

Audubon bird count scheduled

By ROBERT L. THOMAS

Saturday Maricopa Audubon members will participate in the Society's annual Christmas bird count, claimed "the longest-running, farthest-ranging, most popular, least-understood sporting event of the year."

Seventy five years ago the National Audubon Society started the Christmas bird count with 26 birdwatchers.

This year more than 25,000 qualified birdwatchers will take part in counts in all 50 states, 11 provinces of Canada and more than a dozen U.S. territories and Latin American nations.

On foot and by varied vehicle from autos to boats, the birdwatchers will count birds they see and record the species.

Observer teams will be assigned one of more than 1,100 "count areas" and each team's count will be for a single day sometime between Dec. 14 and Dec. 31.

Results will be published in the April issue of American Birds, the Audubon Society's bimonthly journal.

Robert Arbib, editor of American Birds, will participate in the Maricopa Audubon Society's count Saturday.

The Phoenix count began in 1954 with 24 observers who noted 74 different bird species.

In 1973 the Phoenix bird count drew 66 counters who recorded 156 species. Phoenix holds the record for the

most species counted at an inland U.S. city.

The observing area is a 15-mile wide circle roughly bounded by Bullard Ave., 27th Ave., Olive Road and Dobbins Road and takes in parts of the Salt, Gila, New and Agua Fria Rivers.

About 65 to 70 participants are expected, according to Mrs. Janet Witzeman, co-compiler with Mrs. David Demaree of the Christmas bird count.

Arbib said the event's popularity is due to companionship of old friends, the "intrigue of the hunt" and simple outdoors pleasure.

The appeal of the annual count, he said, is shared by noted ornithologists as well as thousands of amateur bird

watchers, including "housewives, school teachers, taxi drivers, writers, farmers, airline pilots, bankers, soldiers and school children."

The count is carried out under safeguards to insure reasonable scientific accuracy.

The result is a 75-year body of data on the winter ranges of American birds. The data has been used in studies of migration, which the Air Force has utilized to avoid bird-plane mid-air collisions.

Last year a total of more than 78 million birds representing more than 1,000 different species were sighted ranging from the Alaskan Tundra to the Caribbean rain forests.



THE ARIZONA REPUBLIC

Phoenix, Sunday, Dec. 29, 1974

Janet Witzeman photo

The ruff, left, a shorebird of Europe and Asia, has been seen for the first time in Arizona. The other two birds are long-billed dowitchers, winter migrants common in the region.

Our Xmas count breaks a U.S. record!

New bird species spotted

A new species—the ruff shorebird of Europe and Asia—has been seen for the first time in Arizona, the Maricopa Audubon Society has reported.

The long legged, robin-sized bird was spotted during the annual Christmas count hosted by the local chapter Dec. 21.

The ruff first was seen Nov. 10 and Audubon members have been keeping tabs on it since.

A total of 162 different species was counted—the third year the Maricopa organization's count has topped 150 birds — over a 15-mile wide circle on the west side of Phoenix.

Sixty five persons participated. They included observers from throughout Arizona and from California, Oregon, Minnesota, and New York.

Including the ruff, observers saw 14 new (for Arizona) species, raising the all-time total species count for the local club to 216 species.

They are the long-billed curlew, great egret, greater semi-palmated plover, Sprague's pipit, Nashville empidonax flycatcher, American redstart, brown western tanager, Hutton's vireo, chestnut-sided warbler, Coues' flycatcher.

Of the 162 species sighted were five different herons, 14 kinds of shorebirds, six types of owls and 13 species of warblers.

The birdwatchers credited the abundance to the ripa habitat along the Salt River between 27th and 115th Aves.

Highest number of birds ever counted in Phoenix Christmas count of 1972 when 165 species were recorded.

To count the night-flying owls, several groups trees and thickets with the aid of flashlights from daylight.

Members have also participated in other bird counts Nogales, Patagonia, and Yuma.

Audubons attack CAP plan

The Maricopa Audubon Society has issued a brochure attacking the Central Arizona Project as a threat to rare eagles and hawks nesting in steamside vegetation that would be inundated or cleared if CAP is built.

Dr. Robert Witzeman, president of the local conservation group, said the purpose of the brochure is to raise money from other conservation organizations interested in preventing CAP.

"It is also a message to the U.S. Bureau of Reclamation that their environmental impact statement did not apply itself to raptors that nest along the sites of CAP reservoirs," Witzeman said.

Audubon official says

Orme Dam to threaten bald eagles

Construction of the Central Arizona Project's Orme Dam will destroy two and possibly three pairs of endangered southern bald eagles, an Audubon Society official contends.

The birds are part of a small band of seven nesting pairs, the last remaining bald eagles in an eight-state area of the Southwest, according to Robert Witzeman, Phoenix physician and president of the 1,000-member Maricopa Audubon Society.

Witzeman offered testimony against construction of CAP in Washington, D.C. last week before public works congressional appropriations subcommittees of the House and Senate.

The Audubon representative said the project would waste vast amounts of electrical energy by pumping water uphill into central Arizona. He said the operation would be equivalent to supplying energy to a city of 800,000 population. Besides the waste of energy, Witzeman said CAP will

Orme adversaries square off

Arizona State University

Thursday

Vol. 1 No. 6, July 8, 1976

summer

state press

Tempe, Arizona

Public hearings start Friday

"It is also a message to the Bureau that they did not explore alternative sites for Orme Dam, such as Lake Pleasant, Adobe Dam, Buttes Dam or Cave Creek Dam, any of which would not cost more than Orme and probably a lot less," he said.

Also joining the Maricopa Audubon Society are Audubon chapters in Tucson, Sierra Vista, Sedona and Silver City, N.M.

Money raised by the brochure will be used to finance the Citizens Concerned About the Project (CCAP).

According to the 12-page pamphlet, CAP "will destroy or seriously degrade most of the last remaining fragments of riparian (streamside) habitat associated with the major watercourses of the Sonoran Desert of Arizona and southwestern New Mexico.

"In the process," continued the publication, "it will probably account for the extirpation of the Gray Hawk from the United States as a breeding species — and potentially

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14 groups fight Orme Dam plan

By JIM BOARDMAN

PHOENIX (AP) — Until recently, most Arizonans accepted the slogan "Arizona Grows Where Water Flows."

But now, 14 organizations representing approximately 9,000 Arizonans, are challenging that policy as too costly in terms of damage to the state's wildlife, recreation, aesthetics and particularly to the Yavapai Apaches, who inhabit 2,400 acres of desert along the Verde River, 25 miles northeast of Phoenix.

CAP will cause "the extermination of the five pairs of Gray Hawks now nesting on the San Pedro, pushing to the brink of extinction in the U.S. a species which, optimistically, numbers 25 pairs in Arizona and one pair in New Mexico," according to the brochure.

Hooker Dam, on the upper Gila River in New Mexico, CAP will flood nesting sites for Zone-tailed and Black Hawks, the publication claimed.

April 13, 1976, Scottsdale Daily Progress

waste large amounts of water through evaporation from the project's four large desert reservoirs. He maintained that the Charleston Dam will evaporate half of the water which flows into it.

Witzeman said the Bureau of Reclamation has considered alternative dam sites which could have saved the eagles.

The Army Corps of Engineers have conducted studies that show simple construction of levees along certain reaches of the Salt River would confer equivalent flood protection and at the same time permit an expanded Rio Salado, Witzeman contended.

By Hal DeKeyser

A face to face confrontation between supporters and opponents of the controversial Orme Dam is expected tomorrow at public hearings on the environmental impact of the project.

The dam, part of the multi-billion dollar Central Arizona Project (CAP), is planned for the confluence of the Salt and Verde rivers.

The Bureau of Reclamation, the agency responsible for design and construction of the dam, claims Orme is the best site for a dam that will provide the Valley with flood protection and store CAP water pumped in from the Colorado River. The water is for

agriculture, industry and municipal users.

Public hearings on the Orme Dam environmental impact statement will be held from 1 to 10 p.m. tomorrow and from 9 a.m. to 6 p.m. on Saturday in the Prescott room of the Phoenix Civic Plaza Convention Center, 225 E. Adams of Phoenix.

Opponents of Orme Dam are pushing for an alternative site to the Verde-Salt confluence. They claim detrimental effects of the dam on the economy, the environment and water quality make it infeasible.

Citizens Concerned About the Project (CCAP), the organization spearheading attempts to block construction of Orme, has enlisted the support of other groups who oppose the dam. The opposition includes the Sierra Club, Young Republicans, ASASU, Committee to Save Ft. McDowell, Orme Legal Fund, Tucson Audubon Society, Maricopa Audubon Society, Water Quality, Arizonans for a Quality Environment, members of the Tucson City Council and Sen. Manuel Pena, D-Phoenix.

At a press conference in Phoenix last week, the organizations outlined their reasons for opposing Orme, and

The dam would kill the San Pedro River!

'Bird watchers' to tackle CAP, Orme Dam

By DAVID LUCAS

An environmental group previously noted for "bird watching" is preparing to take on the federally funded Central Arizona Project on a national scale.

Members of the scientific staff of the National Audubon Society and Massachusetts Audubon Society visited Scottsdale this week to study the CAP and Orme Dam controversies and determine how to bring them, into national attention.

The Maricopa Audubon Society has been one of the most vocal opponents of the water projects and is a principal plaintiff in a suit against the Bureau of Reclamation being heard in federal court this week.

The Arizona Audubon Council, of which Maricopa is a member, requested help from the scientific experts of the societies.

Dr. Joseph Linduska, president for the national society's science program, said the environmental and economic impacts are of national importance because rare

species of birds could be endangered and federal funds are being used for the \$2 billion project.

"We came here with no preconceived notions about the projects," Linduska said. "We are here to evaluate them and determine their national impacts.

"If we decide to participate," he said, "we will try to find ways to stop it (CAP) if possible, or, if the project is inevitable,

controversy into national attention.

Opponents claim the CAP is a waste of money because very little Colorado River water may be available by the time the project is completed and it would not be needed here if water resources were managed properly. They also object to the environmental damage they say Orme Dam would cause to wildlife and the landscape.

Among their first impressions of the CAP, Audubon members questioned the apparent lack of concern by the Bureau of Reclamation about wildlife habitat. They claim work has been started on a Salt River siphon below Granite Reef Dam without a proper environmental impact statement on the possible damage to the habitat of the rare Yuma Clapper Rail.

Related stories, Pg. 3

alter it to make it as least objectionable as possible."

The scientific staff of the societies meeting here include resource economist, two physicists, a biologist and several directors of society programs.

In meetings at the Holiday Inn, members talked with local opponents of the water projects to hear their objections and discuss possible strategies for bringing the

Audubon officials discuss CAP

Top officials of the National Audubon Society are holding a week-long scientific conference on the Central Arizona Project in Phoenix and Tucson this week.

Tuesday scientists from the National Audubon and the Massachusetts Audubon Society, accompanied by members of the Maricopa Audubon Society, toured the site of Orme Dam, CAP's main reservoir and flood control facility.

Among those attending the conference are Dr. Joseph P. Linduska, National Audubon Society vice-president of science; bald eagle experts C. Eugene Knoder and Sandy Sprunt; Richard Plunkett, former editor of the national bird-watching magazine, American Birds; economist Dr. Lee Kopolowski, physicist Dr. James Mackenzie; and pesticide expert Dr. Ian Nisbet.

Phoenix participants include Dr. Rob-

ert Witzeman, Maricopa Audubon Society president, and Frank Welsh, a member of Citizens Concerned About the Project (CCAP).

Scottsdale Daily Progress

LATE STOCKS

YOUR AWARD WINNING HOMETOWN NEWSPAPER

Page 10

Vol. XVI, No. 304 Phone: 947-7544. Classified: 944-9311 SCOTTSDALE, ARIZ., THURSDAY, FEB. 10, 1977 7302 East Earll Drive 50¢ Per Week — 10¢ Per Copy



Yavapais Not Lazy

Editor:

This rebuttal is in response to Senator Barry Goldwater's statement which appeared in the July issue of the Audubon magazine and in part reprinted in The Arizona Republic.

It seems unbelievable that a Senator who has spent so many years as a representative of the State of Arizona could be so misinformed as to refer to the Indians who reside on the Fort McDowell Reservation as Yavapai-Apaches. The total population consists

of approximately 268 of which only 15 are Yavapai-Apaches. Is his remark "that Yavapai-Apaches are lazy" aimed at those 15 Yavapais?

As to the bare existence which we have learned to live with, it would be far better than living in an urban slum which we have seen happen to other tribes who have lost their reservations, and cannot survive or adjust to that kind of strange environment. As for not being ambitious, we have demonstrated that to be untrue by our refusal to allow our ancestral lands to be flooded and turned into a playground for wealthy people.

The tribe is moving toward economic growth and we are doing this at our own pace.

DIXIE L. DAVIS
Scottsdale

AUDUBON SOCIETY representatives from around the country have been meeting in Scottsdale this week to discuss controversies surrounding the Central Arizona Project and its proposed Orme Dam. Dr. Joseph Linduska (left), president of the National Audubon Society's science program, locates on a chart the proposed site of Orme Dam for Eugene Knoder, director of the environmental science program, and Dr. Lee Kopolowski, a resource economist.

Progress photo

The Arizona Republic Thurs., Feb. 10, '77

The Arizona Republic

Fri., July 29, 1977

Environment Award Winners Named

By VICKI CHRISMAN
Special to The Denver Post

The city of Northglenn, the Denver Public Schools Balarat Center and the University of Colorado are among nine recipients of the 1976-77 Outstanding Environmental Achievement Award of the Rocky Mountain Center on Environment.

The ROMCOE awards, presented this week at a luncheon at the Continental Broker, recognize "significant contributions in the areas of environmental awareness, education, action and research in the eight-state Rocky Mountain region.

THE HILLIARD award for the most outstanding achievement, in memory of Edward Hobbs Hilliard Jr., was won by Lois Webster of Aurora.

Webster was a founder of the Denver Audubon Society and is a member of the Colorado Open Space Council, Colorado Field Ornithologists and Colorado Native Plant Society.

The City of Northglenn received the government activity-agency award for its

municipal water project, recycling and water conservation programs and its cosponsorship of a regional solid-waste recycling workshop.

THE BALARAT Outdoor Education Center received the educational award for its ecologically oriented programs, which have reached more than 60,000 Denver students.

CU and KBTV-Channel 9 were the joint winners of the communications-media award for their documentary film, "Water, We Had Best Care."

The citizen conservation activity organization award was given to the Wyoming Outdoor Council of Cheyenne for its organization of a citizen's legislative lobby, monitoring of state agencies and service as a citizen's information source.

DR. ROBERT WITZEMAN, a Phoenix, Ariz., physician, is the winner of the individual award for citizen conservation. He is president of the Maricopa Audubon

Society and has headed many conservation efforts.

Orme Dam protester chosen for award

Oct. 16, 1977 ARIZONA REPUBLIC

Robert Witzeman, Phoenix physician and president of the Maricopa Audubon Society, has been named environmental citizen of the year by a Colorado environmental organization for his work opposing Orme Dam.

Dr. Witzeman guided and coordinated a coalition of conservationists, residents and Indians who opposed the Central Arizona Project's system of reservoirs.

They successfully killed three of the four CAP dams: Orme Dam at the confluence of the Verde and Salt Rivers; Charleston Dam on the San Pedro River near Tombstone; and Hooker Dam in the upper Gila River in New Mexico.

The Rocky Mountain Center on Environment will present Dr. Witzeman with his award at a luncheon

B-4 Sat., Feb. 25, 1978O The Arizona Republic

CAP benefit exaggerated, economist says

A University of Montana economist said Friday the U.S. Bureau of Reclamation has exaggerated the benefits to be expected from a \$1.6 billion investment in the Central Arizona Project.

Thomas Power said his research shows only a nickel's worth of return, in terms of benefits, for each dollar spent on the project to bring Colorado River water to Maricopa, Pinal and Pima counties.

Power spoke at a Phoenix Press Club news conference called by the Maricopa Audubon Society. The society opposes parts of the CAP aqueduct system.

He said he examined state and federal data starting in January. He said he will have a "detailed reading" on the cost to benefit ration of the CAP by April.

"My comments here have to be labeled exploratory," he said.

Power said the public and the Congress need to know more about the benefits to be derived from federal subsidy of the CAP, and who exactly will benefit from the water.

"The Bureau of Recla-



Dr. Thomas Power

mation has used methods that tend to cast the project in the most optimistic light," Powers said. The bureau is building the CAP for the Central Arizona Water Conservation District, a 15-member board elected from the three counties.

Power charged that large benefits which the bureau predicts from

CAP water "are largely an invention."

He said accurate cost-benefit figures will en-

able people and Congress to decide if they really want the CAP.

As he sees it, Power said, the CAP will support marginal uses of water, such as the growing of low-value alfalfa and wheat.

"There is a water suffi-

ciency . . . the problem is allocation of water," Power said.

"One of the most valuable and scarce resources you have in Arizona is water," he said. "You ought to be committing that to higher uses."

A-14 Wed., Mar. 8, 1978O The Arizona Republic

Flood loss blamed on state and SRP by Audubon chief

The president of the Maricopa Audubon Society Tuesday blamed the state's water policies and the Salt River Project for the "urban property damage" caused by flooding in the Salt River last week.

Dr. Robert Witzeman, speaking at a society meeting at the Phoenix Zoo, said it is "Arizona's outmoded water policies" which prevent the SRP from "undertaking a groundwater 'recharge' storage project . . . (which) would allow more storage space for flood control."

Witzeman said a recharge project would free the SRP's "agribusiness-controlled board of directors" from having "to store as much water as possible in its dam for agricultural use."

He said recharging would permit the SRP to release "impounded waters well in advance of rainstorms to provide storage space which would prevent urban property damage."

"Even though the SRP delivery area is more than 50 percent urbanized, their current water policy appears to disregard urban property rights along the Salt River," Witzeman said.

Lon Miller, an SRP spokesman, said the recharge idea "did not work for the pioneers" who settled the Valley and "it would not have prevented the high flows of water in the Salt River."

terior's water project review and only return 58 cents for each acre-foot of water," the project, Witzeman said.

CAP will probably never be an energy crisis will make it too expensive to recharge Colorado River water to

the Colorado River water to be committing that to higher uses."

Miller said the rains were "so heavy and intense that the quantity of water flowing in the Verde River set a record. Furthermore, the quantity of runoff far exceeded the capacity of the lakes on the Verde River, even if they had both been completely empty.

"Horseshoe and Bartlett lakes were about half empty at the time the storm began," he said. "The total content of these lakes, and the rest of the SRP system, was below normal due to a drought which had lasted more than two years.

"It would be unconscionable to release water on the gamble that a predicted storm would produce such a heavy rain," Miller said. "What if it didn't rain? Two of the three storm fronts (that passed through Arizona last week) did not produce the predicted amounts of precipitation."

Miller said the failure of storms to produce predicted rain is common.

Witzeman said there were two methods to recharge water from the Salt and Verde rivers.

The first would be through controlled reservoir releases which would percolate into the sand and travel through the Salt riverbed downstream from the Granite Reef Diversion Dam, he said.

The second would be to use a three-square-mile area of the river bottom containing a series of levees and bays. Witzeman said the Army Corps of Engineers has been studying this method and estimates such an area would be able to recharge more water than the six SRP dams on the two rivers are able to supply annually to Valley users.

Witzeman said the SRP, by reducing reservoir surface area through a recharge program, could save more than 100,000 acre-feet annually of evaporative losses.

He said this also would prevent the loss of an annual average of 50,000 acre-feet of floodwaters which the SRP dams fail to capture.

Audubon birdwatch popular in Arizona

During the last two weeks in December, Audubon members in 19 Arizona localities will be engaged in the so-called Christmas bird counts. On these occasions bird enthusiasts strive to identify and count all birds which can be seen or heard in one 24 hour period in a carefully preselected 15 mile diameter count circle.

Christmas counting is not only an effort to observe annual fluctuations in bird populations in a given count circle from year to year, but also is a social event in which birdwatchers get together for dinner at the end of a rigorous day to tally the often exciting and unexpected discoveries of the day's "hunt."

At times there is a friendly rivalry between various cities and communities to see which locality can observe the highest number of species. Last year Nogales led the state with 152 species, Phoenix was second with 151, and Tucson third with 144.

Nogales and Phoenix have been close rivals for many years, both listing about 150 species each year.

The larger cities in Arizona have the advantage of more bird observers than do smaller towns and communities. But many urban birders enjoy participating in the smaller and often more ecologically diversified outlying areas.

For example, Tucson Christmas count compiler Bill Roe and Arizona Christmas count editor Kenn Kaufmann each participated in eight counts. For these two zealous enthusiasts this meant several stints of all-night driving, such as when one count followed another one on the succeeding day in a locality 200 miles distant. Since Christmas counts are dawn-to-dusk affairs.

Last year Tucson's count marshalled 88 bird observers, the largest number in the state, whereas Camp Verde was the smallest with 4 participants.

The number of species tallied is often a direct function of the enthusiasm of the count's manager. Energetic compilers will entice as many experienced birders as possible to help in their count. Even out-of-state experts are solicited. In fact, Arizonans encourage experienced "snowbird" birdwatchers from northern U.S. cities to share in sunny Arizona's delightful Christmas count weather.

The Phoenix Christmas count with its circle in southwest Phoenix will take place Monday and all experienced birders are urged to participate. To sign up contact Mrs. David Demaree in Phoenix at telephone 266-7579. Tucson's count will be held today.

Christmas Counts located at high altitudes in cold climates such as Flagstaff encounter comparatively few birds. Last year Flagstaff's 10 hearty birders only recorded 42 species making them 15th out of 18 Christmas counts in the state.

But Arizona's warm winter climate especially at its lower elevations has been responsible for this state consistently having the largest number of species of birds of any inland state in the U.S. or Canada. States which are situated along oceans have a great advantage over inland states because of the many sea birds which winter-over in those maritime regions.

Over 30,000 birdwatchers participated in 1,300 Christmas counts throughout North America last year. Freeport, Texas gained first place with 196 species. Coastal counts in California and Florida also contend vigorously for the first place spot in the nation. San Diego, California and Cocoa, Fla., have frequently been traditional winners. Last year Nogales was 40th in the U.S. out of 1200 counts, and Phoenix 41st.

Each year the results of the Christmas counts are published by the National Audubon Society in their publication, "American Birds." One of the most interesting statistics evolving from Christmas counts is the disclosure of the locality in the U.S. which yields the greatest number of individuals of a given species. For example, the Phoenix Christmas count circle encountered the highest number of Gambel's quail (1,430) and mourning doves (3,070) of any of the 1,200 count circles in North America. Also Phoenix captured the nation's highest numbers for some 13 other species of birds, such as, Abert's towhee and Bendire's thrasher.

Tucson had the highest number of Inca doves, cactus wrens and canyon wrens of any U.S. count. Last year Nogales was clearly the sparrow capitol of the nation with the nation's highest tallies on seven different species of sparrow including 12,000 white-crowned sparrows and 9600 chipping Sparrows.

Parker was the Roadrunner capitol of the U.S. last year with 49 of those birds. In Grand Canyon, last year, participants in that count, mostly park rangers and their families, found the nation's highest number of pinyon jays. The tiny community of Portal, situated in the Chiricahua Mountains, garnered the highest numbers of eight different species of birds last year, including such species as Arizona woodpecker and Mexican chickadee.

Some truly devoted Christmas Count participants arise at 1 or 2 a.m. in order to census owl populations which may be detected using voice or tape imitations of territorial calls. The Santa Catalina Mountain count encountered seven pygmy owls last year, comprising the highest number of individuals of that species for the nation. Bird feeder watchers are particularly important in the cold northern U.S. regions where winter food supplies for birds are, at times, limited to bird feeders. In Arizona hummingbird feeders frequently are the only means of canvassing certain species of hummingbirds and orioles.

Carter A Foe Of CAP?

Editor:

I would like to comment upon the following statement from a pre-Thanksgiving article by *The Republic's* Washington Bureau which I believe was misleading — that president Elvis Stahr of the National Audubon Society "ignored a review by the Carter administration that has cleared the CAP for full funding in each of the last two project years."

To say Carter "cleared" the CAP in 1977 or 1978 would be to imply that he believed CAP was a justifiable or cost-effective project. More correctly one should say Carter acceded to political realities. His compromise "hit" list of six smaller "turkeys" was a realization that he could not keep the CAP and other fattest "turkeys" off the Congressional menu. Arizona's Morris Udall, chairman of the powerful House Interior Committee, and John Rhodes, House minority leader, were a significant part of the political realities of the CAP.

President Carter's Water Projects Review analysis in April 1977 concluded that the CAP failed on economic grounds — returning only 57% in benefits for each federal dollar spent. That disgraceful return was based on an "interest" rate of 6.4 percent whereas today Uncle Sam must borrow money at an even higher rate to build the CAP — making the project's return still less.

Nor did Carter show any new willingness this fall to approve the CAP or the rest of the huge turkey dinner which Congress served him. He emphatically vetoed them and diligently (and successfully) jawboned Congress to sustain his veto. The final compromise bill retired six of the turkeys to the barnyard — saving from indigestion an inflation-prone U.S. Treasury which would have had to digest so many well-fattened, overstuffed birds.

LOIS BECKER
Maricopa Audubon Society
(Vice-President) Tempe

NAS President Stahr a strong conservationist!

The Arizona Republic

SECTION **B** Page 1

Wednesday, Nov. 22, 1978

CAP rated a 'turkey' by coalition

Republic Bureau

WASHINGTON — The Coalition for Water Project Review, in a Thanksgiving Eve press release, attacked the Central Arizona Project as a "congressional turkey."

The coalition, comprising the most militant conservation organizations, gave similar labels to 11 other projects.

"These budget-busting water projects are so economically wasteful and ecologically destructive, they can only inflame the taxpayer revolt now spreading across the country," said Elvis J. Stahr, president of the National Audubon Society.

Stahr ignored a review by the Carter administration that has cleared the CAP for full funding in each of the last two project years.

The coalition asserted:

"This is a \$1.6 billion diversion of Colorado River water into Central Arizona as a growth machine for Phoenix and Tucson. To pump this water out of the Colorado basin for distribution in these areas will require as much electricity as is used by a city of 800,000 people.

"Currently, Arizona has a higher registration of pleasure boats per capita than any other state, as well as the world's highest water fountain, shooting a jet of water taller than the Washington Monument. The state has refused to reform its antiquated ground-water laws, which allow over-use of supplies and encourage massive waste.

Study Of Recharge Plan As Orme Dam Alternative Asked

May 30, 1978 *The Phoenix Gazette*

By JOHN CARPENTER
Gazette Reporter

The Maricopa Audubon Society today called upon Interior Secretary Cecil Andrus to make sure studies of a water recharge possibility to Orme Dam are included in the Bureau of Reclamation new \$1 million study of alternatives.

"Recharge would increase the storage capacity of the watershed," Dr. Robert A. Witzeman, Audubon presi-

groundwater table aquifers where it is stored. When needed, it is pumped from the ground and used.

(The recharging system operates by using existing dams to control initial floodwaters (or surplus water), releasing them into spreading ponds or basins, for infiltration or percolation into the ground. The system has been

Turn to ●RECHARGE, Page B-2

The Arizona Republic Sun., Dec. 17, '78 B-5

Wednesday is bird census day

Arizona will be going for the birds Wednesday.

That's when Audubon Societies throughout the state count the numbers and kinds of birds and determine if bird populations are rising or falling.

The counts evoke friendly competition

every year as each city and town tries to find more birds and more species than the other. Arizona is said to have more species than any other inland state.

Last year, Parker counted 157 species. It was followed by Nogales with 154 species; Tucson with 152; and Phoenix with 135. Yuma was

11th on the list with 103 species, and the Grand Canyon was 19th and last on the list with 32 species.

Phoenix led the nation in the number of inca, mourning doves, Costa's hummingbirds, yellow-headed blackbirds and white-crowned sparrows being found.

The boundaries for the Phoenix tally will be Sun City on the north and the Salt and Gila rivers on the south.

Those in the Phoenix area wishing to participate in the bird count, should contact the Maricopa Audubon Society, 4619 E. Arcadia Lane, Phoenix.

Flood Protection Available 'Almost Overnight'

Following is a letter to Dr. Lee Thompson, chairman of the Salt-Gila Flood Control Study's Community Advisory Board, from board member Robert A. Witzeman, calling for alternatives to the Orme Dam.

The needless damages caused by the two recent SRP releases highlight the need for immediate institutional changes which almost overnight could provide flood protection for our community. Our local governments can implement these changes without waiting for the federal government by enforcing existing floodplain regulations, requiring SRP to use its existing six dams for flood control, improving the bridges over the Salt River, and protecting or relocating existing structures within the floodplain:



Witzeman

Local solution to the problem could be accomplished for considerably less than the \$240 million Orme Dam federal proposal. However, the administration is looking for a combination of environmentally positive and economically effective solutions and can be expected to fully cooperate in such a relatively non-structural mix.

The key to the proposed local solution is the enforcement of restrictions on construction within the 100-year floodplain. The law has been on the books since 1973 but some local governments have continued to permit development which of course was flooded by both events last year. This "simple" measure will avert future problems. There are of course developments within the floodplain which were, wisely or not, built before the law was passed. Our society in the past has used general tax revenues to protect these areas. Should we accept this philosophy, then we can build dikes or channels to provide protection and/or we can provide some upstream protection to reduce the flows.

Analysis of the Orme Dam Task Force Report indicates almost \$1.5 million in annual damages can be expected within the 100-year floodplain (195,000 cfs). A slight reduction in the flow to 160,000 cfs will reduce the annual damages to around \$0.5 million. Thus \$1 million in annual damages, fully two-thirds of the damages, can be prevented by a relatively small reduction in flood flows.

This can be accomplished by using the gated top portion of Horseshoe to store the flood peak. The flood storage area can be maintained by recharging its water to the underground aquifer, with local governments purchasing the water if necessary. Local government could also provide a better flood warning system which would per-

mit use of this storage space until storms develop.

The remaining half million in annual damages are essentially those that occurred this year — the airport, bridges and the structures that are well within the floodplain. Rio Salado Phase III uses a flow of 160,000 cfs and carries it in a 1,200-foot-wide channel 15 feet deep. This could readily be constructed for a mile or so to carry flows past the airport at a cost of around \$10 million. The remainder of the floodplain through Phoenix should be maintained as an open space greenbelt which would dwarf the presently proposed Rio Salado. Existing structures within the floodplain can either be relocated or protected with levees for a few more million dollars.

Since Orme's operating criteria require release of 50,000 cfs, and the largest bridge flooded out by the SRP releases was designed to carry only 35,000 cfs, enlargements are indicated with or without Orme. Our existing three floodproof bridges will carry the 160,000 cfs proposed flow rate. The number of additional floodproof bridges is dependent on an economic analysis. The City of Phoenix presently plans two but the largest might pass only 130,000 cfs. It should cost less than a million dollars to increase its size to 160,000 cfs.

Emphasis

Another alternative would use the gated top fifth of Roosevelt reservoir to store peak flows on that river. Combined with Horseshoe, this could reduce the 100-year flood flows to less than 100,000 cfs, and, with surcharge, considerably less. This might save enough tax dollars (through smaller bridges, channels and dikes) to make it worthwhile to change the law governing the SRP. This, of course, is the major institutional problem facing the task force.

Use of Horseshoe does not present such a complex issue since the City of Phoenix installed the gates and should have control over their operation. Also I believe the dam itself was built through bond money, not federal funds like Roosevelt. If legal changes are needed, they can surely be made by the state.

As for Orme's storage (regulatory) function, it is for CAP water, and the purpose of the CAP is supposedly to help alleviate our groundwater overdraft. Therefore what better way to store it than underground? Thus recharge can be used to draw down our existing reservoirs for flood control as well as storing CAP water. The benefits accrued to the community in terms of flood control and regulatory storage, reduced evaporative losses, reduced salinity, and pumplifts

in the Valley, compared with Orme's \$240 million cost, would seem more than enough to make up for the pumping costs.

It should be pointed out that flood-related deaths will not be prevented by Orme's 50,000 cfs release. Mid-stream velocities both above and below 50,000 cfs have proved to be very treacherous.

Other popular misunderstandings concerning Orme Dam are related to that structure's ability to conserve or capture floodwaters — officially pegged at 41,000 acre-feet annually. From February through May the conservation pool is designed to be full of CAP water. When water rises above the conservation pool during a storm and enters the flood control portion, safe operating criteria (during the flood season) require outflows to equal inflows up to 50,000 cfs. This is in order to provide sufficient space in the event another storm should occur as it did in 1891.

The level of the conservation pool during flood season is based on the availability of the Colorado supply and our local watershed conditions and it is difficult to predict what the reservoir level would or would not have been in a "typical" year.

Members of this advisory board, and our Valley's taxpayers who would be required to pay for the \$240 million Orme Dam with increases in their property taxes and water bills, should be aware that the previous Task Force brought to light information which showed that Orme's economic benefits had been miscalculated (grossly exaggerated) and that its dollar costs far exceeded its dollar benefits. The Bureau's exaggerated "benefits" figures were contradicted by Task Force data developed from SRP calculations for the value of an acre-foot of water. The SRP Task Force figures were confirmed by an analysis of the U.S. Department of Agriculture. Subsequently even a pro-Orme U.S. congressman presented data supporting the SRP calculations.

Arizonans seeking a flood control and a regulatory alternative should also realize that the administration is now firming up federal guidelines which closely scrutinize the cost-effectiveness of water projects with the intent of separating economically justified projects from wasteful boondoggles. The so-called federal "Principles and Standards" guidelines now being refined will require federal dambuilding projects to meet uniform and accepted accounting standards. Such refinements will unquestionably take the Orme Dams of this nation off the drafting boards and into the waste basket.

In conclusion, this advisory board would be well advised to consider alternatives which can be both economically and environmentally justified. Those alternatives are immediately available for the benefit and protection of the citizens of this valley.

NATIONAL CAPITAL
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NATIONAL AUDUBON SOCIETY

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than \$20/af. CAP provides water at more than \$100/af. The single purpose BR invention provides M&I water at \$200/af. "This sort of pricing system encourages grossly irrational uses of water which then impose very costly solutions on the entire population." (p. 7)

At the price of CAP water, enough groundwater can be mined to permit Arizona's groundwater overdraft to continue for several centuries. Legal changes would encourage the highest valued use of water and also solve the "human-created scarcity" of water in the Phoenix area.

The equivalent of 1/4 of the CAP water supply will be used to cool new

An Economic Analysis of the Central Arizona Project A Summary

INTRODUCTION AND CONCLUSIONS

The Central Arizona Project (CAP) will cost the U.S. taxpayer \$5.4 billion in subsidies. It will return less than 35¢ in benefits for each federal dollar invested and works in opposition to national socio-economic objectives such as supporting family farms, conserving scarce resources, etc.

Arizonans receive almost no value from this "gift" that will cost them more than \$5.1 billion. The CAP may be primarily an urban water project disguised in farm reclamation terms and does not contribute to a solution to excessive groundwater mining in central Arizona. There are numerous more constructive and less expensive alternatives available.

CHAPTER I - NATIONAL INVESTMENT

Much of the \$1.8 billion capital cost of the CAP will be repaid--but at low (3.342%) or no interest. Compared with a 7% market rate, the interest subsidy alone is more than \$3.5 billion. Almost \$2 billion in subsidies will go for non-reimbursable costs and for interest during construction for a total cumulative subsidy of \$5,471,092,000.00. (p. 2)

Municipal & Industrial (M&I) Benefits

To establish the value of M&I water, the Bureau of Reclamation (BR) assumed a "single purpose alternative" would be built and financed with private money. Since private capital would not be available at 3%, a high positive benefit can be calculated by the BR. Almost one-half of the CAP's direct benefits are arbitrarily created in this way. (p. 4)

The BR alternative "is an expensive creation of their own imagination which would never be the alternative chosen by the municipalities in central Arizona." In the year 2020, urban water consumption will amount to only 45% of central Arizona's already available renewable water.

Phoenix residents flood irrigate their lawns at a few dollars per acre-foot (af). Tucson has considerable water resources available to meet its future needs and has been buying out farms to provide M&I water at less

CAP will not produce "new" water. Two-thirds of the water will be taken from present uses in California. The remainder will come from the hope that Utah does not develop its share of Colorado River water. The basic problem with the CAP is there is not enough water to support it. Plans to augment the river extend to the Columbia River and even to the Yukon, at a cost of \$200 billion. Inclusion of these costs would reduce the b/c ratio well below 9.25. (p. 27)

CHAPTER II: CAP AS A SOCIAL PROJECT

One of the primary objectives of federal reclamation projects, according

There is plenty of unused irrigable land near the Colorado River where CAP water originates. Use of CAP water there would save energy, water and tax dollars, increase agricultural production and encourage dispersal of central Arizona's growth. "BR states that absolute levels of urban population will not be affected significantly by the project." (p. 43)

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MAG:RAW:tat

New Dam Unneeded

Editor:

A recent letter to the editor from the Central Arizona Project Association adds an interesting perspective to the flood control controversy, and we agree with the premise that flood control must be accomplished, preferably with flood flows captured and stored for later use by the Valley. We would add to that a concern that the flood control method chosen be the best available, both economically and environmentally.

A new dam, however, would not be the best means of reaching these goals. As anyone familiar with the proposed Orme Dam controversy knows, this expensive structure would flood (1) most of an Indian reservation whose residents do not wish to move, (2) nesting habitat of the endangered Bald Eagle, and (3) the only riverine recreational area conveniently close to the Valley.

Underground storage of water

right here in the Valley along the Salt River bottom, could serve the two-fold purpose of a new dam—water storage and flood control—with less expense and without flooding significant areas.

Portions of the six existing upstream dams could be vacated without economic loss if the water were to be stored underground. This vacant space would provide all the flood protection Phoenix and the Valley would ever need.

Water stored underground would not evaporate like surface water; close to 10 percent of the water in the Salt-Verde reservoirs are lost by evaporation when they are full. Also, there is much more space available in the underground aquifers for water storage than any new dam could provide. Thus underground water storage would be a better protection against future long-term drought.

Recharging the underground reservoir would raise water levels in many of the Valley wells. This would save energy for Valley cities and farmers and the SRP. This reduction in pumping cost should be especially significant during the summer peak power demands.

The Arizona water establishment has ignored underground water storage because archaic Arizona water law makes it disadvantageous. It is fortunate that currently a groundwater commission is working to revise and modernize our groundwater code.

The CAP Association's letter falsely accuses us of an emotional bias against dams for any purpose anywhere. For example, in 1973 this Society issued a news release endorsing construction of the three Army Corps Dams in north Phoenix—Cave Buttes, New River, and Adobe Dams.

Contrary to the CAP Association's pro-Orme bias, we believe that the best flood control solution on the Salt River will include a mix of changing Arizona water law, building bridges and dikes, and utilizing existing SRP reservoirs.

THOMAS DANIELSEN
Maricopa Audubon Society

MAS publicity chair! → Phoenix

Letters To The Editor

MARCH 16, 1979

The Phoenix Gazette

Dam Analysis

Your recent editorial on the snail darter and the scrapping of Tellico Dam is quite different from your news article on the Tellico decision which appeared two days earlier.

The decision to abandon Tellico Dam was only partially influenced by the threat it posed to the endangered snail darter. The updated economic analysis revealed it would cost more to operate the dam than the dam's benefits warranted (\$7.22 million in annual costs compared to \$6.5 million in annual benefits according to your page one article).

In addition, the TVA builders of the dam pointed out to the Tellico review committee that the "no dam" alternative would prevent the inundation of \$40 million worth of valuable farm land.

Instead of rebuking those who were concerned over the extinction of a species, we should be thankful that their efforts resulted in an unbiased economic analysis that convinced the federal government to stop a waste of tax dollars and the restoration of valuable riverbottom farmlands.

A federal dam-building agency, in order to have its projects approved by Congress, must present calculations which show benefits exceeding costs. According to the Bureau of Reclamation, most of Orme's dollar benefits are based on its ability to store extra CAP water and to capture Salt and Verde floodwaters.

The Bureau claims the water the dam would store is worth \$98 per acre-foot for agricultural purposes. However, the Orme Alternatives Task Force reviewed a number of studies in 1977 which showed the water to be worth less than \$25.

Orme Dam's cost/benefit figures were computed back in 1968 when the project was authorized. Newer 1973 federal guidelines called "Principles and Standards" would throw out Orme's archaic cost/benefit computations and jettison Orme (like Tellico) as much for its economic problems as its environmental pitfalls.

One cannot put into an economic analysis certain intangibles which would be lost forever. There are many places for flat water recreation in central Arizona.

But Orme would eliminate one of the few places remaining for river-based recreation, as well as the essential habitat of the world's only desert-nesting bald eagle population — which requires these last remaining reaches of river for its survival.

Nor does an economic analysis fairly consider the price to be paid by society for the cultural and social disruption of an entire Indian tribe which would be forcibly uprooted from its homeland.

CHARLES M. MONROE
The Maricopa Audubon Society
(Treasurer) Phoenix

National Audubon group calls CAP 'wasteful and inefficient'

TUCSON (AP) — The Central Arizona Project is a waste of money since state residents will receive almost no value from it because its water will be very expensive, a University of Montana economist says:

A study by Thomas M. Power, chairman of Montana's economics department, was released today by the National Audubon Society, which opposes the CAP. The study called the CAP "a grossly inefficient investment from a national point of view."

Power said in his study that despite billions of dollars in federal subsidies being spent for the project to bring Colorado River water to Arizona's

cities and farms, city residents and farmers still will have to pay a lot of money for the water.

Based on that, Audubon society President Elvis J. Stahr sent a letter to President Carter today, saying the report "brings to light distressing information on benefit-cost miscalculations by the Bureau of Reclamation."

Reclamation officials have estimated that the final cost of the project, including pumping stations, canals, reservoirs and aqueducts, will be between \$1.8 billion and \$2.8 billion.

Despite that spending, Power's report said, water from the CAP will be much more expensive than what urban residents and farmers pay now

in the state. For farmers, Power said, "The costs and risks are likely to be too great."

For farmers, estimates are that the base cost of CAP water will be about \$2 an acre-foot. But Power said operating and maintenance costs for the project could raise that to \$48 an acre-foot.

A 1974 report done in Tucson showed the city may have to pay \$134 an acre-foot, compared with \$20 an acre-foot being paid at the time for underground water.

Stahl said in his letter to the president that the society has "deep concern about the incompatibility of the Central Arizona Project with sound water policy."

Audubon Society 'Disappointed' With CAP

Gazette Bureau

WASHINGTON — The National Audubon Society said it is "disappointed" the Carter administration is going ahead with the Central Arizona Project, describing it as a "raid" on the federal treasury.

supported his "forthright efforts" to reform the water resource policy, but added:

"WE ARE, however, becoming increasingly perturbed by seeming inconsistencies in that reform effort."

Appearing with Stahr at the press session was Dr. Thomas Power, chairman of the University of Montana's department of economics. Power directed a research project funded by the Mellon Foundation to analyze seven "controversial" federal

water projects. His CAP analysis is the first of the seven to be released.

Power said his CAP study was much broader than just economic.

"Although I did look closely and critically at the Bureau of Reclamation's calculus of costs and benefits, my interest was more in the social rationality of this project, for it seemed clear to me that many of these water projects were never intended as "efficient" investments of the taxpayers' funds," Power said.

He expressed belief that CAP "is really a \$5 billion subsidy from the U.S. taxpayer and not the \$1.8 billion repayable loan claimed by its supporters. The economist said his figures show a .35 percent benefit-cost ratio rather than the much higher Interior statistic.

POWER said in his statement:

"CAP is not a 'reclamation project at all. Agriculture is being used as a cover to build a water project to serve one of the most prosper-

ous, fastest growing areas and some of the most profitable industries in the nation. And, they do not need it."

For years, the Audubon Society opposed construction of CAP because the aqueduct would disturb the nests of a handful of endangered bald eagles.

The birds were almost lost in the press session.

The only mention was that one of CAP's four proposed dams would "require relocation of an entire Indian tribe and threaten two of the remaining seven pairs of endangered bald eagles nesting in the Southwest."

But Dr. Elvis J. Stahr, Audubon president, told a news conference his organization will wait for answers to questions submitted to the White House before calling for complete abandonment of the Arizona project.

Stahr's letter to President Carter raised 10 questions concerning funding of CAP and eventual use of the Colorado River water.

The president was advised that the 400,000-member society had

Carter warned of fight over CAP

Republic Bureau

WASHINGTON — The National Audubon Society on Monday threatened to call for abandonment of the Central Arizona Project unless President Carter satisfactorily answers questions the society has submitted.

Dr. Elvis J. Stahr, the group's president, told Carter in a letter Monday that the 400,000 members of the Audubon Society were getting unhappy with "inconsistencies" in the reform of water resource policies.

Stahr called CAP a "raid on the Treasury" during a news conference. The \$1.8 billion project, designed to bring Colorado River water to central and southern Arizona through a series of aqueducts, is expected to be completed in the 1980s.

Dr. Thomas Power, a University of Montana economist, attacked CAP as a "cover" for building a water project to serve "one of the most prosperous, fastest growing areas and some of the most profitable

industries in the nation."

Power told reporters that his analysis of the CAP was one of seven the Audubon Society will release.

The society asked Carter to explain why CAP was reinstated in 1977 when review showed it had a less than one-to-one cost-benefit ratio.

It also asked the president if Arizona has implemented water conservation measures since 1977 and questioned whether taxpayers should be forced to

pay for a project to help Arizona farmers grow surplus crops.

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The Phoenix Gazette

Tues., Mar. 27, '79 A-5
The Arizona Republic