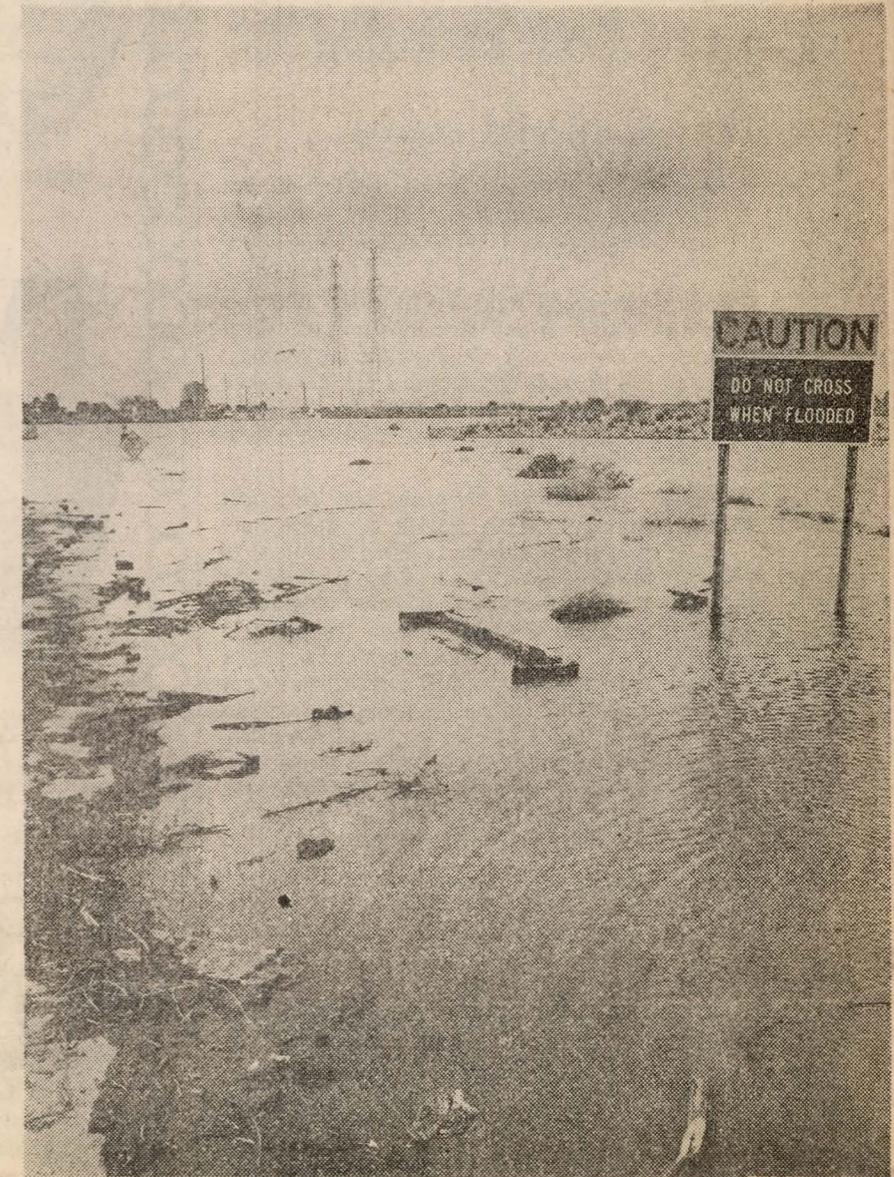
In the next few days The Arizona Republic will examine in detail the problems caused by the lack of adequate river crossings, some plans to alleviate the problem and other plans to do nothing about it.

Tomorrow: The county government, and what it's doing.



Flooding in the river bed of the normally dry Salt River closed the Seventh Avenue crossing, foreground, and flowed into a gravel pit on the South side of the river, owned by the Union Rock and Ma-

terials Corp., 2800 S. Central, dark area at right. At top of photo, taken by Landis Aerial Survey, is the Central Avenue bridge. The Seventh Avenue crossing is still closed.



The Alma School Road crossing at the Salt River bed flooded with surplus runoff water from recent heavy rains and snow melt in the mountains.

Republic photo

2/23/66

Money For Flood Control Makes Interesting Reading

By KENNETH ARLINE
Gazette Staff Writer
(Last of a series)

Interesting discoveries are made in going through the budgets and records of money spent by Maricopa County Flood Control District.

For instance:

- The cost of getting flood control under way included \$171,127.53 in regular salaries and \$457,586 for other "professional services" during the first five years of the district's operation.

- While acquisition of rights-of-way was considered urgent by early leaders of flood control programs, the matter has been relegated to unimportance during the districts' history. In 1964-65, the budget contained \$178,517 for such purchases, but the money was not spent.

- That expenditures went over budget estimates in 17 of the 40 categories in the 1964-65 budget. These included conventions and conferences, \$500 budgeted, \$2,106.75 spent, and mileage allowance, \$250 budgeted, \$3,443.25 spent.

BIGGEST single item (\$176,250) in the \$384,900 budget for 1965-66 is for "professional and specialized services." Like \$457,586 spent in earlier years, this is to pay surveyors, lawyers, appraisers and others doing special work for the district.

This work is in addition to the services provided by John Lowry, flood control engineer; LeRoy Ohsoik, assistant flood control engineer, Jack Karie, administrative assistant, and other salaried workers. The current budget authorizes 11 employees with a total salary of \$56,696. Another \$5,181 is provided for overtime, extra help and employe benefits.

A **RUNDOWN** on other expenses in the 1964-65 fiscal year shows: Salaries and wages, \$33,834.82; extra help, \$4,004.16; postage, \$246.37; telegraph and teletype services, \$200; telephone, \$453.82; liability insurance, \$1,091; memberships, \$30; rents and leases — equipment, \$3,896.25; transportation of objects, \$8.85; other household expense \$10.13.

Smallest individual item was an unbudgeted "construction materials" expense of 12 cents.

WHILE ONLY \$9.91 was spent for medical, dental and laboratory supplies last year, the current budget has \$30 for that purpose. The present budget also has \$3,990 for office expense, \$200 for small tools, \$130 for special expense and \$2,565 for a category designated as "benefits and services received."

According to the budget: A typist earning \$3,492 would use a new \$435 typewriter while seat-

ed on a new \$61 steno chair. She would file her work in either a new \$90 four-drawer filing cabinet or in a new \$94 four-drawer legal size filing cabinet.

Employes have lots of reading material available. A total of \$314 has been spent for books and periodicals since 1960.

Flood control tax money also has helped to swell the funds of the Social Security System and the State Employe Retirement system to the tune of more than \$8,000.

River water to cost \$9 million in lost man-hours

By WILLIAM F. NESBIT

Valley businesses will pay an estimated \$9.4 million in wages to employees who are not on the job because of time lost in trying to cross the runoff swollen Salt River, a study shows.

Since Feb. 21, more than 150,000 Valley motorists daily have been forced to cross the river at as few as five spots because other routes have been flooded.

During that period the Salt River Project has been releasing water from its reservoirs into the normally dry river bed to accommodate heavy runoff from its watersheds.

So far lost man hours have cost Valley businesses about \$5 million.

SRP officials have projected the river flow will continue another five weeks, boosting the expected cost in lost man hours to the \$9.4 million level.

The lost man-hour cost estimates, based on a formula devised by Frank Mangin, industrial-development officer for the Valley National Bank, are in addition to economic losses suffered in other areas.

Such losses include declines in sales-tax revenues due to restricted access to

shopping facilities, erosion and damage to farmland and crops and increased gasoline consumption while cars are idle in long lines waiting to cross bridges.

Slow-moving traffic also increases air pollution from automobiles and frustrates, irritates and angers their occupants.

According to Dr. M. E. Bond, director of Arizona State University's Bureau of Business and Economic Research, the total money losses caused by the lack of adequate river crossings would be "as big as all outdoors."

"I just have a gut feeling," said Bond, "that the cost would scare the hell out of you. It would be astounding."

In each case, officials contacted said they feel the \$5 million lost already — \$156,000 a working day — is a conservative estimate for simply the man-hour aspect of the problem alone.

Said Howard Colquitt, Tempe Chamber of Commerce manager:

"I'm sure the total figure would be staggering, a surprise to everybody."

The problem, a fact to which motor-

Continued on Page A-30

Speaks for eagles

Editor:

The Aug. 16 approval of the U.S. Fish and Wildlife Service of the construction of Cliff Dam on the Verde River has me enraged. I am heartsick, not only for the doomed ethereal and beautiful desert river that will be lost. Don't the people of Arizona realize that it's not *just* the eagles we will be losing? The Sonoran desert riparian community is a unique and swiftly vanishing part of Arizona's rich environmental diversity.

I was one of only two people from Arizona who had the privilege of living near the Cliff nest pair and observing their daily activities during the 1985 breeding season. I found the experience to be one of the greatest highlights of my life. How can those who have only visited the site for a few minutes, or viewed it from a helicopter (Interior Secretary Donald Hodel on Aug. 5), have any appreciation for the Verde or its inhabitants?

The real reason behind Cliff Dam is *not* flood protection, but real estate development. Various measures, such as relocation, have already been taken for flood protection. For example, new bridges have been built and the areas between them channelized so that waters will go through the channels, not up on the banks. The argument that Cliff Dam would supply water is also false.

I personally witnessed the eagles catching fish out of the river right below their nest on numerous occasions. Six miles of river will be lost, with *none* given back to the eagles. All true Arizonans should rally behind protecting this special place of eagles, water and trees.

Nena Renshaw Williams
Missoula, Mt.