

ARIZONA WATER BANKING AUTHORITY

ANNUAL REPORT 1996

Honorable Fife Symington
Governor

MEMBERS

Rita P. Pearson
Chairman

Bill Chase
Grady Gammage
Tom Griffin
Richard S. Walden

Ex officio
Senator Stan Barnes
Speaker Mark Killian



August 1, 1996

The Honorable Fife Symington
Governor of Arizona
1700 West Washington Street
Phoenix, Arizona 85007

Dear Governor Symington:

The Arizona Water Banking Authority herewith submits its first Annual Report to the Governor, President of the State Senate and Speaker of the House of Representatives in compliance with A.R.S. §45-2426.

The 1996 Annual Report is submitted in abbreviated form largely because of the newness of the Authority staff and members and not having stored any water in FY 1996. Authority staff was hired in June and members were appointed on July 9th, with the first meeting occurring on July 18th. However, the Authority is now making great strides and will have a comprehensive report for submittal on August 1, 1997 detailing our accomplishments.

HB 2494 was introduced during the 42nd Legislature and signed by the Governor establishing the Arizona Water Banking Authority (Authority). The Authority will enable Arizona to provide additional security to municipal and industrial water users in Central and Western Arizona in times of future water shortages, by making use of currently unused CAP water.

Since the Central Arizona Project began delivering water to Central Arizona in 1985, Arizona has not made full utilization of its 2.8 million acre feet (maf) entitlement of Colorado River water. As Arizona may not make full utilization of its 2.8 maf until the year 2030, the Arizona Water Banking Authority will work to store as much excess Colorado River water as possible. The legislation established a target for the Authority to store 100,000 acre feet of Colorado River water by July 1, 1997 - a target that the Authority members and staff are going to do all that is both physically and financially possible to meet or exceed.

Just as the Colorado River is the "lifeline of the Southwest", the Central Arizona Project serves as a lifeline to Arizona, bringing needed water to Central Arizona. Making full utilization of our Colorado River entitlement today, will help secure dependable water supplies for all future generations of Arizonans.

On behalf of the Authority I am pleased to submit our first Annual Report and wish to assure you that every effort will be made to make the Authority a success for the future of all Arizonans. We would like to thank you for your continuing support of the Arizona Water Banking Authority and its mission.

Sincerely,

Rita P. Pearson, Chairman
Arizona Water Banking Authority

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ARIZONA WATER BANKING AUTHORITY

created by

HB 2494 / Laws 1996 / Chapter 308

A.R.S. 45-2421

ARTICLE 2. ARIZONA WATER BANKING AUTHORITY

45-2421. Arizona water banking authority

A. The Arizona water banking authority is established. The purposes, powers and duties of the authority shall be executed by a commission to be known as the Arizona water banking authority commission.

B. The commission consists of the following members who are residents of this state:

1. The director of water resources who serves as chairperson of the commission.
2. The president of CAWCD or a representative designated by that president.
3. One person who is appointed by the governor pursuant to section 38-211 and who is knowledgeable in water resource management.

4. One person appointed by the governor pursuant to section 38-211 who represents an entity that holds a central Arizona project municipal and industrial subcontract.

5. One person appointed by the governor pursuant to section 38-211 who represents an entity located in a county adjacent to the mainstream of the Colorado river that holds a valid contract with the secretary of the interior executed before June 1, 1996, for diversion and beneficial consumptive use of Colorado river water in that county.

C. The commission members appointed by the governor shall serve a six year term of office. A member may serve more than one term and may continue to serve beyond the expiration of the term until a successor is appointed and assumes office. The term of office for the commission members appointed by the governor begins and ends on the third Monday in January. The commission members appointed pursuant to subsection B, paragraphs 3, 4 and 5 may be removed by the governor for cause.

D. The commission members appointed by the governor serve without compensation but are eligible for reimbursement for expenses from the banking fund pursuant to title 38, chapter 4, article 2.

E. In order to qualify for office members of the commission shall take and subscribe to an official oath to perform the duties of their office. The oath shall be filed with the director. The official oaths shall be in the form prescribed by law for official oaths of state officers.

F. The president of the senate, or a senator designated by the president, and the speaker of the house of representatives, or a representative designated by the speaker, shall each serve as nonvoting ex officio members of the commission.

G. Members of the commission are public officers and are subject to all provisions of law applicable to these officers.

H. Members of the commission are immune from liability for any action necessary to carry out the purposes of this chapter.

AUTHORITY MEMBERS

Rita P. Pearson, Chairman

Director of the Department of Water Resources who serves as chairperson of the Authority

Bill Chase

Person appointed by the Governor pursuant to section 38-211 who represents an entity that holds a Central Arizona Project municipal and industrial subcontract

Grady Gammage

President of the Central Arizona Water Conservation District (CAWCD)

Tom Griffin

Person appointed by the Governor pursuant to section 38-211 who represents an entity located in a county adjacent to the mainstream of the Colorado River that holds a valid contract with the Secretary of the Interior executed before June 1, 1996 for diversion and beneficial consumptive use of Colorado River water in that county.

Richard S. Walden

Person appointed by the Governor pursuant to section 38-211 who is knowledgeable in water resource management

Ex Officio Members

The Honorable Stan Barnes

Senator designated by the President, serving as a non-voting ex officio member of the Authority

The Honorable Mark Killian

The Speaker of the House of Representatives (or his designee), serving as a non-voting ex officio member of the Authority



ARIZONA WATER BANKING AUTHORITY

BIOGRAPHICAL SKETCHES

THE HONORABLE STAN BARNES - Senator Barnes was appointed as an ex officio member of the Arizona Water Banking Authority by Senate President John Greene.

Senator Barnes serves as Vice President of Public Affairs for First Interstate Bank and is completing his second year of a two-year term as the Arizona State Senator representing District 21 in Mesa. Senator Barnes' committee involvement in the Senate includes: Chairman of the Government Reform Committee, Vice-Chairman of the Natural Resources, Agriculture and Environment Committee, and a member of the Transportation, Appropriations, and Joint Legislative Audit Committees. Formerly, he served two terms in the Arizona House of Representatives from January 1989 - January 1993. Senator Barnes is a native Arizonan from Queen Creek and graduated from Chandler High School. He received a Bachelor of Science in Broadcasting from Arizona State University.

WILLIAM L. CHASE, JR. - Mr. Chase, Water Advisor for the City of Phoenix, was appointed to the Authority by Governor Symington on June 9, 1996, representing an entity that holds a Central Arizona Project Municipal and Industrial contract.

Mr. Chase graduated from California State Polytechnic University, San Luis Obispo with a B.S. in Agricultural Engineering, specializing in Soils and Water and went on to receive a Master of Science in Engineering from the University of California, Los Angeles. He worked for the L.A. District Office of the U.S. Army Corps of Engineers on flood control, water quality and water control programs. Since December 1980, Mr. Chase has served as the Water Advisor for the City of Phoenix. In that capacity, he helps develop policy on a range of water matters including: long-range water supplies and demands; water conservation; water rights; Indian water rights settlements; Plan Six dams; wastewater reuse and water related legislation. Mr. Chase serves on the Board of Directors of both the Western Urban Water Coalition and the Western Coalition of Arid States and has been actively involved in professional water resource management for over 20 years.

GRADY GAMMAGE, JR. - Mr. Gammage serves as a member of the Authority in his capacity as President of the Central Arizona Water Conservation District (CAWCD).

Mr. Gammage is an Arizona native who has practiced law in Phoenix since his graduation Magna Cum Laude from Occidental College and received his J.D. from Stanford Law School in 1976. He along with two partners founded the law firm of Gammage & Burnham in 1983, specializing in the areas of land use and real estate development. Mr. Gammage authored and co-authored a number of articles and books on land use and development issues, including: "The Bureaucrat as Developer: Arizona's Urban Lands Act", Historic Preservation in California, "Phoenix Does it Citywide", "Design Review Comes to Phoenix", "Design Review, a Perspective from the West", "Squareacre, Broaddesert: Visions of Phoenix" in Frank Lloyd Wright: The Phoenix Papers.

Mr. Gammage is currently an adjunct professor at the Arizona State University Colleges of Architecture and Law, where he teaches classes on preservation planning and on land use regulation. Along with serving as President of CAWCD, Mr. Gammage is one of two Arizona advisors to the National Trust for Historic Preservation. He is past chair of the Phoenix Design Review Standards Committee; a former member of the Phoenix Historic Preservation Commission; and past president of the Phoenix chapter of Lambda Alpha, a national real estate economics honorary.

TOM GRIFFIN - Mr. Griffin was appointed to the Authority by Governor Symington on July 9, 1996 as a representative of the communities along the Colorado River. In 1985 he founded and has operated the Water Planning Group, a planning and development consulting firm in Arizona, California and Nevada.

Mr. Griffin is past Chairman of the Bullhead City Water Advisory Committee and currently serves on the Board of the Mohave County Water Conservation District. He was instrumental in the creation of the Mohave County Water Authority and currently serves as chairman. Mr. Griffin is actively involved in the Colorado River Contract for Bullhead City and water issues along the Colorado River.

THE HONORABLE MARK W. KILLIAN - Speaker Killian serves as an ex officio member of the Authority representing the House of Representatives.

Speaker Killian was first elected to the House of Representatives in 1982 representing the 30th Legislative District in the Southeast Valley, including Gilbert, Queen Creek, and Southeast Mesa. Mr. Killian has held several chairmanships and leadership roles during his tenure in the House, including serving as Majority Leader from 1991-1992 and serving as Speaker of the House since January 1993. He has received several honors and awards while serving in the Legislature, including being awarded the National Republican Legislator of the Year award in 1993.

Mr. Killian is a native-born, third generation Arizonan and a graduate of Arizona State University in Business Administration, specializing in real estate and urban planning. He owns a commercial sales and property management company and is a partner in family farming and ranching operations.

RITA P. PEARSON - Ms. Pearson serves as Chairman of the Authority in her capacity as Director of the Arizona Department of Water Resources.

In March of 1993, Governor Symington appointed Rita Pearson as Director of the Arizona Department of Water Resources. Prior to this appointment, Ms. Pearson served as the Governor's Deputy Chief of Staff and Executive Assistant for Environment and Natural Resources. In this position she oversaw ten state agencies including the Department of Water Resources and the Department of Environmental Quality. She also acted as the Governor's liaison to a wide variety of boards, panels and national associations. During her two years on Governor Symington's staff, Ms. Pearson was involved in a number of high profile environmental issues including the ENSCO buy out and the Navajo Generating Station negotiations.

Prior to joining the Symington administration, Ms. Pearson had both public and private sector work experiences. While at the Arizona State Senate, she gained an extensive legislative background. From 1981 through 1985, she was the Research Analyst for the Senate Commerce and Labor Committee. Her most recent work in the private sector was as an attorney with Snell & Wilmer, where she practiced natural resources and administrative law for three years.

Ms. Pearson has earned three degrees from Arizona State University: a Bachelor of Science in 1977; a Masters of Business Administration in 1979 and a law degree in 1988.

RICHARD S. WALDEN - Mr. Walden was appointed to the Authority on July 09 by Governor Symington as a person knowledgeable in water resource management. He currently serves as President and Chief Operating Officer of Farmers Investment Company in Sahuarita; as a Director for First Interstate Bank as well as Vice-Chairman of the National Pecan Shellers Association. Mr. Walden is serving his second six-year term on the Board of the Arizona Power Authority and served on the Governor's Central Arizona Project Financing Study Group. He was a founding member of the Southern Arizona Water Resources Association and remains on the Board. Mr. Walden is involved in a number of organizations including the Arizona Academy, Greater Tucson Economic Council, Green Valley Community Health Center, Tucson Airport Authority, The UofA Agriculture "100" Council, UofA Roundation President's Club, UofA Business School Board of Advisors. Mr. Walden has a

Bachelor of Arts degree in Economics from Pomona College.

STAFF:

HERB DISHLIP - Since August 1985, Herb Dishlip has served as an Assistant Director for the Divisions of Surface Water and Groundwater Management for the Arizona Department of Water Resources. As Assistant Director, he is responsible for overseeing the Department's role as administrator of the State's Groundwater and Surface Water Codes. This responsibility included the preparation and implementation of the water conservation programs required by state water management plans. Mr. Dishlip also currently oversees Department staff involved in Colorado River issues, the Gila and Little Colorado River adjudications, dam safety and floodplain management activities. He previously served as Assistant Deputy Director and as Pinal Active Management Area Director.

Prior to coming to the Department of Water Resources in 1981, Mr. Dishlip worked for nine years for the U.S. Bureau of Reclamation in Arizona and Colorado. He is a graduate Civil Engineer from the University of Iowa and is a registered professional engineer.

TIMOTHY J. HENLEY - In June of 1996, Tim Henley was appointed Manager of the Arizona Water Banking Authority by Director Rita Pearson. Mr. Henley joined the DWR staff in April 1984 as Arizona's representative on interstate water matters, including developing water policy strategies and water issue problem solving. He served as Department of Water Resources Flood Control Branch Chief, Section Manager of the Colorado River Management Division and most recently as Section Manager of the newly created Surface Water Section. As Section Manager, Mr. Henley represented the Department of Water Resources and Arizona in various interstate and intrastate water-related issues including environmental, economic, management, conservation, allocation of Colorado River supplies and all aspects of water resources. He also was responsible for representing Arizona's interest in the Colorado River including the Central Arizona Project.

Prior to joining the Department of Water Resources staff, Mr. Henley worked for the Bureau of Reclamation in the Lower Colorado River Region at both the regional office and Arizona projects office.

Mr. Henley is a member of the Colorado River Basin Salinity Control Forum and Advisory Council and Chairperson for the Forum's Work Group and member of the Lower Colorado River Basin Technical Committee working group.

He has a Bachelor of Science in Civil Engineering from California State University at Sacramento and is a registered Civil Engineer in California and Arizona.

JAMES G. JAYNE - In June of 1996, Mr. Jayne was appointed as Technical Administrator of the Arizona Water Banking Authority by Director Rita Pearson. Prior to his appointment, he served as Special Projects Coordinator and Assistant to House Speaker Mark Killian. In this capacity, Mr. Jayne dealt largely with environmental and natural resource issues, including key pieces of legislation such as the Arizona Water Protection Fund, the Arizona Preserve Initiative and the Arizona Water Banking Authority.

Over the last six years he has been actively involved in policy development and research on a myriad of issues, gaining an extensive knowledge of legislative and governmental processes.

Mr. Jayne earned a bachelor of arts degree in International Affairs from Northern Arizona University and has been accepted into the Master's of Public Administration program at Arizona State University.



HISTORY

Historically, the Colorado River has played an important role in the development of the West, bringing life and prosperity to the arid lands its water reaches by river, canal or aqueduct. The drainage basin of the Colorado covers 244,000 square miles, providing water to over 17 million people and over one million acres of farmland. The Colorado falls over 10,000 feet in its 1,440 mile course through the seven basin states of Wyoming, Colorado, Utah, New Mexico, Arizona, Nevada and California, dumping out in the Gulf of California. In addition to providing a valuable source of water, the hydropower plants on the Colorado generate approximately 12 billion kilowatt-hours of electricity each year for the desert southwest.

Balancing the tremendous water, power and recreational demands placed on the river, while providing needed flood control is a growing burden as demand on the system increases. The first allocation on the river occurred with 1922 Colorado River Compact being signed by all 7 basin states but only ratified by six of the seven - Arizona holding out until 1944. The Compact apportioned 7.5 maf of Colorado River water to both the Upper Basin (Wyoming, Colorado, Utah and New Mexico) and the Lower Basin (Arizona, Nevada, California). The Colorado River Compact and subsequent Supreme Court rulings makes the Colorado one of the biggest fully apportioned rivers in the United States.

In 1928 the United States Congress enacted the Boulder Canyon Project Act (BCPA), approving the substance of the Colorado River Compact with more specificity. The BCPA allocated the 7.5 maf Lower Basin allocation to Arizona, Nevada and California in the following manner:

- Nevada - 300,000 ac plus 4% of any surplus
- Arizona - 2.8 maf plus 46% of any surplus
- California - 4.4 maf plus 50% of any surplus

The BCPA allocation was reaffirmed by the U.S. Supreme Court by the 1963 *Arizona vs. California* decision.

Additionally, the BCPA stated that upon ratification of the Colorado River Compact by California and five other states and with passage of California's self-limitation legislation, requiring California to "irrevocably and unconditionally" limit its annual use to 4.4 maf, the Boulder Canyon Project Act was effective. Other provisions of the Act authorized the construction of Hoover Dam and other structures for water storage, flood control and power generation on the Colorado; required contracts with the Secretary of the Interior for all project water; recognized "present perfected rights" in the Colorado River and required all hydropower be governed by contracts with the Secretary.

In 1944 the Colorado River Compact was finally ratified by the Arizona Legislature, largely due to a change in political climate caused by drought conditions and reduced power generation. Ratification of the Compact set the stage for the eventual introduction of legislation for construction of the Central Arizona Project.

After many years of the Arizona Congressional delegation repeatedly battling for a federally financed project to carry Colorado River water to Central Arizona, the Legislature created the Interstate Stream Commission to help unify the state's interests regarding the Colorado River. Then, in 1951, Arizona was finally told by Congress that it needed to legally clarify its Colorado River claim before any federally funded project could be constructed. In 1952 Arizona filed suit against California to finally determine its legal claim to Colorado River, with the U.S., Nevada, Utah and New Mexico eventually joining as parties. In 1963 the U.S. Supreme Court issued its opinion in *Arizona vs. California*, with the decree following in 1964.

After the 1963 Supreme Court ruling in *Arizona vs. California*, the political leaders of the time began a four year battle to secure funding for a reclamation project that would take approximately 1.5 maf of Colorado River Water from Lake Havasu to Central Arizona, ending at the San Xavier Indian Reservation just south of Tucson.

In 1968, the Colorado River Project Act (S. 1004) was passed by the United State Congress and signed by President Johnson under the stewardship of U.S. Senators Paul Fannin and Carl Hayden. Passage of the Colorado River Project Act marked the official beginning of what we now know as the Central Arizona Project (CAP). Construction on the CAP began in 1969 with the first Colorado River water being pumped from Lake Havasu to the Phoenix metro area in 1985, with eventual completion of the project to Tucson.

The CAP came after many years of lengthy debate and compromise with Arizona being forced to compromise greatly in garnering support from the other Lower Basin states and Nevada. In order to secure authorization of the Central Arizona Project by Congress, Arizona was required to accept an agreement that recognized Central Arizona Project water to be the lowest priority water in the Lower Basin and the first to be shorted in a time of shortage on the Colorado River. Arizona has built the potential shortage issue into water planning for the State.

The newly created Arizona Water Banking Authority is one such entity, created to help secure municipal and industrial water supplies during times of shortage. In short, the Authority is charged with taking Colorado River water that is currently going unused in Arizona and recharging it in Arizona for future years when shortages do occur on the river, forcing Arizona to pump additional groundwater to meet demand.



OVERVIEW

Last Fall the Legislature created the Joint Legislative Committee on Colorado River Issues to examine ways to increase diversions and use of Arizona's Colorado River allocation. One of the key recommendations of the Committee was an endorsement of a program that would provide the necessary resources and the organization to take unused Central Arizona Project water and store it for future use. The Committee recommendation was then sponsored by House Speaker Mark Killian in the form of HB 2494 and was eventually passed by the Legislature and signed by Governor Symington on April 30, creating the Arizona Water Banking Authority (Authority).

The five member Arizona Water Banking Authority was officially appointed on July 9, 1996 by Governor Fife Symington. As defined by the legislation, Rita Pearson serves as Chairman of the Authority in her capacity as Director of the Department of Water Resources and Grady Gammage is a member as President of the Central Arizona Water Conservation District (CAWCD). The Governor appointed three members, each of whom represent particular interests defined in HB 2494 - Bill Chase was selected as a representative of CAP municipal and industrial water users; Tom Griffin was appointed representing Colorado River water users along the River and Richard S. Walden was chosen as a person knowledgeable in water resource management issues. Additionally, the President of the Senate has appointed Senator Stan Barnes to represent the Senate and Speaker Killian represents the House as non-voting ex officio members of the Authority.

The Authority was envisioned to take unused Colorado River water and store that water in Arizona for future use in helping to protect Arizona communities in times of shortages on the Colorado River. The Arizona Water Banking Authority potentially helps provide this protection by:

- helping to assure adequate supply to municipal and industrial users in times of shortages on the river or disruptions of the CAP system;
- assisting in the settlement of Indian water rights claims by providing another pool of water to be used in settlements;
- helping to meet the groundwater management plan objectives of the Groundwater Code by replenishing depleted groundwater aquifers with CAP water;
- benefiting communities along the Colorado River by the possible exchange of credits for stored water and direct diversion along the river;

The Authority may also provide a mechanism by which California and Nevada could potentially store some of Arizona's unused Colorado River in Arizona for diversion in time of future need. The Authority may contract with Nevada and/or California to allow these states to store water in Arizona and allow the recovery of similar amounts of water through forbearance of deliveries in the future. The method of storage would have the added benefit of helping to replenish Arizona aquifers, while providing a future diversion out of the river by the contracting state in time of need.

The Authority will work to store as much unused Colorado River water as physically and financially possible over the next 20 years. HB 2494 establishes a goal of storing 100,000 acre feet by July 01, 1997 and the Authority members and staff expect to meet or possibly exceed this target. The overriding goal for the Authority is to help lessen reliance on groundwater, while providing Colorado River water at an affordable price as a substitute.

The Authority has begun their work with the first meeting on July 18th and will meet monthly at the Department of Water Resources or in communities around the state such as Tucson, Lake Havasu, Casa Grande and Yuma to deliberate on how to best administer the program and discuss the best locations around the state for water storage.

As envisioned, the Authority will facilitate the storing of water in Arizona for the future of all Arizonans.



POTENTIAL STORAGE

In looking into the future and the potentials for CAP water storage, the Authority will examine historical consumptive use, projected use and what underground storage and groundwater savings facilities are permitted or potential facilities.

Figure 1 depicts the data developed by the Bureau of Reclamation which accounts for consumptive uses in Arizona resulting from mainstem Colorado River diversions for the years 1985-1994. The figures indicate that Arizona's use against its 2.8 million acre foot entitlement has been as high as 2.2 million acre feet as late as 1990.

Figure 2 demonstrates the gradual growth in demand for Colorado River water in Arizona until the full entitlement is realized, about the year 2030. The Department of Water Resources regularly prepares projections of future diversions and use of Colorado River water for planning purposes. Projected diversions are based on the best currently available information and judgement, but is clearly still estimation.

The Arizona Water Banking Authority is charged with storing as much of this unused entitlement as possible each year through the use of underground storage facilities (direct recharge) or groundwater savings facilities (indirect recharge). In the early years of the program, the Authority is limited on the availability of direct recharge sites and will thus largely focus on indirect recharge.

Arizona's statutory system for underground storage and recovery facilitates the increased diversions and deliveries of Colorado River water. Water which is in excess of direct delivery requirements may be purchased and stored underground for later withdrawal. Credits may be earned for such storage and those credits are generally marketable to other water users.

Table A represents a partial list of permitted and potential underground storage facilities and their potential annual storage capacities. The availability of adequate recharge facilities is particularly important to the ability of the Authority to store excess water over the near term. One such site is the Granite Reef Underground Storage Project (GRUSP), constructed by the Salt River Project and Phoenix AMA municipalities. Other project facilities of a similar nature and capacity have been proposed in the Phoenix, Pinal and Tucson AMA's, in addition to locations west of Phoenix along the CAP route.

Table B lists existing and potential groundwater savings facilities which could be used to bank additional excess Colorado River water. In addition to the traditional underground storage facilities described above, state law authorizes equivalent recharge through indirect or in lieu means by recognizing groundwater savings facilities. A groundwater savings facility is basically an authorized exchange of surplus surface water for an equivalent amount of groundwater which would have been pumped and used had the surface water not been available. The person or entity who provided the exchange or in lieu water source is recognized through DWR's administrative accounting procedures as having earned or banked a water credit which is no different than the credits earned through direct underground storage.

Over the next 34 years, the estimated amount of Arizona Colorado River water that is available but will currently do unused is 14 million acre feet. For the twenty year period of the Arizona Water Banking Authority program, the amount of unused water will be approximately 11 million acre feet under current projections, without the Authority. Based on this preliminary analysis, it appeared reasonable for the creation of an entity to increase Colorado River utilization by up to 400,000 acre feet per year - the Water Banking Authority is the entity.

Projection of Water Available to Bank

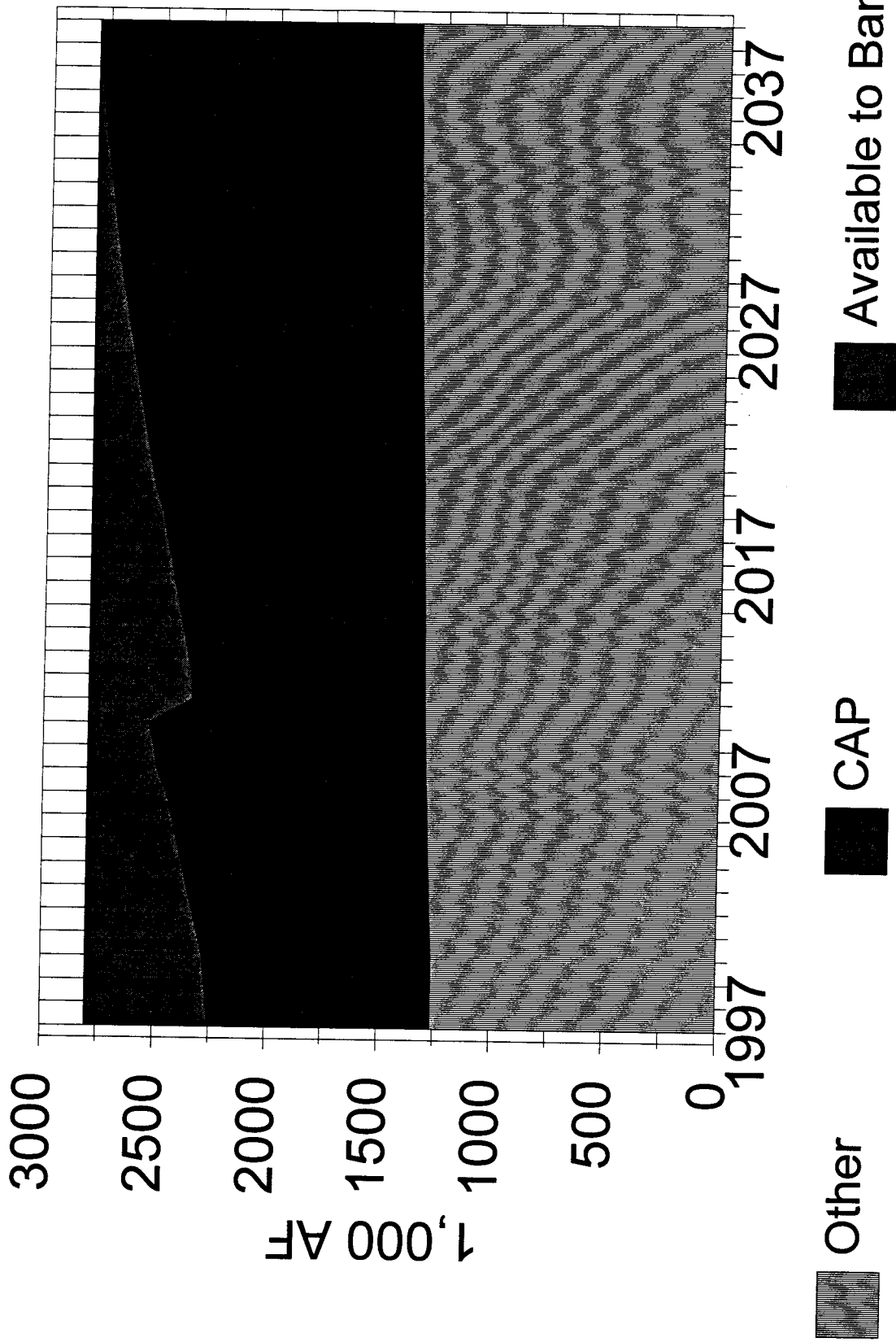


Figure 2

Table A

Permitted and Potential Underground Storage Facilities

Facility Description * = permitted facilities	Location	Approximate Capacity
Avondale Pilot*	Phoenix AMA	5,000
Granite Reef*	Phoenix AMA	200,000
Mesa Spook Hill*	Phoenix AMA	2,300
Scottsdale Water Campus Pilot*	Phoenix AMA	5,000
Peoria Skunk Creek	Phoenix AMA	30,000
Hassayampa CAP	Phoenix AMA	100,000
SRP/CAP Filtration	Phoenix AMA	10,000
Citizens Utilities	Phoenix AMA	15,000
Auga Fria near CAP aqueduct	Phoenix AMA	90,000
Southwest Facility	Phoenix AMA	20,000
Scottsdale Water Campus/ CAP	Phoenix AMA	22,800
West Maricopa Combine	Phoenix AMA	14,000
McMicken Dam	Phoenix AMA	7,500
Queen Creek Wash	Phoenix AMA	10,000
Picacho Reservoir	Pinal AMA	5,000
Tucson Injection Pilot*	Tucson AMA	20,000
Pima Mine Road	Tucson AMA	18,000
Avra Valley	Tucson AMA	30,000
Canada Del Oro	Tucson AMA	30,000
Brawley Wash at Three Points	Tucson AMA	40,000
Santa Cruz River In Channel	Tucson AMA	45,000
APS Ranch Project	La Paz County	100,000
Centennial Wash	Harquahala Valley	50,000
Total		869,600

Table B**Permitted and Potential Groundwater Savings Facilities**

Facility Description * = permitted facilities	Location	Approximate Capacity
Tonopah IDD*	Phoenix AMA	15,000
Queen Creek IDD*	Phoenix AMA	28,000
Maricopa Water Dist.	Phoenix AMA	30,000
New Magma IDD*	Phoenix AMA	70,000
Salt River Project	Phoenix AMA	100,000
San Tan ID*	Phoenix AMA	5,000
Roosevelt WCD*	Phoenix AMA	100,000
Chandler Heights Citrus ID*	Phoenix AMA	3,000
Maricopa Stanfield IDD*	Pinal AMA	120,000
Central Arizona IDD*	Pinal AMA	110,000
Hohokam IDD *	Pinal AMA	40,000
Cortaro Marana IDD*	Tucson AMA	10,000
BKW Farms*	Tucson AMA	8,800
Avra Valley IDD	Tucson AMA	20,000
Farmers Investment Co.	Tucson AMA	20,000
Harquahala Valley IDD	Harquahala INA	5,000
Total		684,800