

DAILY NEWS SUN

December 8, 1993

# Taxpayer group to tap water rights

By IAN MITCHELL  
Daily News-Sun staff

The chief subject the Sun City Taxpayers Association will scrutinize next year won't be taxes — it will be water.

Cliff Cowles Jr., president of the association, said controlling water rights is the "single-most important issue we'll face as taxpayers."

Speaking at a special membership meeting Tuesday in Lakeview Recreation Center, Cowles said Citizens Utilities has an advantage over Sun City residents because the firm has the ear of the state Department of Water Resources and the Arizona Corporation Commission.

"It's time for the pendulum to swing," he said.

Cowles and Ken Larkin, chairman of the Taxpayers' utilities committee,

presented a list of the association's water concerns before an audience of about 50 people.

Fred Kriess, general manager of Citizens Utilities, attended the meeting but did not speak.

"There was no invitation given for us to make a presentation," Kriess said after the meeting. The Taxpayers' presentation discussed only "a third" of the story, he said.

Cowles said Citizens' extension of service to the Coyote Lakes development in Surprise through its Sun City Water Co. subsidiary is "technically illegal" without a certificate of convenience and necessity from the corporation commission.

The commission has never penalized a utility company for expanding without receiving the formal permission, Larkin said.

Pat Williams, a representative of the corporation commission's consumer service office, said the commission does not have any record of granting a line extension agreement for Coyote Lakes, although such an agreement is required, he said.

Citizens' application for a certificate of convenience and necessity to serve the Surprise development is pending before the corporation commission.

Kriess said Citizens received line-extension permission from the commission in 1984. The commission has since changed the rules for expanding a private utility's service area, he added.

"We've been advised by the commission to the extent that (if) a new Coyote Lakes-type project would

See Board objects, A3

## Board objects to surcharge

—From A1

come along in the future, for us to provide water service ... we're going to have to get a certificate and also approved line extension agreements," Kriess said.

Association board members said they also object to the conservation surcharge on higher-volume Sun City water customers.

"Any way you look at it, it's a rate increase," said Cowles. "Sun City is the only community paying a conservation surcharge in the state of Arizona."

After the meeting, Kriess said he is not aware of how widespread such surcharges are among private utilities, but said the 14.9 cents per

1,000-gallon charge goes to recover the costs of Citizens' conservation program.

"The surcharge is designed for us to recover dollar-for-dollar the amount of money we spend," he said. "It is not a money-making proposition for us."

The surcharge was approved by the corporation commission, he added.

Also at the special meeting Tuesday, members of Taxpayers unanimously elected Gene Levy, Ruby Rasmussen, Bob Stumpf, Preston Welch and Richard Wiesler to three-year terms on the group's board of directors. The five ran unopposed.

# Water concerns flow freely in West Valley

By Lori Baker  
Staff writer

SUN CITY — Most Sun City residents don't give much thought to water, but they should stop taking it for granted, community leaders say.

"If it comes out of the faucet tasting good, many people think there's no problem," said John Vickery, chairman of the Sun City Home Owners Association water resources committee.

To bring attention to potential water problems, the Home Owners Association sponsored a forum Nov. 23.

"Water is the economic lifeblood for the future of communities," Bill Beyer, an attorney and engineer, said at the forum. "Property values increase where water is available."

For decades, politics has influenced which part of the Valley gets water supplies. An example is

the Salt River Project's Arizona Canal, which for years has delivered water to major cities in the Valley.

The western portion of the Valley — except Glendale and part of Peoria — depends on pumping ground water to meet its requirements.

Until 1980, ground-water pumping was not considered a problem. But legislators decided that controls need to be placed on pumping ground water and that other sources of water are needed.

The 1980 Groundwater Management Act requires developers to show that they have a water supply to last 100 years before proceeding with construction, and it calls for conservation requirements on each ground-water user. This affects cities, towns, private water companies and groups such as the Sun City Recreation Centers.

Concerns over water helped unite West Valley communities.

"The northwestern corner of the Valley has been viewed as having no power, but we're changing that," Beyer said.

The Western Maricopa Coalition — made up of representatives of West Valley communities — has exerted political clout in recent water controversies involving county, state and federal agencies.

For example, Westmarc helped reverse a state law that called for taxing pumped ground water. Since Sun City and some other West Valley cities depend solely on ground water, this tax was expected to hit the west side hard.

Sun City and Sun City West residents, too, have lobbied legislators and state officials to protect the quality of water in the community.

They figured heavily in the fight against the proposal for the Cholla

Landfill, which some residents said could contaminate the water supply. The landfill application was denied.

Another controversy involves expansion of the Glendale Municipal Landfill. Although Glendale officials say there is no threat to the Sun Cities' water supplies, Sun Cities residents are not buying it.

"Sun Cities residents have an incredible voting block and incredibly experienced people in water issues, and they should use this to control their destiny," said David Iwanski, chairman of Westmarc's water resources committee.

Water not only is needed in the Sun Cities for household uses but to irrigate golf courses — an important part of the retirement communities' lifestyle.

The Central Arizona Project Canal also brings water into the Valley. But Glendale is the only West Valley community taking the

water. All Valley residents, however, will be paying for the construction of the CAP canal.

"The quality of ground water is much better than Central Arizona Project water, so we should continue to use ground water as long as we can," said Sun City resident Gene Jensen, a retired engineer who specialized in water resources.

Another issue being discussed is putting effluent — treated sewage — into the ground to replenish the water table. This is occurring in Sun City West.

Meanwhile, Sun City Water Co. General Manager Fred Kriess said his company recently completed an in-depth study of water in its service area.

Results of the study will be discussed with community leaders later this week. In addition, the report will be highlighted in January at a forum for customers.

# Little agreement on water reserve

By IAN MITCHELL  
Daily News-Sun staff

Whether Sun City's water glass is half-full or half-empty depends on who you ask and how you phrase the question.

Citizens Utilities and the Sun City Home Owners Association have sponsored separate studies of the area's groundwater, and while some of their research has similar findings, many of their conclusions are quite different.

Ed Dapples, a retired Northwestern University geologist who conducted the HOA study, said the average groundwater level in the area is rising — the water level in some wells is up 40 feet — but water levels have dropped in more than half of Sun City West and most of Sun City south of Grand Avenue.

Water pumping in those areas should stop, Dapples said.

Over-pumping of groundwater can lead to fissures and settling as has been observed on and around Luke Air Force Base, he added.

"You've got to keep water in these sediments in order to keep them from settling," Dapples said, adding that he has seen some fissures at the southwest corner of Sun City which indicate over-pumping.

Dave Frohnen, operations manager of Citizens Utilities, said he does not know of any ground settling in Sun City.

"There is no accurate means to project the future amount of ground subsidence," he said. "The science is a long way from being able to do that."

Though neither Citizens' nor the HOA's study has been released, both appear to agree that groundwater levels in Sun City-area wells vary. Over the past decade, the water level in some wells has risen while it has decreased in others, the reports indicate.

"There have been areas of groundwater decrease not too far from Sun City, but there have also been areas of groundwater rise," Frohnen said.

See Sides look, A5

# Sides look to address CAP allocation

—From A1

Citizens' study shows well-water levels since 1983 have risen by as much as 20 feet in northern Sun City and fallen by about the same amount toward the southern end of the retirement community, Frohnen said.

Those findings sound similar to parts of Dapples' study, which says that an underground fault running roughly along Grand Avenue divides the water supply.

North of the fault, water levels have generally risen, while south of the line they have dropped, Dapples said.

Dapples' study "destroys a lot of the myth about water decreasing throughout the Valley," said John Vickery, chairman of the HOA's water resources committee. "What it does show is through the past 10 years, some places have gone up and some places have gone down."

Vickery and Dapples said the HOA report shows the need for more study and research of the area's groundwater.

"We're making judgments on water management based on a lack of scientific data," Vickery said.

Dapples said the water north of the fault seems to be higher-quality, with lower salt levels and fewer dissolved minerals than water south of Grand Avenue.

Groundwater south of the fault may be higher in salt and total dissolved solids because it is closer to the Luke Salt Dome, a natural deposit of salt under Luke Air Force Base, Dapples said.

The retired geologist said he is concerned that recharging water south of Sun City could spread higher salt concentrations to the retirement community's wells.

Frohnen said Citizens doesn't see a threat of high-salinity water infiltrating its wells. Sun City's water is some of the highest quality in the area, he said.

Dapples has said his study does not address how long the groundwater beneath Sun City will last because that prediction depends on forecasting

the future population and industry of the area.

That question is the central focus of the Citizens report, which is being conducted by two consulting firms. The study will project construction and growth trends in the company's service area through 2040, but that part of the research has not been completed, Frohnen said.

"The key question that's still out there — we haven't made a decision one way or another — is does it make sense to hold on to our CAP allocation?" Frohnen said.

Citizens has an annual allotment of 15,835 acre-feet of Central Arizona Project water through its Sun City division and 1,439 acre-feet through its Agua Fria division.

By way of comparison, Sun City's total water usage for 1992 was about 11,700 acre-feet, Frohnen said.

"We like the idea of CAP water as a long-term additional water resource," Frohnen said. "What we're struggling with right now is the cost

of CAP and whether or not it is absolutely needed."

The raw cost of CAP water is about three times the expense of groundwater, Frohnen said.

"We think CAP water is a good resource for the state; whether or not it's good for Citizens Utilities and the Sun City Water Co. remains to be determined," he added.

Frohnen said Citizens may have an opportunity to renegotiate or cancel its CAP allotment in mid-February based on the conclusions of its study.

The company will present a draft version of its report to local community groups in mid-December and plans a completed version by the end of January.

Frohnen said the company will have a sign-up list at the HOA's forum Tuesday for people interested in receiving a copy of its study.

Copies of Dapples' study will be available after the forum for 50 cents at the HOA office, 10401 W. Coggins Drive.

# SC taxpayers file \$195 million suit

## Suit claims utility is overcharging

Daily News-Sun staff

The Sun City Taxpayers Association has filed a \$195 million lawsuit against Citizens Utilities claiming the company has overcharged Sun City customers because its filings for rate increases were inaccurate.

The suit, filed Feb. 19 in Connecticut U.S. District Court, includes an estimate that Sun Citizens overpaid the utility by \$65 million and asks for interest and triple damages under the federal Racketeer Influenced and Corrupt Organization Act.

In Citizens' annual report, the utility notes that the suit has been filed and states, "The company believes this action lacks merit and intends to vigorously defend against all claims asserted."

SCTA President Clifford Cowles Jr. Cowles said the taxpayers' group did not announce the suit when it was filed because "we thought that there was an opportunity, perhaps, for the lawyers to get together and come to some sort of settlement before it became common knowledge. But that didn't occur."

Citizens, a Stamford, Conn.-based company, has filed a motion to dismiss the suit, which has not yet been ruled on by the court.

"The Sun Cities Taxpayers Association made substantially the same allegations that are now contained in their federal court action in a regulatory proceeding before the Arizona Corporation Commission in 1986. The ACC rejected those allegations then and we are confident that the taxpayers association's latest effort will be equally unsuccessful," said Brigid Smith, Citizens director of corporate communications.

Citizens is the parent company of the Sun City water and sewer companies.

In the suit, SCTA alleges that between 1968 and 1978 Citizens' sub-

---

**"(Citizens Utilities) overstated the asset base on which their rates are based and therefore they've been allowed to charge more than they should."**

**Clifford Cowles Jr.  
SCTA president**

---

sidiaries' filings for rate increases with the Arizona Corporation Commission were inaccurate because they overstated the amount the company had actually invested in the water and sewer system serving Sun City.

"Between 1968 and 1978 Sun City Water Co. invested no more than approximately \$11,840,440 in property, plant and equipment rather than the approximately \$16,196,000 which it represented to the Arizona Corporation Commission in rate applications," the lawsuit states.

The Sun City Sewer Co. also overrepresented its investments by about \$2 million, the suit says.

The SCTA claims that Citizens' rate applications included about \$8.6 million in expenses that were fictitious.

Because of the allegedly inaccurate filings, the commission, which sets utility rates in Arizona, fixed Sun City water and sewer rates at unfairly high levels, the association claims in its lawsuit.

"They've overstated the asset base on which their rates are based," Cowles said, "and therefore they've been allowed to charge more than they should."

# Phase I medians may dry up

## County panel mulls desert landscaping

By IAN MITCHELL  
Daily News-Sun staff

After more than a year of discussion and planning, a \$2.15-million proposal to change the landscaping of medians in Phase I of Sun City is before the county's Transportation Advisory Board.

If approved, the grassy medians between 99th and 111th avenues south of Grand Avenue and north of Olive Avenue will be partially replaced with water-saving desert landscaping.

Citizens Utilities financed a conservation plan for the medians as part of an August 1991 agreement with the Department of Water Resources.

In exchange for the median plan and other conservation measures, the agreement exempted the utility from excess water usage fines through 1993.

Between 45 and 50 acres of medians are in Sun City's Phase I. The medians, owned and maintained by the county, use about 57.7 million



Mollie J. Hoppes/Daily News-Sun

Ed Lydon of Sun City walks his dog, Duffy, in the median of 107th Avenue near Connecticut Avenue. A proposal before the county Transportation Advisory Board would cut water use by converting some grass medians in Sun City's Phase I to desert landscaping.

gallons of water a year at a cost of about \$45,000.

The conservation proposal was unveiled in July 1992. Under the proposal, parts of the medians, which are now Bermuda grass with citrus and palm trees, would be replaced with desert landscaping and decomposed-granite paths.

Most of the desert landscaping would be concentrated in commercial areas, with grass and pathways near residences.

Planners have said the new medians would use about 24 million gallons of water a year at a cost of about \$23,200.

The median conversion plan has

been included in a capital improvement program awaiting consideration by the Transportation Advisory Board, said Kent Hamm, assistant county engineer.

The advisory board may discuss the plan at its June 21 meeting.

After the board has considered the capital improvement program, it will be forwarded to the Maricopa County Board of Supervisors for final action.

Hamm said the \$2.15 million median project would take seven years to complete. The staff proposal budgets \$50,000 for work in fiscal 1994 and \$350,000 for landscaping work each of the next six years, he said.

The medians are owned by the county and maintained by county employees with assistance from the Sun City Prides. Until May 1992, Citizens gave the county water for the medians at no charge, but meters have since been installed and the county is billed for its usage.

Hamm has said the labor and water costs of maintaining the medians costs the county about \$135,000 a year and that the proposed landscaping would cut that cost by \$30,000 to \$40,000 annually.

# Citizens initiates water study

By IAN MITCHELL  
Daily News-Sun staff

The Northwest Valley's water supply will be the subject of a study announced Monday by Citizens Utilities.

Dave Frohnen, manager of operations for Citizens, said the study results would guide the utility's future operations.

Citizens Utilities, through several subsidiaries, provides water and sewer service to Sun City, Sun City West and much of Surprise.

"What we're looking at doing is coming up with a plan to assure that the service area that we serve has 100 years of water supply and (we're) looking at the best ways to do that, whether it means drilling more wells or using Colorado River water or using other sources of water," Frohnen said.

"We want to look at the future needs of the area and the supplies of water."

Citizens has hired Water Resources Associates and BRW Inc. to conduct the study, which Frohnen said will cost the utility about \$70,000.

Frohnen said Citizens announced the study to the water advisory group about six weeks ago and has also notified the Surprise city officials.

The water advisory group is a panel made up of representatives from the Sun City Home Owners Association, the Property Owners and Residents Association of Sun City West and the recreation centers of both communities.

"We want to work with the community leaders, with the water advisory group and devise a plan at some intermediate stage," Frohnen said. The intermediate plan will be presented to the public at a forum in July, and the study will be completed sometime in August, he added.

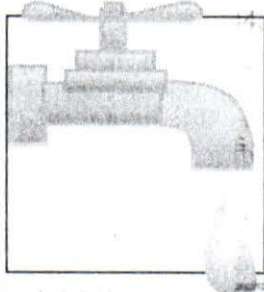
John Vickery, chairman of HOA's water resources committee, said Citizens announced the study as a diversionary tactic to draw attention from HOA's proposal of forming a water district in Sun City.

Citizen's study could be biased toward the utility's desire to expand, he added. "They can have the study say whatever they want to say if they're paying the guy (conducting it)."

Citizen's also provides water to Coyote Lakes, a 308-acre development north of Bell Road in Surprise. It also has filed a request with the Arizona Corporation Commission to provide CAP water and groundwater to the proposed Rancho Cabrillo development north of Sun City.

Frohnen said the study was "totally independent of the recent HOA actions."

Citizens, he said, has "been wanting to do this for quite a while ... the existing studies are a bit out of date right now."



# Struggle for water HOA to study need for local water district

By KATHLEEN WINSTEAD  
Sun Cities Independent

A Sun City Home Owners Association committee is looking into the possibility of forming a water district in order to protect the water rights of local residents.

During a May 11 meeting, the HOA Board of Directors gave its Water Resources Committee the go-ahead to proceed with a feasibility study on the creation of a Sun City water district.

John Vickery, chairman of the committee, believes local water rates could go up if Citizens Utilities Co. is allowed to supply water to areas outside of Sun City. In addition, Mr. Vickery says the area's 100 year assured water supply could be jeopardized.

"A water district has all the powers of a municipal corporation with respect to water," he says. "A water district has the right and the duty to assess taxes."

According to Mr. Vickery, three possible approaches to forming a water district will be studied. A water district could be formed to purchase the Sun City Water Co., the Maricopa County Board of Supervisors could act as a governing board to regulate the water district or area residents could elect a board of governors to oversee the operations of the water district.

The feasibility study will involve a sampling of the population and the preparation of petitions which may be presented to area residents on November 23 when the next HOA forum will be held.

"We'll react to our constituency," he says. "We don't have a groundwater problem yet. We have cheap, good water under us and we're afraid it's in jeopardy."

"The Department of Water Resources is trying to identify a way Sun City can come up with a water district where we don't have to acquire the water company. That's being researched," says the HOA director.

To form a water district, HOA must gather the signatures of a majority of persons who own property within the limits of the proposed district or 51 percent of those who own land within the limits of the district.

After collecting the required signatures, HOA would have to post a bond. A hearing would be held and the county Board of Supervisors would make the final decision.

"We're not objecting to Citizens Utilities and the way they deliver water to us. We simply want to have a voice in our destiny the way municipalities have," adds Mr. Vickery.

Jim Mattison, a member of the Water Resources Committee, says forming a water district is preferable to incorporation.

"One, we can incorporate. Two, we can form a water district. There's been no real progress on water rights since 1988. About all we've been able to do is block action," he says.

"We're in worse shape today. Our right to groundwater has been taken over by bureaucratic agencies. One of our big problems is we have no consensus of opinion by the Sun City Taxpayers Association, the Rec Centers or HOA. All three of our organizations should share a common objective.

"We must realize that Sun City exists in name only, as a subdivision. We have no right to take any action as Sun City. We're volunteers. We are represented right now by the Legislature and the county. We can't be served by a for-profit corporation and protect our own interests."

While the Water Resources Committee embarks on a feasibility study, HOA plans to intervene in a case involving Citizens Utilities supplying water and sewer services to Coyote Lakes, a 769-home development located between Sun City and Sun City West.

The case will come before the Arizona Corporation Commission for approval or rejection later this

year. Intervention will allow HOA, along with the Sun City Taxpayers Association which also is intervening but for different reasons, to present testimony before the commission. The commission regulates privately

owned utilities in the state.

Both the Sun City Water Co. and Sun City Sewer Co., subsidiaries of Citizens Utilities, have asked for a Certificate of Convenience and Necessity that would extend to a 400-acre section west of Sun City.



# Sun City water district could face 'tough battle'

By IAN MITCHELL  
Daily News-Sun staff

Forming a Sun City Water District would be "a tough battle" according to the chairwoman of the state board which regulates utilities.

Marcia Weeks, who heads the Arizona Corporation Commission, was in Sun City Friday to address the League of Women Voters on a variety of utility issues.

In answer to one league member's question, Weeks said she had not heard of the Sun City Home Owners Association's plans to investigate forming a water district in the Sun City area.

HOA has proposed the district as a method of imposing limits on Citizens Utilities, the company which owns the Sun City Water Co.

The association's board members have said they are concerned about how the utility's service to areas outside Sun City will affect the retirement community.

Under one type of water district being examined by the homeowners group, a water district would charge local residents property tax and purchase the Sun City Water Co. from Citizens.

"You're looking at a tough battle," Weeks said. "You may be able to do it."

Weeks said Citizens would fight condemnation of its Sun City operations. "They're not going to give up Sun City easy," she said. "You're excellent customers, you pay your bills."

After the meeting, Weeks said she didn't

know the rules governing the establishment of a water district.

"They certainly have the ability to form a water district out here," she said. "Whether or not its necessary, I don't know."

Citizens' administration has improved in recent years, Weeks told the league members. "The old people are gone at the top," she said. "The heartless, greedy, old management is gone."

In addition to water issues, Weeks also discussed electric rates Friday.

Weeks said the electric rates charged by Arizona Public Service Co., which serves the Sun Cities and much of the Northwest Valley, should stabilize.

APS has raised rates for a total of 15 percent over a 10-year period, she said.

"That's not bad when we had to put in all of Palo Verde into the rates," Weeks said. The cost of APS's share in the nuclear power plant, the largest in the nation, had to be reflected in the rates the commission allowed APS to charge, she added.

Now that construction at the power plant is completed and APS has instituted cost-saving measures, rates "will remain stable for quite a long time in the future," Weeks predicted.

The utility came in \$44 million under budget last year, she added. "APS is doing so well that they may not even come in for a rate increase the next time they can."

# Water company's actions protested

By Lori Baker  
Staff writer

SUN CITY — A community leader says it's unfair that Sun City has to conserve water while its water company is piping water to a new housing development in Surprise.

Cliff Cowles, president of the 23,000-member Sun City Taxpayers Association, questioned why Sun City Water Co. can provide water to the Coyote Lakes development while the company is under a state conservation mandate. The water company serves about 26,000 homes.

Coyote Lakes, which is under construction northwest of 115th Avenue and Bell Road, will have 768 homes, a golf course and commercial development. Although sandwiched between the Sun Cities, it will not be an adult community.

Sun City Water Co. says it is

permitted to obtain new customers.

The water company struck an agreement with the state Water Resources Department in 1991 to reduce water use. The company in 1992 began charging customers higher rates based on consumption. An education campaign also was launched to encourage homeowners and businesses to conserve water.

Cowles said he also fears that the costs involved in providing the new service will prompt Sun City Water Co. to seek a rate increase in the future.

"Someone has to pay for the pipes that are going in to serve this new area," Cowles said.

However, Fred Kriess, general manager of Sun City Water Co. and Sun City Sewer Co., said there will not be a rate increase request because of the new development.

See WATER, Page 4

## WATER

From Page 1

He offered to meet with the association board to discuss members' concerns.

Kriess said the agreement with Coyote Lakes' developer will not have an adverse impact on the company's ability to meet its water conservation goal.

Kriess said he has requested that the state water department adjust the water conservation goal to recognize Coyote Lakes.

The new development, which will have about 1,200 to 1,400 residents, did not exist in 1980. That's the year that the water company's conservation target is based on.

Water has been provided for construction at the site for about a month. Pulte Homes has begun building model homes in Coyote Lakes.

The water company is seeking permission from the Arizona Corporation Commission to expand its

service area to include the Coyote Lakes houses and other developments. An application was filed in February, and a hearing has not yet been set.

Cowles said the taxpayers association would oppose the water company's proposal to serve Coyote Lakes.

Kriess said the water company had an agreement with the former property owner in 1984 to provide water. But the owner went bankrupt.

The water company recently struck an agreement with the new owner, Lakepoint Development Corp.

In addition to Coyote Lakes, the water company began providing water in February to Baptist Village in Youngtown. That retirement apartment complex is within Sun City Water Co.'s service area, which was approved by the Corporation Commission.

# Utility tests water in Sun City homes

## Samples sought from 100 houses

By MIKE GARRETT  
Daily News-Sun staff

SUN CITY — Citizens Utilities will sample water at 100 Sun City homes during the second stage of its lead and copper testing program this week.

Citizens tested 68 Sun City West homes last month and found only one home with a water supply that failed to meet the lead content standards set by the Environmental Protection Agency.

That home's water lead content was tested at 50 parts per billion. The acceptable EPA lead standard is 15 parts per billion. No Sun City West homes exceeded EPA's acceptable copper level of 1,300 parts per million.

Citizens is conducting its water sampling program to meet stricter nationwide drinking water standards mandated by the 1991 EPA Safe Drinking Water Act in conjunction with the state Department of Environmental Quality. Homeowners are being asked to volunteer water samples for testing.

"We're expecting lower readings for Sun City than for Sun City West," said George Del Castillo, manager of administration for Citizens Utilities. "We may not get any readings at all in Sun City for lead and copper because the (water) lines are so old."

"The inside of the pipes (in Sun City) homes) have become coated (with particulates in the water) enough over the years so they're sealed off from direct contact with the water and any copper or lead," he said. "EPA has asked us to target homes newer than 10 years. But the newest unit we've found in Sun City is 11 years old."

Del Castillo said the 100 Sun City homes will be selected for testing from Sun City phases 1 through 3 from south of Grand Avenue to north of Bell Road. Homeowners were selected randomly from among those who indicated an interest in partic-

ipating in program.

"We're hoping to be able to acquire 60 good samples from these 100 households, the minimum required by federal law," Del Castillo said. "Those results should be available in about two weeks. Households will be advised by letter of their specific results."

The average lead content of samples from Sun City West tap water was less than 5 parts per billion, the cutoff point for labs to detect measurable lead content, Del Castillo said.

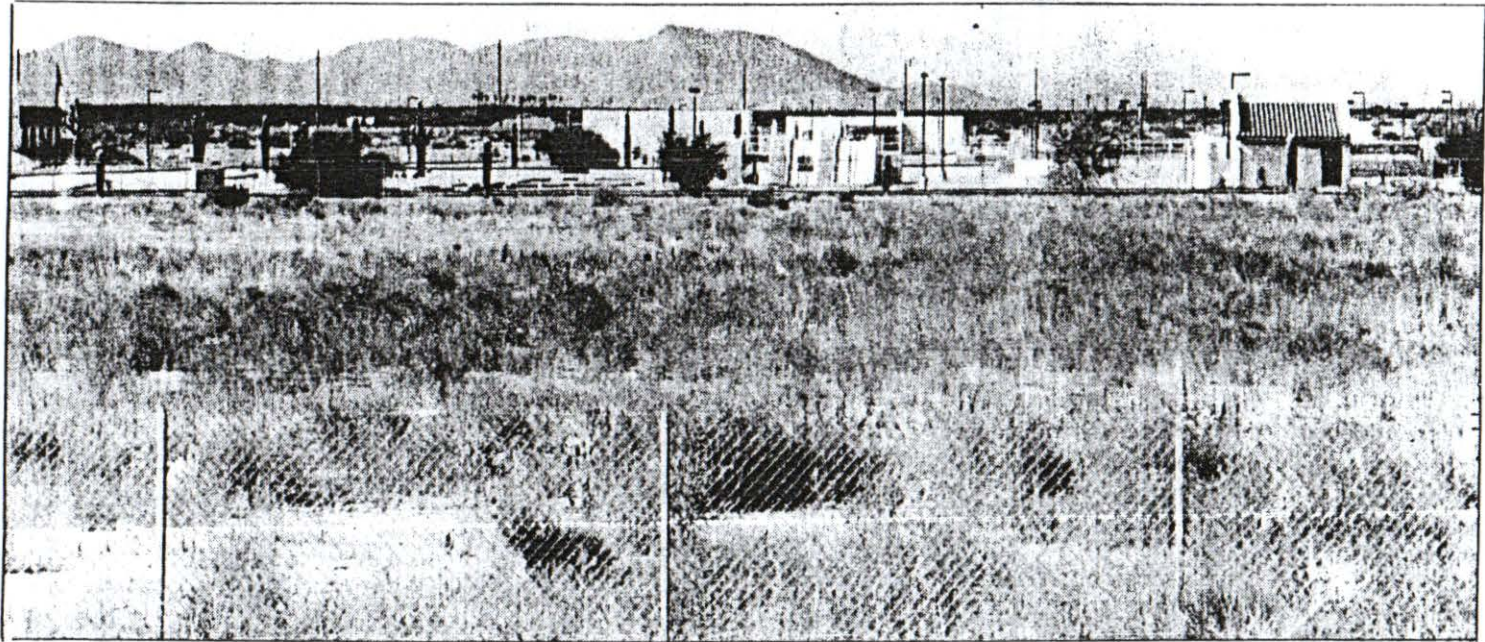
An EPA-appointed panel of water experts has established a compromise level of 15 parts per billion between what water quality people say is safe and what the public thinks is acceptable, Del Castillo said.

■ EPA studies show that lead levels are likely to be highest in homes with lead pipes and service lines; homes with copper pipes joined with lead solder; homes less than five years old where leaching water has the greatest effect; or in homes equipped with brass faucets.

The studies show that residential plumbing systems are a major source of lead in drinking water due to a chemical reaction that occurs between the water and the lead pipe or lead-based solder used to seal areas where pipes are joined.

■ The selection process also involves contacting the local building and safety inspector (Maricopa County) and the builder of Sun City homes (Del Webb Inc.), to identify whether lead or copper pipes or lead solder were used in some homes.

■ Del Webb has used a 95-to-5 percent ratio of tin-to-antimony-based solder on pipes used in all Webb homes built since 1986, said Martha Moyer, manager of public and community relations. "Homes haven't been constructed with lead pipes since World War II," she said.



Rick D'Elia/Daily News-Sun

The Arrowhead Water Reclamation Facility in Glendale supplies reclaimed treated wastewater to the

golf course and other greenbelt areas in the Arrowhead Ranch master-planned community.

## Experts call effluent safe for irrigation

*Second in a series*  
By DAN BURNETTE  
Daily News-Sun staff

Some people think "reclaimed wastewater" is a bureaucratic euphemism for sewage.

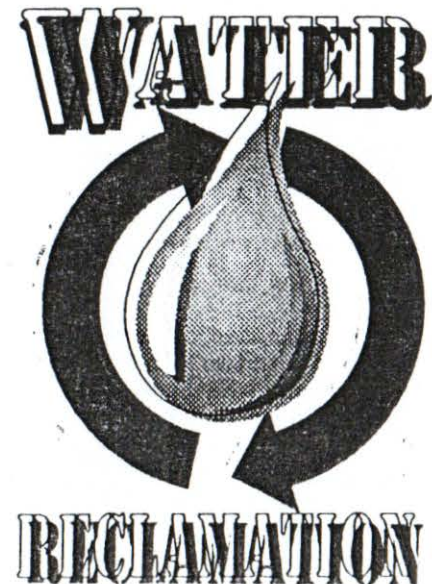
But the phrase really describes the end product of a set of mechanical, biological and chemical processes that duplicate much of what Mother Nature does to recycle the world's water supply.

At the Arizona Department of Environmental Quality, officials prefer to

use the term "treated effluent" to describe what often is called "reclaimed wastewater" in the debate over whether to use this recycled form of water for irrigating parks.

John Godec, a spokesman for the Department of Environmental Quality, said "treated effluent" describes where the water comes from, but concedes the term may seem unappealing to the public.

"Treated effluent does start out as  
See Bacteria, fungi, A5



# Bacteria, fungi help break down pollutants

—From A1  
effluent, or sewage, but it's treated in a number of ways so that the bacteria, viruses and other harmful material are removed," Godec said. "What you end up with is water that's safe for irrigation."

Wastewater is created in every household and most businesses. Wastewater includes the water that runs down the drain from cooking and cleaning, and the waste washed down bath drains and toilets. The waste flows to treatment plants, where it must undergo three processes to make the water safe and useful for irrigation.

Primary treatment uses screens and settling tanks to remove solids from the wastewater. About 35 percent of the harmful "ingredients" of wastewater are removed at this point.

The secondary stage involves the use of bacteria and oxygen to break down some of the pollutants.

People generally think of bacteria as harmful, but beneficial bacteria are everywhere. One of the uses of beneficial bacteria and fungi, or simple plants, is to "eat" pollutants in wastewater.

The wastewater is aerated, or allowed to mix with oxygen, which allows beneficial bacteria to grow. Sand and fine gravel are used to remove small particles. At this point, 85 percent of the pollutants are removed.

Creating "treated effluent" (or "reclaimed wastewater") requires a third stage — disinfection. This stage can involve the use of chlorine or sunlight. The extracted solids, called sludge, are carted off to be composted for enriching farm and forest land, while the treated effluent is used

for irrigation.

Treated effluent, under Arizona's standards, is approved only for irrigation, but the standards are high enough that the water is comparable to the quality of water in a typical swimming pool and exceeds the quality of water set for recreational lakes.

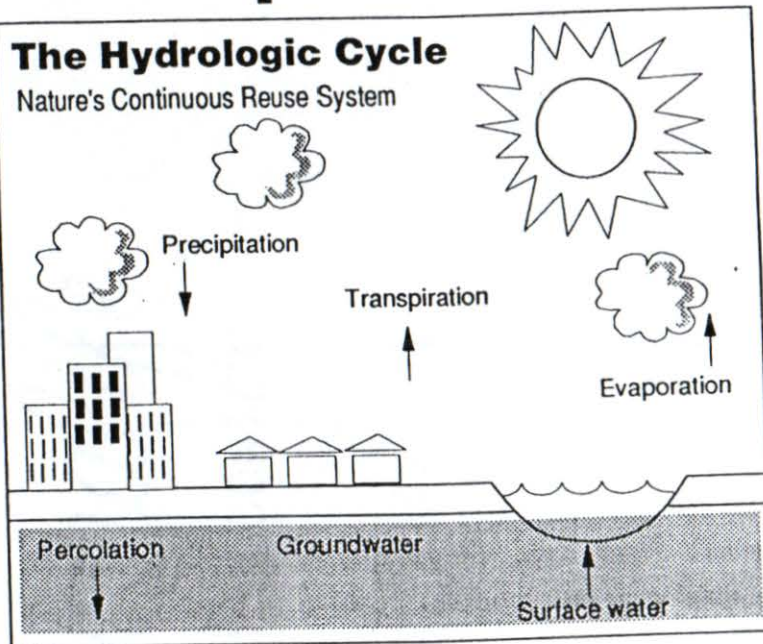
Treated effluent does have minute amounts of some bacteria or viruses, but the traces are too low to cause infection.

The fact the state does not permit treated effluent under present standards to be used as drinking water doesn't mean it isn't safe for irrigation.

Additional treatment could make treated effluent safe for consumption; the city of Denver is using higher-standard treated effluent for part of its drinking water supply.

## The Hydrologic Cycle

Nature's Continuous Reuse System



Source: *Journal of Freshwater* 1986-87

Daily News-Sun graphic

# Hearing to air median landscaping

By JACQUE PAPPPAS  
Daily News-Sun staff

SUN CITY — A proposal to change the grassy medians in Sun City Phase I to a combination of turf and desert Sonoran landscaping will be unveiled at a public meeting July 20.

Sun City Water Co., a subsidiary of Citizens Utilities, developed the landscaping option in an effort to comply with a conservation plan requiring the company to meter and bill for all water used on the medians.

The Department of Water Resources is requiring Citizens to analyze the potential water savings on the medians by proposing an alternative landscape proposal.

The median proposal will be presented at an open house from 2 to 7 p.m. July 20. The location of the open house will be announced at a later date.

While Citizens was charged with finding an option to reduce the amount of water used on the medians, the proposal is not binding, said George del Castillo, compliance coordinator for Citizens.

"We will present this idea to the county for consideration, but they will go through their own project approval process," del Castillo said. "This is only a recommendation for an alter-

native design that uses a lot less water."

Gary Lasham, with the county's operation's division, said the county does not have plans in its five-year budget for landscape modifications on the medians.

"We are looking at this from a dollars and cents view, but I think the politicians are going to make the decision. There is some obligation from Carole Carpenter's office to do something on this," Lasham said.

Lasham said he has heard that it could cost about \$2.5 million to relandscape the medians, many of which are 60 feet wide.

"It's a lot of money for median work. They are going to present the public with a colorful chart of what could be done, but there is no obligation on the county's part once the concept is turned over to us," Lasham said.

Citizens hired a landscaping design firm to develop a low-water use plan to save at least 6.5 million gallons per year used to maintain the medians.

The firm surveyed nearly 300 local residents who attended a public meeting on the medians on March 30 and developed the plan in part by using their suggestions.

In addition, about 100 people

filled out a written survey on what they think should happen to the medians, del Castillo said.

Of those who filled out the written questionnaire, 48 favored desert landscaping, 29 favored turf, 12 favored a combination and seven had other preferences.

One of those people is Sun Citian Ricky Rekiere who walks her dog, Chauncey, on the medians every day.

"I wish they would just leave the medians alone. They are wasting water by letting it all run on the street and watering after it rains. If they would stop doing that they would save water," Rekiere said.

Although del Castillo would not release cost and other details of the options considered, he said that the final plan combines desert and turf landscaping. In addition, the option includes handicapped access, low-maintenance plants, and an area to exercise and walk pets.

"Unfortunately there hasn't been a good clear consensus of what the public wants. There is strong opposition to retain the grass and strong opposition to go all desert," del Castillo said. "We've tried very hard to include everybody. Unfortunately, when you don't have a clear consensus and you have to come

up with a compromise you don't please everybody."

Del Castillo said the design goals and objectives were: provide a safe, pleasant environment useful to adjacent residents; respect the existing image of Phase I; provide unity throughout the development; and to reduce the gallons of water used per day on the medians.

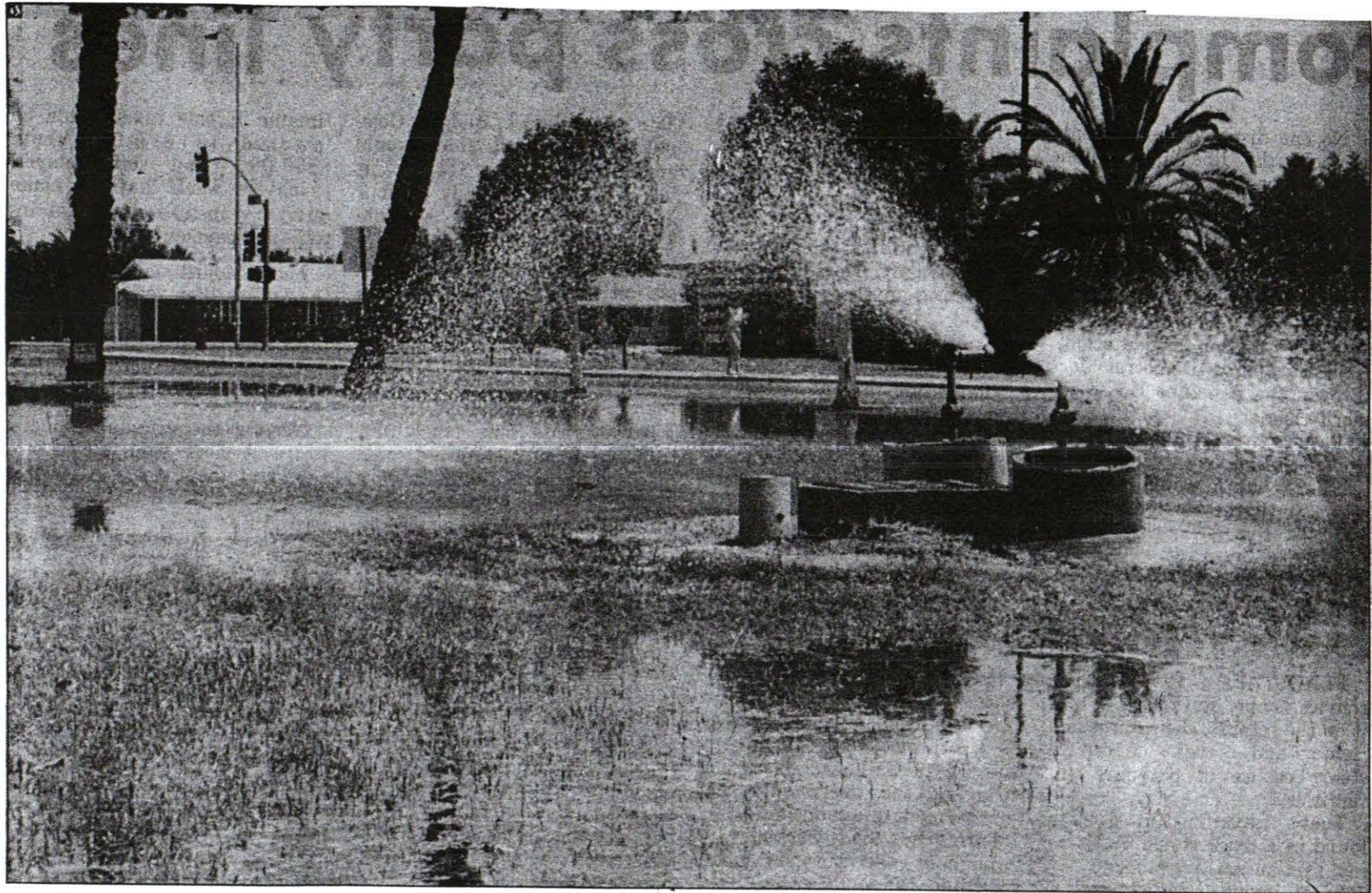
"They (landscaping firm) studied the cost and water requirements for each option. The research has been thorough," del Castillo said.

For example, the plan calls for more intensive desert landscaping near businesses and more turf near the residential areas.

Del Castillo said the plan also allows for the landscaping to be phased-in over five years so "the county wouldn't have to incur the price all at once."

In the past, Citizens has provided water at no charge to Maricopa County, which in turn provides the maintenance for the medians.

But as of May 1, the county took full responsibility for both the maintenance and watering costs of the Phase I medians between 99th and 111th avenues south of Grand Avenue to Olive Avenue.



Phase I medians may be converted to a combination of turf and desert landscaping as efforts are made to conserve on

water in Sun City. A proposal will be made by Sun City Water Co. at a public meeting July 20.

Frances Guarino/Daily News-Sun

# Condo goes dry with landscape to save water

By JACQUE PAPPAS  
Daily News-Sun staff

SUN CITY — All it took was a change of scenery for residents of a local 12-unit condominium to conserve water in Sun City.

People living in Clair Vista Condominiums, located in the 10400 block of Clair Drive, just completed converting their front lawns from grass to desert rock and plants.

"Now that water conservation has become a common topic, we decided to discuss what do about it here at our condominium," said Claire Wheadon, who has lived in the unit since it was built 28 years ago.

"Fifteen years ago when we started thinking about water conservation people thought it was ridiculous because Sun City is between two rivers. But today the time has come where we are in a water conservation dilemma."

In January, Wheadon, chairman of the condominium group, and other members met and decided to form a landscaping committee.

"We had minimal resistance, but all the residents came through with the financial assistance needed to put in desert landscaping," Wheadon said.

The residents hired a landscape architect to make blueprints and arrangements for the transformation of grass to desert plantings.

In March, the first plans were drafted and on Monday the project was completed, said Preston Gatten, who served as chairman of the landscaping committee. He was assisted by several condominium residents.

Workers removed three inches of sod from the front lawns and replaced it with gravel and desert plants.

Now the front lawns boast small sloping hills of sandstone-colored rock and a variety of cacti.

"This was an ideal setting for desert landscaping. We had no trees in the front and everything is fairly flat," Gatten said. "Everybody seems to be pleased."

Condominium residents were able to go to the nursery and see what type of desert plants were available. Among the selections were yucca and golden barrel cacti and several Joshua trees that will be planted later this year.

Gatten would not say how much the relandscaping project cost, but said that the group's main objective was to conserve water.

"There is no way with the water costs the way they are that you could recover the cost of landscaping until about 15 years. Our concern was not trying to save money, it's a case of trying to save water," Gatten said.

About one-third of the condominium is now desert landscaping, Gatten said. The residents' decided to keep grass in their backyards.

Gatten said he estimates that the condominium will save 45,700 gallons a month.

"People who come by observe and ask questions. I'm sure some will approve and disapprove," he said. "I hope this helps some people make up their minds to go ahead with desert landscaping."

Wheadon said she will present a detailed report to the Sun City Condominium Chairmen Association so other condominium units interested in converting their grass lawns have a model to follow.

"There will be no need for overseeding with rye, no fertilizer, no water, less gardening costs, no more stolen sprinkler heads and no grass clippings to fill our bulging landfills," Wheadon said.

Fred Kriess, manager of Citizens Utilities' Sun City office, said the company has literature available to residents interested in making improvements to conserve water inside and outside the home.

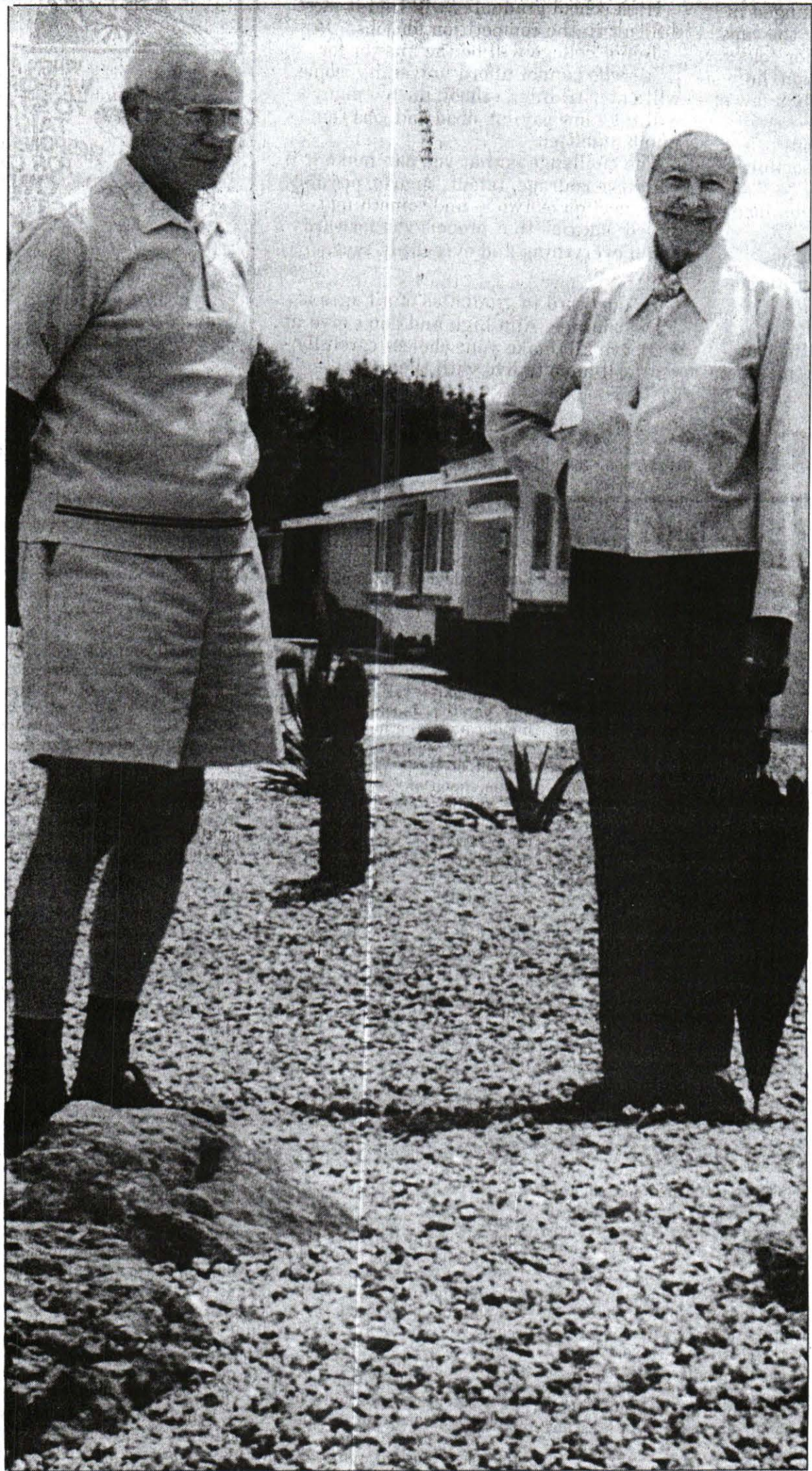
"We endorse any measures that customers can take to conserve water and we are appreciative of the efforts made by this condominium group," Kriess said. "It's an example that others should follow."

Kriess said 60 to 70 percent of the water used by local residents is used outside the home.

"The condominiums that have grass are among our larger water users as far as our residential customers are concerned," Kriess said.

He said George del Castillo, the company's regulatory compliance coordinator, has plans to soon involve the condominiums in a water audit program.





Jacque Pappas/Daily News-Sun

Sun Citizens Preston Gatten and Claire Wheaton stand in the newly landscaped desert garden in front of their 12-unit condominium. The residents of Clair Vista condominium had all the grass removed from their front lawns in an effort to conserve water.

# Board reports on water

## Specific CAP uses outlined in Sun City

By Lori Baker  
Staff writer

SUN CITY — When the West Valley begins using Central Arizona Project water, it should be primarily for agricultural and irrigation purposes, the Sun City Home Owners Association board said.

Ground water — which now is the sole source of water for Sun City and most West Valley communities — should continue to be used for domestic uses, such as drinking, the HOA board said in adopting water resource management goals May 12.

The HOA plan will be given to the U.S. Bureau of Reclamation for its study on how West Valley communities and private water companies could begin using their CAP allocations. The CAP is a cross-state concrete waterway — consisting of open canals, tunnels and siphons — that delivers water from the Colorado River near Parker to central and southern Arizona.

West-side communities — with the exception of Glendale — do not have the distribution lines and treatment facilities needed to take their share of water from the CAP aqueduct.

The HOA water management goals call for a twofold water system for the West Valley.

The first should be a "safe, taste-acceptable, high-quality domestic system which will cause minimum damage to household plumbing and appliances." Ground water would be for domestic uses.

Secondly, there should be an irrigation system adequate to service "municipal and recreational facilities and to preserve property values and community ambience." CAP water could be used for irrigation.

Jim Mattison, chairman of HOA's water resource committee, said "the Bureau of Reclamation wants to study optimum use of CAP water. California would like to grab that (CAP water) and take it away from us."

Enough CAP water to serve about 140,000 West Valley residents annually is flowing to California because CAP allocations are not being used, officials said.

One of the proposals being considered by the Bureau of Reclamation is storing the West Valley communities' share of CAP water in the ground to replenish the water table, and those communities would be given a tax credit toward the amount of ground water pumped.

Sun City has a CAP allocation, but Citizens Utility, a private water company, has no immediate plans to use the water.

Ground-water use will become more costly in the future because of a new state ground water replenishment tax.

The tax will be levied on ground water pumped in communities in the Phoenix Active Management Area that encompasses the Valley, and will be used to finance a replenishment district. The district will store water not immediately needed from the CAP and other sources for future use. The program will be phased in over 15 years.

HOA has been working with the Western Maricopa Coalition on redrafting the replenishment district legislation so that credit could be given for CAP water that is stored under ground.

Coalition communities are Avondale, Buckeye, El Mirage, Gila Bend, Glendale, Goodyear, Litchfield Park, Peoria, Sun City and Sun City West, Surprise, Tolleson, Wickenburg and Youngtown.

See WATER, Page 3

# WATER

From Page 1

The west-side's CAP entitlement is 40,000 acre-feet annually. An acre-foot — which would serve 4.8 people for a year — is the quantity of water that would cover an acre to a depth of one foot.

Glendale is the only west-side community using CAP water, but it is using only about 11,000 acre-feet of its annual allocation of 14,000 acre-feet, city officials said.

The HOA board said a water plan must provide for the needs of the projected municipal and industrial development of the West Valley.

"Retirement communities should be considered as industries (centers of employment) rather than conventional communities," the report says.

Also, the plan says the water needs for Luke Air Force Base should be recognized because the base is "vital to the welfare of the West Valley and defense of the United States."

**"Retirement communities should be considered as industries (centers of employment) rather than conventional communities."**

**HOA water plan**

The plan calls for water conservation, even in periods of oversupply.

"A water conservation ethic must be instilled in the general population — and in community leaders and developers," the plan says.

HOA President Dixon Wightman said it is important that the Bureau of Reclamation knows what Sun City residents want.

"It (the plan) lays out a blueprint of where we've been and where we want to go. It's a long-range plan," Wightman said.

# Water company solves a growing problem

By JACQUE PAPPAS  
Daily News-Sun staff

SUN CITY — The Sun City Water Co. has come to the aid of a local club that is trying to grow vegetables for the Westside Food Bank.

"I think this is just wonderful," said Jim Little, president of the Sun City Agricultural Club. "The water company really cared about our problem and really came through for us."

For the past three years, the club has grown and harvested thousands of pounds of lettuce, green onions, turnips, carrots, beets, cabbage and other vegetables for needy families in the Northwest Valley.

But because of an increase in water rates that went into effect in February, the club members feared that they could no longer afford to irrigate the half-acre plot it has set aside for the food bank.

The new irrigation rates include a \$28.60 monthly base rate and charge of 65 cents per 1,000 gallons used. Previously, the monthly base rate for irrigation was \$52.20 plus 37 cents per 1,000 gallons used after 60,000 gallons.

From Jan. 4 to Feb. 3, 1991, the club used 355,000 gallons and paid \$172.74. Based on the new rates, the charge will be \$258 this year.

From Feb. 5 to March 5, 1991, the club used 672,000 gallons and paid \$298.69. This year, the club expects charges to be \$464.

In essence, each of the club's 250 members would have had to pay about 17 cents more a month to pay the increase in the water bill.

But nevertheless, club members said they thought their crops for the food bank were in jeopardy.

On Monday, Little met with Fred Kriess, manager of the Sun City Water Co., to discuss the club's concerns.

Kriess said he was sympathetic with the club's situation and decided to donate \$100 a month to help defray the water expenses.

"They said the club was interested in conservation and involved in reducing water usage. While we are not able to do anything with the tariff, we do support the food bank and wanted to help out," Kriess said.

Kriess said he has already given Little a check for \$200. The money is coming out of the company's operating budget.

Sun City Water Co. has supported the Westside Food Bank for several years with in-office food collections and baseball tournaments.

"One of my very strong beliefs when I started as manager here is that we had an obligation to support the community we serve," Kriess said.

The Arizona Corporation Commission gave final approval Feb. 20 to a 15.7 percent water rate increase for Sun City residents.

The water rate increase also included an increase in irrigation water rates that the agricultural club is assessed on. The medians in Sun City are assessed on the same irrigation rate.

Renz Jennings, chairman of the commission, said his office suggested that the agricultural club members discuss their concerns with the water company.

"This is the perfect result. It's the kind we encourage," Jennings said. "In the final analysis, though, I believe the club would have continued to do it (grow vegetables for the food

bank) when they realized that it would have cost only 17 cents per member."

The club has 300 20-by-40-foot plots on 5 acres at 10918 Sunland Drive. About 250 members pay a fee to garden on the plots and the money is used to pay for the water bill, repairs, improvements and other club expenses.

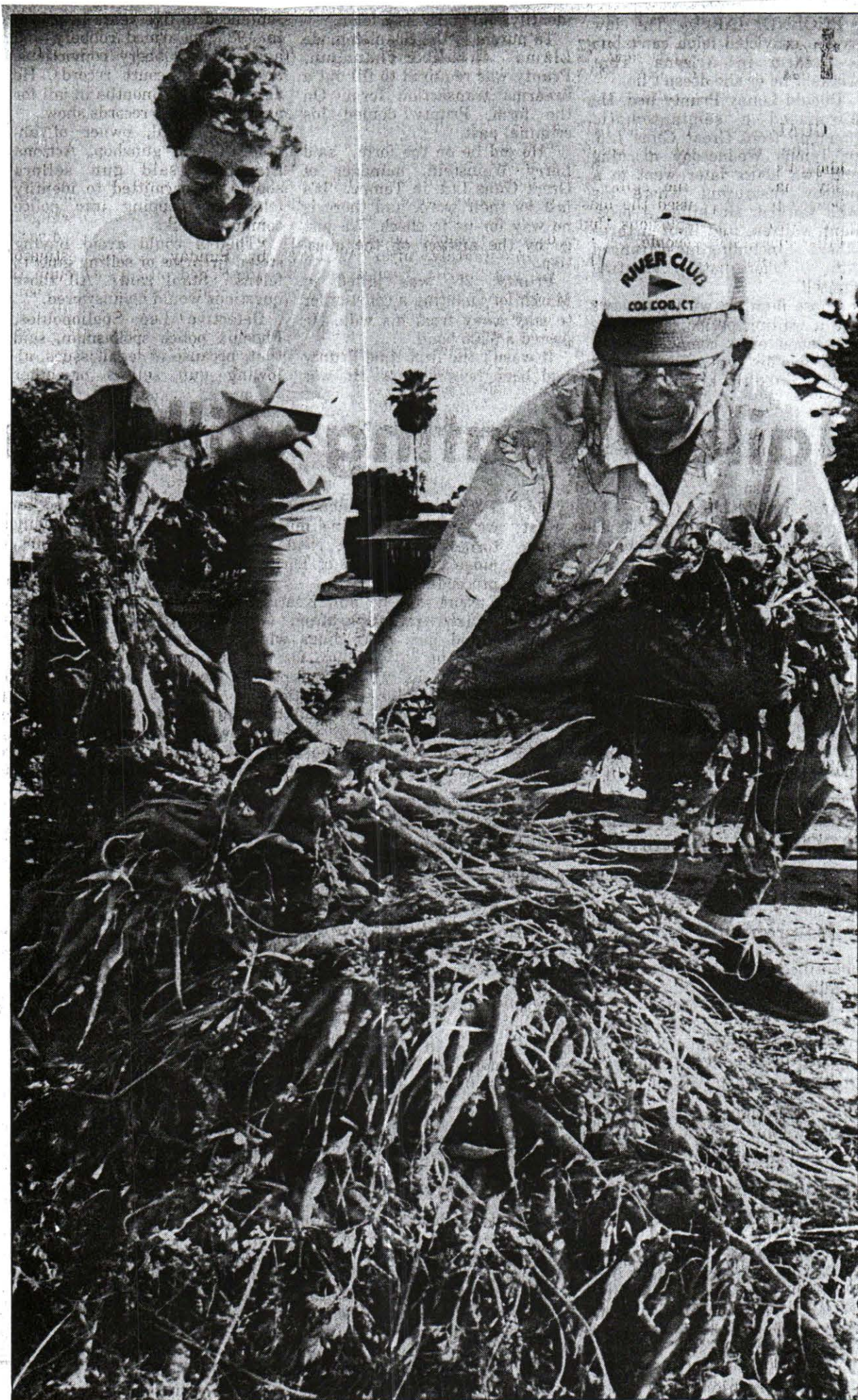
Last year members harvested

16,355 pounds of vegetables for the food bank.

When local residents found out that the club may not be able to grow vegetables any longer because of the increase in water rates, Little said many people mailed in checks.

"The important thing is that we can now continue growing vegetables for this good cause," Little said. "We are very grateful for that."

OVER



Stephen Cherek/Daily News-Sun

Patty Swain and Joe Judice pile up bunches of carrots at the Sun City Agricultural Club gardens at 10918 Sunland Drive. The carrots are destined for the Westside Food Bank.

# Putting squeeze on vegetables

## Water rates boost costs of generosity

By Lori Baker  
Staff writer

### Sun City

**B**ecause of a 108 percent increase in water rates, the Sun City Agricultural Club's vegetable harvests for the Westside Food Bank are growing in expense.

Club members donated about 18,000 pounds of sweet potatoes, onions, carrots, broccoli, cabbage and other vegetables in 1991 to the food bank.

Club members grow and hand-pick the crops, providing the food bank with a truck load of vegetables about every two weeks, said Jim Little, club president.

The water rate increases imposed by the Sun City Water Co. on Feb. 1 caught club members by surprise, Little said.

He said club members attended an Arizona Corporation Commission meeting about water rate increases in December in Sun City but that there was no discussion at that meeting of how the irrigation rates his club pays would be affected.

"We thought we were going to be paying about the same increase as residential customers," Little said.

A 15.7 percent rate increase for residential customers was approved by the commission for Sun City Water Co.

The water company only has two irrigation customers — the non-profit Sun City Agricultural Club for its five acres of gardens at 10918 Sunland Drive, and Maricopa County for its grassy street medians south of Grand Avenue.

Fred Kriess, general manager of Sun City Water Co., said he plans to meet with Little to discuss the club's concerns.

Kriess said the new water rates are designed to encourage conservation, as required by an agreement with the Arizona Department of Water Resources.

Water company officials convinced the commission to allow the irrigation category to continue to be available to the agricultural club because it is a lower rate per gallon than what residential and commercial customers pay.

"We urge the agricultural club members to work it out with their water company. If things don't work out, that's what we're here for," said Jon Poston, spokesman for the Arizona Corporation Commission.

The residential rate for a 2-inch meter is \$44 for the first 1,000 gallons and \$1 per 1,000 gallons for additional water. The irrigation rate for a 2-inch meter is \$28.60 plus 65 cents per 1,000 gallons used.

To help the county reduce irrigation costs, the water company had hired a consultant to suggest how to use less water in the county-owned medians.

Little said his club would like to conserve water, too. But he said the county has more flexibility because it could replace grass with gravel and desert plants.

"We can't just stop using water," Little said. "We'd have to go out of business."

The water bill for the club is expected to increase by about \$4,200 this year for the 256 gardens, Little said. Because it is a chartered club, the Sun City Recreation Centers Inc. pays half the bill.

If the club uses less than its 635,000-gallon monthly allotment, the new rates are about 75 percent higher than the old ones. If the allotment is exceeded — as it was eight of the 12 months in 1991 — then the rates go up by 108 percent. Little estimated the water bill increase based on last year's water use.

### Bigger harvest

Fourteen gardens are used to grow vegetables for the food bank. Water costs for them are expected

to increase by about \$355, in part because of the higher water costs and also because more vegetables are being planted. For example, about 2,500 sweet potato plants will be planted in about a month, compared to 1,500 last year.

Little said he hopes to get donations to help the club pay for the water. He has vowed to personally make up the difference if need be.

"We began growing vegetables for the food bank three years ago as a way to help needy families

and Sun City widows," Little said.

Although the food bank occasionally receives surplus vegetables from produce houses, the Sun Citizens provide a valuable service because they grow certain vegetables on request, said Debbi Ennis, the food banks' community relations director.

"Fresh vegetables are important to people's health," Ennis said. "It's nice to have vegetables grown in the northwest Valley because we can specifically ask for what we need, like sweet potatoes."

The agricultural club was started more than 20 years ago under the auspices of the Sun City Recreation Centers Inc. and operates on land leased at no cost by Sunland Mortuary.

Many members have been gardening all of their lives.

Bob Davis joined the club 16 years ago after moving to Sun City from Illinois.

"I've gardened all my life. I have a desire for fresh vegetables," said Davis, a retired chemical engineer.

Joe Judice, a retired horticulturist, said he enjoys raising vegetables for the food bank. "Growing food for hungry people makes me feel really good," he said.

## Water district considered for Sun City

By Lori Baker  
Staff writer

SUN CITY — The Sun City Home Owners Association board is considering circulating petitions for creation of a Sun City water district — which supporters say would protect Sun Citians from higher water costs.

Jim Mattison, chairman of the HOA water resources committee, said at Tuesday's board meeting that a water district would provide a way to raise money to pay such experts as attorneys, geologists and engineers to represent Sun City property owners' interests.

HOA has a water defense fund to which Sun Citians have contributed. But Mattison said a water district tax would provide a stable funding source. He estimated that about \$100,000 annually would be needed for the water district.

"We're talking about a small amount of money, probably a couple of dollars per Sun City resident per year to protect Sun City's water rights," Mattison said.

The HOA board's executive committee will discuss Dec. 3 whether to start a petition drive seeking approval from Sun City property owners for the water district. If the full board approves Dec. 10, Mattison said a petition drive would start in January.

Creation of a water district would require approval from 51 percent of the

See HOA, Page 3

## HOA

From Page 1

property owners in Sun City or approval of owners holding 51 percent of the community's property value. The county Board of Supervisors would have to approve the district and would serve as the district's board of directors, Mattison said.

Mattison said he expects opposition.

"People in Sun City may view this as another form of government," Mattison said. "It would not be because the county Board of Supervisors would control the district."

Sun City is served by a private water company, Sun City Water Co., which is owned by Citizens Utilities Co. Although Mattison said he is not finding fault with the water company, he said that Sun Citians do not have a say in protecting their water rights.

When state and federal government officials approve regulations affecting water cost, quality and quantity, Sun City residents are not notified, Mattison said.

But with a water district, such notices would be provided, Mattison said.

"We need to find out about things affecting our water before it's too late," Mattison said.

Although Mattison proposed the district idea unsuccessfully a year ago to the HOA board, he said recent events affecting water costs in Sun City have created a more pressing situation.

For example, the Legislature this year approved the Groundwater Replenishment Act, which is eventually expected to increase water costs by \$100 per acre-foot. Since Sun City uses only ground

water, Mattison said he is concerned about the future cost of water for the community. The ground-water tax would be used to finance a replenishment district to store water not immediately needed from the Central Arizona Project and other sources.

"We met with the governor to discuss our concerns about the ground-water law but we didn't have any data to illustrate our point," Mattison said.

After the meeting with the governor, the HOA executive committee decided to spend \$1,500 from the water defense fund to hire a consulting company to provide comparisons of the impact of the ground-water law on west side communities and East Valley communities, Mattison said.

Since East Valley communities such as Tempe use surface water rather than ground water, they will not have to pay the pumping tax, Mattison said.

Later this month, legislators representing west side communities will meet with HOA board members to discuss legislative issues, including water.

"Water is a very difficult subject. We need sufficient charts to illustrate what is going on," Mattison said.

A joint legislative committee is studying how the ground-water replenishment law will be implemented.

Mattison said that unless the law is changed, it will be discriminatory.

"If we have to, we'll challenge the constitutionality of the ground-water laws in court," Mattison said.

# Citizens Utilities seeks 50% rate raise

By Lori Baker  
Staff writer

**SURPRISE** — Citizens Utilities Co. has applied to the Arizona Corporation Commission for a 50 percent rate increase for water supplied to some areas of Surprise and permission to form a consolidated service area in the city.

The revenue increase would amount to \$61,500 from customers in Sun Village, Kingswood Parke and Happy Trails recreation vehicle park. The application was filed Aug. 21 but the commission has not scheduled a hearing.

"We are only seeking recovery of our cash operating expenses, and we're not seeking rates sufficient to have a return on our investment," said Fred Kriess, general manager of Citizens Utilities.

Citizens Utilities has provided service to those developments since Aug. 30, 1989, under an agreement with Surprise for the area west of Litchfield Road. At that time, customers received a reduction in rates from what Surprise had charged.

"It was our intention that once we had a history of our operating costs, we would file for a consolidated service area and a new rate structure, which is what we're doing now," Kriess said.

The proposal for consolidating the service areas would form a new entity called Desert Mountain District that would be a district of Sun City Water Co. but would have its own rates and separate book-keeping. Sun Village and Kingswood Parke customers now are in the Agua Fria Division and Happy Trails recreational vehicle park is in the Sun City Water Co. certificated area.

For the 550 customers living in the Sun Village and Kingswood Parke single-family residential developments, the current minimum charge is \$9.68 per month for up to 2,000 gallons. Anything over 2,000 gallons is billed at \$1.61 per 1,000 gallons, Kriess said.

The proposed rates for Sun Village and Kingswood Parke call for a minimum monthly charge of \$14.52 plus \$1.64 per 1,000 gallons.

**"We are only seeking recovery of our cash operating expenses, and we're not seeking rates sufficient to have a return on our investment."**

**Fred Kriess**  
General manager  
Citizens Utilities Co.

Under the existing rates, a customer using 5,000 gallons of water would pay \$14.51 monthly, compared to the proposed Desert Mountain rate of \$22.77, Kriess said.

Citizens Utilities plans a public meeting to discuss the new rates Nov. 14 in Sun Village. The time and exact location are yet to be decided. The Surprise City Council has not taken a position on the rate increase. The remainder of the city receives its water from neighboring El Mirage.

In Happy Trails, there is one master meter serving about 1,200 lots. Under the current rates, the minimum charge is \$200 for up to 185,000 gallons of water. Excess water is billed at 90 cents per 1,000

gallons. The proposed rates call for a minimum of \$300 monthly plus \$1.64 per 1,000 gallons, Kriess said.

## Sun Cities unaffected

To avoid confusion over the Desert Mountain rate case, Kriess discussed the proposal at Monday's inaugural meeting of the Water Advisory Group, which is comprised of Sun City and Sun City West residents.

"Because this case involves Sun City Water Co., I wanted to make sure the advisory group understood that the proposed rates do not have anything to do with Sun City or Sun City West residents," Kriess said. "The Sun City Water Co. does not just serve within the white walls of Sun City."

Citizens Utilities had filed a 27.9 percent rate increase request in May for Sun City Water Co., which is not related to the Desert Mountain case. A public hearing for the Sun City case will be Dec. 3.

The Water Advisory Group was formed through an agreement between west-side legislators, Sun City Water Co. and Sun City West Utilities Co. to provide information on water matters that affect the Sun Cities' 38,000 customers.

The panel was formed voluntarily by Citizens Utilities after legislation had been introduced during the last legislative session that would have required citizen advisory groups for private water companies.

The group's next meeting will be in early January at the Sun City Home Owners Association office. Time and date have not been set.

Among the topics to be tackled by the panel are the use of treated sewage for irrigating golf courses, water conservation, and the use of Central Arizona Project water. A major issue to be debated is the effect of a ground-water pumping law that will phase in fees for ground-water pumping over a 15-year period starting in 1996. Sun City and Sun City West now use only ground water.

Members of the advisory group are George Radie, Gene Jensen, and James Mattison, of the Sun City Home Owners Association; Dick Egan and Arve Dahl of the Sun City West Property Owners and Residents Association; Keith Hook of the Sun City West Recreation Centers; Bob Adams of Sun City Recreation Centers; Dess Chappelle, a Sun City West resident; and Kriess.

# Water companies accept conservation plan

## SC, SCW providers faced fines of \$200,000 for exceeding state water limits

The two private water companies serving the Sun Cities have agreed to a mandatory water conservation program in lieu of paying \$200,000 in fines for exceeding state-mandated water consumption limits.

The Arizona Department of Water Resources, Sun City Water Company and Sun City West Utilities Company announced last week that a settlement agreement regarding water conservation had been reached.

The settlement resolves the

department's allegations that the companies violated the Groundwater Management Code by providing more water to its customers than allowed in 1987, 1988 and 1989.

The settlement marks the first time the state has ever imposed a mandatory water conservation program on a private company in Maricopa County.

Instead of paying the fines, the water companies agreed to institute a comprehensive program to encourage Sun Cities residents to

### Water conservation tips See Page 18

conserve water.

As part of the agreement, the state will not assess any penalties against the companies in 1991 through 1993 as long as conservation programs continue and water usage in the two retirement communities does not exceed 1989 or 1990 levels.

The companies' conservation program will include:

- Implementing an enhanced

public education and conservation promotion campaign, including modification of the water bill format to emphasize conservation.

■ Offering to provide water audits to both single-family and multi-family residential customers, at no direct charge, including suggestions on how customers can reduce their water usage.

■ Offering to retrofit commercial customers with low-flow toilet flushing devices and low-flow shower heads.

- Seeking approval of a rate

structure that encourages customers to conserve water.

■ Develop and coordinate implementation of a conservation plan to reduce water use on the medians south of Grand Avenue, including metering and billing for water used there.

Elizabeth Rieke, director of the Department of Water Resources, feels the settlement is in the public interest.

"We believe that these

See WATER, Page 18

OVER



(conservations) programs will be more effective in helping conserve our state's groundwater supplies than to impose fines or penalties for past water usage which exceeded the code."

Fred Kriess, general manager of both water companies, said he believes the settlement is fair to both the companies and its customers.

"The settlement is a realistic way to come into compliance with DWR water usage requirements without penalty, while customers learn to reduce their consumption.

"In addition, our audits will help customers recognize how they can conserve water," he adds.

Sun City Water Co. faced fines of \$173,000 because Sun Citians used an average of 290 gallons per person per day between the years of 1987 and 1989.

State limits were set at 239 gallons.

Sun City West residents consumed 232 gallons per person per person in 1989. The state limit was 219 gallons.

Mr. Kreiss says excessive watering of residential landscaping was the major reason for the Sun City and Sun City West exceeding their state-imposed limits.

Golf courses in the Sun Cities are

not affected by the conservation program since they use irrigated water from private wells and not by groundwater supplied by the two private water companies.

## Helpful hints on conserving water in the home:

### In the kitchen

- Repair leaks immediately. Check every faucet in your home for leaks. A slow drip can leak 15-20 gallons a day. Many times a washer is all that is needed to stop a leak.
- A lot of water goes down the drain needlessly because in the past it was plentiful and cheap. Become conscious of the amount of water you're using and look for ways to use less.
- Keep a container of water in the refrigerator for drinking instead of cooling water by letting it run down the drain.
- When using a dishwasher or clothes washer, do only full loads.

### In the bathroom

- Closing the stopper and filling the sink with water is a better way to wash your hands and shave than letting the water run down the drain.
- When taking a tub bath, close the stopper before running the water. Watch the depth of the water in the tub. A tub filled about six inches deep requires about 25 gallons of water.
- Install a flow restricter in your shower head or replace it with a low-flow shower head.
- "Navy" showers save even more water. Turn on the water to wet down, then turn it off. Soap up, then turn the water back on to rinse off.
- Check for a leaky toilet by placing food coloring or a dye capsule into the tank. If the water in the bowl changes color without flushing the toilet, there's a leak.
- Toilet dams, which are flexible plastic or metal

panels, fit inside the tank and reduce the amount of water used to flush the toilet. This saves about 1-2 gallons of water with each flush.

### Outside the home

- A single lawn sprinkler spraying five gallons per minute uses 50 percent more water in just one hour than a combination of 10 toilet flushes, two five-minute showers, two dishwasher loads and a full load of laundry. Water lawns only when required. Soaking only when needed is better than daily sprinkling.
- When operating sprinklers, water in the early morning or late evening to reduce evaporation.
- Slow watering, such as that provided by a drip system, is one of the most efficient methods of irrigating plants.
- Instead of lawns, utilize low water-use plants.
- Check hoses and connectors for leaks and repair them.
- Install water-saving devices such as a nozzle which can be shut off or adjusted to fine spray.
- To save moisture, use mulch in the garden, around shrubs and trees.
- Sweep sidewalks and driveways clean with a broom instead of using the hose.
- Don't let the water run while washing the car. Instead, wash your car from a bucket of soapy water, then use the hose to rinse the car off quickly.

Source: Arizona Corporation Commission

# Purging water lines steams Sun Citian

## Utility company floods streets to clean water

By JACQUE PAPPAS  
Daily News-Sun staff

Catherine Holland gets irritated when she sees water running down the streets near her Sun City home.

"It makes me provoked. The water is all over the place sometimes and it just seems like such a waste," Holland said. "Some streets look like lakes. I know a lot of people who are concerned about water conservation and wish something could be done about this."

In some cases, water usage on lawns and plants can be reduced by maintenance or conservation.

But in other cases, there is no feasible way to save thousands of gallons of water pouring into the streets.

Such is the case with the Sun City Water Co., which oversees the maintenance of Sun City's 1,450 fire hydrants.

The utility company has to flush the hydrants to remove sediment from drinking water, test the flow rate and get rid of air pockets in water mains.

Marvin Collins, operations manager for Sun City Water Co., said the company usually flushes water from a fire hydrant when customers complain that there are particles in their drinking water.

Fire hydrants and homes along the same street are attached to the same



Daily News-Sun photo by Jacque Pappas

**CLEAN START** — Ernie Vargas, a utility worker for Citizens Utilities, opens the valve on a fire hydrant to flush water containing dirt particles. About 600 to 800 gallons of water per minute are released.

water line.

"When the office gets a call, we verify that there is a problem and then flush the hydrants nearest to the house," Collins said.

Since Sun City gets all its water from wells, water that is brought to the surface often has particles of sand in it, Collins said.

Although the company has filters

that remove the majority of sand, Collins said particles still get in some customers' water.

When a main needs to be flushed, utility workers open a valve on one end

of a water main, attach a hose to a nearby fire hydrant and let the water run until it is clear.

"It doesn't interrupt water service to customers, but when they see the water flowing down the streets they get concerned," Collins said. "The water can literally flow for a mile or two before it gets to a drain. People often think it's a water line break."

Collins said the water comes out of the hydrants at an average rate of 600 to 800 gallons per minute. It usually takes 10 to 15 minutes to clear a main.

"Some people think it's wasting water, but it is a necessary thing," Collins said. "It's the only way to clear the line. As soon as the line is clear (free of dirt), the water is shut off."

The Sun City Fire District pays the water company to maintain the fire hydrants.

The company checks each hydrant twice a year to make sure the caps can be easily opened by firefighters and to make sure there is water flowing.

This year, the fire district has budgeted \$154,000 to pay for the hydrant maintenance.

But the water company may start recovering the fire hydrant maintenance fees in the general water rates if a proposal is approved by the Arizona Corporation Commission.

Sun City Water Co. filed for a 27.9 percent increase in May that includes a proposal to recover the general water rates. The proposal is pending hearing this fall.

Either way, the fees would be collected through property taxes.

# HOA, PORA, Citizens Utilities sign water pact

By PEG KEITH  
Sun Cities Independent

## Agreement will enhance communications

Lines of communication between Citizens Utilities Company and the water users in Sun City and Sun City West have been strengthened.

With the signing of a three-way agreement between the water company, Sun City Home Owners Association and Prop-

erty Owners Residents Association, a local "water group" will be formed.

The water group will receive information on company activities affecting the retirement communities.

The agreement, dated June 19, was signed locally at Citizens

Utilities offices in Sun City.

Headquartered in Connecticut, Citizens Utilities serves the retirement communities through the Sun City Water Company and the Sun City West Utilities Company.

The water company's general manager Fred Kriess, HOA President George Radie, PORA

President Bob Emmons and state Rep. Bob Williams were present when the agreement was signed.

Coinciding with the signing of the agreement, Northwest area legislators agreed to withdraw proposed legislation that would have done, essentially, what the agreement accomplished, says

Eugene Jensen, member of HOA Water Committee.

He explains that, due to constituent concerns about the impact of water company activities, Representatives Williams and Kyle Hindman introduced HB 2331, which would have required the water company to give notice to

See WATER, Page 3

## WATER

From Page 1

customers of intention to expand its service area or to provide water to an area which is not contiguous.

The water company notes that questions of constitutionality were raised about the proposed bill.

Mr. Jensen says that, in December 1987, Sun City Water Company attempted to obtain a certificate of convenience and necessity from the state Corporation Commission to provide water service to a new desert subdivision, several miles from Sun City.

The company's proposed plan, Mr. Jensen says, was to pump groundwater from the Sun City area to the new subdivision, and to adopt a revenue system under which Sun City residents would have helped pay the cost of the new system.

Sun City residents had only a few days between Christmas and New Year's to prepare to testify before the Corporation Commission.

In 1990, Mr. Jensen continues, the water company attempted to obtain state approval to transfer water from the company's Central Arizona Project allocation to a new desert-area subdivision several miles from Sun City.

He says the Home Owners Association had only a weekend to organize its presentation before the Maricopa County Board of Supervisors.

Fred Kriess, water company general manager, says the company is pleased to be able to work with the west-side legislators, "to find a mutually acceptable way to provide

Sun Cities residents with additional information on our activities.

"We already give residents many opportunities for voluntary input in our activities, such as the group in which the Sun City Home Owners Association is an active participant. This agreement builds upon what we already are doing," says Mr. Kriess.

William Beyer, the attorney who has represents HOA in water-related matters, says "The agreement is a matter of parties saying they will work together ... it's a good-faith formal statement."

He praises the leadership in the Sun Cities and legislators, "working together to make this happen."

He says the agreement marks the first time the legislators involved

have gotten together in this manner. As a working member of the Western Maricopa Coalition, Mr. Beyer says, "We have never seen this before on such a scale."

The final crunch happened on the House side of the legislature, Mr. Beyer says, and the Senate added support as well.

As part of the agreement, the water company has agreed to provide information on community requests for:

- Expansion of service areas
- Sale or transfer of water rights
- Changes in boundaries of service areas and/or certificates of convenience and necessity
- Administrative review or

variances from conservation requirements of management plans imposed by the Department of Water Resources

■ Hearings on or settlement of enforcement actions by the Department of Water Resources

■ Authority of reclamation or use of reclaimed water

■ Authority for recharge, underground storage or indirect storage of underground water

■ Requests relating to water conservation plans or efforts

■ Requests for rate changes

■ Requests for actions made necessary by the Groundwater Replenishment Act.

Mr. Kriess says that the water companies will work with the new water group concerning these activities.

Westside legislators involved in reaching the agreement were representatives Bob Williams, Bob Burns, Brenda Burns, Kyle Hindman, Nancy Wessel and John Keegan and senators Pat Wright,

# HOA plans study of state water bill

## Organization may consider lawsuit

By RICK GONZALEZ  
Sun Cities Independent

The Sun City Homeowners Association Board of Directors has unanimously voted to allow Jim Mattison, chairman of the board's Water Resources Committee, to review and analyze the recently passed water replenishment act and decide if it should be challenged in court by HOA.

The replenishment act was signed into law last week by Gov. Fife Symington, who called it "a landmark in Arizona water history."

George Radie, HOA president, says the water act calls for a tax or fee to be charged for pumping groundwater. "With the replenishment act, he says, communities have to replenish the groundwater pumped or else pay a tax.

Since the Sun Cities rely entirely on groundwater, Phoenix and some other cities rely heavily on Salt River Canyon surface water.

Northwest valley legislators and local homeowners groups have opposed the bill, saying it will create an economic hardship on Northwest Valley communities who use large amounts of groundwater, such as the Sun Cities.

Prior to the bill's passage, Mr. Mattison sent a letter to Gov. Symington, stating that if he signed it into law, HOA would consider challenging the act in court.

Mr. Radie says the replenishment act covers Maricopa County only and not the entire state. Although other areas, such as Litchfield Park, may be included, "the Sun Cities will pay the brunt of the tax," he feels.

As the replenishment act wound its way through the House and Senate, lawmakers from all of the rural areas "voted for it, because it wouldn't affect them," Mr. Radie says.

"Our (Sun Cities) legislators all voted against it in the House and Senate, but they didn't have enough clout" to defeat it.

"It is possible HOA will take judicial action, saying the act is unfair because it targets a small segment of the area. We may challenge it," adds the HOA president.

Mr. Radie says that, at the board's June 11 meeting, Mr. Mattison was given the authority to research the replenishment act and see if it

See WATER, Page 3

(OVER)

## ■ WATER

From Page 1

warrants court action, "preferably in the federal court."

Mr. Radie says he prefers a federal court because "federal judges are not subject to politics. They are appointed, not elected. They are not up there for election."

Besides reviewing the replenishment act, Mr. Mattison will also recommend a legal attorney to help with the legal matters involved.

In a case like this, he says, "you need some outside assistance. We're talking about constitutionality."

Before any kind of action would be initiated, the executive committee (comprised of the board president, first and second vice

presidents, treasurer and secretary) would have to give formal approval.

Mr. Mattison says he feels the water replenishment act is unconstitutional on a number of grounds:

"It affects only a few communities in the Northwest Valley," he says. "It is class legislation. It does not affect the citizens equally."

The replenishment act is also unconstitutional, Mr. Mattison says, because "it abrogates a constitutional right granted to the citizens in the Arizona Constitution of 1912.

"We have a right to the water flowing underground."

Mr. Mattison says he will continue to study the replenishment act, although he has not seen all of it. He says he has heard that "there may be further amendments (to it)."

A retired trial attorney and federal judge, Mr. Mattison says that, if the challenge is taken up, he will probably assist a hired attorney "as an officer of HOA, not as an attorney."

Mr. Mattison also prefers the federal courts because "the calendars are so crowded in the Arizona courts and the pressures are such that it (the case) would probably have a better chance (of being heard) in the federal courts."

If the case went to an Arizona court first, Mr. Mattison explains, "it might take four or five years to get to the federal court.

"I can't predict it would take that long, but it (the case) would probably go through various courts in the appeals process and end up in the federal courts anyway.

"This way, (going straight to the federal court), it might only take six months.

"Primarily, this is a question of law," Mr. Mattison says. "I think the state is under water. I think Arizona's lawmakers have lost sight of our fundamental constitutional rights."

# Water bill left in limbo

## HOA spends to fix building, grounds

By JACQUE PAPPAS  
Daily News-Sun staff

SUN CITY — A bill that would give communities like Sun City more control over private water companies will most likely be put on hold until next year.

House Bill 2331 was introduced by Rep. Bob Williams, R-District 15, at the request of members of the HOA Water Resource Committee who helped draft the measure.

But people who have been lobbying to get the bill through the House and Senate said today that the measure does not have enough support to guarantee its passing this year.

The bill would allow residents in unincorporated areas to petition the Maricopa County Board of Supervisors to establish an unpaid utility advisory board. The private water company would then be required to keep the board informed of their proposals and regulatory agencies would be required to include the views of the board in their hearings.

"It's like a Chinese fire drill at the Capitol and the legislators really want to wrap up and go home. They are not interested in picking up a bill that does not have a lot of push behind it," said Bill Beyer, an attorney for the HOA. "It think it's an important bill because it would improve communications between customers and private water companies throughout the state."

Eugene Jensen, a member of the HOA's Water Resources Committee, said the board will have to decide next year if they want to reintroduce the bill.

"What we need is support from other communities with private water companies. If this is regarded as just a Sun City bill it will never pass," Jensen said.

James Mattison, chairman of the HOA water panel, said Tuesday at the HOA monthly board meeting that he planned to send letters to House Speaker Jane D. Hull and all the other legislators to seek their support of the bill.

But Mattison said he was told not to deliver the letter to all the legislators because there was some sort of "commotion" about the bill.

Jensen said the commotion essentially means the bill will die this year.

"I think it's dead for this year. They have a budget mess to unscramble and other water bills to consider," Jensen said.

Also at the HOA meeting Tuesday, the board unanimously voted to spend no more than \$6,000 on painting, repairs and landscaping for the HOA office at 10401 Coggins Drive.

In other business, Director Glenn Sanberg said eight candidates will run for five vacant posts on the board in the fall. A public "Meet the Candidates" meeting will be held in October.

The candidates are Lynn Arend, Wilbur W. Isenberger, Michael J. Keeley, George J. Hartman, Bruce Norris, James H. Reynolds, Anna H. Russ and Jay Woods.

# Utility defends action on water proposal

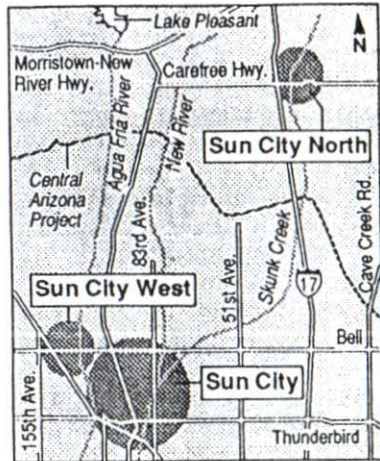
By Connie Cone Sexton  
Staff writer

**SUN CITY WEST** — Even in hindsight, a manager from Citizens Utilities Co. said he would not have told Sun City residents that his water company wants to service the proposed Sun City North by using part of the area's allocated Central Arizona Project water.

Several Sun City and Sun City West residents expressed shock that Sun City Water Co. — a subsidiary of Citizens Utilities — applied earlier this month for a franchise to supply water to the proposed retirement development south of New River.

Fred Kriess Jr., manager of Citizens Utilities, said his company did not want to tip off the residents about the franchise request.

"We felt it was not in the best interest of our company," he said. "We are not the only water



Staff artist

company in town. We had to make a business decision."

That kind of response triggers even more worry for Eugene Jensen of Sun City.

He said a committee made up of Sun City residents and officials

See WATER, Page 9

from the water company was formed recently. "The purpose was to have communication between the residents and the company. They were meeting with us. Why didn't they let us know about the franchise request?"

Sun City West residents who are served by Sun City West Water Co. — also a subsidiary of Citizens Utilities — are worried that their ground water could be at stake.

The community does not have a CAP allocation. Residents have expressed concern that the water company would tap their ground water to help service the proposed development.

During a membership meeting Thursday of the Sun City West Property Owners and Residents Association, Kriess assured the residents that their ground water is safe.

There are no plans to construct pipelines from Sun City to the proposed development, he said.

"That will not happen. And, right now, nobody knows where the water (for Sun City North) will come from."

Kriess understands that residents felt some betrayal in not being told but said many are misinformed about what Sun City Water Co. wants to do.

The company was approached by Del Webb Lakeview Corp., which is considering developing Sun City North on about 5,700 acres in the north Valley. Webb wants to use in Sun City North about half the 15,000 acre-feet of Central Arizona Project water that

**"Ninety percent of the people here don't have a real understanding of the water that is available. They think, all you have to do is turn on the faucet."**

E.C. Dapples

professor of geology emeritus Northwestern University

had been allocated to Sun City Water Co. for use in Sun City.

Permission to reallocate the water must come from the federal Bureau of Reclamation, and its decision would be based on recommendations by the Arizona Corporation Commission and the state Department of Water Resources.

"What ever happens up there, it will be a separate utility with a separate set of rules, distinct from Sun City," Kriess said.

E.C. Dapples, professor of geology emeritus from Northwestern University, now a resident of Sun City, said residents should not be too quick to judge Sun City Water Co.

"There is a problem all over this area of people who are ready to give an opinion, but they don't have any knowledge about the subject," he said.

"Ninety percent of the people here don't have a real understanding of the water that is available," he said. "They think, all you have to do is turn on the faucet. I have a sneaking suspicion that more than half of the residents come here

expecting to see grass. And they want trees, golf courses, lakes and little ponds. They just expect the water to be available."

Dapples, who recently completed a report examining ground water in the West Valley, said few people take the time to understand and appreciate the Valley's water supply.

He questions why more isn't done to study water resources

"Nobody can predict what our water supply will be," he said. "We do not have any adequate measurement of rainfall. There is a shower here, a shower there, and unless you go out and measure each one, there is no way to predict what our supply is."

Part of the problem, he surmises, is that the Valley grew too fast. "It was difficult to know how big the population was going to be and what our water demands were going to be," he said.

"Our ground water in the Sun Cities is the best in this whole Valley. Our quality is better than the CAP. Whether the supply stays as good as it is is going to depend on the amount of recharge."

Daily News-Sun, Sun City, Ariz.

APRIL 11, 1990

# Group seeks to protect SC water rights

By JACQUE PAPPAS  
Daily News-Sun staff

SUN CITY — The Sun City Home Owners Association says it took bold steps Tuesday in an effort to defend residents' water rights from the whim of private water companies.

The board of directors unanimously approved a four-part plan that includes the establishment of a defense fund to take legal action in water resource issues.

Eugene Jensen, chairman of the board's Water Resources Committee, said the action is in response to Sun City Water Co.'s efforts to use part of the community's Central Arizona Project water allotment for a proposed North Phoenix development.

The company applied with the Maricopa County Board of Supervisors for a public service franchise to construct sewage and water utility systems for Del Webb Corp.'s Sun City North.

"The proposal serves to bring our water resource and rights issues into sharp focus," Jensen said. "We simply are left out of negotiations and are generally the last to know what others intend to do."

"I've come to the conclusion that the days of cheap water and unlimited use are over," Jensen said. "We are totally unprepared to deal with this."

The HOA has formed an ad hoc committee to oversee and operate the temporary water

'I've come to the conclusion that the days of cheap water and unlimited use are over... We are totally unprepared to deal with this.'

Eugene Jensen  
water committee

defense fund.

Jensen, who will chair the committee, said the money will be used for intervention and representation before state and county agencies such as the Arizona Corporation Commission — which gives the final approval on water transfer applications.

The committee will first investigate the feasibility of establishing a Sun City Water District, Jensen said.

Such a district would work similarly to Sun City's fire district, he said.

"People would be paying for their water protection," Jensen said. "If this is not possible we could try to get the legislators to provide the Northwest Valley with a water district. We need someone here who can keep in touch with what's going on to protect and preserve the water rights of the residents in this area."

The water defense fund would See Group, A5

OVER



—From A1

be terminated upon the establishment of such a district. Any excess monies that may remain would be given to a charitable organization selected by the HOA.

But the success of HOA's plan hinges on community support, Jensen said.

"We have to get the message out to Sun City because if we don't get a response, then we're out of the water business," he said. "Intervention in agency proceedings or for initiating and prosecuting legal actions against water predators cost money."

Board President Frederick Hardy said the HOA is dependant the community's involvement.

The ad hoc committee is seeking the support and financial contributions of other local organizations and from residents.

"The Home Owners does not have the fiscal ability to pursue this to the extent it needs to be done," Hardy said.

In addition support from various political groups in the Sun Cities will be sought to question candidates on their views regarding water resources and rights.

The HOA will ask Arizona Congressmen to discuss the allocation of CAP water with the Secretary of Interior to assure that water reserves will not be transferred without certification from the state Department of Water Resources.

Jensen said Sun City water users must deal with a number

of issues — one of which is determining if Sun City Water Co.'s CAP water application was granted on behalf of the company or the water users.

Sun City Water Co. has a CAP allocation of 16,000 acre feet of water a year. An acre-foot is the amount of water it takes to cover an acre of land 1 foot deep.

But the water company has never used the CAP allocation, instead relying on groundwater sources.

In 1987, the company applied to use about half of the allocation for a development north of Sun City West. The status of Rancho Cabrillo del Norte subdivision is still unclear.

Sun City Water and its parent company, Citizens Utilities, applied to shift about 7,850 acre-feet of the federally subsidized water to the Sun City North project.

Jensen said Citizens Utilities should be asked a number of questions including whether Sun City residents are paying for the company's legal fees in recent interventions.

Jensen said the HOA's goal is to participate in legal and technical actions and maintain working relationships with neighbor communities that share common underground water resources.

"If we cannot communicate on the basis of trust, then we must seek legislation which will require communications. After-the-fact communications . . . are clearly inadequate for community oversight over a private water company," Jensen said.

# CAP water sparks squabble over use in Sun City area

## Will allocation still be available?

By Connie Cone Sexton  
Staff writer

One way for Sun City to end its reliance on ground water is to someday be able to use its Central Arizona Project water, a state water official says.

But that can happen only if a CAP allocation is still available to the community, Larry Linser, deputy director for the state Water Resources Department, pointed out.

Sun City residents are on alert, poised to fight a request by the Sun City Water Co. to move half of its CAP allocation to a proposed development south of New River it has asked to serve.

Fred Kriess Jr., manager of Citizens Utilities — the parent company of Sun City Water Co. — said the landowner approached him suggesting that the company could be the water provider for the site.

Del Webb Corp. has been considering buying the land for a proposed third Sun City in the Valley.

Soon after the water company filed a request to reallocate its CAP water, the Sun City Homeowners Association cried foul and started a water defense fund to preserve its CAP allocation.

But Kriess said the allocation of 15,000 acre-feet of CAP water was designated for the company's use and was not allocated to Sun City residents.

On Friday, Webb officials met with Sun Citizens to allay fears about their need for CAP water.

Tom Ryan, Webb's vice president of project planning and development, told the group that the Sun Cities have a 100-year assured ground-water supply.

Linser, however, said a push is on to get communities off of ground water.

That the area has an assured supply of ground water is no reason for not being able to keep its CAP water, he said.

When Sun City Water Co. made its original request for the CAP water, it was to serve its service area regardless of whether there was a ground-water supply,

**"Our position on CAP water is that it ought to be used where it's needed. In Sun City . . . we're working hard on wise water management."**

Fred Kriess Jr., manager  
Citizens Utilities

Linser said.

"That water supply was to service Sun City and to allow them to stop pumping ground water and that continues to be the objective," he said.

If the Sun City Water Co. says its service area no longer needs the CAP water, it might have to go back into the general pool, the deputy director added.

"The request they made was directly for use in the Sun City area," Linser said.

Although the company has filed a franchise request to serve the proposed third Sun City with half of its CAP allocation, Linser is not sure it will be approved.

"We hope not. But the subcontract for the supply is not with water resources. It is between Citizens Utilities and the Central Arizona Water Conservation District and the United States. Any movement of water is a contract issue between those parties," he said.

Linser understands why some communities have a dependence on ground water. For the time being, it is cheaper to use than CAP water.

"Ground water needs little if any treatment. CAP water will cost around \$60 an acre-foot delivered and they will have to build treatment plants to use it," he said.

"But by continuing to pump ground water, the depth (to reach the water) gets greater and certainly the costs will become higher," he said. "It conflicts with our ground-water management program and that was not the intent with the

(OVER)

original allocation.

"If they (Sun City Water Co.) aren't going to use it for the original purpose, it should be put back in a pool of unallocated water," Linser said.

Kriess said nothing is definite about the proposed development, anyway.

"Our role in this whole endeavor is that we were approached to be the utility service provider," he said. "The owner of the land is responsible for obtaining water for the site. It may not ultimately come from Sun City. It just hasn't been decided."

Kriess said the original request

for CAP water should not limit the projected use of the allocation.

"Our position on CAP water is that it ought to be used where it's needed. In Sun City, our groundwater levels are rising and we're working hard on wise water management."

The idea to get communities off ground water is very involved, he said.

"It's kind of a political issue and one that may be open to further discussion down the road. I appreciate the department of water resources' concern and work closely with the staff," Kriess said.

# Webb's water facts run into skepticism

By **Connie Cone Sexton**  
Staff writer

**SUN CITIES** — Despite statements from Del Webb Corp. that the Sun Cities have a 100-year assured water supply, some residents remain cautious.

Because of the current and anticipated supply of ground water, the Sun Cities have no need for Central Arizona Project water, officials from Webb and the local water company told local legislators, area residents and community leaders.

The announcement might be an effort to calm fears that the Sun Cities — which now use only ground water — would be left with insufficient water resources should they not have access to CAP water.

Sun City Water Co., a subsidiary of Citizens Utilities, currently has about 15,000 acre-feet of CAP water allocated for its service area, which includes Sun City.

Residents became alarmed in mid-April after learning that the water company had applied for a franchise to supply water to a proposed Sun City retirement development south of New River.

Fred Kriess Jr., manager of Citizens Utilities, said the water company was approached to use about half its CAP supply to service the proposed community.

That request sent off shock waves

throughout Sun City, causing the Home Owners Association board to create a legal defense fund to help protect the area's rights to CAP water.

Kriess said, however, that the CAP allocation was made to the water company, not to Sun City. He said he could not recall how the water company worded its request for the CAP water, whether it specified that the water was for Sun City or just for its general service area, about a 96-square-mile area in the Northwest Valley.

During a press conference Friday — just after the meeting with residents and local leaders — Webb officials said they were confident that their message about the assured water supply got across.

"Del Webb has not and will not do anything to jeopardize the availability of an adequate water supply for the Sun Cities," said Tom Ryan, Webb's vice president of project planning and development.

Eugene Jensen, chairman of a water resources committee for the Sun City Homeowners Association, said he reserves the right to be skeptical.

Jensen, who attended the meeting with Webb on Friday, said he came away not knowing any more than when he went in.

"I knew what they were talking about,"  
See WATER, Page 8

## WATER

From Page 1

he said.

Jensen said the ultimate question is: "Are we willing to let go of any of the CAP water?"

Even though Webb produced a chart showing that the area appears to have an increasing supply of ground water, Jensen said he wants even more proof that the area will have water.

"I'd rather have a wet assurance than a paper assurance," he said.

"If you assume that the water

company made a prudent decision in getting that CAP allocation for us, than letting it go may be imprudent."

He said about 3,000 Sun Citizens have responded — many with checks — to support the legal defense fund in case the community has to go to court to protect the CAP water.

"We don't want to have a fight with them," Jensen said. "We think Del Webb did a great job of

building Sun City, but they should look after us."

Chuck Roach, Webb's general manager for Sun City West, said not everyone understands how water supplies for the state work.

"Overall in Arizona, there is no water shortage," he said.

Ryan said Sun City should not have to rely on the CAP. "There is no need for it. The question becomes, 'Why do you need two assured water supplies?'"

# Saving water

## HOA supports conservation

By JACQUE PAPPAS  
Daily News-Sun staff

SUN CITY — While many local groups just started addressing water conservation issues, the Sun City Home Owners Association is numbering its accomplishments in the field.

Since 1985, the HOA has acted on a number of water conservation and management concerns in the West Valley.

Eugene Jensen, chairman of the board's Water Resources Committee, reviewed the group's actions at a monthly meeting Tuesday.

Jensen said the board has taken action on more than 21 water issues that required professional evaluation of more than 2,000 pages of state reports.

Volunteers attended meetings on a weekly basis, drafted and typed hundreds of pages of materials and participated in numerous meetings with other Northwest Valley water resource officials, Jensen said.

But despite the HOA's active participation in water issues, Jensen said many local residents do not realize the importance of water conservation.

"I think most people won't (take water conservation measures) unless they are forced into a reduction in water use or see a deterioration of their water quality," Jensen said. "Most people will not respond until there is a crisis situation and then they usually overreact."

In 1985 the HOA joined with other community organizations to form "Water Watch" to investigate a variety of water resource issues, including the filing of claims for Sun City water rights.

By 1986, the group formed a standing committee on water resources and hired an attorney to advise them on the legal aspects of filing claims for water rights.

Jensen said one the HOA's most notable accomplishments in the water field occurred in 1987 when the group made a formal filing for ground water rights on behalf of its members.

"The filing of the water rights saved the community a bundle of money. It cost us \$200 and attorneys fees while it would have cost every family in Sun City about \$20," Jensen said. "Many people couldn't have filled out those forms to begin with. They were not easy."

Jensen said the association

saved residents about \$500,000 in filing fees plus an estimated \$2.5 million in attorney fees.

Also in 1987, the HOA and other local groups voiced their opposition to the Arizona Corporation Commission on a proposal by Sun City Water Co. to expand its service area to a new subdivision north of Sun City West.

The water company, in apparent reaction to the testimony, withdrew its original proposal and introduced measures that would insulate the Sun City rate payers from additional costs associated with new service areas.

In 1988 and 1989 the HOA filed a number of reviews and proposals with the Department of Water Resources on its groundwater code for water conservation. The proposals generally included adverse comments on the proposed regulations defining an "Assured 100 Year Water Supply."

Jensen said another significant HOA project involved Sun Citian Edward Dapples, a professional geologist, who headed a technical report on the "Geology of Groundwaters in the West Salt River Valley Subbasin." The report discusses the general sources of ground water available to the Sun Cities.

This year a second such geological report was released. The report incorporates the most recent data available from local water users and from technical papers of the United States Geological Survey.

Jensen said the HOA hopes to share its knowledge of the area's water resources and share ideas with other West Valley communities.

"We will try to get the county to take on an increasing role in the communities in the area and perhaps form a coordinated West Valley plan," Jensen said. "But it takes a long time to get a focus."

Board president Frederick Hardy said an optimum way to unite such a plan is through the Western Maricopa Coalition.

Hardy is the HOA liaison to the newly formed coalition.

"I think it's a great idea. It is joining together the many splintered groups of the West Valley," Hardy said. "It includes all non-elected entities from industry to chambers of commerce and city managers."

# Sun Cities' water needs spring from underground

By **CONNIE STEELE**  
Daily News-Sun staff

**SUN CITY** — When residents of Sun City and Sun City West turn their water taps on, the water that flows out is as good as any in the Valley, a local geologist said recently.

And underground water levels have increased slightly over the past 10 years, said Ed Dapples of Sun City, professor emeritus in geology from Northwestern University in Evanston, Ill.

But he warned that if anything should upset the equilibrium between water use and rain fall, the rosy picture could change.

"If water withdrawal increases or rain fall decreases, you lose the equilibrium (between use and replenishment)."

Excess water consumption is the most pressing water problem locally, said Fred Kriess, general manager of Citizens Utilities Co., which supplies both Sun City and Sun City West through totally independent systems. But he also said that state regulations protect the water supply and its quality.

Consumption in Sun City has exceeded state limits by 50 gallons per person per day, he said.

Limits specified for Sun City by the Arizona Department of Water Resources, Kriess said,

were 239 gallons per person per day.

During 1987 and 1988, Sun City's average per capita consumption of water ran 289 gallons per day, Kriess said.

As long as a balance is kept between what is removed and what flows in, water levels can be maintained, Dapples said.

"In the past 10 years we have maintained the level," he said. "In fact, the ground water level is just a little higher than in the past."

He said, Citizens Utilities Co. "has done a great job. We have the best quality ground water of any community in the whole metropolitan Phoenix area."

"We're very much aware of water levels and water conservation," Kriess said. "There are many, many factors that could impact that. We monitor groundwater levels."

Before a development may be built, he said, "Every developer must show a 100-year water supply to the department (of water resources)."

The department has set criteria for drilling wells that regulate wells and water sources.

"There are controls built into the system that protects our ground water supply."

Dapples has served on the Sun City Commission on Water, an arm of the Sun City Home

Owners Association. He has made a point of studying the supply and quality of area ground water.

"Everybody on the commission has been associated with water consumption," Dapples said Monday. Members meet with various communities within the county and examine about 15 different issues related to water use.

Dapples, who has lived in Sun City since 1975, is a registered geologist in Arizona and a fellow of every major geological association in the U.S.

"I'm interested in professional affairs of the state."

Here at home, his interest digs into underground sources of water supplying homes in the retirement communities.

He said high quality water occurs locally because it comes from rain that falls on the mountains north of the Sun Cities. Rain water then flows underground and is stored in natural basins supplying the Sun Cities.

Kriess said the high quality of ground water supplying the Sun Cities is due, in part, because the water does not flow through chemically treated agricultural soils on its way to underground basins.

# Code cuts water allotments

By JACQUE-PAPPAS  
Daily News-Sun staff

SUN CITY — Major water users and providers in the area are gearing up to comply with the second phase of a state-mandated conservation code that eventually will cut their water allotments by about 10 percent.

The Arizona Department of Water Resources notified about 10,000 regulated water users of the new code requirements last

month.

The Sun Cities and other target areas in the state must comply with stricter water usage measures to reduce annual per capita requirements under the 1980 Ground Water Management Act.

The requirements are part of a second management plan that covers the years 1990 to 2000. The plan's intermediate conservation requirements begin Jan. 1, 1992.

Officials from Citizens Utilities Co. and the Recreation Centers of Sun City said Monday the regulations are too strict and compliance will be a continuous battle.

Fred Kriess, manager of Citizens Utilities' local office, said the water companies are considering several options, including an appeal of the imposed regulations.

"It will be difficult," Kriess said. "The company has several

options available to it and we are aggressively exploring our options."

Water users and providers have 90 days to respond to the department.

Kriess said the second phase of the Sun Cities' water management plan is divided into three sections.

In Sun City, residents will be limited to 239 gallons per person per day from 1992 to 1994; See Sun Cities, A3

## Sun Cities must comply with strict water limits

— From, A1

233 gallons per person per day from 1995 to 1999 and 214 gallons per person per day by the year 2000.

In Sun City West, residents will be limited to 219 gallons per person per day in the first years, 201 gallons per person per day in the second part of the phase and 188 per person per day gallons after 2000.

Sun City Water Co., which was required to cut water use to an average of 239 gallons per person per day, used 289 gallons per person per day in both 1987 and 1988.

The Sun City West Water Co., which was required to cut water used to 219 gallons per person per day, used 242 gallons per person per day in 1987 and 255 per person per day in 1988.

Since water usage was surpassed in both communities during those years, Kriess said it "will be a challenge" to keep water usage under the mandate.

"We still are encouraging our consumers to use water wisely," Kriess said. "We have regular community relations meetings with people from local groups . . . and really try to deal extensively with water conserva-

tion in the community."

Pamphlets on ways to conserve water in the home or yard are available at both water company offices: 15626 N. Del Webb Blvd. in Sun City and 13606 W. Spanish Garden Drive in Sun City West.

The Recreation Centers of Sun City will feel the crunch from the new phase of the water management code, said Jim Key, golf division manager.

In 1989, Key said, the golf courses had an allotment of five acre-feet of water by the management plan.

Now the allotment will de-

crease to 4.9 acre-feet for the first 90 acres of green and then to 4 acre-feet of water for the remaining greens.

An acre-foot is the amount of water it takes to cover an acre of land one foot deep.

"There's no doubt that it's going to be tough on the rec centers and on everybody," Key said.

"Our recourse is to take advantage of technology and update our sprinkler systems and computerize the rest of the courses," he said. "Most golf course operations only have to deal with 18 holes, but with us

being such a large operation and with so many other projects, we are looking at a pretty tidy sum of money."

Key said it would take at least five years for the centers to complete all irrigation work and computer installations at the seven golf courses.

He said the centers are considering appealing the mandated water allotment for its golf courses.

"Until then, we will have to learn to live with these strict water restrictions," Key said. "That means that the courses will be drier in July and August

or it means we have to save even more during the cooler times of the year."

Bill Plummer, Department of Water Resources director, signed the management plan Dec. 5, and his department mailed certified letters to notify cities, private water companies, golf course operators and other water rights holders of their new conservation requirements.

Among the plans' most controversial requirements are restrictions on the size of new golf courses. Those in the Phoenix area will be restricted to 120 acres.

By MIKE RUSSO  
Independent Newspapers

The Sun City Home Owners Association has been selected to receive a grant to conduct a survey to determine the level of groundwater depletion in the area and to organize an education program for the residents of the Sun Cities.

Funding for the grant will be provided by the Arizona Department of Water Resources, Active Management Area conservation and augmentation program.

The amount of the grant will up to \$48,000,

“

*They will provide a real straight-forward, objective look at the use of alternative water sources.”*

**Mark Frank**  
ADWR AMA area manager

according to Mark Frank, AMA area manager.  
“Technically they don't have the grant yet,”

Mr. Frank said. “The director of the agency approved the project, which means it is now subject to a contract development stage, which we go through with every grant we do. The final amount of the grant will then be negotiated,” he said.

Ninety-percent of proposals that receive preliminary approval go through a “full-blown contract negotiation,” Mr. Frank noted.

“We normally award about 20 grants per year,” Mr. Frank said. “We received 36 applica-

See ■ HOA GRANT, Page 2

# HOA gets grant for water study

## Focus of study to be on groundwater depletion, education

### ■ HOA GRANT

From Page 1

tions this year, and we awarded 14 grants, serving 16 projects.

“We have a certain amount of money to give out based on amount of fees collected for groundwater withdrawal,” he added.

ADWR awarded about \$1.4 million this year through the grants program, according to Mr. Frank.

HOA actually applied for the grant in August 1997, before the CAP Water Task Force began studying ways to make CAP water “used and useful” in the Sun Cities.

“They requested funding to conduct a feasibility study to determine appropriate or alternative uses of CAP water in the Sun City area, and based on that information, conduct a community outreach program where residents of Sun City would be educated regarding the proposal,” Mr. Frank explained.

The study will be conducted by the HOA Water Resource Committee, according to Gene

“

*We will try to get knowledgeable people, like Dr. (Edward) Dapples and Gene Jensen, involved.”*

**Gene Zylstra**  
HOA Water Committee  
chairman

Zylstra, committee chairman. “We will try to get knowledgeable people, like Dr. (Edward) Dapples and Gene Jensen, involved,” Mr. Zylstra said.

“We will bring the public up to date on the real (groundwater) situation,” Mr. Zylstra said.

“They will provide a real straight-forward, objective look at

the use of alternative water sources,” Mr. Frank added.

The study is expected to enhance the work done by the CAP Water Task Force.

“We want our money to fund something new or take it to the next level,” Mr. Frank explained. “This will be the next step beyond the level of analysis with which the task force was involved.”

A similar type grant was approved two years ago for PORA, according to Mr. Frank. “The general scope of that grant was pretty much the same thing. Look at potential uses of CAP Water in Sun City West,” he said.

There is no specified timetable for conducting the study, Mr. Frank said, but HOA plans to complete the task within a year and half, according to Mr. Zylstra.

The final report will be available to the public, Mr. Zylstra noted.



# Group seeks to protect SC water rights

By JACQUE PAPPAS

Daily News-Sun staff

SUN CITY — The Sun City Home Owners Association says it took bold steps Tuesday in an effort to defend residents' water rights from the whim of private water companies.

The board of directors unanimously approved a four-part plan that includes the establishment of a defense fund to take legal action in water resource issues.

Eugene Jensen, chairman of the board's Water Resources Committee, said the action is in response to Sun City Water Co.'s efforts to use part of the community's Central Arizona Project water allotment for a proposed North Phoenix development.

The company applied with the Maricopa County Board of Supervisors for a public service franchise to construct sewage and water utility systems for Del Webb Corp.'s Sun City North.

"The proposal serves to bring our water resource and rights issues into sharp focus," Jensen said. "We simply are left out of negotiations and are generally the last to know what others intend to do."

"I've come to the conclusion that the days of cheap water and unlimited use are over," Jensen said. "We are totally unprepared to deal with this."

The HOA has formed an ad hoc committee to oversee and operate the temporary water

---

'I've come to the conclusion that the days of cheap water and unlimited use are over... We are totally unprepared to deal with this.'

Eugene Jensen  
water committee

---

defense fund.

Jensen, who will chair the committee, said the money will be used for intervention and representation before state and county agencies such as the Arizona Corporation Commission — which gives the final approval on water transfer applications.

The committee will first investigate the feasibility of establishing a Sun City Water District, Jensen said.

Such a district would work similarly to Sun City's fire district, he said.

"People would be paying for their water protection," Jensen said. "If this is not possible we could try to get the legislators to provide the Northwest Valley with a water district. We need someone here who can keep in touch with what's going on to protect and preserve the water rights of the residents in this area."

The water defense fund would  
See Group, A5

# Group wants water rights

—From A1

be terminated upon the establishment of such a district. Any excess monies that may remain would be given to a charitable organization selected by the HOA.

But the success of HOA's plan hinges on community support, Jensen said.

"We have to get the message out to Sun City because if we don't get a response, then we're out of the water business," he said. "Intervention in agency proceedings or for initiating and prosecuting legal actions against water predators cost money."

Board President Frederick Hardy said the HOA is dependant the community's involvement.

The ad hoc committee is seeking the support and financial contributions of other local organizations and from residents.

"The Home Owners does not have the fiscal ability to pursue this to the extent it needs to be done," Hardy said.

In addition support from various political groups in the Sun Cities will be sought to question candidates on their views regarding water resources and rights.

The HOA will ask Arizona Congressmen to discuss the allocation of CAP water with the Secretary of Interior to assure that water reserves will not be transferred without certification from the state Department of Water Resources.

Jensen said Sun City water users must deal with a number

of issues — one of which is determining if Sun City Water Co.'s CAP water application was granted on behalf of the company or the water users.

Sun City Water Co. has a CAP allocation of 16,000 acre feet of water a year. An acre-foot is the amount of water it takes to cover an acre of land 1 foot deep.

But the water company has never used the CAP allocation, instead relying on groundwater sources.

In 1987, the company applied to use about half of the allocation for a development north of Sun City West. The status of Rancho Cabrillo del Norte subdivision is still unclear.

Sun City Water and its parent company, Citizens Utilities, applied to shift about 7,850 acre-feet of the federally subsidized water to the Sun City North project.

Jensen said Citizens Utilities should be asked a number of questions including whether Sun City residents are paying for the company's legal fees in recent interventions.

Jensen said the HOA's goal is to participate in legal and technical actions and maintain working relationships with neighbor communities that share common underground water resources.

"If we cannot communicate on the basis of trust, then we must seek legislation which will require communications. After-the-fact communications . . . are clearly inadequate for community oversight over a private water company," Jensen said.



SPRING

# Del Webb Confirms Sun Cities Water Supply

370

FILE

Del Webb and Citizens Utilities officials confirmed the existence of a 100-year assured water supply in the Sun Cities and said there is no reason to believe that residents would need to utilize a Central Arizona Project allocation now available to Citizens Utilities and the Sun City Water Company.

"Based on hydrogeological surveys, the Arizona Department of Water Resources has confirmed an assured water supply here in the Sun cities," said Tom Ryan, Webb's vice president of project planning and development. "Those surveys were completed in the mid-to-late 1970's and since that time, the water table in the Sun Cities has stabilized and in some areas, it has begun to rise."

Ryan, other Webb officials and representatives from Citizens Utilities met with community leaders and elected officials representing the Sun Cities to "present the facts and alleviate any concerns about the Sun Cities water supply." Concerns arose after it was acknowledged that Citizens Utilities was seeking a franchise application to serve a proposed Sun City north of Phoenix. Citizens proposed using a portion of its CAP allocation to serve the new community.

Ryan said any approval of the reallocation would need to come from several governmental authorities including the Arizona Department of Water Resources, the Arizona Corporation Commission and the Maricopa County Board of Supervisors.

"The CAP allocation is not required to serve the water needs of the Sun Cities. There are 25 wells serving residents in these communities and the water level; in those wells has stabilized since we began taking this land out of agricultural use," Ryan said.

It is estimated that residential usage requires two and one half times less water than agricultural use.

Information presented by Webb and Citizens utilities indicated that if residents of the Sun Cities were to utilize the CAP allocation, a nine-mile pipeline and treatment facility would have to be constructed at a cost of several million dollars.

"Those costs could be recovered from customers

Continued on Page 13

Continued from Page 1

contingent upon the approval of the Arizona Corporation Commission," said Fred Kriess, general manager of Citizens Utilities. "At this time, our customers have not been assessed any charges relative to the company's CAP allocation.

Ryan also explained Del Webb's position with respect to the transfer of water to its proposed Sun City and the company's relationship with Lakeview City, Inc.

"We have an option agreement with Lakeview City to purchase all or part of 5,700 acres based on several factors,

one of which is that it is the seller's responsibility to provide water to the site. We have not been a party to any negotiations between Lakeview and the State," he said.

1990

VF

WATER SC

## Sun City Grandfathered Water Rights History

1957 - Del E. Webb Development Co. buys 50% interest in Boswell Farms Inc., subsequently changed to 51% Devco and 49% Boswell for tax reasons. The purchase agreements eventually included irrigated acres in what is now Surprise and irrigated acres in what is now Sun City west.

1958 - First Development plan filed by Devco.

1960 - First land owners started using groundwater withdrawn from wells owned by the Sunburst Water Co. a wholly owned Subsidiary of Devco.

1962 - Sunburst sold to Sun City Water Co. water facilities adequate to provide water service to 3,000 properties for "not in excess of \$93,000."

1980 - Twenty years later The Groundwater Act of 1980 confirmed older statutes and specified that the owners of retired irrigated land (defined as the platted boundaries of Del Webb's Sun City) are entitled to the use of that quantity of groundwater that was used in the five years preceding 1980 and the groundwater may not be used on any other land.

1984 - 24 years later the Sun City Water Co. started exporting Sun City groundwater to Brookview via a temporary pipeline. Not in the company's service area. No CC & N from the Corp. No franchise from the City of Surprise.

1985 - Utility completed construction of a 12 inch pipeline to Brookview and started construction of service facilities in Brookview.

January 1986 - Twenty-six years after the first Sun City land owner started using groundwater and after twenty-four years of no mention of ownership of the groundwater it withdrew and delivered for its customers, the Sun City Water Co. sent a letter to the Department of Water Resources saying that it "owns the right to the water it withdraws and it is incorrect to suggest that the right is also owned by Sun City landowners,"

November 6, 1986 - Water Watch delivers 6,000 petitions to Recreation Centers of Sun City urging rec board to file for water rights.

November 10, 1986 - Recreation Centers board declines to file for water rights in behalf of Sun City landowners.

Sun City Home Owners Association announced it will file for the water rights on

behalf of all Sun City land owners.

# Water works

## Managing Viewpoint Lake difficult during arid periods

Maintaining a large body of water -- everything from cleaning up the litter, feeding the fish to sustaining the proper color -- can be a difficult job, to say the least.

Tom Camp, a biologist, is the owner of Aquatic Management, the firm hired by the Recreation Centers of Sun City, Inc. to take care of Viewpoint Lake, the largest lake in Sun City.

"Our main job is to maintain the quality of the water," says Mr. Camp.

He says Viewpoint's water level should normally be 71 inches. The lake is down about 8 inches presently.

"The water fluctuates daily.

"When it is down around 8 inches it can fluctuate 4 inches," says the biologist.

A red-and-white-striped pool near the bridge on Cameo Drive shows the water level at 51 inches.

The reduction in the water level does cause some problems for the water maintenance company.

"Sunlight penetrates the bottom, germinating the seeds and making the weeds grow faster."

Mr. Camp says some weed growth is good for the lake and its aquatic life.

The weeds act as a nursery for the lake's small fry.

When the growth gets out of hand, the maintenance company does one of three

things:

1. Add dye. Food coloring is poured into the water to darken it. The darker water blocks out the sun's rays, making it harder for the weeds to grow.

2. Add fertilizer. An analysis of the water is sent to a laboratory. The right level of fertilizer is determined and added to the lake.

The fertilizer returns the lake to its natural light green color.

3. If all else fails, says the biologist, a chemical is released on the bottom of the lake to suppress further weed growth.

"I know some residents are upset with the water but the fish are in abundance in there.

"Let's just say, the water is very healthy for fish production," he adds.

No state fishing license is required at Viewpoint Lake, but a limit of five fish of combined species has been set for those fishing.

In his monthly report to the Recreation Centers this past April, Mr. Camp says, "the present level of the lake is going to cause some deleterious impact from the macrophytes in the lake."

Responding to residents' concern over the amount of litter in the lake, Mr. Camp says it's about average.

"It's always normal to me."

# Residents upset over lake level

## Work at Lakes West hinders water flow to Viewpoint Lake

By LAURIE HURD-MOORE  
Sun Cities Independent

Some of Sun City's most popular and expensive homes surround Viewpoint Lake, one of only two lakes in the community.

A steady drop in the lake's water level, however, has some area homeowners up in arms and demanding that the Rec Centers step in and rectify the problem.

Homeowners living along the lake claim the low shoreline is not only hurting the appearance of the lake, but also making it increasingly difficult for residents to enjoy the amenities that come with living next to a large body of water.

If allowed to continue, some area homeowners fear the declining water level will eventually hurt the overall value of their homes.

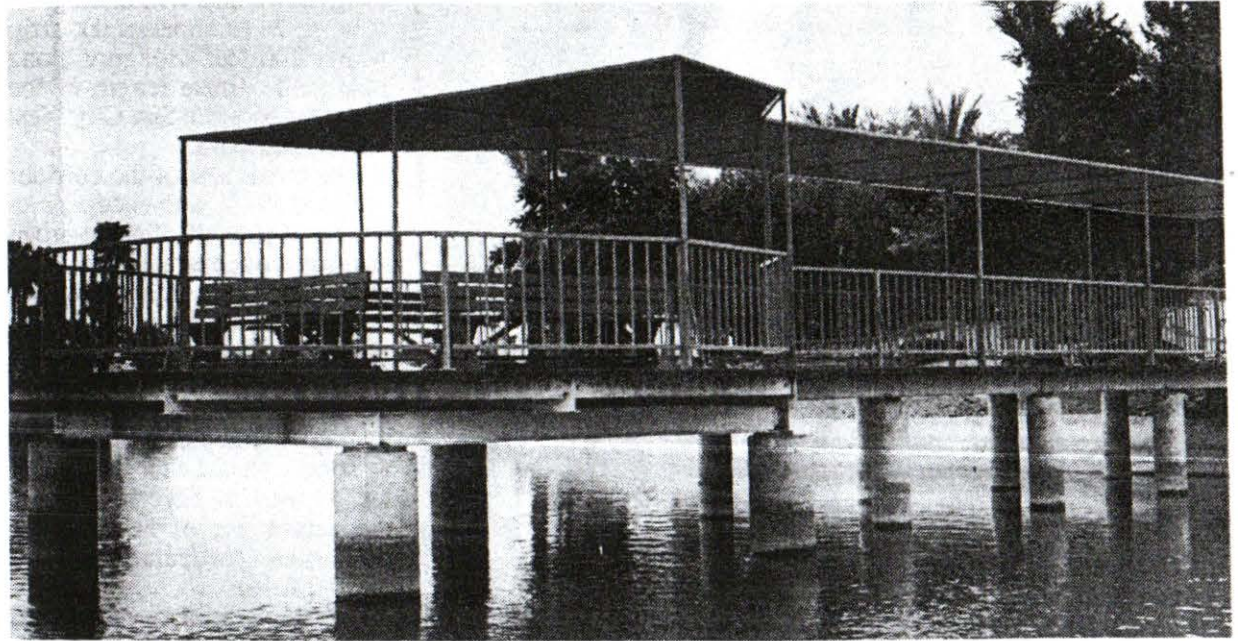
The exact amount of water missing from the 30-plus acre lake is the subject of some debate.

Figures between four feet and 20 inches have been reported by several residents. Officials overseeing the lake say the amount is much less.

Henry Holman and his wife, Erma Culver, live along the lake.

"The lake water is down so low you can hardly take the pon-

See LAKES, page 16



"A BATHTUB WITH A DIRTY RING" is how one resident describes the present condition of Viewpoint Lake in Sun City. As can be seen in this photograph, the present water level is several inches below normal (the shaded areas of the concrete pillars).

OVER

toon boats out," he says.

The two have lived at 13853 Buccaneer Way for over three years.

The couple, along with 80 other lakefront property owners, pay an annual fee for the privilege of living next to Viewpoint Lake. The fee increases each year.

This year, Mr. Holman says, he had to pay \$173.

A drop in the level of the lake is normal, especially during the summer months. This summer, however, the level has remained "terribly low," says Mrs. Culver.

Keeping the lake clean, says Mr. Holman, has become a difficult task because the low water level prevents boats with motors from reaching certain sections, mainly the shore.

The low shore level also makes it difficult for people to board boats from the docks.

"And the lake smells," says Mr. Holman.

"We don't smell it around our house, but everyday we walk our dog over the dam or bridge by Cameo Drive, and the debris collected there stinks," he says.

The low water level also has resulted in an aerator hose being cut recently by a boat's motor.

"(A) boat got tangled up in the hose and cut it. Now it's floating on top of the water," he says.

"The hose rests on the bottom of the lake. The boat motor could not be any bigger than two, two-and-a-half feet, so the lake would have to be awfully low for it to cut the hose," he says.

There are three independent aerator hoses in the lake that assist in keeping oxygen at the bottom of the lake.

Mr. Holman says he and a number of his neighbors have complained to the Rec Centers about the low level of the lake.

"In the past, they said the lake is low because no more water can be used. The allotment of water has been used up and we'll (the Rec Centers) get fined if we use anymore water," says Mr. Holman.

Viewpoint Lake receives its water from a well located at Sunland Memorial Park. Before it reaches the lake, however, the water is routed to Lakes West Golf Course where it is used to irrigate the greens.

Sunland Memorial Park, located at 15826 Del Webb Blvd., uses a portion of the water to irrigate its grass. The pump that moves the water toward the golf course is owned by Sunland Memorial Park.

From Lakes West, the water makes its way to Viewpoint Lake through a series of creeks and ponds. The lake acts as a reservoir and water is continuously withdrawn and channeled back to the golf course for further irrigation purposes.

Vern Hansen, general manager of the Recreation Centers of Sun City, Inc., says some of the water had been lost in the channeling process due to leaks in the system.

Over the past few months, however, the golf course's watering system was sealed to prevent water leakage.

The general manager says work on the golf course is nearly complete and the flow of water back to the lake has been increased.

He says residents can expect to see the lake return to its normal level in the near future.

"The lake has been receiving water. It has been running about 20 hours a day," says Mr. Hansen.

"We have been just as concerned (about the low water level at the lake) as the residents. It has been hard to convince them of this," says Mr. Hansen.

"We are building it back up again. We could use the help of some rain.

"It's just been a balancing act between the lake and watering the golf course," says Mr. Hansen.

The general manager says it will take some time for the flow to increase the lake's water level significantly.

Mr. Hansen says the lake's level has increased three-quarters of an inch over the past week.

Bill Lee, an engineer and president of Viewpoint Lake Homeowners Association, says the basic problem with the water system is that the pump is not owned by the Rec Centers.

Mr. Lee and his wife, Martha, live at 13605 Tan Tara Point.

"All the golf courses in Sun City have their own water source except Lakes East and West

courses," says Mr. Lee.

Water for Lakes East is stored in Dawn Lake, which lies east of Viewpoint Lake.

"Dawn Lake is wholly owned by the residents. They pay for the water that goes into their lake and get credit for the water taken out to be used at the course," says the association president.

Viewpoint Lake, however, is owned and operated by the Rec Centers. The well is owned by Sunland.

Much of the water for Viewpoint Lake, says Mr. Lee, evaporates during its journey from Sunland to the lake.

The lining of Lakes West ponds and streams should arrest much of this water loss, he says.

Biologist Tom Camp, owner of Aquatic Management, says Viewpoint's water level should

normally be 71 inches. The lake is down about 8 inches, he says.

Aquatic Management was hired 14 years ago by the Rec Centers and Viewpoint Lake's homeowners association, to maintain the lake.

Mr. Camp says residents should try to be patient with Rec Centers management.

"There have been new laws passed regulating the use of water. The Rec Centers are trying to adjust. This presents a challenge.

"Rather than use a million gallons of water on an 18-hole course each day, the Rec Centers have been mandated to use something like 700,000 to 800,000 gallons," he adds.

The reduction in the water level does cause some problems for the water maintenance com-

"Sunlight penetrates the bottom, germinating the seeds and this makes the weeds grow faster."

Mr. Camp has noted the steady

drop in the lake's water level in monthly reports submitted to the Recreation Centers.

In March, the level was down 18 inches from normal. In May, the level had risen, but was still 14 inches below normal.

In his June report to the board, Mr. Camp states, "the lake (level) is back down again substantially.

"Every effort should be made to bring the level back to normal."



# Sun Cities didn't meet water goals

By JACQUE PAPPAS  
Daily News-Sun staff

SUN CITY — Sun City and Sun City West are among 26 areas served by city and private water companies that have exceeded state-mandated water conservation goals in 1987 and 1988.

The Arizona Department of Water Resources last week sent out 26 notices of non-compliance to large municipal water providers in the Phoenix and Tucson Active Management Areas.

Notices were sent to those providers that did not reach their gallons-per-capita-per-day requirements.

Fred Kriess, manager of Citizens Utilities' local office, said the company expected the Sun Cities to use more water than allowed by the state's groundwater code.

But he said the code, requiring the Sun Cities and other target areas in the state to comply with stricter water usage measures, treats the West Valley retirement communities unfairly.

"The amount of water they allot per person per capita per day really treats the Sun Cities unfairly. They do not consider the fact that Sun City and Sun City West have changed drastically. We get no credit for commercial development. They are looking only at population and total water use," Kriess said. "Sun City West is one of the most water conserving areas in Arizona. Most of the lawns are desert landscaping and the area is drastically reducing the number of grass lawns."

Under the 1980 Ground Water Management Act, cities and other large water providers were required to reduce annual per-capita water use to target levels starting in 1987.

The Sun City Water Co., which was required to cut water use to an average of 239 gallons per person per day, used 289 gallons per person per day in both 1987 and 1988.

The Sun City West Water Co., which was required to cut water use to 219 gallons per person per day, used 242 gallons in 1987 and 255 in 1988.

"It is definitely a disappointment, but our position is that we want to see wise water management," Kriess said. "We want to take all the steps we can to work toward compliance in future years."

Kriess said compliance in the Sun Cities will be a challenge, considering that the communities already have used more water this year than in all of 1988.

The groundwater code provides for stiff fines when water providers do not achieve conservation requirements.

Although water providers face fines of up to \$10,000 for each day of violation, department officials said they will work to lower or waive fines if water providers come up with acceptable plans to conserve more water.

The department's compliance policy is geared to helping water providers reach their conservation targets rather than collecting large monetary fines from violators, said Bill Plummer, director.

Plummer said: "The goal of the conservation requirements is to encourage reduced groundwater pumping. Many of the municipal providers who did not reach their conservation targets are commended for reducing their groundwater pumping by quickly acquiring renewable water supplies, such as Central Arizona Project water."

Sun City Water Co., Sun City Sewer Co., Sun City West Utilities Co. and the Agua Fria Division are all subsidiaries of Citizens Utilities, which uses CAP water.

When negotiating settlements, Plummer said the department will consider mitigating factors such as efforts the provider has taken to reduce groundwater pumping, problems associated with seasonal population in-

creases and conservation efforts.

If a provider does not meet conditions to conserve water, then the department will pursue more stringent penalties, Plummer said.

Large water providers, those that served more than 500 customers as of 1987, are all under the groundwater code, which requires the department to adopt a series of five management plans.

The code was established in 1980 and requires active management areas to have a stable water level by 2025.

Nearly half of the 47 providers in the Phoenix region failed to meet the targets, according to figures released by the department last week.

Peoria and Luke Air Force Base are among the 17 municipalities and private companies that did not exceed water-use goals established by the de-

partment.

The city of El Mirage was sent a notice of non-compliance and Youngtown was sent an advisory letter for compliance.

El Mirage, which was required to cut water use to an average of 140 gallons per person per day, dropped from 177 gallons in 1987 to 164 gallons last year.

Youngtown cut its water usage from 399 gallons per person per day in 1987 to 348 in 1988. Although Youngtown now averages one gallon below the department goal of 378 gallons, an advisory letter was still issued because of high usage in 1987.

Peoria, which had a target of 292 gallons, used 220 gallons in 1987 and 210 gallons in 1988.

The Recreation Centers of Sun City are classified under separate turf-related codes. Centers officials said today they expect to be in compliance with target goals for 1988.

# Water code leaves SC greens brown

By JACQUE PAPPAS  
Daily News-Sun staff

SUN CITY — About 20 years ago, Frank Shelton bought a home along Lakes West golf course.

"I bought my home because when you walk out on the back patio, you can see the beautiful greens of the golf course," Shelton said. "There is nothing more pretty than a sea of green for your backyard."

But last year, Shelton has noticed a change in the once lush greens that surrounded his back patio.

"The grass used to be green, but not anymore. It's not a very pretty sight when you look out

here," Shelton said. "Now, much of the grass is brown. In many places there isn't even grass any more. Who knows, maybe the recreation centers forgot to water."

Shelton is one of many Sun City residents with homes along golf courses who say they have seen a gradual deterioration of the grassy areas beyond their property lines.

Although the Recreation Centers of Sun City boasts more than 1,000 acres of green on its eight golf courses, the dry grass along home property lines has not been forgotten.

Jim Key, golf course maintenance coordinator for the centers, said the problem is not new. "See Sun Citians, A3

— From A1

ters, said the state's Groundwater Management Code has tied the hands of the recreation centers.

The Department of Water Resources oversees the groundwater conservation management code, which requires the Sun Cities and other target areas in the state to comply with stricter water usage measures.

The code was established in 1980. It requires that active management areas have a stable water level — no more water drawn from ground supplies than is naturally replenished — by the year 2025.

The regulations apply to each of the state's four water management areas — Maricopa County, Pinal County and the Tucson and Prescott areas.

Key said grassy areas along golf course property lines have suffered the most since the code went into effect in 1987.

Most of the perimeter areas that are drying up are watered by a flood irrigation system while the greens are watered by a sprinkler system, Key said.

Since the centers' first priorities are the course greens and fairways, Key said the perimeter areas have not been watered as they have in the past.

"The more the water restrictions go down, the less we can water these areas. People are calling us and telling us they are upset by the brown grass. It's been a really tough situation and it hasn't been fun to wrestle with," Key said. "We're not gaining anything by not watering. We're losing too because it's unsightly to everyone. We aren't doing this necessarily because there is a water shortage, we are doing it because it's the law."

Key said the problem can be solved by converting the flood irrigation systems on the courses to allow the perimeter areas to

be watered by a sprinkler system.

But such a conversion takes money. Last year the centers spent hundreds of thousands on new irrigation systems at North and South courses.

"Until we do away with flood irrigation, the residents will not feel too good about what we're doing outside their back door," Key said. "We are very concerned. We want residents to know that this is something we're not ignoring."

Sprinkler systems on North and South golf courses now extend to the resident property lines.

The new system has equipped the courses with computers that set the amount of water used on the greens according to temperature and other weather factors.

"The golf course industry has been given the short end of the stick. I wonder if enough consideration was given to what a

big part golf plays in the state's tourist industry. It's pretty hard to market a brown golf course to the nation," Key said. "What I really see as the problem is more down the road. If we are having trouble keeping these flood areas green now, it will be even tougher in years ahead."

Key said the recent sealing of lakes on Lakes East and West courses may help eliminate water loss that has occurred in past years because of seepage.

The Department of Water Resources accounts for the natural evaporation of water but does not account for any loss through seepage.

Dawn Lake, which serves Lakes East, and Viewpoint Lake, which serves Lakes West, are the only storage lakes not located on a golf course.

All other lakes are located on and involved with the design of the golf courses they serve.

Turf facilities, such as the

OVER

recreation centers, are under special provisions of the groundwater code, said Mark Frank, deputy director of the Phoenix Active Management Area.

Frank said there are 354 turf facilities under the code. He said turf facilities — parks, golf courses and school yards — must be larger than 10 acres.

“They (recreation centers) are unique in the sense that they have a clustering of golf courses in a planned community,” Frank said. “But in terms of their water allotment, there is nothing unique about them. Paradise Valley, Cave Creek and Sun City all have the same application rate.”

Frank said the water allotment is determined by a set application rate and the number of acres involved.

The rate is now restricted to 5

acre feet of water per year. The second period of the conservation plan is drafted at 4.9 acre feet. The new rate would become effective in two years after it is adopted.

Frank said the department has received dozens of comments regarding restrictions on turf facilities.

He said large turf facilities are particularly concerned because their allotment goes from 4.9 to 4 acre feet if they exceed 90 acres.

“We evaluated and determined what the golf courses should be using. Even if historically they have used a certain amount, they are restricted to less because of the conservation plan,” Frank said. “Obviously, no one is going to be happy about the restrictions. But we all have to work together to save for future years.”

# Dry

## ideas

### Sun Cities go above water use limitations

By JACQUE PAPPAS  
News-Sun staff

SUN CITY — In 1987, the Sun Cities used more water than allowed by the state's Groundwater Management Code.

In 1988, the Sun Cities showed an increase in water usage.

And if things keep going the way they have so far this year, the Sun Cities will again fail to meet water conservation requirements mandated by law, water officials said.

Fred Kriess, manager of Citizens Utilities' local office, said the Sun Cities have used more water so far this year than was used for all of 1988.

"The areas here are growing rapidly, so it's only natural that they need more water," Kriess said.

The Department of Water Resources oversees the groundwater conservation management code requiring the Sun Cities and other target areas in the state to comply with stricter water usage measures.

The code was established in 1980 by the Arizona Legislature. It requires that active management areas have a stable water level — no more water drawn from ground supplies than is naturally replenished — by 2025.

The regulations apply to each of the state's four water management areas — Maricopa County, Pinal County and the Tucson and Prescott areas.

During 1987, the first year of enforcement, the Sun Cities did not comply with the conservation plan, Kriess said.

Although the department has not yet issued non-compliance notices for 1988, Kriess said the utility recorded an increase in water use in the Sun Cities.

Kriess said the water usage increase is most notable in Sun City West.

"In Sun City West, I'm sure we had an increase because they are still a rapidly growing community. Both Sun City and Sun City West are not the same communities they were in 1980," Kriess said. "Sun City has seen an increase in commercial development and in 1980, Sun City West was a new community with small, immature landscaping."

Since water allotments for the 45-year conservation plan are based on data collected in 1980,

Kriess said water usage allowed in future years could be unrealistic.

Many local and Valley organizations have expressed concerns with the department's draft management plan, saying that it does not consider a variety of factors.

"Last year was a very hot year and this year has been, too. I think the heat certainly has been an influence on the amount of water used by residents," Kriess said. "Since the data for the law are based on 1980 water use findings, things like growth and temperature are not accounted for."

In 1980, the test year for the water code, the average temperature for the entire year was 74 degrees, National Weather Service officials said.

In 1988, the average was 76 degrees and so far in 1989 there have been a number of high temperature records.

Phoenix recorded its 64th straight day of temperatures

Mueller said the department director is now reviewing the second water management plan, which is in five phases to enforce excess pumping of groundwater. The second phase will be in effect from 1990 to 2000.

Sun City Water Co., Sun City Sewer Co., Sun City West Utilities Co. and Agua Fria Division are all subsidiaries of Citizens Utilities.

But whether potential fines would create rate increases for consumers is something Citizens Utilities has not yet addressed, Kriess said.

The Arizona Corporation Commission would first have to approve any increase in the company's rates.

Kriess said the company has worked to establish a good working relationship with the department and has made efforts to inform the public of the importance of water conservation.

He said the company provides information on water efficiency and conservation to its customers.

above the 100-degree mark on Wednesday, adding to a record set two days before.

Although Department of Water Resources officials said they will consider water-use factors before issuing the final draft of the management code, all areas covered under management are still subject to fines if water use limits are exceeded.

Faith Mueller, unit supervisor of the municipal program for the Phoenix area management program, said the maximum fine is \$10,000 for each day of non-compliance.

Although Citizens Utilities received a notice of non-compliance in 1987, no fines have been issued so far, she said.

"We have not taken any compliance action at this point because the department is reviewing the compliance policies that are being established," Mueller said. "After the policies are established, we will look at the violations and work out some kind of compliance program."

June 18, 1988

# 2 local groups say water plan unfair to area

By JACQUE PAPPAS  
News-Sun staff

SUN CITY — Two local home owners associations say information in a 450-page water management plan is inconsistent, inadequate and unfair to the Sun Cities and other West Valley areas.

The Sun City Home Owners Association (HOA) and the Sun City West Property Owners and Residents Association (PORA) will present a joint technical analysis of the plan at a public hearing Monday.

Eugene Jensen, one of eight area engineers and lawyers who have reviewed the plan, said the associations have made several recommendations in their analysis of the Department of Water Resource's management plan.

"The plan represents perhaps the most complex and important community efforts being undertaken in the state of Arizona. The implications of the plan will touch the lives and pocketbooks of just about everyone who lives in the Valley," said Jensen, chairman of the HOA water resources committee. "Unfortunately, this plan does not take into account the rapid growth in the West Valley and treats the areas as one homogeneous region. It seems as though the department has not thought any of this through."

Jensen said the plan, which is in draft form, does not consider developments such as construction of the freeway system or probable community impact of the expansion of Lake Pleasant.

In the HOA/PORA recommendation, Jensen proposed that the department reconstruct the plan to reflect community development, rights to use of surface and groundwater and identify actions needed to reach the water conservation goal by the year 2025.

Although the plan indicates a continuing groundwater deficit through 2025, Jensen said the plan ignores areas like the Sun Cities where legislative mandate of groundwater has already been met.

He said sections of the plan dealing with mandatory water conservation measures are acceptable, but the analysis of the economic impact of these measures is limited.

In addition, Jensen said the population estimates in the plan for the Sun Cities is modest and does not reflect the actual water using population and water use practices.

"The objective is not to use

groundwater any faster than it is replaced naturally. In the Sun Cities, we are already at that level that is essentially stable so we shouldn't be faced with having to substitute the lower quality water we have," Jensen said. "The safe yield for these areas have already been attained and now the problem for the area is one against protection of future overdrafts."

Jensen said the same underground resource system supplies water to the Sun Cities, Youngtown, El Mirage, Surprise and parts of Peoria.

This water is of high quality and could be mixed with an inflow of lower quality water from adjacent areas over a period of time, Jensen said.

Time is another problem Jensen and others who worked on the association report had to overcome.

"The amount of time which has been allocated to the first stage of the review process is far from realistic. Those of us who have the responsibility for technical review have had only a few days to develop an appraisal," Jensen said. "We have had no meaningful opportunity to meet with representatives of our neighboring communities to discuss either the technical details of the report or to consider alternate views."

The plan, a second in a series of five to enforce excess pumping of groundwater, will be in effect from 1990 to 2000.

The plan was released May 20, public hearings are scheduled for June 20 and the deadline for final comments is June 28.

The management plan public hearing will be 9 a.m. to noon and 7 p.m. in the Phoenix City Council Chambers, 200 West Jefferson.

Jensen said a panel of eight area lawyers, water resource scientists and engineers all helped in compiling the associations' recommendations on the plan.

But although the association plan gives detailed suggestions and reasons why the management draft should be altered, there is no guarantee that any changes will be made said HOA President Ted Hoyt.

"Gene (Jensen) and members of the community and PORA have put a lot of time into this report. They are qualified experts in these areas and we are lucky for them to be so concerned with issues that affect all of us here in the Sun Cities," Hoyt said.

## Raymond taps watery issue

By DOUG DOLLEMORE  
News-Sun staff

SUN CITY — Sometimes you can tell a lot about a person by the way he drinks water.

Some people drink quickly. They gulp down the liquid in one swift motion. They never stop to enjoy it.

But Hank Raymond is different. He sips his water slowly and carefully. He holds it in his mouth momentarily before he swallows. He savors each and every drop.

He drinks his water that way because he knows how vital it is to Arizona, and how quickly it can disappear.

"I think most people think that water will be there when they need it, but it won't be if we don't plan," says Raymond, who lives southwest of Surprise.

"I've been constantly concerned about newcomers to Arizona and their lack of understanding about how important supplemental water supplies are to us. It's a real problem."

It's a problem that Raymond has been working on for more than 50 years. In that time, the 73-year-old Arizona native has become a central figure in developing the state's water conservation policies.

Raymond is chairman of the board of the Central Arizona Project — a series of aqueducts, pumping stations, tunnels, siphons and control gates that stretches 300 miles across the state's deserts. When it is completed in the early 1990s, the \$4 billion project will carry 1.5 million acre-feet of Colorado River water from Lake Havasu to Phoenix and Tucson annually.

One acre-foot is the amount of water needed to cover one acre to the level of one foot. But more importantly to Arizonans, it is also the average amount of water used each year by a family of four.

"A lot of people have been involved in water resources and water management over the years, but Hank really deserves credit for sticking with this issue and seeing that it's resolved," says Keith Turley, chairman of the board of Pinnacle West, the holding company for Arizona Public Service Co.

Raymond always has had a stick-to-it nature, says Turley, who grew up with Raymond in a poor Mesa neighborhood.

"We grew up on the wrong side of the tracks. We were born white trash and we rose out that," Turley says. "We had no place to go but up."

Raymond did go up, although it often wasn't easy. In 1936, he dropped out of the University of Arizona because he couldn't pay tuition. He got a job working for the Maricopa Water District.

Within a year, he returned to the university and earned his degree.

"I ended up having more money when I graduated than when I started out," Raymond says.

After college, he became a field engineer for the water district. There, his concern about falling ground water levels grew.

"I noticed the water table was lowering. It wasn't being recharged as fast as we were pumping out of the ground," he says. "I recognized the only way we could continue to grow agriculture and support industry was to import water from the Colorado River."

But in the 1930s, a Colorado River aqueduct was just another pipe dream, so Raymond turned his attention to other projects. He became district engineer and manager for the water district. His boss was Walter O. Boswell.

"I told him I thought it was a pretty big job, but I'd give it a try," Raymond says. "He said, 'If you make a mistake, come and tell me about it. But if you make the same mistake twice, I'll fire you.' I thought that was fair. Boswell was a fair man. He had very high moral standards and business integrity. I admired him."

During World War II, Raymond served with the Seabees in the South Pacific. After the war, he returned to the water district.

But he also had other interests. In 1947, he helped incorporate Goodyear and served on the town council for eight years.

"We started out having one guy be town manager and working out of his house," Raymond says. "We ended up having a town hall, a police department and a fire department. We were spending most of the time making dog ordinances and that kind of stuff. Finally, I got fed up with it and got out."

That was in 1955, and it was his only venture into elective politics. But in the next 30 years he served on 21 commissions, boards and committees. Among his appointments were a 15-year stint on the state Commission of Agriculture, a 10-year hitch on the Del E. Webb Development Co. board and a 12-year term as president of the Arizona Citrus Institute.

He was also chairman of the board of Walter O. Boswell Hospital for 15 years and is now

chairman of Del E. Webb Hospital board.

"My wife said I never learned to say no," Raymond says. "I guess I got into these things just because I was there."

And people seem to appreciate Raymond being there. He was named Arizona Agriculture Man of the Year in 1976 and received an outstanding citizen award from the U.S. Department of Interior in 1984.

But Raymond is proudest of his work for the Central Arizona Project. He served as president of the project association for 24 years and has been chairman of the board since 1984.

"It's so important to the state," Raymond says. "Without it, I doubt the economy of the state could be good or survive."

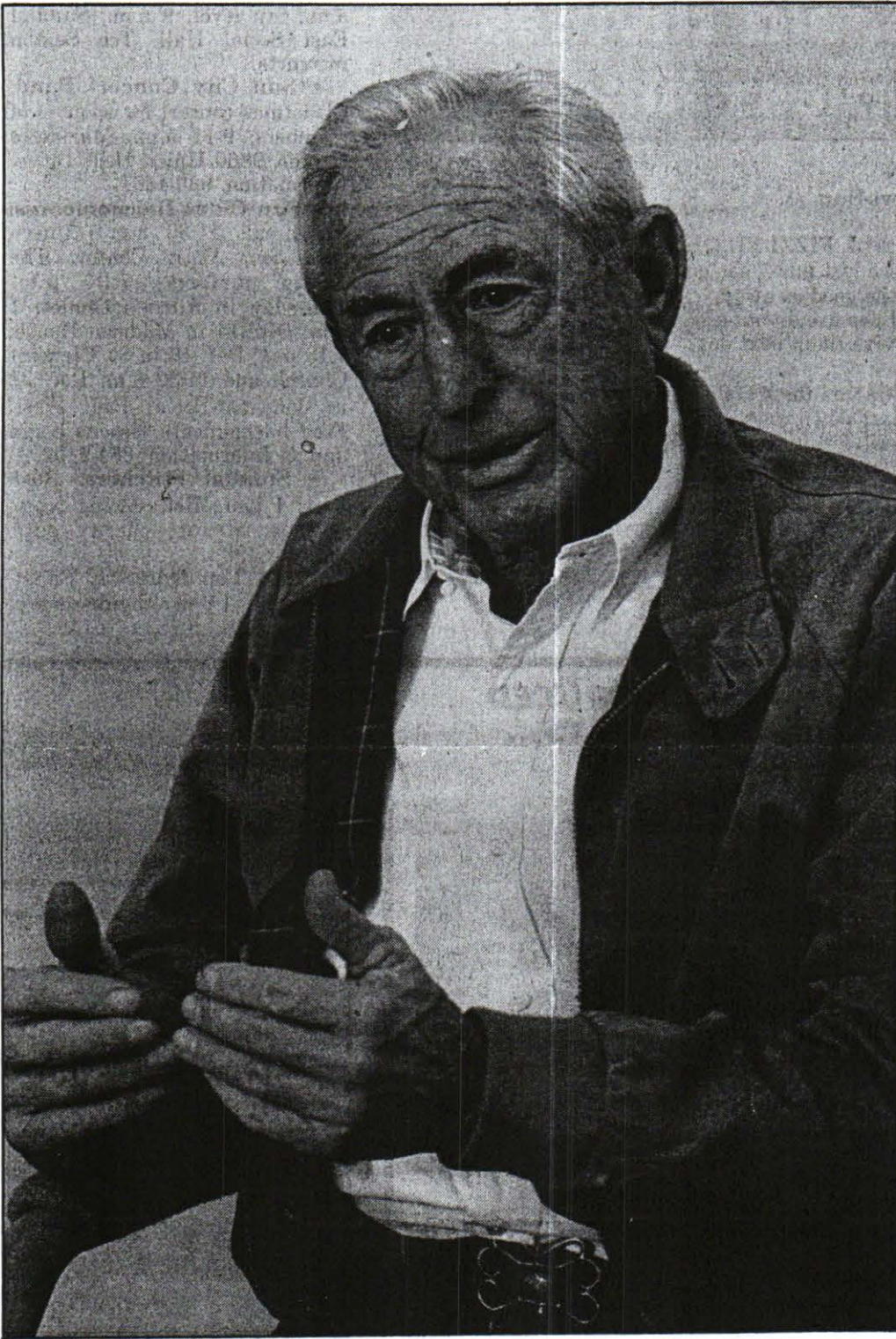
"Somebody ought build Hank a statue," Turley says. "Heck, we should build a fountain that has a statue of him in the middle with water coming out of his hair."

---

**'I think most people think that water will be there when they need it, but it won't be if we don't plan. I've been constantly concerned about newcomers to Arizona and their lack of understanding about how important supplemental water supplies are to us.'**

Hank Raymond

---



**FAIR BOSS** — One of Hank Raymond's bosses was Walter O. Boswell, who told him: "If you make a mistake, come and tell me about it. But if you make the same mistake twice, I'll fire you." Raymond says, "Boswell was a fair man. He had very high moral standards and business integrity. I admired him." (News-Sun photo by Mollie J. Hoppes)

# Sun City Extra

THE ARIZONA REPUBLIC

WEDNESDAY, SEPTEMBER 10, 1986 NW

A

## Water battle welling up in Sun City

### Residents warned of utility's control

By ROBERT BARRETT  
The Arizona Republic

SUN CITY — Like the war clouds gathering over Europe before World War II, water clouds are gathering over Sun City, according to one expert.

"We're going to have to use less water, we're going to have to pay more, and we're going to get a lesser quality," said Eugene T. Jensen at the Home Owners Association board of directors meeting last week.

Jensen, who was the regional administrator and deputy administrator of the Environmental Protection Agency in Washington and served as the executive secretary of the Virginia Water Control Board and director of Kansas Water Pollution Control, is afraid that residents will lose control of their water.

Jensen said that if the Sun City Water Co. files for the community's water rights on its own behalf, the residents will have relinquished their rights to the water.

"Then all of our water decisions will be made for us by a for-profit company based in

Connecticut," he said. "I don't trust Citizens Utilities, and I don't trust them to act in our best behalf."

However, Jensen said the utility's first responsibility is to its stockholders.

"I think those of us who live in Sun City have a better idea of how to control our water resources," he said.

Citizens Utilities, the parent company of the Sun City Water Co., is based in Connecticut.

The Groundwater Management Act calls for the establishment of water rights in critical ground-water areas, he said. The lower Gila River watershed, which supplies Sun City's wells, is one of the areas. The deadline for filing for water rights is Jan. 20, 1987.

After the meeting, Bill Raymo, manager of the Sun City Water Co., said the firm will file for the water rights on behalf of the parent company.

"There seems to be some hang-up on the word 'behalf,'" Raymo said. "We are filing in the name of the company that's operating that (water) system."

Once it has control of the water rights, Jensen said, Citizens Utilities could mix Sun City's

water with CAP water, which would lower its quality because Colorado River water is salty.

"Colorado River water is salty and corrosive, which means water heaters may not last a long time," he said.

CAP water would require treatment, an expensive process, and the cost would be passed on to the consumers by Citizens, Jensen said.

Raymo said Sun City Water has received an allocation of 17,000 acre-feet per year of CAP water.

"We will use that water when the cost of treating that water approaches that of well water or when no well water is available," he said. "We will continue to use well water until the cost is prohibitive."

Raymo said that a treatment site for the CAP water has not yet been selected but that residents would not pay for the treatment plant until they begin to use the treated water.

According to Jensen, the only way to avoid CAP water is for residents to establish their rights to the water and to monitor its usage by the water company.

"It won't do you any good to file on your own," he said.

Only a unit of local government can file for

the water rights, so there are three possibilities: Maricopa County, the Recreation Centers of Sun City Inc. or the Sun City Fire District could file, Jensen said.

Raymo said, "The homeowners are not the water purveyors, we are. It's an exclusive franchise."

He said he expects the dispute over water rights to end up in court.

If residents can find a local unit of government to file for the water rights, Jensen said, residents can regulate the amount of well water pumped by the water company, thus ensuring CAP water would not be used.

However, everyone will have to practice water conservation, he added.

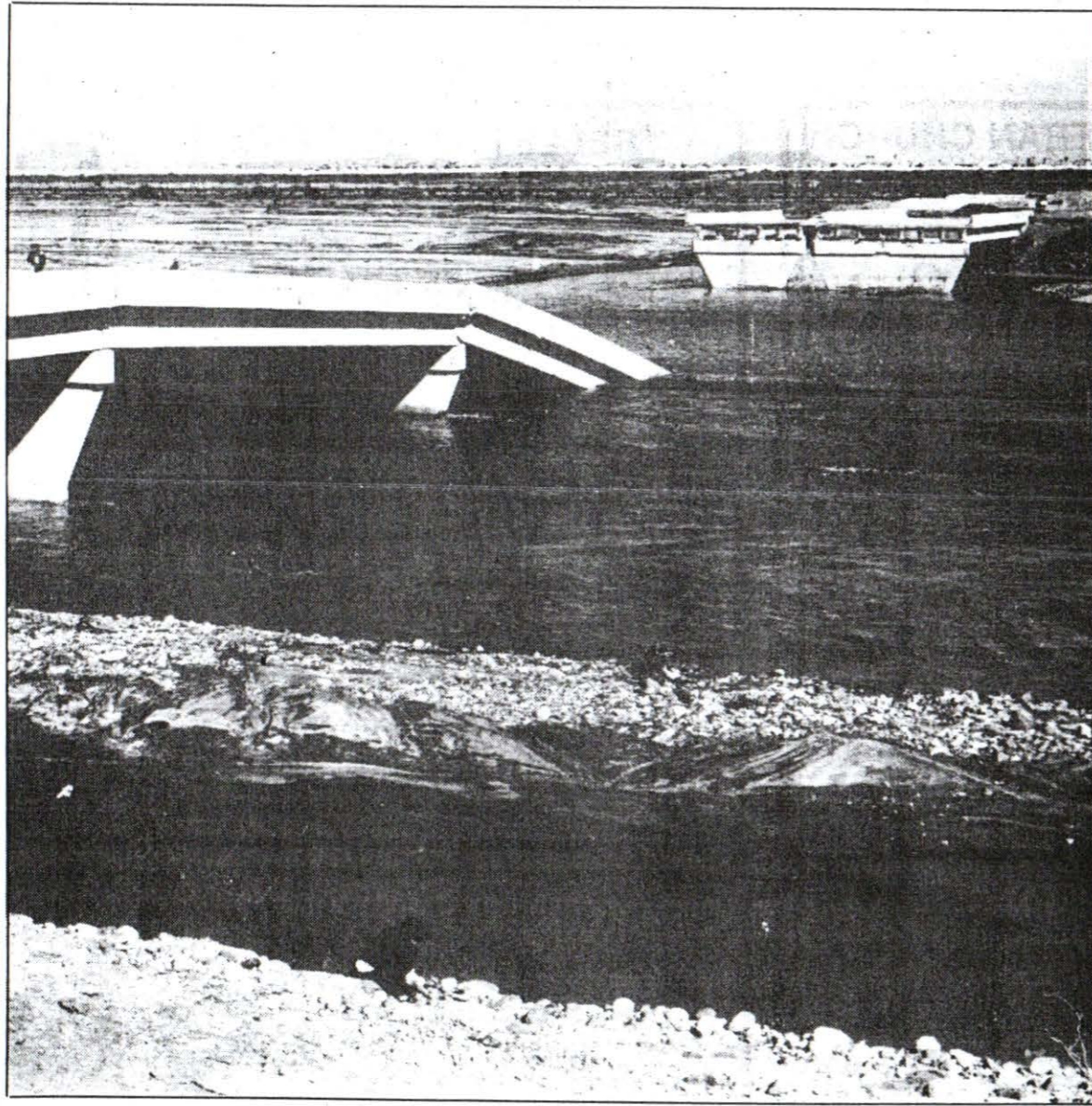
"The average use is 250 gallons of water per day per person," Jensen said. "We have to go down to using 140 gallons or less than that per day per person."

Jensen said he believes that once residents understand the dispute they will find a solution to the water problems.

"We are looking into this," he said. "Right now, there are only questions. We have to have answers by January."



## 1979 Flood Destroys Bell Road Bridge



**Story & Photo,  
Art Bender, President  
Friends of the SCW Library**

During the 1979-80 monsoon season, floodwaters of the Agua Fria River destroyed the Bell Road bridge between the Sun Cities. Extensive rain storms in the Bradshaw Mountains drained into Lake Pleasant and water had to be released to save the Waddell Dam. That water flow and concurrent rain in Sun City West took our bridge away.

The Sun City West streets were flooded from sidewalk to sidewalk. During the next 18 months traffic on Bell was routed to a temporary road at the river bottom south of the bridge site. Of course, as of now, the river bottom was dry most of the time.

It was a great day when we got our new bridge. That same storm also destroyed a bridge over the Agua Fria River on I-17 at Black Canyon City.

# Group will file N.S. 11-10-86 water rights for Sun Citians

By DAN BURNETTE  
News-Sun staff

**SUN CITY** — The Sun City Home Owners Association (HOA) will file for water rights on behalf of homeowners in the area, HOA and Recreation Centers of Sun City Inc. announced this morning.

The rec centers had considered making the filings for homeowners, but legal counsel advised the rec board that such an effort "is outside the scope of our articles of incorporation," rec board President Doris Timpano said.

The rec centers called a news conference this morning on the water rights matter after Water Watch, a citizens group, last week delivered almost 6,000 pieces of mail from homeowners urging the rec centers to make the mass filing.

The filings for water rights must be made by Jan. 20, 1987, with the Arizona Department of Water Resources. Who owns the rights to water in the Lower Gila River Watershed, of which Sun City and surrounding areas are a part, will be decided in Maricopa County Superior Court.

Water Watch had asked the rec centers to make the filings on behalf of all homeowners in Sun City to eliminate the costs for each person to file individually, said Gene Jensen, president of the citizens group.

The individual filing fee is \$20 for each source of water, but a

group like the rec centers or HOA can file on behalf of all homeowners in the area for \$260, Jensen said. The \$260 figure is based on the amount of water in the Sun City area.

Water Watch has maintained that there are at least 1,600 property owners in Sun City who have water rights attached to the deeds on their homes.

The group has said property owners, or an association acting in their behalf, should file for the water rights or face losing those rights to Sun City Water Co.

Jensen has said he is concerned that Sun City Water Co. will pipe Sun City water to other outside communities.

Executives of the utility, a subsidiary of Citizens Utility Co. of Stamford, Conn., have said they intend to file for water rights on behalf of the company.

But Ken Powers, president of HOA, said this morning that Sun City Water Co. may not have a valid claim to the water, and that prompted the HOA to take up the matter.

HOA will only file on behalf of its members, though, so anyone who doesn't belong will have to pay the \$2 individual membership or \$4 for a household membership, Powers said. Water Watch will pay the \$260 mass-filing fee.

Jensen said this morning he is pleased the HOA decided to make the mass filing.

"Either the rec centers or the HOA is a perfectly good organization for making these filings," Jensen said.

Nat Jampel, president of the Town Meeting Association, was present in the audience at this morning's news conference and said he wasn't allowed to address the media.

After the conference, he called the HOA effort a "fraud."

"They're just trying to drum up membership," Jampel said.

He said homeowners don't need to file for water rights because Sun City Water Co. is doing so.

He criticized Water Watch as "a pro-incorporation front that is trying to create a controversy and then saying the solution is to incorporate."

Jampel cited recent comments by Water Watch member Les Merydith, who as president of Citizens for Self-Government recently told his group that Sun Citians wouldn't have to worry about filing for water rights if they had a municipal government to do so on their behalf.

## SRP founded by visionary 1903 farmers

By EARL ZARBIN

Seventy-five years ago this week the farmers of the Salt River Valley incorporated an organization whose business continues to affect everyone living in the Phoenix area.

On Feb. 7, 1903, the ranchmen filed the articles of incorporation of the Salt River Valley Water Users' Association with the Maricopa County recorder.

The association was formed to repay the costs of constructing Roosevelt Dam on the Salt River and to equitably distribute the water collected in the reservoir behind the dam.

The impetus for the association was the passage by Congress in June 1902 of the National Reclamation Act. The law authorized the U.S. government to construct irrigation works, including dams and canals, with the beneficiaries of these improvements to repay the construction costs.

But the law did not specify the manner in which locales desiring federal assistance were to contract with the government.

However, because the site selected for a storage dam to serve the Salt River Valley was considered among the most suitable in the arid West, the U.S. Department of the Interior — assigned to the job of administering the reclamation law — encouraged the landowners here to form an organization to deal with the government.

That body, the Salt River Valley Water Users' Association, became the model for other irrigation associations in the 16 Western states and territories to which the reclamation law applied.

Today, the Water Users' Association — along with the Salt River Project Agricultural Improvement and Power District which was created in 1936 — form the Salt River Project.

The SRP serves more than 271,000 electric customers in Gila, Pinal and Maricopa counties, and distributes water for agricultural, municipal and industrial uses to about 238,000 acres of land lying on both sides of the Salt River in Maricopa County.

Within the boundaries of the SRP are major portions of eight cities — Phoenix, Mesa, Scottsdale, Tempe, Glendale, Peoria, Gilbert and Chandler, and all of Tolleson. The population within the SRP water service area is estimated at 945,000.

If the men who incorporated the Water Users' Association were here now they wouldn't be surprised that the Salt River Valley has grown.

They probably would be amazed by the extent and form of the growth, but they would be proud that their labor helped make it possible for so many people to live here.

These turn-of-the-century businessmen and farmers were certain that the only thing holding back the Valley's further development was the absence of reservoirs to contain the periodic floods that rushed down the Salt and Verde rivers.

They thought that capturing the floods would mean a year-round water supply for the farmland. (Some successful efforts were made at tapping the underground water supply, notably by Dr. A. J. Chandler, the Arizona Territory's first veterinary surgeon and founder of the community bearing his name, but cheap power for extensive pumping wasn't available.)

So the entrepreneurs, and the dreamers, concentrated on locating storage dam sites on the two rivers. They decided the best one was about 60 miles east and a little north of Phoenix. This was the Tonto Basin site, which was on the Salt River just below its confluence with Tonto Creek.

Arthur Powell Davis, who was then a topographer and engineer for the U. S. Geological Survey, in 1897 produced a

report, "Irrigation near Phoenix, Arizona," in which he said of the future Roosevelt Dam site:

"It would probably be impossible to find anywhere in the arid region a storage project in which all conditions are as favorable as for this one. The capacity of the reservoir, in proportion to the dimensions of the dam, is enormous. The lands to be watered are of remarkable fertility. . ."

Modern farming in the Salt River Valley traces back to 1867, when John W. "Jack" Swilling organized an irrigation company. The Swilling Irrigating and Canal Co.'s ditch head was on the north channel of the river just east of 40th Street (if the street were extended on a straight north-south line) and a little north of Buckeye Road (if extended).

SWILLING AND his cohorts brought water to the land in time to grow crops of wheat, barley and corn in 1868. Other canals were started on both sides of the river. Since the water flow was erratic, there were times when there was too little as well as too much water.

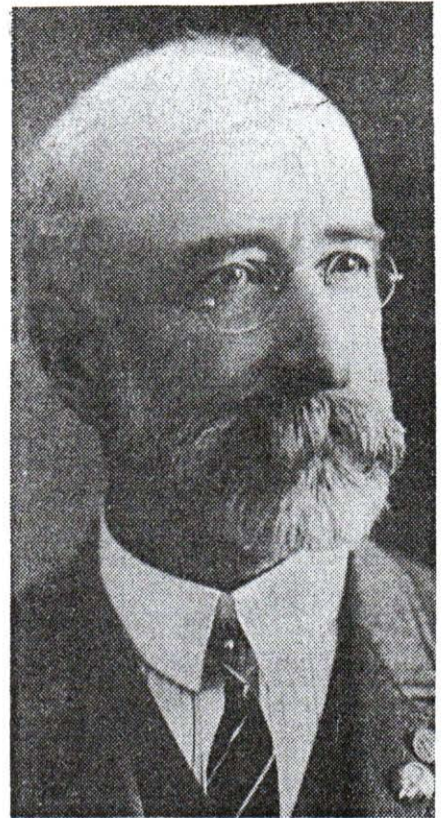
Water storage was frequently discussed. Lawsuits were filed in efforts to settle the questions of who had the first right to water and to how much. Storage sites were located and attempts were made to raise money to build dams.

Storage dams were built on the Gila River southwest of Phoenix and on the Hassayampa River to the northwest (this was the Walnut Grove Dam, built primarily for mining and cattle grazing), but they were destroyed by flood waters. At least 45 persons died when the Walnut Grove Dam collapsed in 1890.

These dam failures and others did little to inspire confidence in construction of dams on the Salt and Verde rivers. Other pessimists said silt would quickly accumulate in the reservoirs, making the life of the lakes too short to justify the investments.

EFFORTS TO get federal government aid in the construction of canals and reservoirs on a widespread basis in the arid West began in the 1870s. One idea then, and the one embraced in passage of the National Reclamation Act was that money derived from the sale of public lands be used to finance construction of irrigation projects.

Supporters of federal assistance argued that there were many precedents for such aid, among them the



Benjamin Fowler

appropriations for the development of rivers and harbors.

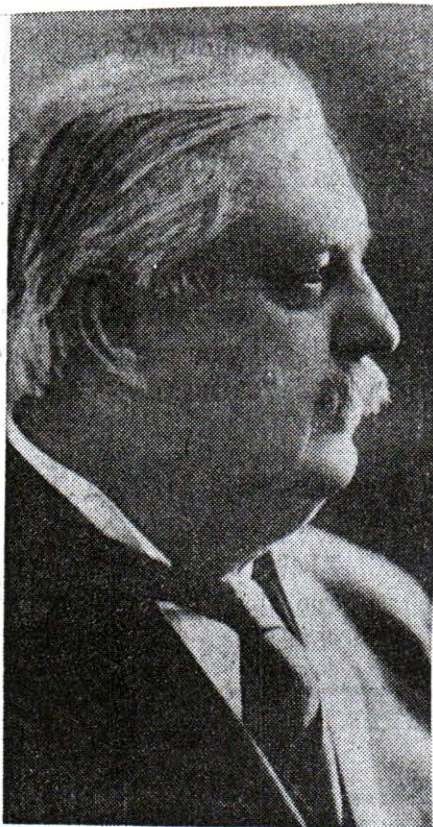
The promoters of national irrigation, in the 1890s, added another ingredient. They argued that the cities of the East were overcrowded and the solution to this was opening the public lands of the arid West by making water available through irrigation projects.

Largely under the guidance of George H. Maxwell, who lived many years in Phoenix and died here in 1946, the National Irrigation Association conducted a decade-long educational and propaganda campaign on behalf of federal aid.

The association pointed to the success of government-sponsored irrigation works in India and other nations. Supporters said National irrigation would benefit the Indians, especially tribes such as the Maricopas and Pimas along the Gila River in Arizona. National irrigation, besides opening the public lands for homeseekers, would open new markets for eastern manufacturers and the transcontinental railroads (the Santa Fe railroad became one of the major contributors to the National Irrigation Association.)

VIRTUALLY ALL of the propaganda was aimed at opening the arid public lands. Little concern was expressed for lands already in private ownership, such as those in the Salt River Valley. As a result, while national irrigation was supported here, there were continuing efforts to devise a local means for building a storage reservoir at the Tonto Basin site.

Corporations made repeated, but



Joseph Kibbey

unsuccessful, attempts to raise money for the dam. Other proposals were to allow Maricopa County to bond itself to subsidize a private company in the construction or to permit the county to build the dam itself.

Congress would have to approve any plan permitting the county to bond itself, and there was considerable doubt as to whether the county could win such legislation.

Another idea that received lots of support, but which eventually was opposed strongly by the National Irrigation Association, was asking Congress to cede the public lands to the states and territories. These lands would be sold and the proceeds used to construct irrigation works.

**EXTENDED DROUGHT** came to Arizona and the Valley in the late 1890s. This was the main thing that brought together the contending water factions in the Valley in search of water storage, but there were others.

First, land speculators had peddled more acres than there was water for. This had given rise to "floating water rights" — a system which treated water as a marketable commodity separate from the land. The right to use water for a certain piece of land could be sold, leased, loaned, or mortgaged. Without a right, water couldn't be obtained. This system was prevalent on the Phoenix side of the river and was the cause of considerable bitterness.

Second, the canals could not carry enough water to irrigate all the land. (In 1901, there were 277,821 acres under the canals susceptible to irrigation, but only 123,635 were cultivated.) This meant that even on occasions when water was more than adequate, it flowed past the Valley.

Two other problems were increasing upstream water diversions and overgrazing of the forest watersheds, the last of which the farmers said diminished "the great storage reservoirs established by nature." Both of these played some part in the Valley's critically short water years, but they were minor in comparison with the drought, overcultivation and limited capacity of the canals.

**IN APRIL 1900**, the third year of severe drought, the Phoenix and Maricopa County Board of Trade appointed a five-member Water Storage Committee "to agitate the question of bonding the county for the purpose of building water storage reservoirs."

The committee, in cooperation with a second group that included representatives of the canals and towns, prepared a bill for introduction in Congress to allow Maricopa County to bond itself for up to \$2 million to establish a reliable system of irrigation. The bill died in Congress in 1901.

The Territorial Legislature in March 1901 approved a bill, introduced in the House by Benjamin A. Fowler of Glendale, creating a five-member Maricopa County Water Storage Commission with the power to spend \$30,000 in the succeeding two fiscal years for water storage purposes.

At the end of April, the commissioners appropriated \$5,000 to support the work of Arthur Powell Davis of the U.S. Geological Survey in boring for bedrock and other work at the Tonto Basin site. Davis met with the commissioners in July and reported that the storage capacity of a reservoir would be even greater than expected.

On Dec. 3, 1901, President Theodore Roosevelt delivered his first message to Congress and asked for a national reclamation law.

**THE PRESIDENT** said "vast areas of public land . . . can be made available for homestead settlement" by the construction of reservoirs and mainline canals. He said the reclaimed lands "should be reserved by the government for actual settlers."

He also said that "Whatever the nation does for the extension of irrigation should harmonize with, and tend to improve, the condition of those now living on irrigated land."

Those last words may have been read to mean that Roosevelt wasn't opposed to aiding areas of privately

held lands, but the legislation that came from Congress was aimed at opening public lands and nothing more.

This led The Arizona Republican to state on Jan. 27, 1902, that "to hope for a federal appropriation for the benefit of farms now in cultivation is to hug a delusion, absolutely."

A short time later it printed a similar message: "As we have recently pointed out, the Salt River Valley has no direct interest in either the success or failure of 'national irrigation.'"

Davis returned to Phoenix on April 17, 1902, and submitted his report on the Tonto Basin dam site to the Water Storage Commission. He estimated the cost of construction at less than \$2 million, including a power house for electrical generation.

**DAVIS SAID** the cost was less than expected because he had found near the site the materials to manufacture cement. Making cement at the site could save as much as \$500,000.

Meantime, Fowler and some others had gone to Washington to work on behalf of the act to allow Maricopa County to bond itself. Fowler also interested himself in the proposed Hansbrough-Newlands bill (the National Reclamation Act).

It seemed that the bill would pass without doing anything to help lands already in private hands. At that point, Maxwell prevailed upon Roosevelt to call a conference at which it was agreed to permit assistance to areas such as the Salt River Valley.

This change in the bill may have been communicated to Phoenix, because on June 17, the day Roosevelt signed it, The Republican answered an inquiry from a reader as to whether the legislation would apply to the Valley:

"Certainly, it can, if the water consumers are willing to have the cost of storage charged against their land; if the secretary of the Interior is willing, and if satisfactory contracts can be made between the department and the water users."

**THE FOLLOWING** day, June 18, the Water Storage Commission agreed to underwrite the survey of a canal to develop electric power in connection with the proposed Tonto Basin dam.

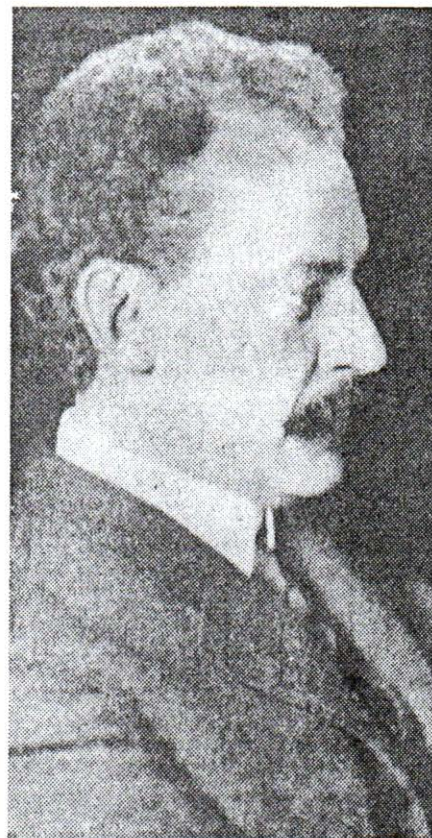
In reporting this, The Republican then said, "Unless the water storage bill (allowing the county to bond itself) is passed and the bonds are voted, there can be no water power canal, but sometime there will be a reservoir built, either by the county or by private capital, and the information obtained by the survey will not be wasted."

Clearly, some confusion existed as to the application of the National Reclamation Act in the Valley and the newspapers continued to report on the efforts to move the county bonding bill through Congress. However, the prospects for the bill were poor.

On July 20, a public meeting was held at which it was decided to appoint a three-member committee to go to Washington to find out if the Interior Department could be induced to build the Tonto Basin dam.

One of those named to the committee was Fowler. Fowler was reported to be returning from Washington with a proposition from the Interior Department for construction of the dam.

**THIS PROVED** false, but at a mass meeting on Aug. 2, Fowler said "there are certain officials who want to build the first reservoir at Tonto, simply be-



Dwight Heard

cause it will in the future serve as a model for others."

"Our work will take on more than local interest, in fact, will become national, for every man will want to know what is being done with the first project, and every man will watch with interest to see how the government's policy will work," Fowler said.

"We must build for the future. After we have constructed the first reservoir we can have as many as we like, and within 25 years we can have 500,000 acres of land in this valley under cultivation instead of what we have now."

He said the people had to accomplish

many things by Jan. 1, 1903, "for by that time the government will be ready to begin on the first reservoir, and if we are not our chance is gone."

Fowler said they would have to settle the water right question, which meant they would have to determine who was entitled to water, how much and in what order; the water would have to be attached to the land and could not be separated; the canal companies would have to become the property of the land owners; title would have to be obtained to the proposed dam site and turned over to the government; a plan would have to be devised to repay the government for building the dam.

"The government is not coming down here to make contracts with each and every individual who owns land," he said. Fowler said the people would have to form an association or company, with "Every share of stock (10) represent one acre of land."

AT THE SAME meeting, Dwight B. Heard, who had ranching interests on both sides of the river and had been in Washington with Fowler, expressed his belief that the reservoir was within easy reach. Indeed, the Geological Survey already had constructed a plaster model of the dam based on Davis' drawings.

The Aug. 2 meeting created a 26-member group known as the Water Storage Conference Committee. It was directed to meet to "make such adjustments and secure such agreements as may be required by the Department of the Interior prior to the consideration of the construction of the Tonto Basin reservoir."

Maxwell, the executive director of the National Irrigation Association, was invited to come to Phoenix to advise the people on what to do to get the reservoir.

Meantime, Col. William Christy, a banker, wrote to Frederick H. Newell, chief hydrographer for the Geological Survey, to inquire about the best course to take in getting the reservoir.

NEWELL ANSWERED Aug. 4 "that the interpretation of the reclamation law, and its application to a particular circumstance, may properly be entrusted to its principal advocate and exponent, Mr. George H. Maxwell."

Newell also said "that whatever (Fowler) may recommend to you will be based upon a complete knowledge of proper methods and feasible ends."

Maxwell spoke to the Water Storage Conference Committee on Aug. 9. He proposed a cooperative association of farmers and landowners to buy the canal companies and to go before the government with their differences resolved.

Within a few days, the conference committee enlisted attorney Joseph H. Kibbey to draft a plan for acquiring the canals and to settle disputes between the water users.

Kibbey presented his plan Sept. 4, but it wasn't until Sept. 24 that the conference committee instructed an executive committee to prepare articles of incorporation for an association to represent landowners with the government.

FROM THEN until January 1903, Kibbey, Maxwell and the executive committee labored over the articles. The full Water Storage Conference Committee met Jan. 17 to consider the articles.

The conference committee was disturbed upon learning that three of the 11 executive committee members

were in disagreement with the proposed articles. The three, all with holdings south of the river, were Heard, E. W. Wilbur and J. W. Woolf. They submitted a minority report.

The minority report prompted Maxwell to comment that "until today (he had) felt that there was no very serious danger in the way of construction of this reservoir. I confess that this so-called minority report came to me as something in the nature of a shock."

THE CONFERENCE committee spent the next few days reviewing the articles, adopting them Jan. 21 by majority vote.

The minority objected to a number of things, including the provision of the reclamation act that made water inseparable from the land. The minority was pictured as wanting the system of floating water rights continued.

The southsiders objected to giving a lien on their lands to insure the payment of assessments levied by the Salt River Valley Water Users' Association and to repaying the costs of constructing the dam.



George Maxwell

Heard, at a later time, summarized the arguments of the minority by saying that the articles asked the legitimate farmers with existing water rights to underwrite the bulk of the cost for the benefit of owners of speculative idle lands.

But the articles were adopted and there "followed a love feast in contrast with the spirited debate." The Phoenix Enterprise of Jan. 21 reported.

The articles were filed with the Maricopa County Recorder Feb. 7, but the love feast had withered.

When the articles were adopted, it was announced that the original board of governors would include members of the executive committee. When the articles were filed, a revised list omitted the names of Heard and Woolf.

THE REASON was that the mass of landowners under the Tempe Canal and its branches chose not to join the Water Users' Association. They informed the Water Storage Conference Committee that their views were not compatible with the articles.

The disagreement did not end there.

The water users under the Tempe Canal voted to have amendments to the articles sought by the minority adopted "either through the secretary of the Interior or otherwise."

The canal company named a committee of five, including Heard, Woolf and Carl Hayden, who was later to represent Arizona in Congress, to investigate the cost of installing a pumping system to insure summer water. This was ironic, because another of the points raised by the minority was that they might be forced to take pumped water which might damage their lands or crops.

Meantime, the Water Users' Association began enrolling land owners in the association.

ON MARCH 14, the association got some good news. The day before, Secretary of the Interior Ethan A. Hitchcock authorized the Geological Survey (the Bureau of Reclamation had not yet been formed) to acquire the necessary property and rights of way for construction of the reservoir.

That same month, Hayden went to Washington to present the minority views to Hitchcock. Hayden returned April 5, but refused to disclose the results of his trip until he spoke with the Tempe Canal owners.

In the interim, Charles D. Walcott, director of the Geological Survey, arrived in Phoenix and visited the Tonto Basin. He sent a report to Hitchcock, who on April 17 directed a telegram to Walcott endorsing the report and construction of the dam.

The following day, Walcott met with the Water Users' Association Board of Governors and announced that the minority position had been considered and rejected and that the articles of the association had been approved.

WALCOTT MET later that same day with the minority and informed them that the only changes in the articles that would be considered by the Interior Department would be those made by the Water Users' Association itself.

But the disagreement on the articles still wasn't over.

Heard became the spokesman for the opposition and it was not until after he journeyed to Washington and presented his views to Walcott and Hitchcock that he agreed to sign some of his land into the association.

At a meeting with the Tempe Canal owners in July, Heard urged them to join, but the majority refused.

By then, about 195,000 acres were enrolled in the association and all that was needed to start construction of the reservoir was Hitchcock's approval.

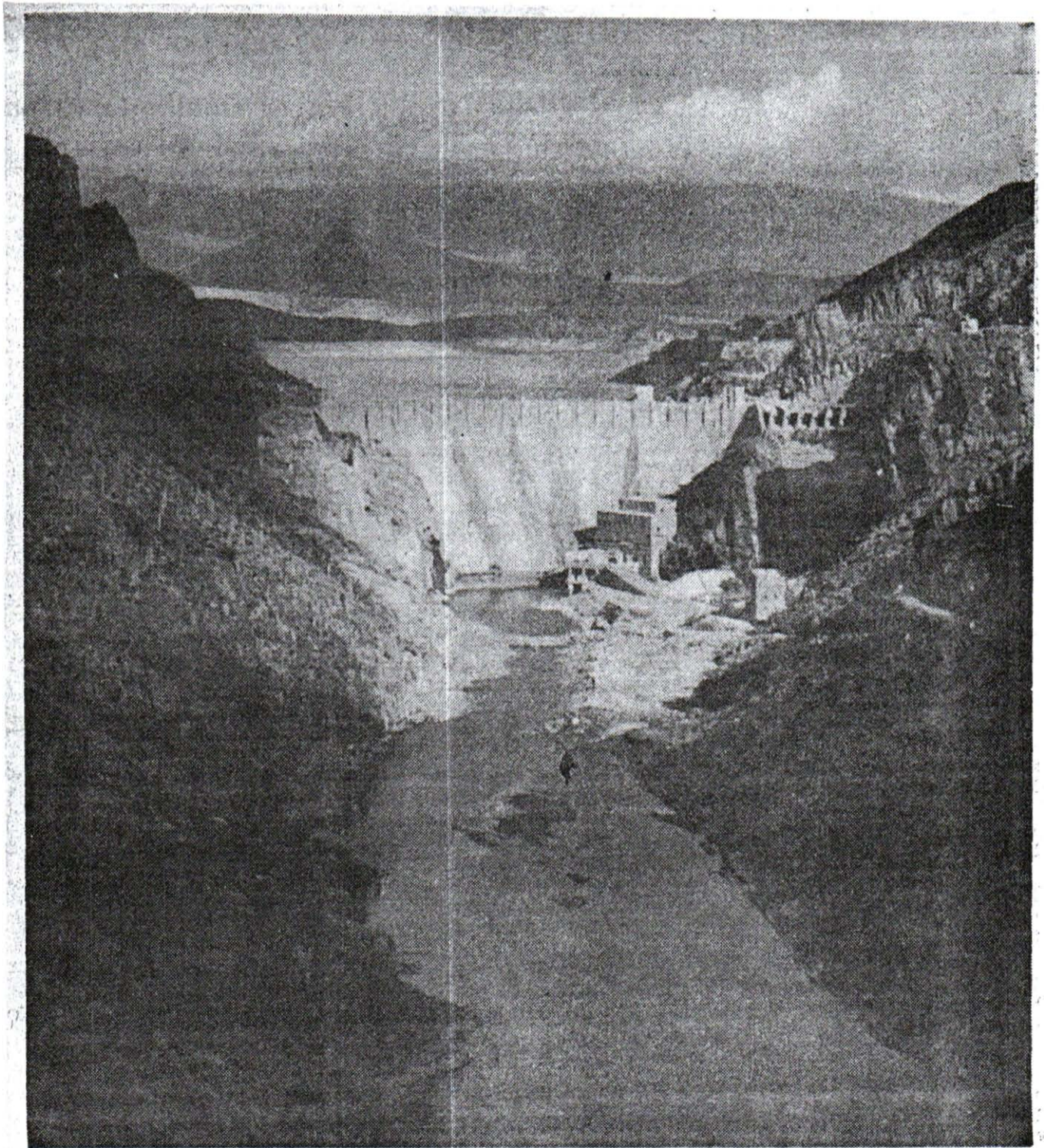
BY THEN, too, another controversy, this one over whether the first Arizona project would be on the Salt River or the Gila River, was stilled, if not at rest.

Pinal County residents, along with many in the Salt River Valley, thought that the first project would be the San Carlos Dam, which would aid the Pima and Maricopa Indians on the Gila River Reservation.

For various reasons, including one that the National Reclamation Act didn't apply to Indian reserves, the San Carlos Dam was rejected.

Another reason was that officials of the Geological Survey considered the Tonto Basin site the best and they wanted to build there.

On Oct. 13, 1903, Hitchcock officially issued the order for construction of the future Theodore Roosevelt Dam.



Roosevelt Dam on the Salt River east of Phoenix was built with federal funds. The Salt River Valley

Water Users' Association was incorporated in 1903 to repay the government's construction cost.

Republic photo

8A News-Sun - Tuesday, April 29, 1975

**SUN CITY WATER**

# Potable...pure

Sun City would not be a desert oasis of sprawling golf courses, lakes, and abundant greenery were it not for an almost limitless supply of the most unique substance on earth—water.

Currently, Sun Citizens use about 235 gallons of water per day per person.

Nationally, per capita water consumption is gauged at 70-85 gallons per day.

Consequently, without modern, progressive water management and development, the Sun City oasis could become a mirage in a very short time.

**SUN CITY** Water Company came into being in April 1962, as a result of the purchase of the Del E. Webb owned and operated Sunburst Water Co. Sun City Water Co. is a wholly owned subsidiary of Citizens Utilities Company, Stamford, Conn.

As a corporation, Sun City Water Co. rates and standards of service are regulated by the Arizona Corporation Commission.

However, size and depth of wells, pumping plant operation, and water treatment procedures, are regulated by the state and county health departments.

**LAST YEAR**, the utility pumped 3.2 billion gallons of water into the community as compared with 1.8 billion gallons in 1970.

Paul E. Emrick, manager, explained, "Not only is residential use of water increasing for drinking, cooking, and bathing, but so are the demands for adequate rates of flow and pressure to operate such modern

conveniences as automatic dishwashers, clothes washers, garbage disposals, and swimming pools."

The company currently has 14 wells in operation, all of which are located within the community. Two now unused wells will go into commission within the next six to eight months, with plans calling for the drilling of three additional wells in the next two years.

The "static water level," or level which ground water seeks naturally, varies in Sun City from an average depth of 450 feet at the extreme northern boundary to 210 feet at the southern.

**"There is no such thing as naturally pure water."**

**THE WELLS** vary from 380 feet in depth to 1330 feet, the average depth being 1000 feet. These wells can pump a maximum of 20,000 gallons per minute, or a total of 22.8 million gallons of water a day.

June 24 was the peak day in 1974 for water usage, when 14.6 million gallons, or roughly 50 per cent of the available water resources, were used.

Except for a sand removal process, Sun City well water undergoes no chemical treatment for purification. The water is potably pure as it is pumped from the aquifer, or water-bearing subterranean levels.

**MONTHLY**, however, the County Health Department checks the purity of the water by collecting 45

samples at random throughout the system and testing them for bacteriological content. The number of such samples is based on the population served.

Should any abnormal bacteriological count be recorded, the Sun City Water Co. would flush that portion of the system with chlorine as a sterilization agent. All traces of chlorination are then washed from the system before water again flows for consumption.

"There is no such thing as naturally pure water," said Emrick, "only in test tubes in a laboratory. Rain water is closest to being naturally pure. But it is contaminated as it falls through the atmosphere and seeps into and through the ground.

**"HOWEVER,"** Emrick added, "water filtered through the ground to its static level also undergoes a purification process. Therefore, contaminants are not all bad, but merely foreign to the pure substance."

Some water companies have chosen to chlorinate water as preventative action against possible bacteria problems. However, such action usually occurs with water stored above ground level in dams and reservoirs.

**"Land without water is useless."**

To date, Sun City water has remained highly potable and no need exists to introduce chemicals for purification into the system, Emrick said.

Before Sun City became an exurban oasis, irrigated cotton agriculture dominated the area. Such agriculture required about 5½ acre-feet of water per acre per year, full urbanization, including golf courses, requires only about two acre-feet per year.

**THE AVERAGE** rate of water level decline for Sun City wells during the period of irrigated agriculture was 8.3 feet per year. During the period of full urbanization the average decline has been 3.0 feet per year.

Thus Sun City and its lush landscapes require only 36 per cent of the water to sustain its present needs as the cotton fields which preceded urbanization.

How extensive the holdings of the water-bearing aquifer under Sun City are, no one is quite sure. Nor is the exact source of this ground water known.

**"LAND** without water is useless," says Emrick, "and the water we have here is never really used up, it's merely moved around and changed."

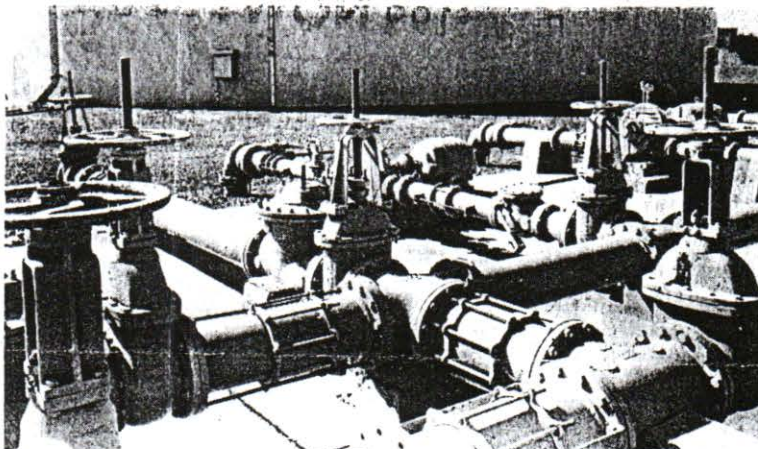
In Emrick's opinion, Sun City has "the best water system in the state. Our community has had orderly growth, due to good pre-planning. Our water system is modern, and of top quality as a result."

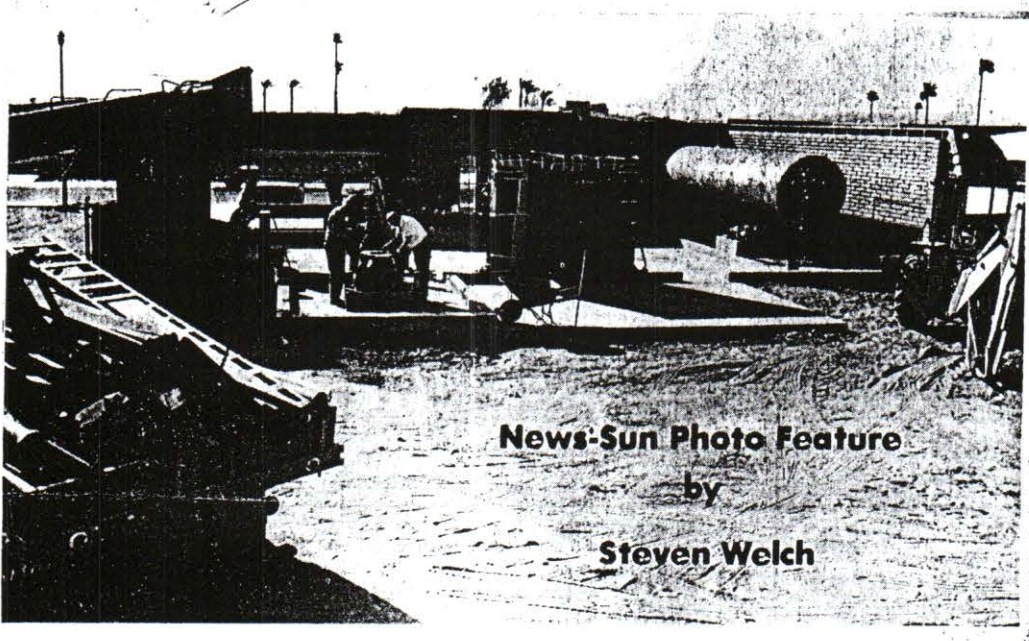
With the average depth of Sun City wells 1,000 feet, Sun Citizens can look forward to a virtual abundance of water for at least the next 300 years, he added.

And by the year 2275, the full extent of the aquifer may be known, tapped, and ready to sustain the future needs of Sun City, desert oasis.

(Left) Looking like any other new home on Wheatridge Dr. from the front, rear view shows workings of new well No. 32-C. Well was drilled in March 1974 and \$175,000 project is scheduled to start operation within next six months. When completed pumping station will be fully landscaped and look like home from both front and rear.

(Right) Maze of pipes and valves at main pumping station behind water company offices represents part of more than 200 miles of mains which feed all points in Sun City.



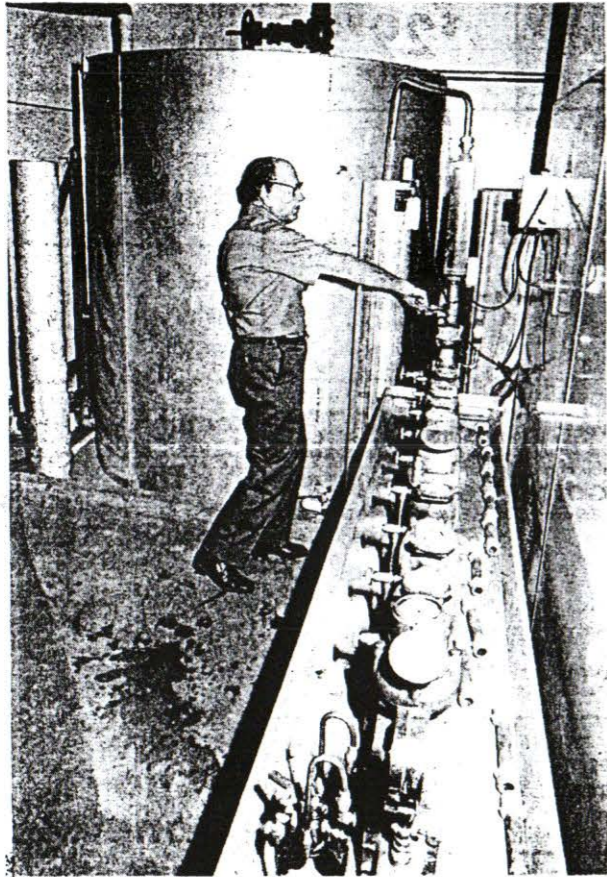


**News-Sun Photo Feature**

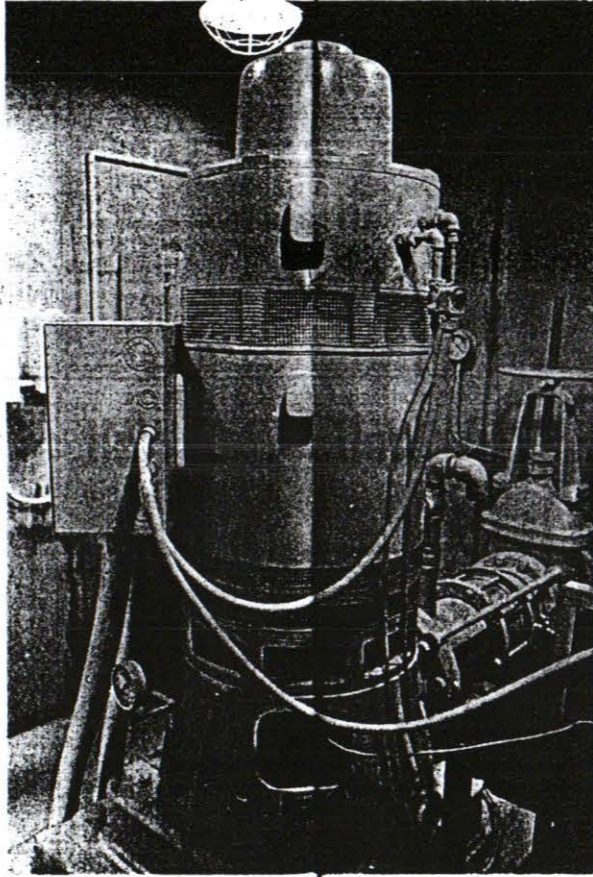
**by**

**Steven Welch**

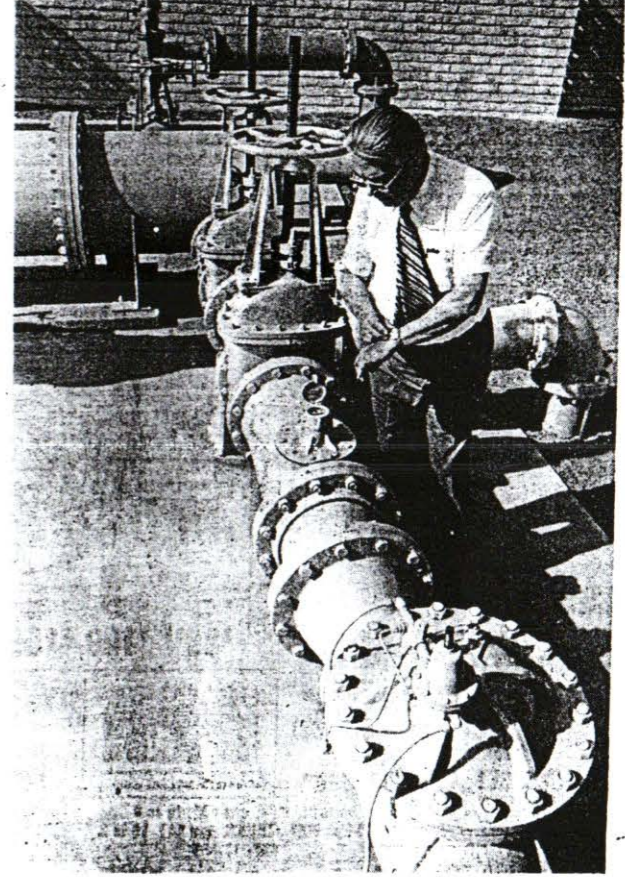




Joe Sharrock, Sun City Water Co. meter repairman, checks accuracy of flow through eight hydraulically coupled water meters. Water company reports most meters read low, in consumer's favor.



At the heart of water company system are huge pumps like this 350 horse power giant. Pumps are housed in concrete pits underground to reduce noise pollution, and keep water flowing from aquifer to utility subscribers.



Paul Emrick, manager of Sun City Water Company, checks flow rate at well No. 5-A. Water here is pumped from a depth of 450 feet at a constant rate of 1600 gallons per minute.

# Situation Ideal: Sun City Water 'Soft,' Supply 'Strong'

Sun City's water supply is "strong and healthy" and there should be no problem in the foreseeable future, according to Paul Emrick, Sun City Water Co. manager.

"We're in a good position for water here since Sun City is quite fortunate to be located between two rivers," he pointed out. The local water official's statements should dispel thoughts that the area's water reserves might face depletion within the next 20 years.

EMRICK CITED Sun City's "fortunate" position between the Agua Fria and the New rivers. "The flow over millions of years has provided a natural drainage for the western part of the Salt River Valley and has built up the water reserves underground," Emrick said.

He noted that the proposed development area

of Sun City, encompassing about 10,000 acres, formerly was heavily irrigated for 35 years while cotton was being raised.

"We are now using only 50 to 60 per cent of the water that was used while the cotton was being irrigated," Emrick pointed out. He emphasized that "we're in a good water area" with plenty of underground storage.

THE WATER company currently has eight wells in use, with a combined pumping capacity of about 11,500 gallons per minute and a daily capability of about 16.5 million gallons. Also, the company has a storage capacity of about 2.8 million gallons.

The average daily residential consumption, per person, in Sun City is 215 gallons, with about 10,431 units, including 19,300 people being served.

Sun City residents are

fortunate in having pure, "soft" water at the low monthly cost of \$5 per 10,000 gallons, according to Emrick. "The only treatment we need to give our water is the removal of sand. Otherwise, it is used as it comes from the ground," he said.

EMRICK emphasized that the company is maintaining a progressive posture of "master planning" Sun City's water supply, opening new wells in strategic locations as the area increases in population. Three more wells are expected to be added within the next year.

The most recent well put into operation—June 15—is located at 10906 El Capitan Cir. The one at Waikiki Drive and Agua Fria Drive was opened two years ago and another, at 111th and Peoria Avenues, was put into operation four years ago.

Other wells are located at 101st and Grand avenues; 111th Avenue and Cherry Hills Drive; 111th and Florida avenues; 107th and Peoria avenues, and 107th and Alabama Avenues.

EMRICK REVEALED some interesting figures relating to consumption of water by Sun City residents. Total usage in 1970 was 1,436,251,000 gallons. The largest amount pumped in one day in 1969 was 6.6 million gallons on June 30 and 8.3 million gallons in 1970 on June 1. The largest amount this year, so far, was 9.6 million gallons on June 22.

He said the peak period of daily usage by residents is between 6 a.m. and 10 a.m. Most of the consumption is directed toward watering shrubs and grass.



PAUL EMRICK

# Multi-Million-Year-Old Water Tapped For Sun City Supply

By JIM WELLS

Sun Citians gulp and gargle daily from caverns of antiquity and perhaps even satisfy these necessities from the same sources as man's best friend before there were leashes—the dinosaur.

Behind this proposal is resident W.M. Gulbrandsen, a water bug over 40 years in engineering and sanitation capacities.

But underneath it all, Sun City included, are fossil wells estimated by Gulbrandsen in the neighborhood of old—a few million years.

Advocate of digging until one finds the source, did just that before moving here in 1968 from Pittsburgh where he was a sanitary engineer 25 years. For 15 years previously he served in a similar capacity in New Jersey.

The former Pennsylvanian wanted to know before moving here just what he was going to have to drink and dip in.

So he penciled a request to area water watchers asking for samples of the local liquid.

His reply came in pint-sized sterilized bottles. After testing several of the Sun City droplets, Gulbrandsen found the water perfectly agreeable for his purposes, and moved to 9223 N. 107th Dr.

The sources of this supply, he explained, are underground fossil caverns,

some as deep as 1500 feet. One could only venture a guess as to how long the supply has been there, he offered, but at least several

million years.

Since becoming a resident here, he has kept a periodic check on water content. He sends a specimen to

Bridgeville, Pa., water analyzers for analysis and in return receives a breakdown of the sample's component parts.

As a scientist of sorts, he likes to pick things apart. Water chemists, Gulbrandsen said, break a gallon down into a million parts. There are 17.1 parts to a grain, he added.

Water with an excess of 7 to 10 grains of calcium and magnesium per gallon is considered hard water, he pointed out.

Sun City's count in November 1968 was nearly hard enough to skate on at 8.1 grains.

The water here although hard, he said, is excellent in many other respects.

The federal government, he said, has a finger in every glass of water a person drinks. Washington watermen have set up limits on parts of chemicals and salts tolerable in a gallon of H<sub>2</sub>O.

Sun City's supply falls far short of the maximum parts tolerable in several chemicals.

The government says only 250 parts of sulfate are permissible in a given gallon. Sun City's November, 1968, count was 15.6.

Chloride must not exceed 250 parts; Sun City's count in 1968 was 40.3.

As for flouride, Gulbrandsen said, "if children lived here, dentists would go broke." Persons of retirement age have already cut the cake as far as their teeth are concerned, he explained, and the excellent distribution of

flouride in water here can't help them much. But young children would definitely benefit.

Water chemistry in recent years has become an art, the Sun Citian said. Many power and electronic plants couldn't operate without a water chemist.

In the case of TV and radio tubes, he said, they first have to be washed with a pure or highly demineralized water before chemical coatings can be applied. No washum, no slickum, he said.

Although there isn't a "pure" water, chemists can come close.

A mug of highly demineralized or "hungry" H<sub>2</sub>O, as water wizards call it, can clean a piece of corroded brass, or gobble carbon dioxide out of the air.

There is no better cleaning substance, Gulbrandsen said, than water.

Saturday night mothers would agree.



W.M. GULDBRANDSEN ... former water chemist

A G R E E M E N T   O F   S A L E

MARCH 1, 1962

SUNBURST WATER Co.  
&  
DEL E. WEBB DEVELOPMENT Co.  
TO  
SUN CITY WATER COMPANY

NOTES:

PRICE FORMULA	PAGE 8
1,790 CUSTOMERS	PAGE 10
WATER RIGHTS	PAGE 13

1962

3/1/62  
1962

7

AGREEMENT FOR SALE

THIS AGREEMENT, made as of the 1st day of March, 1962, by and between SUNBURST WATER CO., an Arizona corporation, hereinafter referred to as "Seller", DEL E. WEBB DEVELOPMENT CO., an Arizona corporation, hereinafter referred to as "Devco", and SUN CITY WATER COMPANY, an Arizona corporation, hereinafter referred to as "Buyer".

WITNESSETH:

This Agreement is made with reference to the following facts:

Devco is the legal and beneficial owner of two hundred fifty (250) shares of the common capital stock of Seller, said shares constituting all of the issued and outstanding stock of Seller; and

Devco is the legal and beneficial owner and holder of all of the long term notes payable of Seller; and

Seller is desirous of selling and Buyer is willing to purchase Seller's business and all of Seller's assets other than cash and accounts receivable, and Devco desires that Seller and Buyer consummate the aforesaid sale.

NOW, THEREFORE, the parties hereto mutually covenant, warrant represent and agree as follows:

1. Representations and Warranties of Seller and Devco

Seller and Devco jointly and severally represent, warrant and agree as follows:

(a) Seller is a stock corporation which has been duly incorporated and organized and is validly existing and in good standing as a corporation under the laws of the State of Arizona, and there are no proceedings or

L

actions instituted or pending to dissolve said corporation or to limit or impair any of its rights, powers or privileges;

(b) Seller is authorized to issue under its Articles of Incorporation as now in force and effect a total of five million (5,000,000) common shares of the par value of One Dollar (\$1.00) per share and of the aggregate par value of Five Million Dollars (\$5,000,000.00), of which there are issued and outstanding two hundred fifty (250) common shares, and all of said common shares have been duly issued and are validly outstanding shares. Seller does not now have and on the closing date will have no outstanding options, warranties, or any other form of obligation for the issuance of any shares of capital stock, nor will Seller issue any additional shares or other securities of any kind prior to said closing date.

(c) Devco is the legal and beneficial owner of all of the outstanding common shares and long term notes payable of Seller and has good, merchantable and indefeasible title to and full right to sell, exchange and transfer any or all of said outstanding shares and long term notes payable of Seller. Said shares and long term notes payable of Seller are free and clear of all liens, claims, encumbrances or outstanding interests of any kind.

(d) Seller owns and operates a public utility water system, serving water to consumers in the unincorporated community of Sun City, located in Maricopa County, Arizona, and is duly authorized, licensed, franchised and certificated as is necessary to carry on its business;

(e) The properties, facilities and plants of Seller were constructed of new materials and in accordance with good utility practices and are being operated in accordance with the requirements of all regulatory authorities

having jurisdiction over Seller and are in a state of good condition and repair;

(f) Seller is now or will be on the closing date the sole and unconditional owner of all of the properties, facilities, contracts, rights and assets reflected on its books and records, free and clear of all liens, claims, encumbrances or outstanding interests of any kind;

(g) The balance sheet, income account and statement of financial condition attached hereto and incorporated by reference herein, collectively marked "Exhibit A", is true and correct and accurately reflects the assets, liabilities, income, earnings and financial condition of Seller as shown by its books and records as of December 31, 1961. It is understood and agreed that the purchase price to be paid by Buyer to Seller has been determined by Buyer in reliance upon the truth and accuracy of said financial statements attached hereto as "Exhibit A". Said financial statements have been prepared in accordance with generally accepted principles of public utility accounting and in accordance with the Uniform System of Accounts for Water Corporations prescribed by the Arizona Corporation Commission, hereinafter referred to as "Commission". There are no liabilities, debts or obligations of Seller, including any liability for construction work in progress or for local, state or Federal taxes, which are not disclosed thereon. Devco shall and does agree to indemnify Buyer for any deficiency in any individual asset account, other than cash and accounts receivable, subsequently determined to arise from any transaction occurring on or before the closing date;

(h) The books and records of Seller are regularly and accurately kept and maintained in the ordinary course of business and in accordance with

the applicable rules, regulations and systems of account of the Commission and the balance sheet, income sheet and statement of financial condition attached hereto as "Exhibit A" reflect such fact;

(i) There will be no material adverse change in the business, property, financial condition, earnings or government regulations of Seller between the date of the balance sheet, income sheet and statement of financial condition attached hereto as "Exhibit A" and the closing date;

(j) Seller will procure such consents of regulatory authorities and all other permits and consents as are necessary for Seller to consummate this sale;

(k) Seller's business will be operated diligently and in its present manner by the present management until the closing date, and no dividends or distributions of any kind have been or shall be made, no property, rights or claims of Seller have been or shall be sold or otherwise alienated, and no increase in compensation or bonus to an officer, employee or agent of Seller has been or will be made or agreed upon between the date of the balance sheet, income account and statement of financial condition attached hereto as "Exhibit A" and the closing date;

(l) There are no existing contracts or obligations of any nature between Seller and any other party other than as disclosed on the balance sheet, income sheet and statement of financial condition attached hereto as "Exhibit A", and no contracts or obligations shall be executed or incurred by Seller following the date of this Agreement, other than such usual contracts and obligations as are necessary in the ordinary current operations of Seller's business;



(m) There are no employment contracts or contracts for service between Seller and any other party which cannot be cancelled without penalty as of the closing date;

(n) Except as may be expressly set forth in "Exhibit B" attached hereto and incorporated by reference herein, there are no tax claims, assessments or actions at law or suits in equity of any nature involving Seller or any proceedings before any public authority involving Seller, nor are any such actions, suits or proceedings known by Seller or by Devco to be pending or threatened by Seller's customers or by any other party, nor is Seller subject to or in default with respect to any judgment, order, writ, decree, injunction, assessment or similar command of any court, governmental department, commission, board, bureau or agency;

(o) No agreement has been executed nor arrangement made whereby any of Seller's property is or might become subject to municipal, county, district or any other form of change of ownership;

(p) There are no orders or requirements of the Commission or any other agency having jurisdiction over Seller which have not been complied with;

(q) Seller as of the date hereof has an adequate water supply to serve not less than two thousand four hundred (2,400) residential customers. The quality of said water shall be not less than the minimum standards of the Arizona State Department of Health or other governing agency. Devco and Seller have no knowledge or information which would indicate that the said water supply will not continue to be adequate to serve said number of customers or that said analysis of said water will not continue to meet the aforesaid

minimum standards;

(r) No change in any existing agreement or arrangement unfavorable to Seller has been made in contemplation of this Agreement, and no new agreement or arrangement unfavorable to Seller has been made in contemplation of this Agreement;

(s) Devco and its affiliates have not, directly or indirectly, executed any agreement with purchasers of homes or any other structures in Seller's service area, nor made any representations to such parties, whereunder said purchasers may have acquired or may reasonably believe that they have acquired any interest in mains, services, meters or other installations, other than service connections traversing said purchaser's own properties, used in rendering water service to them;

(t) Devco has subdivided and presently intends to subdivide acreage owned or controlled by Devco as shown on the maps and plats, collectively marked "Exhibit C", attached hereto and incorporated by reference herein. Said acreage contains not less than three thousand three hundred seventy (3,370) lots upon which Devco, either directly or through affiliates, presently intends to construct a total of not three thousand seventy less than / (3,070) homes and/or commercial structures by September 1, 1963 ;

(u) As of the closing date neither Devco nor Seller shall have entered into any agreement which obligates or might obligate Seller to mortgage, pledge or in any way hypothecate any of its property;

(v) Seller has filed all Federal and State income tax and all other tax returns which are required to be filed, and has paid all taxes shown in such returns and all tax assessments made against it to the extent that such taxes and assessments have become due and payable on or before the closing date;

All of the representations, covenants, warranties and agreements of Seller and Devco herein set forth will be true and correct on the closing date and all of the said representations, agreements, covenants and warranties shall remain in full force and effect regardless of any investigation or verification by Buyer of anyone on behalf of Buyer, and shall survive the closing of this transaction.

2. Representations and Warranties of Buyer

Buyer covenants, represents, warrants and agrees as follows:

(a) Buyer is a stock corporation which has been duly incorporated and organized and is validly existing and in good standing as a corporation under the laws of the State of Arizona;

(b) Buyer will procure such consents of regulatory authorities having jurisdiction over Buyer and Seller and all other permits or consents as are necessary for Buyer to consummate this sale;

(c) Buyer has the authority to enter into this Agreement and agrees to furnish Seller with a certified copy of the Buyer's corporate resolution approving this Agreement and authorizing payment to Seller as set forth in Paragraph 3 hereof.

Said covenants, representations and warranties shall remain in full force and effect regardless of any investigation or verification by Seller or anyone on its behalf, and shall survive the closing date.

3. Sales and Purchase

The transaction provided for by this Agreement shall be effected as follows:

(a) Upon the mutual representations, warranties, covenants and

agreements herein contained and subject to the terms and conditions of this Agreement, Seller agrees to sell to Buyer all of its assets except cash and accounts receivable as of the closing date, free and clear of any lien, claim or encumbrance, including but not limited to Seller's business, customers, certificates of convenience and necessity, franchise, permits, rights, land, easements, wells, pumps, tanks, water mains, services, meters and all appurtenances thereto, together with Seller's books and records as hereinafter set forth.

(b) Delivery of Seller's bill of sale, deeds and other documents of transfer to Buyer and payment of the purchase price shall be made at the office of Devco, 2727 North Central Avenue, Phoenix, Arizona, on the 15th day of March, 1962. Said date is referred to herein as the "closing" or "closing date":

(c) At such closing, Buyer shall deliver to Seller Buyer's check in payment for the aforesaid assets in an amount computed from Seller's balance sheet as of March 15, 1962, in accordance with the following formula:

Utility plant, at cost, plus land, at cost, less  
accumulated depreciation, less Five Thousand  
Dollars (\$5,000.00)

A computation of utility plant, plus land, less accumulated depreciation, based upon Seller's balance sheet as of December 31, 1962, is shown in "Exhibit D", attached hereto and by this reference made a part hereof. Seller's balance sheet as of March 15, 1962, shall be in the same form as

the aforesaid balance sheet. Buyer's payment for the aforesaid assets to Seller at the closing shall be that shown in the aforesaid computation in "Exhibit D", \$888,465.06, adjusted to reflect (i) plant additions from December 31, 1961 to March 15, 1962, not in excess of \$95,000.00, (ii) additional depreciation accrued from December 31, 1961 to March 15, 1962, and (iii) the cash reduction set forth in the aforesaid formula.

(d) If Buyer upon audit in accordance with utility accounting principles of Seller's books and records determines that original cost of utility plant is overstated or that accumulated depreciation is understated on Seller's balance sheet as of March 15, 1962, Buyer shall on or before March 15, 1963 submit its claim or claims to Devco in the amount of the difference between said balance sheet figures and Buyer's determination of what said figures should have been. Within thirty (30) days after receipt thereof, Devco agrees to review any such claims for purposes of verification. Buyer shall give Devco such access to its books and records as Devco may require for this purpose. Subject to verification thereof as aforesaid, Devco agrees to pay Buyer's claim or claims, or the undisputed portion of such claim or claims, no later than sixty (60) days after receipt thereof. It is understood and agreed that all of the representations, covenants, warranties and agreements set forth elsewhere in this Agreement are and will remain unaffected by the procedures set forth in this paragraph 3(d), and are and shall be and remain in full force and effect regardless of any claim or claims made at any time by Buyer under this paragraph 3(d).

4. Rates, Customers and Service Area

Seller and Devco jointly and severally covenant, represent, warrant and agree as follows:

(a) Attached hereto, marked "Exhibit E", and by this reference made a part hereof, is a Schedule of Rates which has been approved by the Commission for service by Seller. The rates shown in said Schedule of Rates have been in effect and charged since the initiation of Seller's operations, and are lawfully in effect and being charged as of the date hereof;

(b) As of the closing date, Seller shall be serving not less than one thousand seven hundred ninety (1,790) customers, one thousand seven hundred ninety (1,790) of which are metered, and shall have installed water production, storage and treatment facilities adequate for service to not less than three thousand ( 3,000 ) residential customers, and water transmission and distribution facilities, including service stubs, adequate for service to not less than two thousand four hundred ( 2,400 ) residential customers. The size and location of the aforesaid facilities and the areas and lots served by the aforesaid facilities are shown on plans and drawings described in "Exhibit F" attached hereto and by this reference made a part hereof. Said plans and drawings described therein are by this reference made a part hereof. Attached hereto marked "Exhibit G" and by this reference made a part hereof is an inventory of said facilities;

(c) The area in which Seller is franchised and certificated to provide water service is described in "Exhibit H" attached hereto and by this reference made a part hereof;

(d) All of the information contained and statements made in Seller's 1960 Annual Report to the Commission, a copy of which is attached hereto

marked "Exhibit I", and by this reference made a part hereof, are true and correct, and that there have been no changes in Seller's certificated service area, franchise, property, operations, or anything else which would require making any material change in said information or statements, other than such changes as are necessary to reflect growth, if said Annual Report forms were to be prepared and completed as of the closing date.

5. Guarantees, Land Rights and Waivers

Seller and Devco jointly and severally covenant, warrant, represent and agree as follows:

(a) Seller has, or will have at the closing, good and merchantable title to all land and easements required by it, including easements for ingress and egress and for all water distribution mains and appurtenances thereto, free and clear of any lien or encumbrance;

(b) Seller, between the date of the balance sheet attached hereto as "Exhibit A" and the closing date, will not, without Buyer's prior written approval, grant any security interest in or agree to sell, lease, exchange or otherwise dispose of any of its assets, and will not create any obligations or loans except by borrowing from Devco;

(c) Devco does hereby fully and completely waive and release for itself, its affiliates, successors and assigns and for all subcontractors and their respective subcontractors, any and all claims or rights to mechanics' liens under the statutes of Arizona against or with respect to any and all property of Seller wherever located or with respect to any monies or other consideration which may be due now or any time hereafter

or be claimed due from Seller to Devco or its affiliates, which claim or lien might be asserted by reason of doing, making or furnishing heretofore by Devco, its affiliates, successors, assignees, materialmen, subcontractors or any others, of any labor, services, materials, apparatus, machinery or anything else for or on behalf of Seller;

(d) Devco undertakes and agrees to enforce at Devco's expense all warranties in connection with construction of Seller's facilities sold hereunder which were installed prior to the closing date.

6. Risk of Loss

If, before the consummation of this transaction on the closing date, any part of the assets of Seller is destroyed and/or damaged by fire or any other cause, the purchase price shall be reduced by the cost of replacement or restoration of said damaged or destroyed assets.

7. Condition of Buyer's Obligation

Buyer's obligation to purchase Seller's business and assets as set forth herein in accordance with this Agreement is subject, at the option of Buyer, to the following conditions:

- (a) The matters stated in Paragraph 1 and Paragraph 4 of this Agreement shall be true and correct as of the date of closing;
- (b) Buyer shall have received an opinion of its counsel to the effect that there are no outstanding liens, encumbrances, claims or security interests of record of any kind against the assets being sold hereunder;
- (c) Buyer shall receive the written opinion of Devco's counsel that:
  - i. Seller is a duly organized and existing public utility corporation in good standing and has obtained all permits, franchises and certificates necessary to carry on its business;



ii. Seller has good and merchantable title free and clear of all liens and contingent obligations to all real and personal property reflected in Seller's balance sheet as of March 15, 1962, and there are no restrictions of any nature on Seller's right to sell and transfer its business and said property to Buyer.

#### 8. Competition

Devco and Seller agree that, from and after the date hereof and for so long as Buyer shall carry on the business of a public utility, Devco and Seller will not, directly or indirectly, undertake to have eliminated any areas from those areas which are certificated by the Commission to Seller as of the date hereof, except for a one hundred sixty (160) acre, more or less, parcel owned by Charles Wetzler jointly or in severalty. In connection with all lands owned, or to be owned by Devco in the aforesaid certificated area, the aforesaid obligation of Devco shall be a covenant running with the said lands and properly recorded as such by Devco within thirty (30) days after the closing date hereof. Within such certificated area, Devco agrees to grant to Buyer all rights to ground water and withdrawals thereof under land owned by Devco when and as such land is platted for subdivision purposes, reserving however in Devco, its affiliates, lessees and vendees, the right to construct wells and withdraw such ground water as may be required by the aforesaid parties for any purposes other than for transmission and distribution for consumption by residential and commercial consumers.

9. Cooperation

Devco, Seller and Buyer agree to cooperate and to cause their affiliates to cooperate in making effective all of the terms and provisions of this Agreement and will each, at the written request of the other, and at the requesting parties' expense, join in taking any action, including joint, separate or consolidated applications to the Commission, which may be required to be taken, in order to render the terms and provisions of this Agreement effective and to enable the parties and their affiliates so requesting cooperation to exercise the rights granted or reserved to it by this Agreement.

10. Records

Devco and Seller shall deliver to Buyer at the closing all records, reports and returns of Seller pertaining to the operations of Seller's business and construction and operation of Seller's plant facilities, as set forth in "Exhibit J" attached hereto and incorporated by reference herein. Said items shall be made available to Buyer at its request in advance of the closing for any reasonable purpose.

11. Finders

Devco, Seller and Buyer agree that no broker, agent, finder or any other person not party to this Agreement was in any way involved in any matter relating to or resulting in this Agreement.

12. Notices and Approvals

All notices, requests, demands and approvals herein provided shall be given in writing. If given by Seller to Buyer they shall be sent by United

States Certified Mail, postage prepaid, addressed to Buyer, c/o Citizens Utilities Company, Ridgeway Center, Stamford, Connecticut, or to such other person or corporation and place as Buyer may from time to time designate in writing. If given by Buyer to Seller, or to Devco, they shall be sent by United States Certified Mail, postage prepaid, addressed to:

Secretary  
Del E. Webb Development Co.  
2727 North Central Avenue  
Phoenix, Arizona

or to such other person or corporation and place as Seller or Devco from time to time designates in writing.

13. Parties in Interest

This Agreement shall inure to the benefit of and shall be binding upon Devco, Seller and their successors and assigns, and shall be binding upon and inure to the benefit of Buyer, its affiliates, successors and assigns.

14. Approval of Commission

This Agreement is subject to the approval of the Commission and Devco, Seller and Buyer shall make application as required for such approval upon execution hereof.

15. Governing Law

This Agreement is executed and intended to be performed in the State of Arizona and shall be construed and enforced in accordance with the laws of that State.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement at Phoenix, Arizona, as of March 1, 1962.

SUN CITY WATER COMPANY,  
an Arizona corporation

By *John C. Ibb*  
BUYER

SUNBURST WATER CO.  
an Arizona corporation

By *[Signature]*  
SELLER

DEL E. WEBB DEVELOPMENT CO.,  
an Arizona corporation

By *[Signature]*  
DEVCO