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BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL  
CHAIRMAN  
JIM IRVIN  
COMMISSIONER  
MARC SPITZER  
COMMISSIONER

Arizona Corporation Commission

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IN THE MATTER OF THE JOINT APPLICATION OF SUN CITY WATER COMPANY AND SUN CITY WEST UTILITIES COMPANY (APPLICATION NOW ASSUMED BY ARIZONA-AMERICAN WATER COMPANY) FOR APPROVAL OF CENTRAL ARIZONA PROJECT WATER UTILIZATION PLAN AND FOR AN ACCOUNTING ORDER AUTHORIZING A GROUNDWATER SAVINGS FEE AND RECOVERY OF DEFERRED CENTRAL ARIZONA PROJECT EXPENSES.

Docket Nos.: W-01656A-98-0577;  
SW-02334A-98-0577

ARIZONA-AMERICAN  
WATER COMPANYS  
RESPONSES TO  
EXCEPTIONS

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Arizona-American Water Company ("Az-Am") hereby responds to RUCO's and Sun City Taxpayers Association's (SCTA) exceptions to the ALJ's Recommended Opinion and Order dated May 15, 2002 (the "Recommended Order").

**I. BRIEF STATEMENT OF THE CASE.**

The focus of this case is the groundwater decline problems in the Sun Cities and Az-Am's substantial efforts to implement the Sun Cities Groundwater Savings Project (GSP) as the community's chosen alternative to alleviate those problems. The GSP truly is a public project. In Decision No. 62293, the ACC found that the "consequences of excessive groundwater withdrawal include decreased water levels, diminished water quality, well failures, increased pumping costs, and more land

subsidence.” See Decision No. 62293, p. 18. The GSP is designed to mitigate those problems by using CAP water (4,189 acre-feet in Sun City and 2,382 acre-feet in Sun City West) in place of groundwater pumping at Sun City and Sun City West golf courses.

The ACC previously approved the GSP project concept. Id. at pp. 12-16. Because the GSP was in the conceptual stage, however, the ACC placed two conditions on final approval. First, the ACC required Az-Am to perform an engineering analysis to evaluate (i) the feasibility of a joint facility with the Agua Fria Division; and (ii) the need for all major elements of the proposed GSP. Second, the ACC ordered Az-Am to provide evidence of binding commitments from the golf courses participating in the GSP. Id.

On January 9-10, 2002, Hearing Division convened an evidentiary hearing to evaluate those limited issues. Az-Am, Staff, RUCO and SCTA all participated in the hearing. The ALJ issued the May 15, 2002 proposed order and recommended approval of the GSP.<sup>1</sup> See Recommended Order, p. 25. ALJ Nodes correctly determined that Az-Am has satisfied Decision No. 62293 and the proposed project “is the appropriate option for implementation of the GSP concept under the facts and circumstances....” Id.

**II. THE COMMISSION SHOULD AFFIRM THE ADMINISTRATIVE LAW JUDGE’S RECOMMENDED OPINION AND ORDER.**

Based on the underlying record and prior ACC decisions, the ACC should reject SCTA’s and RUCO’s exceptions to the ALJ’s Recommended Order. SCTA and

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<sup>1</sup> ALJ Nodes is the second hearing officer to issue a recommended decision approving the GSP. On March 14, 2001, ALJ Jane Rodda also issued a proposed order recommending approval of the GSP and authorization for Az-Am to proceed with project construction. See Proposed Opinion and Order dated 3/14/01, p. 9.

RUCO rely on evidence and arguments unsupported by the factual record before this Commission, beyond the scope of the January 9-10, 2002 hearings and contrary to the ACC's prior findings in Decision Nos. 60172 and 62293. The ACC should focus on the factual record in this docket. ALJ Nodes faced the following issues at hearing:

- (1) Does the PER satisfy Decision No. 62293 by addressing the feasibility of a joint project with the Agua Fria Division (including timeframes for any such joint facility)?
- (2) Does the PER address the need for all major elements of the GSP?
- (3) Did Az-Am provide evidence of binding commitments from the participating Sun City and Sun City West Golf Courses?

The ALJ's Recommended Order is supported completely by the underlying record and ALJ Nodes correctly determined that the answer is YES to all three questions.

The ALJ's proposed findings and conclusions are bolstered by the public need for the GSP. The Sun Cities pump approximately 34,000 acre-feet of groundwater per year with only about 2,000 acre-feet of recharge in Sun City West. See 1/9/02 Tr., Husted Test., pp. 60-63. Sun City doesn't recharge any water and relies exclusively on groundwater pumping. Id. at p. 52. Because of such excessive pumping, the Sun Cities CAP Task Force developed a community consensus for the best plan to use CAP water in the Sun Cities. The GSP was the chosen option and the ACC found that the GSP "will provide direct benefits to the Sun City areas." See Decision No. 62293, p. 19.

Based on the testimony and evidence presented during the January 9-10 hearing, Az-Am satisfied Decision No. 62293 by evaluating the feasibility of a joint facility with the Agua Fria Division and the need for all major elements of the proposed

project. Az-Am also demonstrated binding commitments from the golf courses to participate in the GSP. In the Recommended Order, ALJ Nodes correctly decided those issues and the ACC should adopt the May 15, 2002 Recommended Order.

**III. SCTA'S AND RUCO'S EXCEPTIONS TO THE PROPOSED OPINION AND ORDER ARE LEGALLY AND FACTUALLY FLAWED.**

In their exceptions, SCTA and RUCO make several arguments to overturn the GSP and reject the Recommended Order. Az-Am addresses those arguments below. Before addressing those specific arguments, however, it bears emphasis that SCTA also argues that the Commission should rescind Decision No. 62293 even though it is final and non-appealable. SCTA urges rescission of Decision No. 62293 because it is irreconcilable with SCTA's and RUCO's arguments against the GSP.

In Decision No. 62293, the ACC adopted the CAP Task Force's recommendations to implement an interim CAP water usage plan (via recharge at the MWD Groundwater Savings Facility). The ACC then adopted the GSP concept as the permanent plan. Ultimately, the ACC approved the GSP concept over less costly options:

“While there are clearly less costly options...we will approve the concept of the groundwater savings project and approve the reasonable and prudent costs associated with the completion of the preliminary design/updated cost estimates.” Id. at p. 16.

The ACC approved the GSP concept over five other proposed options--including SCTA's recommended option of recharge at the Agua Fria Recharge Project and RUCO's recommended option of a water exchange/recharge project with MWD. Id. at p. 11. The Commission should abide by Decision No. 62293 and affirm the Recommended Order.

A. **SCTA's Changed Circumstance Argument Is Unfounded and Does Not Justify Overturning the May 15, 2002 Order, Decision No. 62293 and the GSP.**

On pages 3-5 of its exceptions, SCTA argues that the May 15 Order should be rejected because of changed circumstances relating to the Agua Fria Recharge Facility based on data from monitoring wells near the Recharge Site. SCTA argues that “[t]he data will demonstrate the direct and appreciable impact on the Sun Cities that can be achieved by the recharging activities at that facility.” See SCTA Exceptions, p. 4. SCTA has no support for that statement or its arguments on this point.

SCTA attached excerpts from the CAWCD Fourth Quarter Report and 2001 Annual Monitoring Report to its exceptions. But that document was not part of the record below. SCTA attempts to interpret short-term on-site data to support future long-term benefits to the Sun Cities, but SCTA misconstrues the CAWCD Report. At this point in time, the Report doesn't demonstrate any immediate and direct impacts in the Sun Cities from the Agua Fria Recharge Facility. On that issue, it's important to understand the locations of the Agua Fria Recharge Facility in relation to the Sun Cities. The Agua Fria Recharge Facility basins are located approximately 3.5 miles north of the northernmost part of Sun City. The blow off structure for the Agua Fria Recharge Facility is located another four miles north of the recharge basins. See Agua Fria Recharge Project Map (attached as exhibit A). The Facility is approximately 10 miles from the southern part of the Sun Cities and the blow off structure is 14 miles north.

SCTA cites page 4 of the CAWCD Report for the argument that Sun City water levels will increase from the Agua Fria Recharge Facility. But all the CAWCD

report states is that “hydrologic responses occurred at different monitoring sites at different times depending on the location relative to the recharge project inflow point (blow-off structure).” See CAWCD Report, p. 4. All of the monitoring wells mentioned in the report are located near the Agua Fria Recharge Facility basins--3.5 miles north of Sun City and four miles south of the blow-off structure. The CAWCD Report indicates exactly what is expected from a recharge project--increased water levels as a result of the recharge operation near the recharge basins. Nothing more, nothing less.

The underlying factual record and the CAWCD Report lend no support for SCTA’s claim that the Agua Fria Recharge Facility will provide direct and immediate benefits to the Sun Cities. In fact, after less than a year of partial operation of the Agua Fria Recharge Project, the facility temporarily ceased operations in May 2002 because water levels at monitoring wells near the recharge basins are approaching “alert levels” established in the facility’s permit to operate. These circumstances may indicate that the water isn’t moving out into the regional aquifer as quickly as anticipated from the recharge facility. Az-Am agrees that the Agua Fria Recharge Project is a substantial benefit to the region, but the record here establishes that the GSP, unlike the Agua Fria Recharge Project, will provide direct and immediate benefits to the Sun Cities.

SCTA’s recharge claims also contradict the Commission’s findings in Decision No. 62293 because the Task Force and the ACC considered the Agua Fria Recharge Project and rejected it in favor of the GSP. In pre-filed testimony filed in 1999, SCTA’s own expert Mr. Husted testified that recharge was not the preferred alternative because “[t]he CAWCD and MWD recharge projects may provide very long range and

indirect benefits to Sun City ratepayers..." See Husted Pre-Filed Testimony, 9/10/1999, p. 9; 1/9/02 Tr. Husted Test., p. 83. But that's not all. In September 1999, the CAP Task Force introduced pre-filed rebuttal testimony from Dess Chappelle as the Assistant Project Manager for the Central Arizona Project. See 9/30/99 Pre-Filed Rebuttal Testimony of Dess Chappelle (attached as exhibit B). Mr. Chappelle supported the GSP and, as part of his testimony, he introduced a hydrologic report prepared by Herbert H. Schuman regarding "Utilization of Central Arizona Project Water in Sun City and Sun City West." Id. Mr. Schuman utilized an ADWR digital groundwater flow model to evaluate impacts of various CAP water options on the Sun Cities and determined that the Agua Fria Facility would offer minimal benefits to the Sun Cities:

"Figure 7 shows the projected water-level changes that can be expected at the end of 20 years of recharging 100,000 acre-feet/year at the Central Arizona Water Conservation District's recharge site on the Agua Fria about 3.5 miles north of Sun City. Only about one foot water-level change is projected in the Sun City and Sun City West areas after recharging 100,000 acre-feet/year for 20 years."

See Schuman Report, 9/21/99, p. 2. SCTA offered no contrary evidence or testimony.

SCTA further overlooks the fact that the Agua Fria Recharge Facility likely will be used to its capacity--without any CAP water from the Sun Cities. See 1/10/02 Tr., Larson Test., p. 368. SCTA's recharge argument also ignores the impacts of future recovery of recharged water by participating entities.

In a last ditch effort to foil the GSP, SCTA makes mention of a proposed recharge facility in the Agua Fria River from Bell Road to Thomas Road. Az-Am assumes SCTA means the effluent recharge facility proposed by the City of Phoenix and other owners of the 91<sup>st</sup> Avenue Wastewater Treatment Plant. Az-Am (via Keith Larson)

is a participant in the project planning. Again, SCTA did not raise this issue at the January 9-10 hearing and SCTA's reference to that project is the epitome of speculation and innuendo. Project planning is in its infancy and the facility is planned for construction in 2008 (at the earliest). Further, the quantity of effluent available for recharge is unknown and subject to further evaluation because effluent may be used to establish habitat and recreational facilities and for other direct uses. The project also will be phased and likely won't reach the Sun Cities until much later than 2010.

**B. Az-Am Has Demonstrated Adequate and Binding Commitments from the Participating Golf Courses.**

As exhibits A-6 through A-8 at the January hearing, Az-Am introduced the Water Exchange Agreements between Az-Am and the Recreation Centers of Sun City, the Recreation Centers of Sun City West and Briarwood Country Club. See 1/10/02 Tr., pp. 360-361. Exhibits A-9 through A-11 were the operating agreements with the golf courses. Id. at pp. 362-364. Az-Am provided evidence of binding commitments to the GSP from the golf courses as required by Decision No. 62293. SCTA presented no persuasive evidence to the contrary at hearing or in its exceptions.

**1. ADWR Approval of the Water Exchange Agreements Does Not Impact the ALJ's Recommended Opinion and Order.**

On pages 5-6 of its exceptions, SCTA argues that the Exchange Agreements are unenforceable because they haven't been submitted to ADWR for approval yet. Az-Am fully rebutted this argument at the January 9-10, 2002 hearing. For starters, SCTA fails to mention the express wording of the Exchange Agreements:

6.1 Either party may terminate this Exchange if any of the following pre-conditions has not occurred...(b) Arizona Department of Water Resources (“ADWR”) has issued all permit or approvals necessary to implement an exchange to enable the use of CAP water on Recreation Centers’ golf courses no later than March 31, 2001. (emphasis added)

See Agreement for Exchange of CAP Water in Sun City, ¶ 6.1(b) (exhibit A-6). That language doesn’t render the Agreements void for lack of ADWR approval. Neither Az-Am nor the Recreation Centers have indicated any intent to terminate the Exchange Agreement for lack of ADWR approval.

SCTA also fails to mention Az-Am’s ongoing consultations with ADWR regarding those Agreements. The January 10, 2002 testimony from Az-Am’s Keith Larson fully rebuts SCTA’s arguments on this point:

I think you will also note there that it says either party may terminate this agreement, so I think what you’re getting at is why haven’t we filed these, we don’t have regulatory approval...We anticipate following this proceeding getting approval from the Commission to move forward with this project, applying to the Department for the exchange permits. The Department has been involved in this proceeding from the beginning, is well aware of the project and fully endorses the Groundwater Savings Project. We anticipate no problems in getting this permit. The fact that we haven’t applied yet is strictly related to the delays incurred in moving forward with this project....our legal counsel had discussions with DWR during the process of drafting these agreements, consulted with ADWR staff and that is the basis of what you have before you. The opinions of the Department are reflected in these agreements...(emphasis added)

See 1/10/02 Tr., Larson Test., pp. 380-381.

2. ***The Recreation Centers of Sun City West Possess Adequate Water Rights to Support the GSP.***

Next, on pages 6-7 of its exceptions, SCTA concocts an argument based on Sunland Memorial Park’s water rights and expiration of the General Industrial Use Permits (GIUP) possessed by the Sun City West golf courses. SCTA’s claim is that the

Sun City West golf courses may not have sufficient water rights to support the CAP water exchange because the GIUPs possessed by the Sun City West golf courses are due to expire in 2005. SCTA then argues that the pooling provisions in the Operating Agreements may be insufficient to make up the difference because Sunland Memorial Park hasn't agreed to allow the Recreation Centers of Sun City to make its water rights available to the Recreation Centers of Sun City West for the CAP water exchange.<sup>2</sup>

This argument fails for several reasons. First, the Arizona Legislature recently enacted House Bill 2064 to “facilitate the replacement of groundwater use on golf courses with the use of central Arizona project water by allowing a general industrial use permit issued...in the Phoenix active management area to be extended for up to seven years...” See House Bill 2064, § 1 (attached as exhibit C). The Governor signed HB 2064 on April 29, 2002. HB 2064 requires ADWR to extend the GIUPs and it is designed to “give the general industrial use permit holder additional time to secure a replacement withdrawal right to exchange for the central Arizona project water” and the permit extension is “dependent on timely progress toward completion of the water delivery infrastructure that will transport the central Arizona project water to the golf course.” Id. As set forth in HB 2064, the Legislature expressly recognized the public need and benefits of using CAP water to replace groundwater pumping on Sun City and

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<sup>2</sup> The Operating Agreements contain pooling provisions that allow the Recreation Centers of Sun City and Sun City West and Briarwood Country Club to “pool” their water rights to make available, on a year-by-year basis, any surplus water rights for use on golf courses in the event such golf course has insufficient water rights or the exchange See Larson Pre-Filed Rebuttal Test., 7/31/02, pp. 3-4.

Sun City West golf courses (i.e., the GSP) and implemented a seven-year GIUP permit extension to facilitate such a water exchange.

Second, the Recreation Centers of Sun City West have sufficient water rights to support the GSP even if they are unable to renew their GIUPs. Az-Am specifically addressed this argument at the January 10, 2002 hearing:

...my testimony on that issue is that the potential loss of the general industrial use permits are not, the fact that they could not be renewed in the future with the Sun City West Recreation Centers is not a, will not affect the Groundwater Savings Project materially. There are several reasons for that. The shortfall of rights would only amount to about 42 acre feet which is a very, very small percentage of the total 2,300 acre feet of CAP water allocated to Sun City West, and there are other mechanisms that the operating agreements anticipate to deal with to handle that shortfall should it occur.

See 1/10/02 Tr., Larson Test., pp. 363-364; Larson Pre-Filed Rebuttal Testimony dated July 31, 2002, pp. 3-6. The bottom line is that expiration of the Sun City West golf course GIUPs will not jeopardize the GSP because the shortfall would be only 42 acre-feet or only 1.7% of Sun City West's CAP water allotment of 2,382 acre-feet. Id.

Third, that minimal impact means that the availability of Sunland Memorial Park's water rights is immaterial to the GSP. Mr. Larson explained at the January 10, 2002 hearing that, even if the Recreation Centers of Sun City West receive no water rights from the pooling arrangements, they still would have sufficient rights for the GSP:

Q. If the Recreation Centers of Sun City West and Briarwood received no Sun City Rec. Center water from the pooling arrangement and their GIUPs had expired, what water rights would they use to irrigate their golf courses?

A. The Rec. Centers of Sun City West can use the Type II rights through the pooling arrangement. They can also use the effluent credits that they have a right to. The Sun City West Recreation Centers could use, fully use their effluent credits and free up the surplus Type II rights to be made available through the

pooling arrangement for use on the Briarwood Country Club....

Q. And as stated in your testimony, they don't really need the Sun City Type II water rights to facilitate the GSP, agreed?

A. That's correct.

See 1/10/02 Tr., Larson Test., pp. 436-437.

Fourth, SCTA also doesn't tell the rest of the story regarding Sunland's water rights. At the January 10 hearing, SCTA produced an ADWR water rights certificate indicating that Sunland Memorial Park owned certain water rights and not the Recreation Centers of Sun City (RCSC). On redirect, Mr. Larson clarified that the RCSC had a written agreement to use those water rights. See 1/10/02 Tr., Larson Test., pp. 437-438. With its closing brief, Az-Am attached a copy of RCSC's agreement for use of those water rights. See 9/22/75 Agreement (the "1975 Agreement"). Put simply, the original owner of the Sunland Memorial Park water rights (Del Webb through a trustee) conveyed to RCSC the right to use water from the Sunland well. In turn, Sunland and RCSC entered the July 15, 1982 cost sharing agreement attached to SCTA's exceptions. Under the 1975 Agreement, RCSC possesses the right to use water from the Sunland well. As a result, SCTA's affidavit from Ms. Spilde does not undercut the GSP in any way. Once again, SCTA didn't present the Spilde affidavit at the January 9-10 hearing and it was not part of the factual record below.

C. **SCTA's Superior Court Litigation Should Have No Bearing on the Recommended Order in this Docket.**

Next, SCTA argues that the Commission should defer any decision in this docket pending the outcome of SCTA's Superior Court lawsuit and possible appeal. But

SCTA's potential appeal has no bearing on the Commission's duties and obligations to decide the matter before it in this docket. SCTA's argument on this point reinforces the fact that SCTA filed the lawsuit as an effort to delay this ACC proceeding.

SCTA also failed to advise the Commission on the current status of the lawsuit. On November 19, 2001, the Court issued a minute entry granting SCWC's and RCSC's motions to dismiss SCTA's complaint. The Court entered final judgment in SCWC's favor on April 9, 2002. SCTA recently filed a motion for new trial and intends to appeal the Superior Court's judgment. By minute entry dated June 12, 2002, Judge Santana denied SCTA's motion for new trial (attached as exhibit D).

**D. Based on the Evidentiary Record from the January 9-10, 2002 Hearing, Az-Am Demonstrated the Need for All Major Elements of the GSP.**

In their exceptions, both SCTA and RUCO contend that the GSP is too costly and that Az-Am has failed to demonstrate the need for all major elements of the GSP. SCTA and RUCO are wrong because the evidence and testimony presented at the January 9-10 hearing clearly establishes the need for all elements of the GSP.

At hearing, Staff Engineer Marlin Scott fully supported the PER and verified the cost estimates contained in the report. See Scott Pre-Filed Test., 7/31/01, pp. 1-3. He concluded that the Az-Am's Preliminary Engineering Report (PER) adequately addressed the feasibility of a joint project with the Agua Fria Division and the need for all major elements of the GSP. Id. Mr. Scott recommended approval of the GSP. Id.

Further, Az-Am hired HDR Engineering to perform the preliminary design and cost estimating work for the GSP and PER. See Jackson Test, 1/9/02 Tr., p. 218. at

p. 218. HDR and AZ-Am formed an extensive project team to evaluate the best and most viable options for the GSP. See Buras Test., 1/10/02 Tr., pp. 308-312. The testimony from Mr. Jackson as Citizen's chief project engineer, Mr. Buras as HDR's project engineer, Mr. Larson as Citizens' Water Resources Manager and Mr. Scott as Staff's engineer all establish that the PER adequately addresses the cost and engineering issues under Decision No. 62293. See 1/9/02 Hearing Tr., pp. 213-230; 1/10/02 Hearing Tr., pp. 305-312, 317-350, 355-369, 440-442; Jackson Pre-Filed Test. (Ex. A-2), 7/31/01, pp. 3-19; Buras Pre-Filed Test. (Ex. A-4), 7/31/01, pp. 2-6; Larson Pre-Filed Test. (Ex. A-5), 7/31/01, pp. 3-11; Scott Pre-Filed Testimony (Ex. S-1), 7/31/01, pp. 1-4.

Az-Am and HDR performed a comprehensive evaluation of possible GSP alternatives. Section D of the PER is devoted to evaluating and demonstrating the need for major elements of the GSP. See PER, Part D, pp. D-1 to D-62. The recommended Alternative A includes a CAP trunk line (\$7,389,787), a Sun City distribution system (\$7,326,884) and a SCADA system (\$1,744,257) as its major elements. See PER, p. E-4. The PER contains a detailed analysis of the need for each element of Alternative A and the other alternatives. Id. at pp. D-51 to D-61, E-1 to E-6; Jackson Test., 1/9/02 Tr., pp. 213-231; Buras Test., 1/10/02 Tr., pp. 305-311, 350-355.

In their exceptions, SCTA and RUCO present no valid engineering or cost criticisms of the recommended GSP alternative. As such, the ALJ correctly determined that "[t]he requirements of Decision No. 62293, with respect to consideration of a joint project with the Agua Fria Division, examination of all necessary elements of the GSP...have been satisfied." See Recommended Order, p. 25.

**E. SCTA'S and RUCO's Rate Shock Arguments Have No Bearing on Approval of the GSP.**

Both RUCO and SCTA claim that the GSP should be rejected because of potential rate shock. But that issue already has been rejected in Decision No. 62293. Even RUCO's witness, Ms. Diaz-Cortez, conceded at hearing that she gave similar testimony on rate shock to the ACC leading up to Decision No. 62293 based on the same project cost figures. See 1/9/02 Tr. at pp. 179-181.

RUCO's and SCTA's rate shock arguments miss the mark in this case. They are thinly-veiled political arguments and aren't supported by the record here. RUCO, for example, urges the Commission to leave the *status quo* (recharge at the Maricopa Water District site) intact as an effort to avoid any rate increases. In Decision No. 62293, however, the ACC rejected the MWD Recharge Site as the permanent, long-term GSP option. And the ACC did so for good reason because (1) the MWD facility isn't a viable long-term GSP option given ongoing and future development of agricultural lands and (2) the MWD facility will not provide equivalent direct and immediate benefits to the Sun Cities as the GSP.<sup>3</sup> RUCO didn't present any evidence on these points.

RUCO also makes a balancing test argument that the cost of the GSP

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<sup>3</sup> On this issue, Mr. Larson testified as follows: "[The MWD Recharge Facility] is not a viable long-term option for the simple reason that those farms, those agricultural lands will be developed over the next 30 years. It's happening now and it's going to continue to happen every year. As those farm lands go away, the opportunity to deliver CAP water to that groundwater savings facility declines and goes away over time. So really, it's a short term solution that was recommended by the Commission to begin putting the Sun City CAP water to work until this Groundwater Savings Project can be implemented." See 1/10/02 Tr., Larson Test., pp. 367-368.

outweighs any benefits to the Sun Cities. That argument also falls flat. The neighboring community of Peoria has funded the necessary infrastructure to reduce its reliance on groundwater pumping through construction of surface water treatment plants to treat CAP water and pipelines to deliver the water. Past rate increases for Peoria dwarf the \$4.95 increase in Sun City and \$2.65 increase in Sun City West from the GSP. On balance, as compared to costs incurred by other west valley CAP water users, the GSP is a very low-cost way of reducing groundwater pumping in the Sun Cities and immediately reducing water level declines and alleviating other environmental problems.

Finally, the record indicates that the GSP will not result in rate shock. As noted by Staff witness John Thornton, the GSP “translates to an increase of \$4.95 per connection” in Sun City and “\$2.65 per connection” in Sun City West. See Fernandez Pre-Filed Test., 7/31/02, p. 3 (adopted at hearing by Mr. Thornton). As a result, Mr. Thornton testified that “it is Staff’s opinion that the required increase to implement the GSP in Sun City is not rate shock.” Id.

***F. Arsenic Is a Non-Issue Regarding Approval of the GSP in This Docket.***

On pages 4-5 of its exceptions, RUCO contends that the Commission should not approve the GSP because “CAP water that would otherwise be committed to the GSP could be necessary as a least-cost solution to the Company’s arsenic problem.” That argument is factually unsupported. On the arsenic issue, Mr. Larson testified that “the arsenic levels in wells in the Sun City Water Company area” meet the new EPA standard, but “some of the wells in the Sun City West Utilities Company area” do not meet the standard. See 1/10/02 Tr., Larson Test., p. 372. On questioning from Staff’s

attorney, Az-Am engineer Ron Jackson also testified that declining water levels in the Sun Cities may lead to higher arsenic levels. See 1/9/02 Tr., Jackson Test., pp. 291-292.

In other words, the GSP actually may benefit arsenic levels by reducing groundwater withdrawals. RUCO presented no arsenic testimony of its own and RUCO has no basis to argue that CAP water may be a least cost solution to the arsenic problem. In fact, any efforts to mitigate the impact of the new arsenic standard with CAP water would require construction of a new pipeline and a potable water treatment plant. The CAP Task Force concluded that the impact of such facility on ratepayers would be double that of the GSP. Az-Am currently is evaluating alternative groundwater treatment and well blending options and methods to comply with EPA's new arsenic standard. Az-Am's initial research indicates those options will be more viable than construction of a surface water treatment plant and pipeline to distribute CAP water to the Sun Cities.

**G. Future Rate Proceedings.**

On page 11 of its exceptions, SCTA urges the ACC to adopt language relating to future rate proceedings and the GSP. Az-Am believes the ALJ already has adequately addressed those issues in the Recommended Order. SCTA's recommended language is nothing more than an effort to leave open the possibility of re-litigating Az-Am's decision to construct the GSP in a future rate proceeding. On that issue, Decision No. 62293 and the Recommended Order, if adopted, approving the GSP and authorizing Az-Am to proceed with project construction are tantamount to a finding that the GSP is a prudent and reasonable project. That's what this docket is all about. Az-Am agrees that the ultimate cost figures for the GSP would be subject to Staff and RUCO analysis and

review at a future rate hearing. But Az-Am can't agree to an order allowing Staff, RUCO, SCTA or anyone else to contest the prudence of the project in the future.

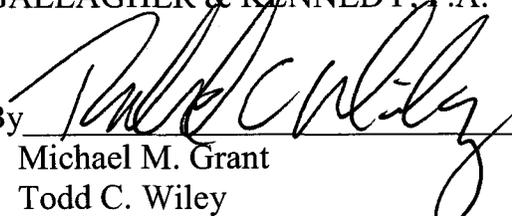
In Decision Nos. 60172 and 62293, the ACC already has determined that Az-Am's decision to retain the CAP allocation was prudent. It stands to reason that Az-Am's decision to use the CAP allocation is prudent and reasonable, as well. If SCTA's requested language is included in the Opinion and Order, Az-Am may have no choice but to decline going forward with the project.

**IV. CONCLUSION.**

Based on the underlying record and prior ACC decisions, this Commission should reject SCTA's and RUCO's exceptions and approve the ALJ's May 15, 2002 Recommended Opinion and Order.

DATED this 21<sup>st</sup> day of June, 2002.

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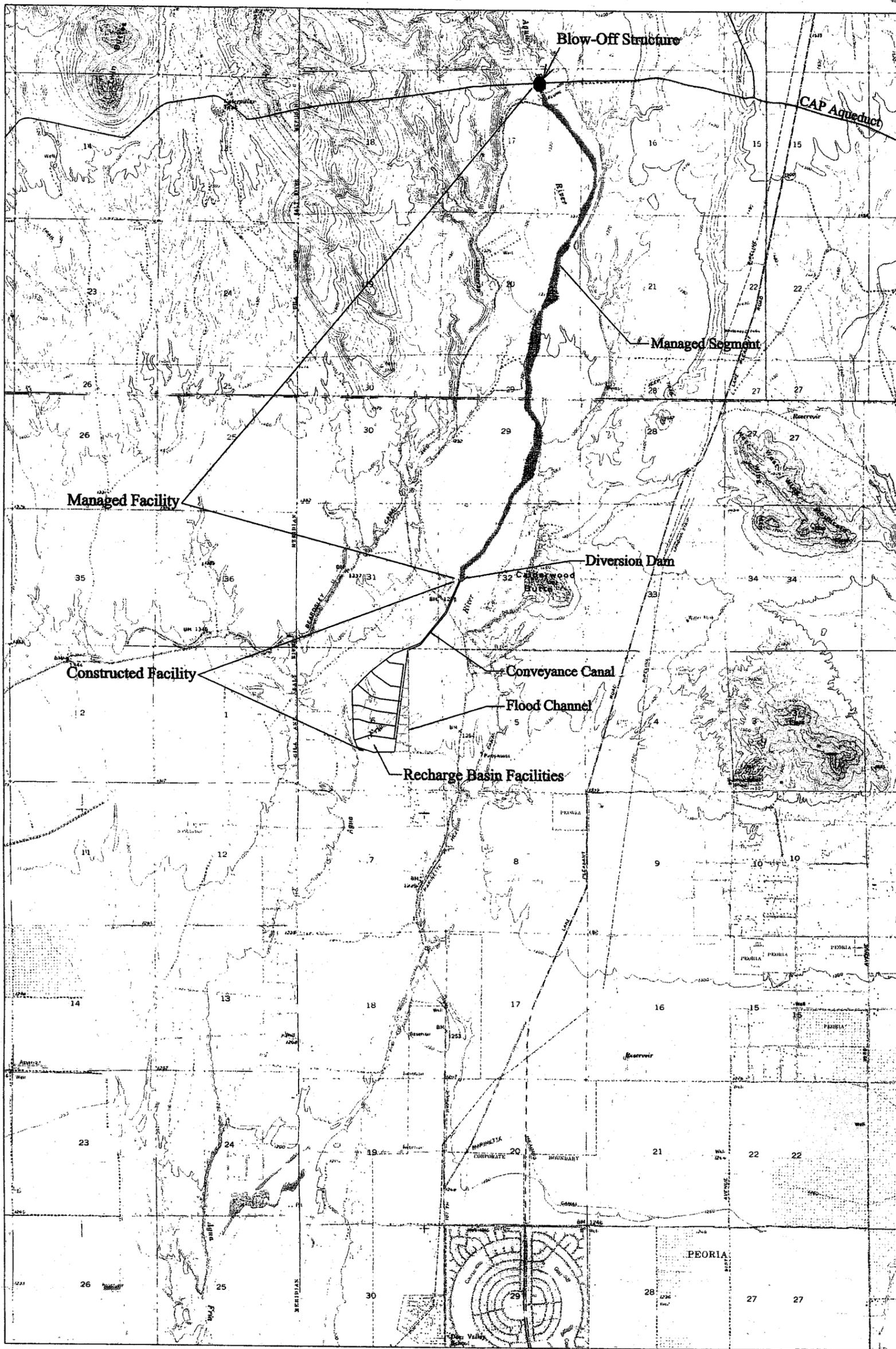
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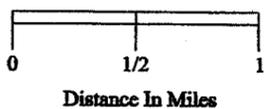
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Attorneys for Sun City Taxpayers Association

By:   
1024432v3

**A**



T5N  
T4N



R1W | R1E

Explanation

 Managed Segment

 **HydroSystems, Inc.**  
 GARY G. SMALL, M.S., P.G., C.E.I.  
 1220 S. PARK LANE, SUITE 5 TEMPE, AZ 85281  
 TELEPHONE: 602-517-9050 FAX: 602-517-9049

**Project Location Map**  
**Agua Fria Recharge Project**

Figure 1

**B**

★ RECEIVED ★

09 01 1999

Citizens Water Resources

1 BEYER, McMAHON & LaRUE  
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2 Sun City, Arizona 85351  
623/977-9898  
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4  
5

BEFORE THE ARIZONA CORPORATION COMMISSION

6 CARL J. KUNASEK  
7 CHAIRMAN  
8 JAMES M. IRVIN  
COMMISSIONER  
9 WILLIAM A. MUNDELL  
COMMISSIONER

10 IN THE MATTER OF THE JOINT )  
11 APPLICATION OF SUN CITY WATER )  
COMPANY AND SUN CITY WEST )  
12 UTILITIES COMPANY FOR )  
APPROVAL OF CENTRAL ARIZONA )  
13 PROJECT WATER UTILIZATION )  
PLAN AND FOR AN ACCOUNTING )  
14 ORDER AUTHORIZING A )  
GROUNDWATER SAVINGS FEE AND )  
15 RECOVER OF DEFERRED CENTRAL )  
ARIZONA PROJECT EXPENSES. )  
16

DOCKET NO. W-01656A-98-0577  
SW-02334A-98-0577

NOTICE OF FILING  
REBUTTAL TESTIMONY

17 The CAP Task Force hereby provides Notice of Filing Rebuttal Testimony for  
18 Carole Hubbs and Dess Chappellear in the above-referenced docket.

19 Respectfully submitted this September 30, 1999.  
20

21 BEYER, McMAHON & LaRUE

22 

23 William G. Beyer, Esq.  
24  
25  
26  
27

1 **AN ORIGINAL AND TEN COPIES**  
2 of the foregoing mailed this  
3 30th day of September, 1999  
4 to:

5 Docket Control  
6 Arizona Corporation Commission  
7 1200 W. Washington  
8 Phoenix, Arizona 85007

9 **COPIES** of the foregoing mailed/  
10 hand delivered this 10th day of  
11 September, 1999 to the following:

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13 Hearing Division  
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16 Phoenix, Arizona 85007

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15 By: 

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REBUTTAL TESTIMONY OF DESS CHAPPELEAR  
CAP TASK FORCE  
W-01656A-98-0577  
SW-02334A-98-0577

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Q: Please state your name and address.

A: Dess Chappellear, and I live at 13837 W. Oak Glenn Drive, Sun City West, Arizona 85375.

Q: Please state your employment background.

A: I am currently retired, but I spent over 38 years in water resources development with the Department of the Interior, Bureau of Reclamation. My most recent assignment was Assistant Project Manger of the Central Arizona Project.

Q: Please state your professional qualifications.

A: I was a professional engineer, now retired, and my qualifications are indicated on the attached exhibit.

Q: Have you been involved in the CAP Task Force?

A: Yes. I was a member of the CAP Task Force referred to in the basic pleadings filed by Citizens Utilities Company, and actively participated in all of the hearings and deliberations of that group.

Q: Have you reviewed the Statement of the CAP Task Force which has been submitted to the Commission as a part of this Docket?

A: Yes.

Q: In your view, is that Statement an accurate summary of the position of the CAP Task Force?

A: Yes. I would, however, recommend that the two "safeguards" which were suggested be put in any Order crafted by the Commission (see Section 6, page 14 of the Statement) should be expanded to include a fixed time limit be placed on the life of the contract for the short-term arrangement between Citizens and MWD. As has been pointed out by several commentators, that

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3 arrangement offers virtually no real benefits to the Retirement Communities,  
4 and should only last for the 42 month deadline established for the construction  
5 of the pipeline infrastructure required for the long-term solution to the use of  
6 CAP water.

7 Q: For purposes of your testimony today, will you adopt that Statement as your  
8 own testimony?

9 A: Yes.

10 Q: What is the purpose of your testimony today?

11 A: To supplement the Statement of the CAP Task Force in response to testimony  
12 which has been provided by certain other parties to this proceeding.

13 Q: Have you read the testimony provided by Mary Elaine Charlesworth  
14 representing the Sun City Taxpayers Association ("SCTA")?

15 A: Yes I have.

16 Q: Are there elements of that testimony with which you would disagree, and if so,  
17 what?

18 A: Yes, I disagree with much of that testimony, but perhaps the area which is  
19 most contrary to my views would be her statements on page 6 to the effect  
20 that CAP water is not critical to Sun City. It is disappointing to see that after  
21 all the years of experience and fact finding which has taken place regarding  
22 the groundwater situation in the Sun Cities, that SCTA still does not recognize  
23 that the Sun Cities are over-drafting their water table and that serious and  
24 immediate consequences are flowing from that situation. As was repeated  
25 several times for emphasis in the Statement by the CAP Task Force, the  
26 current over-drafting of the groundwater aquifer in the area of the retirement  
27 communities is inescapably leading to subsidence and water quality problems.

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3 Further, the current regulatory environment has made it clear that such  
4 overdrafting will no longer be tolerated. As a result, we cannot agree that CAP  
5 water is not needed in the Sun Cities.

6 Q: Have you reviewed the testimony of Claudio Fernandez of the Corporation  
7 Commission staff, and do you have any comment on his testimony?

8 A: Yes. Although I respect the conclusions reached by Mr. Fernandez, I was  
9 disappointed to see an apparent failure to recognize that the use of CAP water  
10 on the golf courses is the only approach which will directly affect a benefit to  
11 the ratepayers of the Sun Cities and Youngtown. We take particular exception  
12 to the conclusions which Mr. Fernandez seemed to reach in support of a  
13 possible, future Agua Fria recharge program as described on page 8 of his  
14 testimony. As was confirmed in the investigations of the CAP Task Force,  
15 discharge at remote sites north of the retirement communities may well benefit  
16 the Northwest Valley region as a whole, it will offer no real benefit to the  
17 retirement communities, at least not for many decades to come. The major  
18 reason for this is the extremely low propagation rates of underground water. A  
19 secondary reason is the potential for water recharged in the Agua Fria river  
20 bed to flow into the low spots of the Northwest valley aquifer, such as the Luke  
21 cone of depression, and thus not be of any real benefit to the Sun Cities  
22 residents.

23 Q: Have the issues of subsidence and the remote recharge plans been of  
24 continuing interest to the CAP Task Force?

25 A: Yes they have. Even though the materials presented to the CAP Task Force  
26 during its deliberations appeared conclusive regarding the fact that any remote  
27 recharge plan which could be considered did not really provide a direct benefit

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3 to the ratepayers of the retirement communities, it was felt that a more  
4 definitive analysis of that issue could be helpful in explaining the issue to the  
5 communities. As a result, all the governance organizations of the retirement  
6 communities (Rec Centers, HOA, PORA, Youngtown) asked Mr. Herb  
7 Schumann, a recognized expert in hydrogeology, to review the issue and  
8 provide us with a further analysis. Mr. Schumann did so, and his most recent  
9 study paper on this matter is attached as Exhibit A and included in my  
10 testimony, along with a summary of Mr. Schumann's qualifications.

11 We believe that Mr. Schumann's analysis should be helpful to the Commission  
12 in recognizing that remote recharge plans simply do not benefit the retirement  
13 communities who would have to pay for the CAP water to implement them.

14 Q: Was there a special reason why the CAP Task Force submitted a statement as  
15 compared to the usual Q & A format used to provide testimony to the  
16 Commission?

17 A: Yes, there were several reasons the use of a Statement seemed important to  
18 us. At the prior Commission hearing on this matter, the Commission members  
19 in effect challenged the people of the retirement communities to come together  
20 and work out what they felt was best for their communities with respect to how  
21 CAP water should be put to beneficial use and then report that  
22 recommendation back to the Commission. The responsible leadership of Sun  
23 City, Sun City West and Youngtown did just that in the form of the work of the  
24 CAP Task Force study team. The Task Force team reported the results of its  
25 study to the Boards of Directors of the Sun City Homeowners Association  
26 (HOA), the Recreation Centers of Sun City, the Property Owners and  
27 Residents Association of Sun City West, the Recreation Centers of Sun City

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3 West, and the city council of the Town of Youngtown, all of whom constitute  
4 the governance organizations of the retirement communities. Those  
5 organizations accepted and endorsed the findings and conclusions of the CAP  
6 Task Force. As a result, it was felt that testimony by some one person was  
7 inadequate to convey that the retirement communities as a group had  
8 responded to the Commission's earlier challenge, and that it was a group  
9 statement being made to the Commission.

10 Further, it was felt that the most important service which the CAP Task Force  
11 could perform for the Commission was to convey the sense of why the  
12 combined organizations of the retirement communities had come to the  
13 conclusion which they had. The Statement of the CAP Task Force was thus  
14 intended as an explanation of the logic and reasoning which had been the  
15 basis for the recommendation which the retirement communities are making to  
16 the Commission. A statement format was used since we were trying to  
17 convey not just the facts which had guided the Task Force, but their reasoning  
18 from those facts.

19 In addition, various members of the Corporation Commission had  
20 recommended that the governance organizations should make a special effort  
21 to make sure that the recommendations of the CAP Task Force had been  
22 communicated, on a broad basis, to as many of the residents of the retirement  
23 communities as possible. The Commissioners' concern was that they wanted  
24 whatever recommendation that was brought forward to truly reflect the will of  
25 the majority of the people in those communities. Thus, the Statement was also  
26 a communication back to the Commission explaining that the governance  
27 organization of the retirement communities had indeed met that burden through

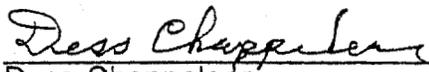
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seminars, public forums, publications and the like, and felt they were on a sound basis in stating that the recommendations of the CAP Task Force met with a strong and positive level of support from within the communities who would have to pay the costs of implementing the recommendations.

However, I have included, by reference in this rebuttal testimony, the Statement previously submitted by the CAP Task Force, and stand ready to answer any questions on it..

Q: Does this conclude your testimony?

A: Yes.

  
Dess Chappelle

Date: 9-30-99

UTILIZATION OF CENTRAL ARIZONA PROJECT  
WATER IN SUN CITY AND SUN CITY WEST, AZ



Prepared By

Herbert H. Schumann and Associates  
1007 East Lilac Dr./Tempe, AZ 85281

September 21, 1999

UTILIZATION OF CENTRAL ARIZONA PROJECT  
WATER ON GOLF COURSES IN  
SUN CITY AND SUN CITY WEST, AZ

Prepared For

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1007 East Lilac Dr./Tempe, AZ 85281

September 1999

# UTILIZATION OF CENTRAL ARIZONA PROJECT WATER IN SUN CITY AND SUN CITY WEST, AZ

By

Herbert H. Schumann

The citizens of Sun City and Sun City West are willing to pay for Central Arizona Project (CAP) water provided they get a direct benefit from the utilization of the CAP water. The utilization must also improve the condition of the alluvial aquifer in their local area. This paper will address those concerns and suggest a plan for the utilization of the CAP water.

## CONCERNS AND BACKGROUND

The citizens of Sun City and Sun City West are concerned about the need to utilize renewable water resources in view of the historic and projected large-scale groundwater depletion in the west Salt River Valley.

The west Salt River Valley is underlain by several thousand feet of alluvial sediments that store large quantities of ground water (Eaton, Peterson and Schumann, 1972). These sediments yield large volumes of water to properly designed deep wells. Figure 1 shows that in 1900, prior to large-scale groundwater development, groundwater flowed from north to south across the area. In 1900, the groundwater system was believed to be in balance, because the rates of inflow or recharge were about equal to rates of discharge.

## GROUNDWATER DEPLETION

Historically, pumping rates have far exceeded rates of replenishment or recharge to the alluvial-aquifer system. Figure 2 indicates that between 1900 and 1983, groundwater pumping had caused water levels in wells to decline more than 300 feet throughout much of the western Salt River Valley. Figure 3 indicates that, by 1991, a deep cone of depression extended from the area west of Glendale to the northeast into the areas of Sun City and Sun City West.

In 1995, the Arizona Department of Water Resources (ADWR) developed a digital groundwater flow model to evaluate future changes in the elevation of water in the alluvial aquifer system which underlies the Salt River Valley. The groundwater flow model indicated that continued groundwater depletion would occur in the northern part of the western Salt River Valley.

Figure 4 shows the projected elevations of water levels in wells in the year 2025. According to the ADWR model, the deepest part of the cone of depression will be located in the area of Sun City and Sun City West. Figure 5 shows model projections of water level changes for the period 1983 to 2025 and indicates that an additional 300 feet of water-level decline may occur in the Sun City, Sun City West and Peoria areas.

Figure 6 shows the static water levels in well (A-3-1)4baa, which is located in the northeastern part of Sun City. These data indicate a decline in the static water level from 84 feet in 1924 to more than 405 feet below the land surface in 1994. These data confirm the large-scale groundwater depletion that has occurred.

Figure 7 shows the projected water-level changes that can be expected at the end of 20 years of recharging 100,000 acre-foot/year at the Central Arizona Water Conservation District's recharge site on the Agua Fria about 3.5 miles north of Sun City. Only about one foot of water-level change is projected in the Sun City and Sun City West areas after recharging 100,000 acre-foot/year for 20 years.

## CONCERNS

Groundwater depletion has necessitated the deepening of existing wells and the drilling of new deep wells to provide the large volumes of water needed for municipal and irrigation use. Today, the cost of drilling and equipping a new large-capacity well in the northern part of the western Salt River Valley can approach \$500,000. Groundwater depletion has also resulted in increased pumping levels (the depths from which water must be lifted by the pumps) and corresponding large increases in the cost of pumping groundwater.

In some areas, new deep wells have encountered water of poor chemical quality and relatively high temperatures that present operational problems. Large fluoride concentrations have been measured in water samples from some of the newer deep wells.

## LAND SUBSIDENCE AND EARTH FISSURE HAZARDS

Groundwater depletion has caused the aquifer system to compact and aquifer compaction has produced large areas of land subsidence in the west Salt River Valley. Land subsidence is the permanent lowering or the sinking of the land surface that results from fluid withdrawal or subsurface mining activities. Land subsidence is a natural geologic process, which has been accelerated by the depletion of the alluvial aquifer in the western Salt River Valley. Rates of land subsidence usually range from a few thousandths to a few tenths of a foot per year and land subsidence is often unrecognized until serious problems occur.

Land subsidence and resultant systems of earth fissures present serious environmental and geologic hazards that have caused many millions of dollars of damage to engineering structures including buildings, streets, roads, highways, railroads, water wells, canals, aqueducts and flood control structures in the west Salt River Valley. Differential or uneven land subsidence has caused changes in the slope of sanitary sewer lines and storm drains, has disrupted underground utilities, and has damaged public and private property.

Earth fissures, locally known as "earth cracks", occur on the edges of subsiding areas and may form long earth fissure zones. Earth fissures often transect natural drainage patterns and can capture large volumes of surface flow. Surface runoff, captured by earth fissures, causes rapid erosion along the sides of the fissures to produce fissure gullies. Fissure gullies can be more than 15 feet deep, 30 to 40 feet wide and as much as two miles long. Large open fissures pose serious safety hazards to people and to domestic animals. Earth fissures extend to large depths below the gullies and can provide vertical pathways for rapid downward movement of toxic contaminants toward the water table (Schumann and Genualdi, 1986).

Figure 8 shows land subsidence, earth fissures and wells damaged by land subsidence in the western Salt River Valley (Schumann, 1996). Areas of maximum land subsidence generally correspond to areas of maximum water-level decline (see Figures 2 and 8). Slightly more than 18 feet of land subsidence occurred between 1957 and 1991 at the intersection of Olive Avenue and Reems Road, which is located about four miles southwest of Sun City.

## BENEFITS OF UTILIZATION OF CAP WATER TO WATER LOCAL GOLF COURSES

1. It is estimated that the infrastructure necessary to deliver CAP water to the golf courses could be constructed within only one to two years. Only a minimum level of treatment would be necessary to use CAP water on the golf courses.
2. Discontinuing pumping of groundwater would have a very positive and immediate effect on local groundwater conditions. Water levels and pumping levels in nearby wells would rise and the cost of pumping water would be reduced in the local area.
3. Discontinuing pumping of groundwater for golf course watering in Sun City and Sun City West will reduce the stress on the alluvial aquifer system and thereby help reduce the potential for land subsidence and earth fissure hazards.
4. Wells now being used to provide water for golf courses could be utilized to provide emergency water supplies for municipal use or turf irrigation during periods of drought or outages in the CAP system.
5. The proposed infrastructure could facilitate the use of CAP water for municipal use at some time in the future. The CAP water would require only the same level of treatment as water from other surface water sources.
6. The hydrologic benefits of utilization of CAP water would be nearly immediate as opposed to the 20 years projected for benefits from the proposed remote recharge project.

## RECOMMENDATIONS

1. Utilization of CAP water to water golf courses in the Sun City and Sun City West is suggested. Pumping groundwater to water those golf courses should be discontinued.
2. The prompt utilization of CAP water on golf courses in City City and Sun City West will provide benefits to the local citizens in a relatively short period of time. Recharging the CAP water at a remote site may not provide benefits to some of the citizens within their lifetime.

## REFERENCES CITED

Eaton, G.P., Peterson, D.L., Schumann, H.H., 1972, Geophysical, geological, and geochemical reconnaissance of the Luke Salt Body, central Arizona: U.S. Geological Survey Professional Paper 753, 28p.

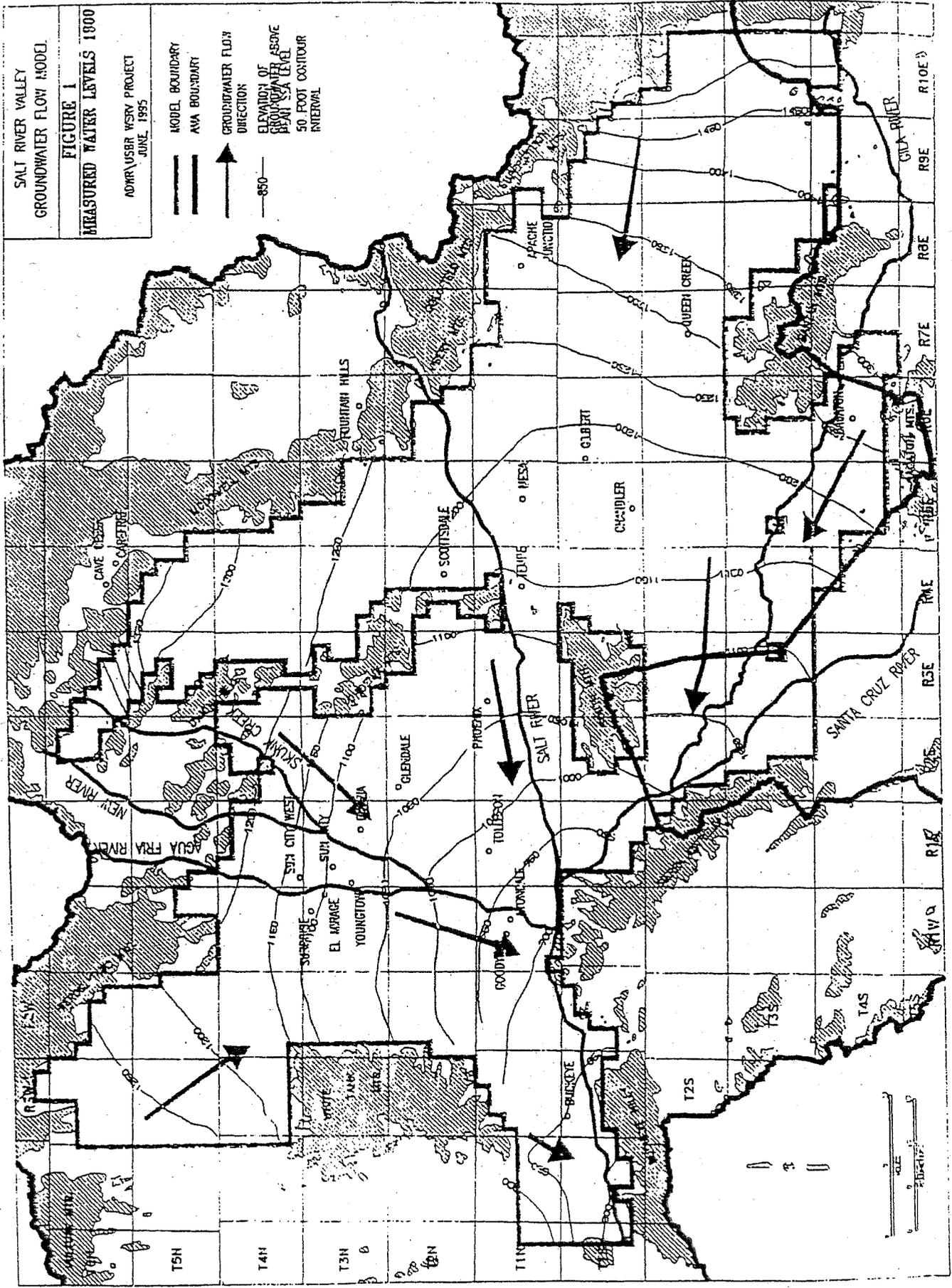
Schumann, Herbert H., and Genualdi, Robert B., 1988, Land subsidence, earth fissures, and water-level change in southern Arizona: Arizona Bureau of Geology and Mineral Technology Map Report 23, 1 sheet.

Schumann, Herbert H., 1996, Land subsidence and earth fissures in the west Salt River Valley, Maricopa County, Arizona: Proceedings of the 9th Annual Symposium of the Arizona Hydrological Society, Prescott, AZ, Sept. 12-14, 1996, 5p.

## LIST OF FIGURES

### Figure

1. Map showing measured water levels in the Salt River Valley 1900.
2. Map showing changes in water levels in the Salt River Valley 1900 to 1983.
3. Map showing water levels in the Middle Alluvial Unit in the Salt River Valley.
4. Map showing simulated water level elevations in the Salt River Valley 2025.
5. Map showing simulated water level changes in the Salt River Valley 1983 to 2025.
6. Hydrograph of water levels in well (A-3-1)4baa
7. Map showing projected 1 foot groundwater level rise contour.
8. Map showing land subsidence in the west Salt River Valley 1957 to 1991.

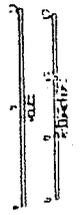


SALT RIVER VALLEY  
GROUNDWATER FLOW MODEL

FIGURE 1  
MEASURED WATER LEVELS 1900

ADRIANUS WISKY PROJECT  
JUNE, 1995

- MODEL BOUNDARY
- AVA BOUNDARY
- GROUNDWATER FLOW DIRECTION
- ELEVATION OF GROUNDWATER ABOVE MEAN SEA LEVEL
- 50 FOOT COURSE INTERVAL





SAN RIVER VALLEY

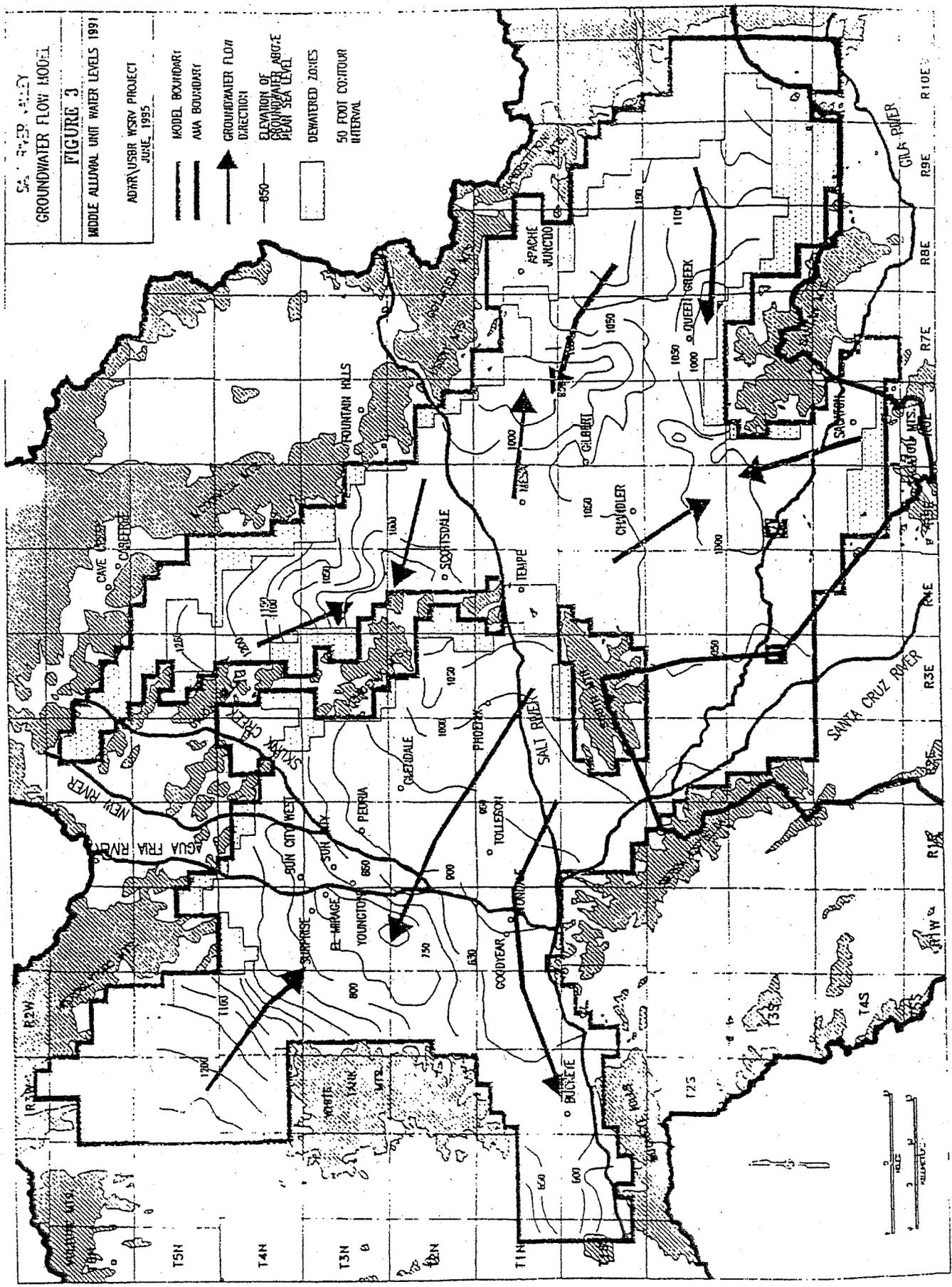
### GROUNDWATER FLOW MODEL

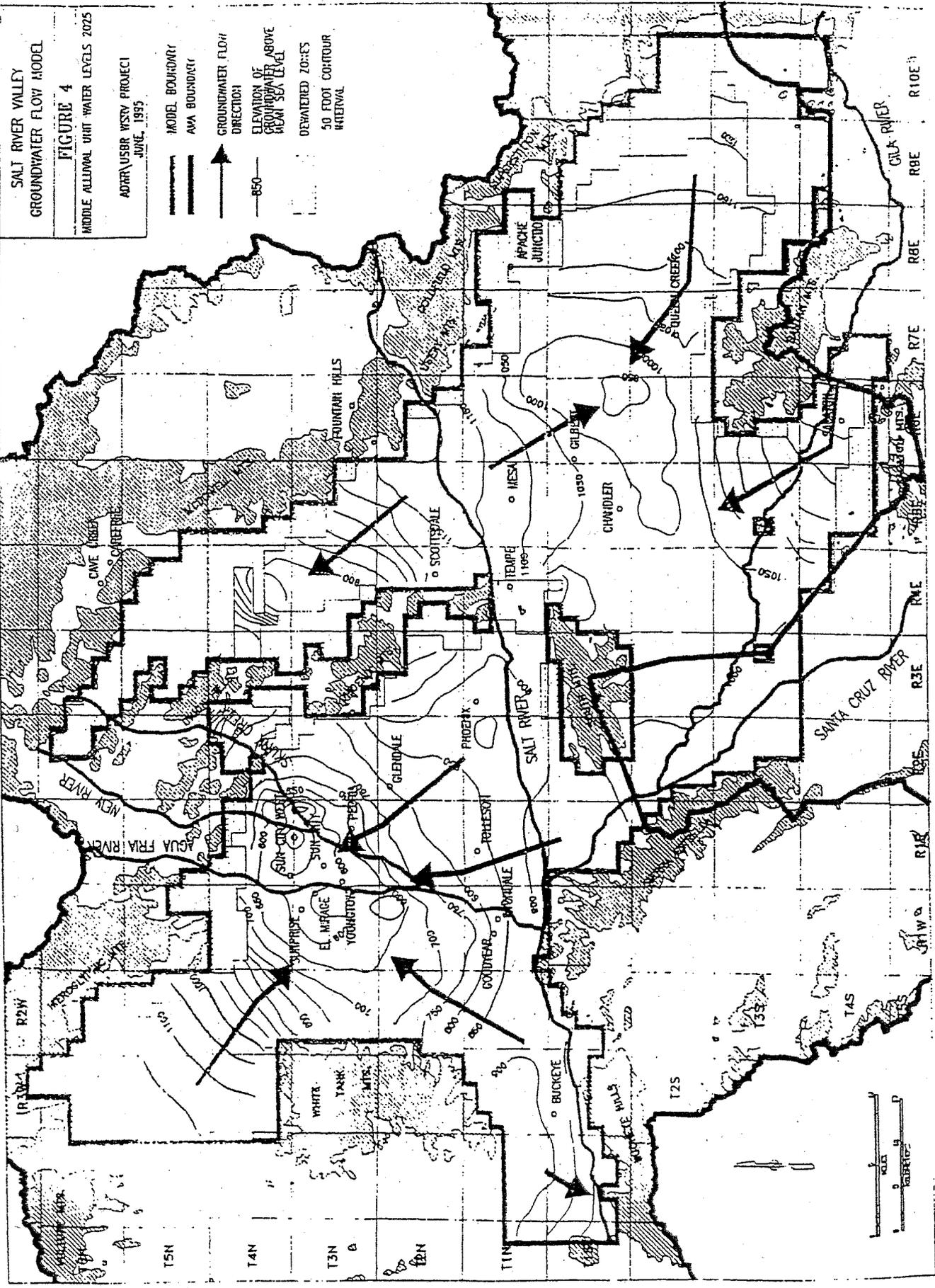
#### FIGURE 3

MIDDLE ALLOWAY UNIT WATER LEVELS 1991

ADARR/USBR WSRV PROJECT  
JULIE, 1995

- MODEL BOUNDARY
- AMA BOUNDARY
- GROUNDWATER FLOW DIRECTION
- ELEVATION OF GROUNDWATER ABOVE MEAN SEA LEVEL
- DEWATERED ZONES
- 50 FOOT COLOUR INTERVAL



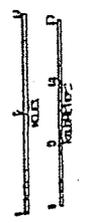


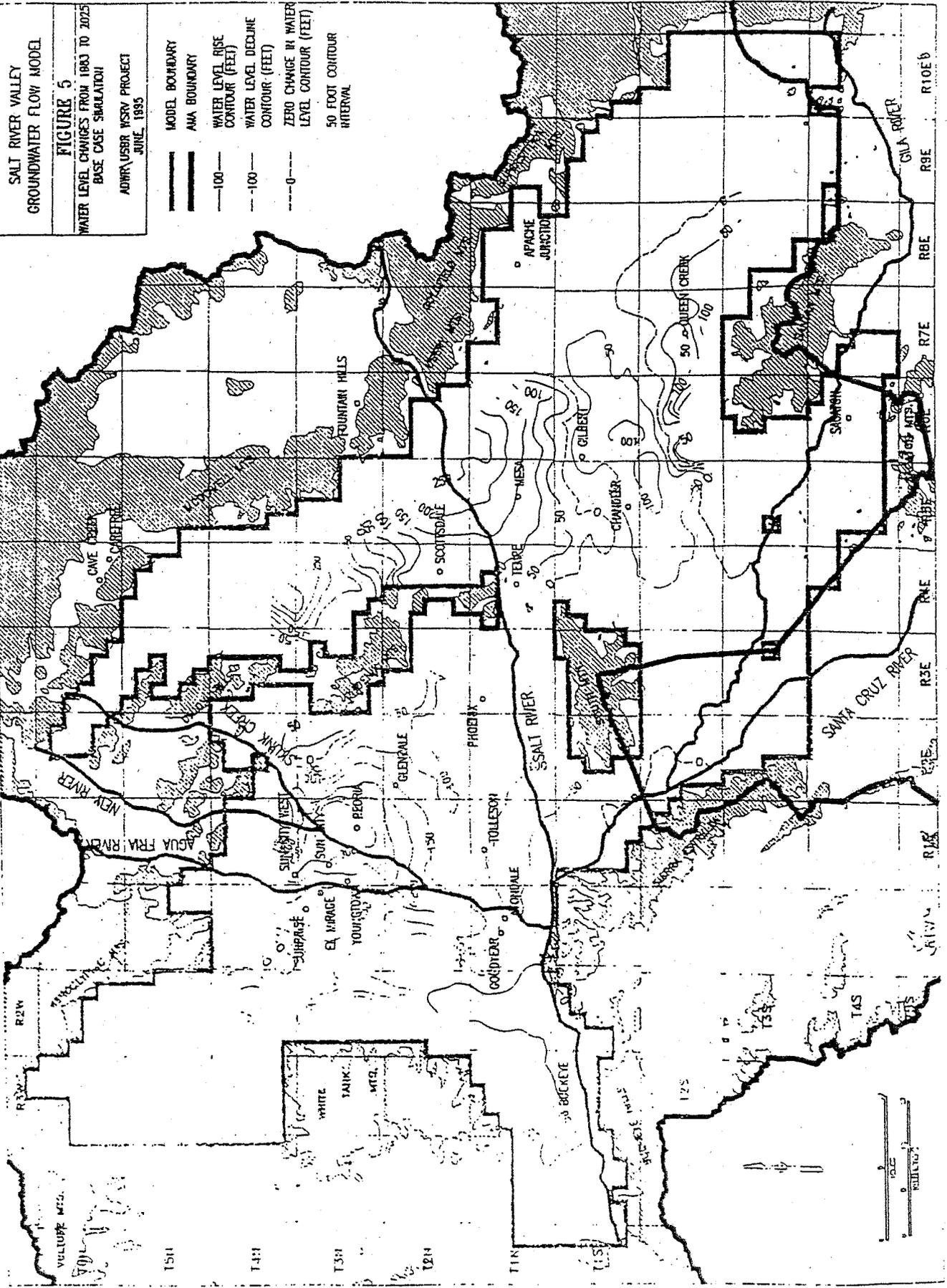
SALT RIVER VALLEY  
GROUNDWATER FLOW MODEL

FIGURE 4  
MIDDLE ALLUVIAL UNIT WATER LEVELS 2025

ADRR\USBR WESTY PROJECT  
JUNE 1995

- MODEL BOUNDARY
- AVA BOUNDARY
- GROUNDWATER FLOW DIRECTION
- ELEVATION OF GROUNDWATER LEVEL ABOVE MEAN SEA LEVEL
- DEWATERED ZONE
- 50 FOOT CONTOUR INTERVAL





SALT RIVER VALLEY  
GROUNDWATER FLOW MODEL

**FIGURE 5**  
WATER LEVEL CHANGES FROM 1983 TO 2025  
BASE CASE SURRELATCH!

ADWR/USBR MRSV PROJECT  
JUNE, 1995

MODEL BOUNDARY  
AMA BOUNDARY  
WATER LEVEL RISE  
CONTOUR (FEET)  
WATER LEVEL DECLINE  
CONTOUR (FEET)  
ZERO CHANGE IN WATER  
LEVEL CONTOUR (FEET)  
50 FOOT CONTOUR  
INTERVAL

Water level changes in the

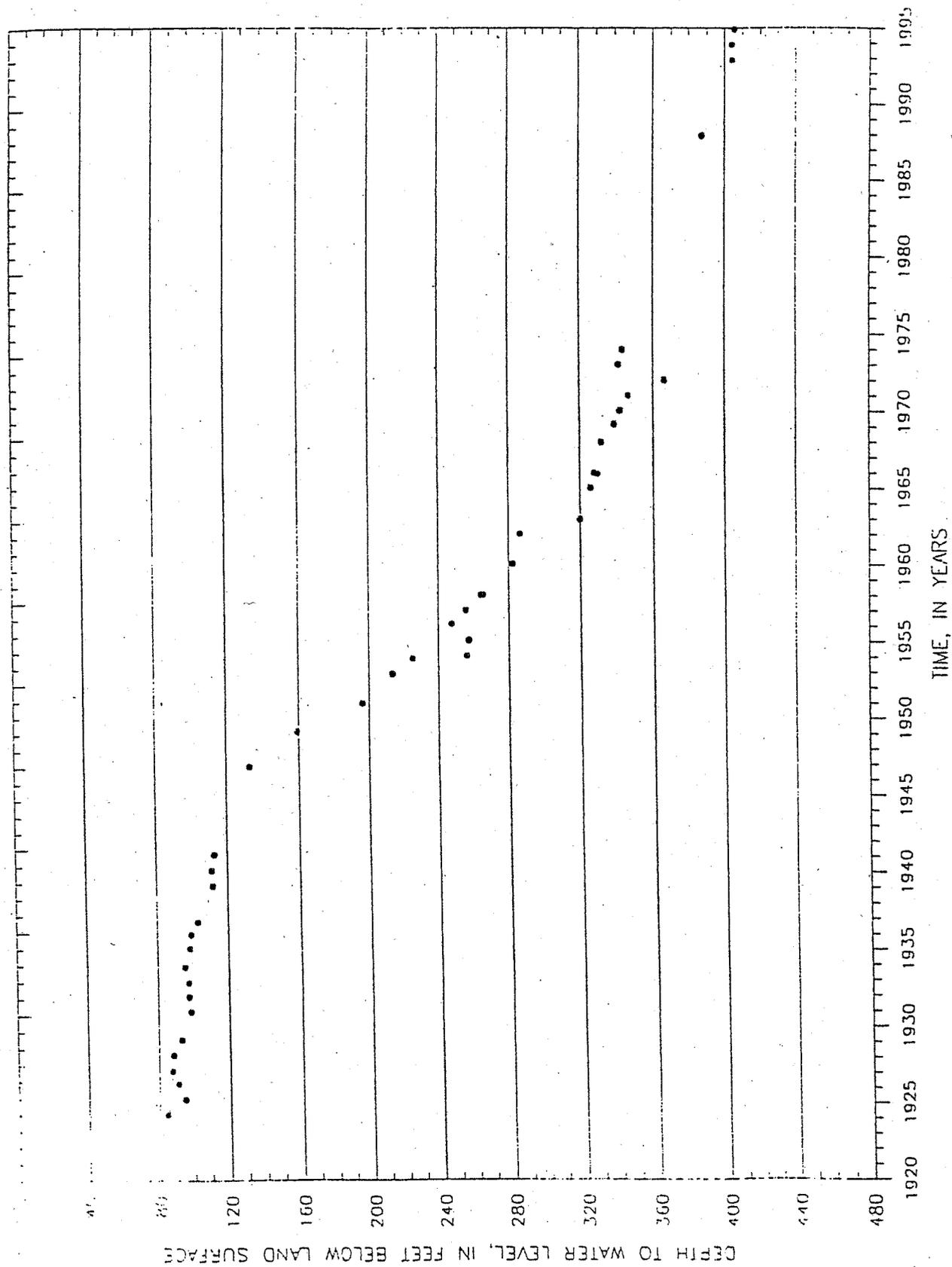


FIGURE 6. HYDROGRAPH OF WATER LEVELS IN WELL (A-3-1)4baa

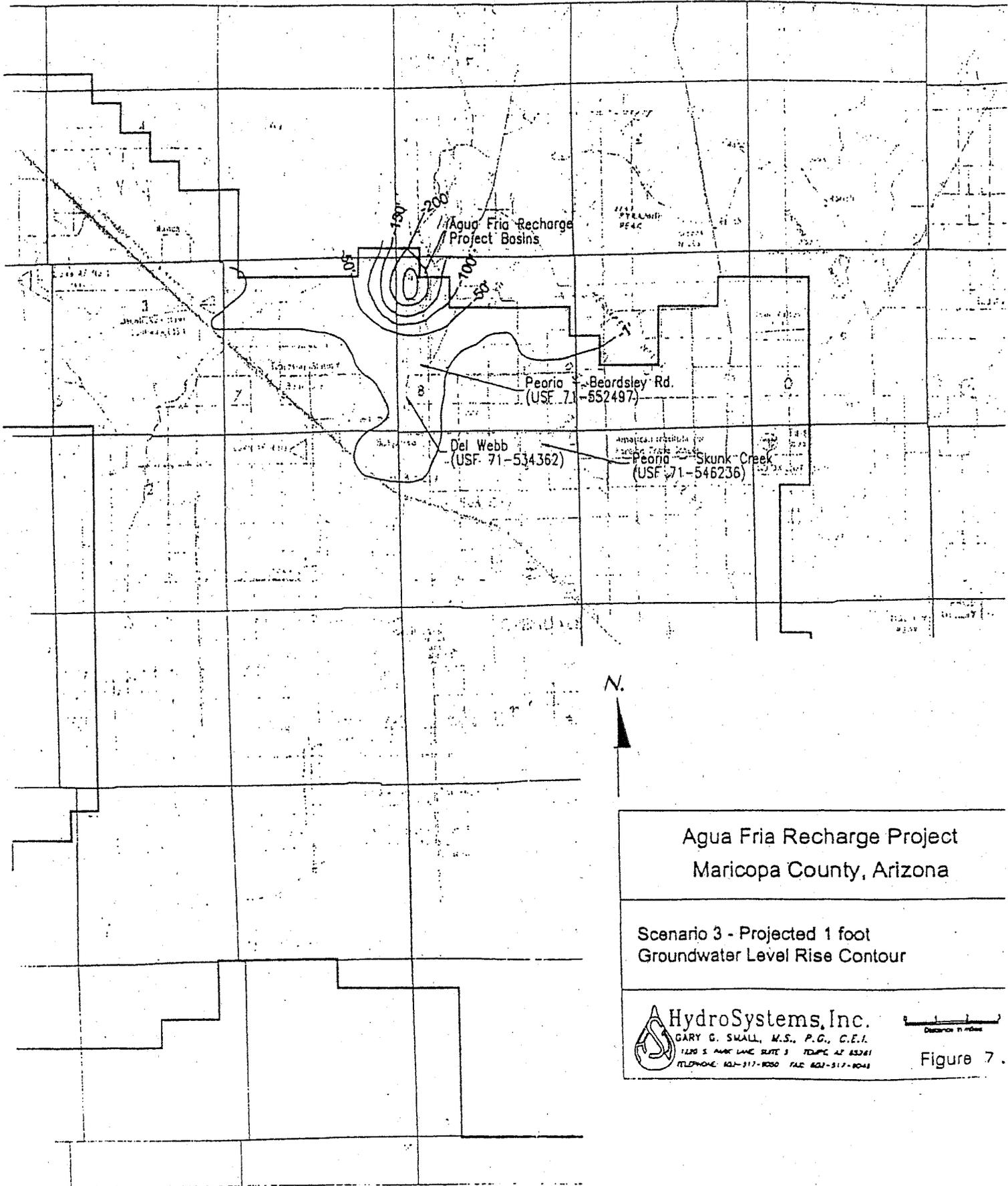
R.2W.

R.1W.

R.1E.

R.2E.

R.3E.



Agua Fria Recharge Project  
Maricopa County, Arizona

Scenario 3 - Projected 1 foot  
Groundwater Level Rise Contour



HydroSystems, Inc.

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Figure 7.

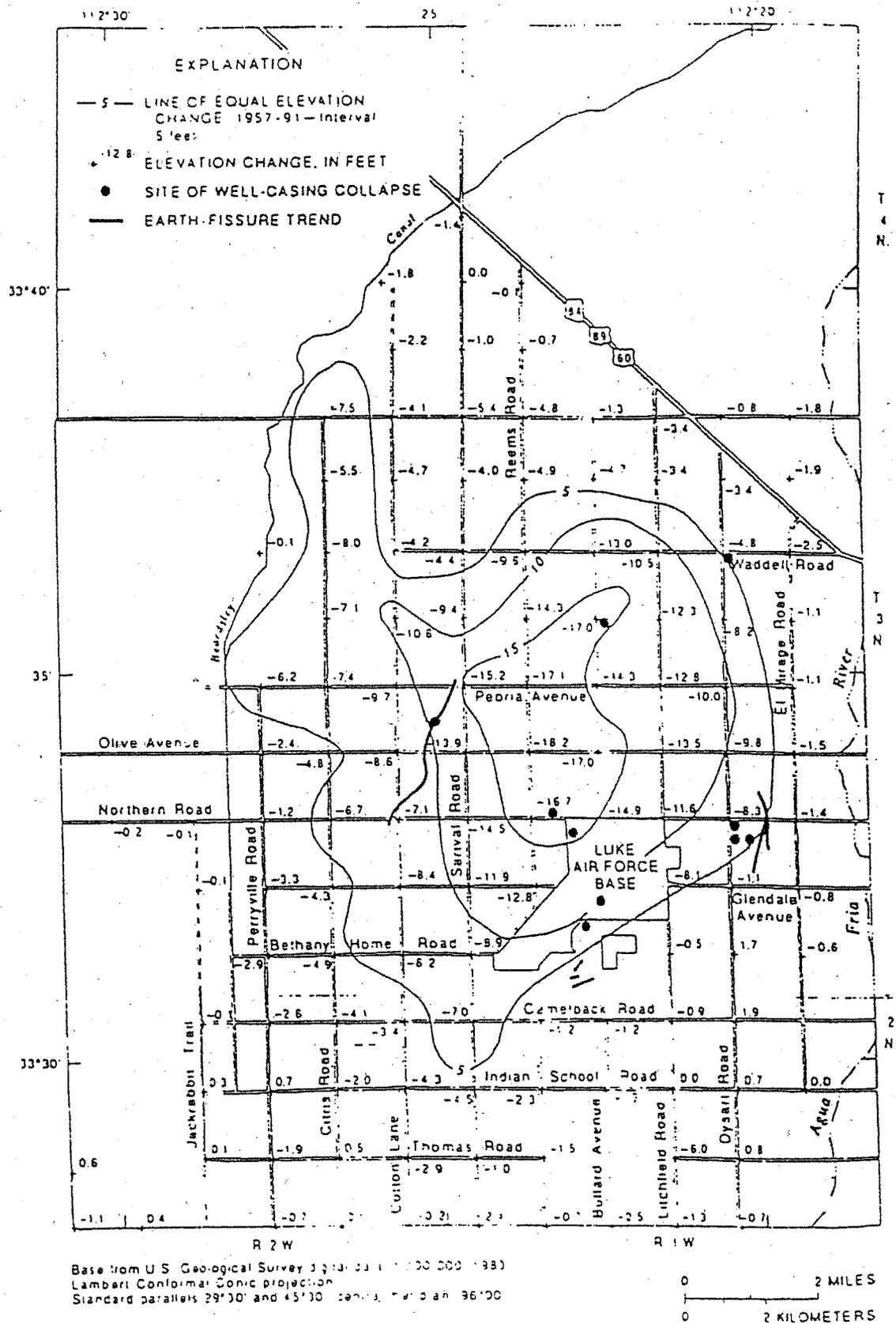


Figure 8. Map Showing Land Subsidence In The West Salt River Valley

**C**

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 House Engrossed  
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State of Arizona  
 House of Representatives  
 Forty-fifth Legislature  
 Second Regular Session  
 2002  
 -----

CHAPTER 72  
 -----

HOUSE BILL 2064  
 -----

## AN ACT

PROVIDING FOR THE DEPARTMENT OF WATER RESOURCES TO EXTEND THE TERM OF A GENERAL INDUSTRIAL USE PERMIT IN THE PHOENIX ACTIVE MANAGEMENT AREA FOR UP TO SEVEN YEARS.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

### Section 1. Purpose

The purpose of this act is to facilitate the replacement of groundwater use on golf courses with the use of central Arizona project water by allowing a general industrial use permit issued under section 45-515, Arizona Revised Statutes, in the Phoenix active management area to be extended for up to seven years after the date the permit would have otherwise expired, if the permit cannot be renewed because the location of the use is now within the exterior boundaries of a private water company and if the permit will be used to exchange groundwater for central Arizona project water that will be used on a golf course. This exception to the requirements of section 45-515, Arizona Revised Statutes, will give the general industrial use permit holder additional time to secure a replacement withdrawal right to exchange for the central Arizona project water or make other arrangements to continue receiving the central Arizona project water for use on the golf course. It is further intended that the extension of the general industrial use permit duration for the maximum seven years is dependent on timely progress toward completion of the water delivery infrastructure that will transport the central Arizona project water to the golf course.

### Sec. 2. General industrial use permit; extension; conditions; termination

A. Notwithstanding section 45-515, Arizona Revised Statutes, the department of water resources shall extend the term of a general industrial use permit issued in the Phoenix active management area for up to seven years after the date the permit would otherwise expire as provided in subsection B of this section if all of the following apply:

1. The general industrial use permit would otherwise expire on or before December 31, 2005 and cannot be renewed under section 45-515, Arizona Revised Statutes, because the site of the general industrial use is now located within the exterior boundaries of a private water company.
2. During the term of the extension, all wells from which groundwater is withdrawn pursuant to the general industrial use permit are located within the service area of the private water company and the private water company has agreed in writing that the term of the general industrial use permit may be extended for up to seven years under terms prescribed by this section.
3. The general industrial use permit is the subject of a water exchange contract, as defined in section 45-1001, Arizona Revised Statutes, to which all of the following apply:

- (a) The water exchange contract was entered into before January 1, 2002 for the exchange of central Arizona project water between a holder of a municipal and industrial central Arizona project subcontract and the holder of the general industrial use permit.
- (b) The holder of the general industrial use permit has agreed in the water exchange contract to exchange groundwater pursuant to one or more general industrial use permits and the total amount of those permits is less than one thousand four hundred acre feet.
- (c) The central Arizona project water received by the holder of the general industrial use permit will replace groundwater for use on one or more golf courses owned by the permit holder.

B. A general industrial use permit described in subsection A of this section shall be extended for an additional seven years after the date the permit would have otherwise expired except that the extension shall terminate:

1. Thirty months after the date of final Arizona corporation commission approval or rejection of construction of a pipeline to transport central Arizona project water to the permit holder's golf courses or the date of final department of water resources approval or rejection of the water exchange contract described in subsection A, paragraph 3 of this section, whichever is later, if within that thirty-month period all necessary contracts for construction of the pipeline have not been executed by a party to the water exchange contract.
2. Two years after the date on which the general industrial use permit would have otherwise expired if within that two-year period construction on a pipeline for transporting central Arizona project water to the permit holder's golf courses has not substantially commenced.

Sec. 3. Repeal

This act is repealed on August 1, 2012.

APPROVED BY THE GOVERNOR APRIL 29, 2002.

FILED IN THE OFFICE OF THE SECRETARY OF STATE APRIL 30, 2002.

**D**

SUPERIOR COURT OF ARIZONA  
MARICOPA COUNTY

\*\*\* FILED \*\*\*  
06/13/2002

06/12/2002

CLERK OF THE COURT  
FORM V000A

HONORABLE MARK R. SANTANA

D. Glab  
Deputy

CV 2001-006415

FILED: \_\_\_\_\_

SUN CITY TAXPAYERS ASSOCIATION  
INC, et al.

LARRY K UDALL

v.

RECREATION CENTERS OF SUN CITY  
INC, et al.

CHARLES I KELHOFFER

MICHAEL M GRANT

MINUTE ENTRY

The court has considered plaintiff's motion for new trial,  
the responses and replies.

IT IS ORDERED:

The motion for new trial is denied.

