STRATEGIC PLAN 2002-2006

EDWARDS AQUIFER
AUTHORITY

ADOPTED BY THE BOARD: APRIL 9, 2002

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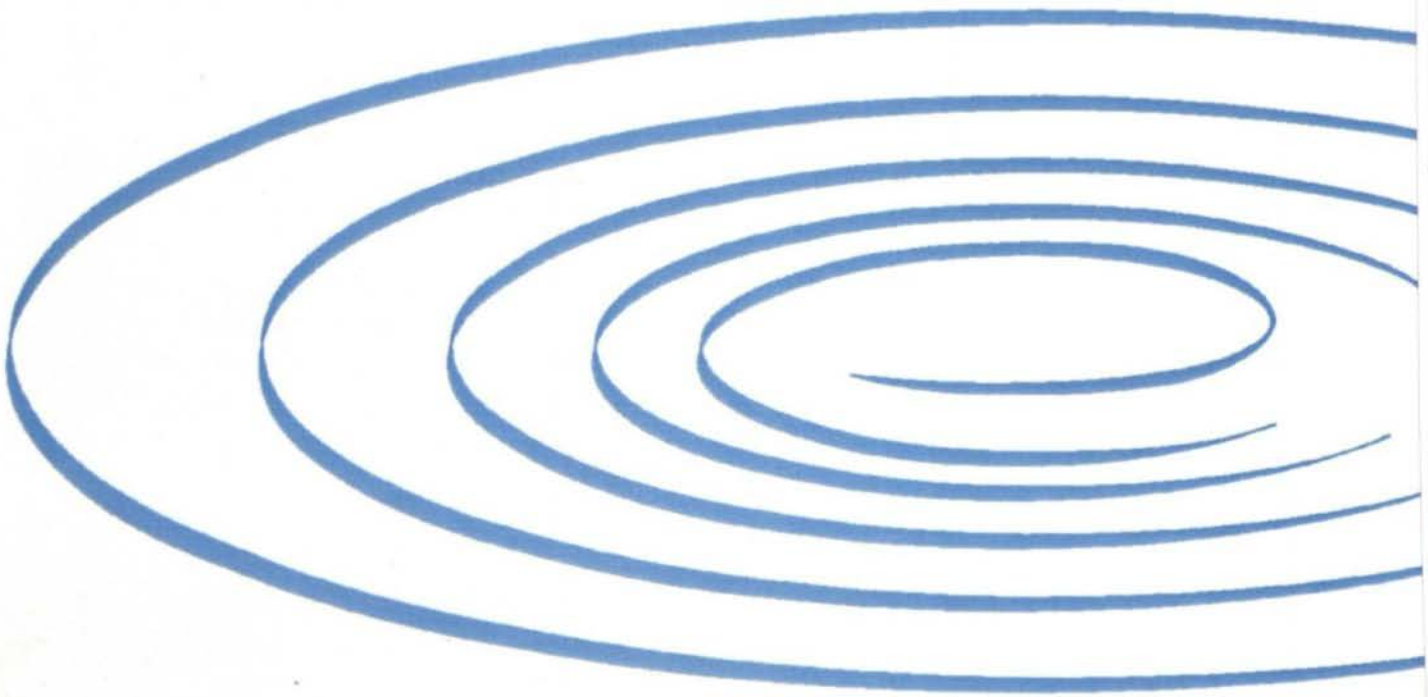


EXHIBIT ONE

FINANCIAL SUMMARY OF STRATEGIC PLAN

		2002	2003	2004	2005	2006
I	**GROUNDWATER WITHDRAWAL PERMITS**					
	Expenses	$1,619,500	$1,576,500	$312,000	$327,000	$188,000
	Positions	3	0	1	0	0
II	**PLANNING**					
	Expenses	$1,005,100	$1,460,600	$1,295,600	$1,368,600	$1,320,600
	Positions	0	2	0	0	0
III	**RESEARCH**					
	Expenses	$1,933,764	$1,477,500	$1,360,000	$1,226,000	$1,045,000
	Positions	3	1	0	0	0
IV	**WATER QUALITY**					
	Expenses	$515,000	$120,000	$231,000	$421,000	$421,000
	Positions	1	3	8	0	0
V	**ENFORCEMENT & COMPLIANCE**					
	Expenses	$558,700	$533,000	$73,000	$3,000	$3,000
	Positions	0	0	0	0	0
VI	**PUBLIC AFFAIRS**					
	Expenses	$555,100	$885,500	$1,046,750	$935,000	$1,169,250
	Positions	0	1	1	0	0
VII	**ADMINISTRATION**					
	Expenses	$1,655,575	$1,793,900	$3,654,700	$1,175,000	$1,545,000
	Positions	1	0	2	0	0
	TOTAL COST					
	FUNCTIONAL AREA SUBTOTALS	$7,842,739	$7,847,000	$7,973,050	$5,455,600	$5,691,850
	BASE OPERATING COSTS (3% increase)	4,051,229	4,440,230	4,933,800	5,609,013	5,777,284
	NEW PERSONNEL COSTS	259,674	349,867	511,844	0	0
	Expense Subtotal	$12,153,642	$12,637,097	$13,418,694	$11,064,613	$11,469,134
	CONTINGENCY (10% of Expense Subtotal)	$1,124,938	$1,263,700	$1,341,900	$1,106,500	$1,146,900
	GRAND TOTAL	**$13,278,580**	**$13,900,797**	**$14,760,594**	**$12,171,113**	**$12,616,034**
	TOTAL POSITIONS ADDED	**8**	**7**	**12**	**0**	**0**
	POSITIONS	**56**	**63**	**75**	**75**	**75**
	NON-AG AQUIFER MANAGEMENT FEE	**$25.00**	**$40.00**	**$43.00**	**$35.00**	**$36.00**

NOTE: *This exhibit does not include costs related to the buydown.*

BACKGROUND

OVERVIEW OF THE EDWARDS AQUIFER AUTHORITY

The Texas Legislature created the Authority in 1993 with the passage of Senate Bill No. 1477 (SB 1477), the Edwards Aquifer Authority Act (the Act). The Authority did not become operational until June 1996 because of legal challenges.

The Authority is governed by a board of directors, composed of fifteen elected members and two appointed non-voting members. The fifteen voting members are elected to four-year staggered terms and represent portions of an eight-county region, which includes all of Uvalde, Medina and Bexar counties, plus portions of Atascosa, Caldwell, Guadalupe, Comal and Hays counties. One of the non-voting members is alternatively appointed by the Commissioners Court of either Medina or Uvalde county, while the other is appointed by the South Central Texas Water Advisory Committee (SCTWAC), which includes representatives from downstream interests.

The Authority was created as a special regional management district to preserve and protect the Edwards Aquifer (the aquifer). The Act directs the Authority to perform a number of specific tasks, most notably to:

- Sustain the Aquifer as a natural resource;
- Sustain the diverse economic and social interests dependent on the aquifer for water supply;
- Protect terrestrial and aquatic life;
- Protect domestic and municipal water supplies; and
- Provide effective control of the Aquifer to protect the operation of existing industries and the economic development of the state.

The Authority's mission statement and goals are illustrated below.

MISSION

The Edwards Aquifer Authority is committed to manage and protect the Edwards Aquifer system and work with others to ensure the entire region of a sustainable, adequate, high quality, and cost effective supply of water now and in the future.

GOALS

- **Fully implement the requirements of the Edwards Aquifer Authority Act.**
- **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
- **Maintain continuous springflow.**
- **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
- **Forge solutions that ensure public trust.**
- **Promote healthy economies in all parts of the region.**
- **Research and develop additional sources of water.**

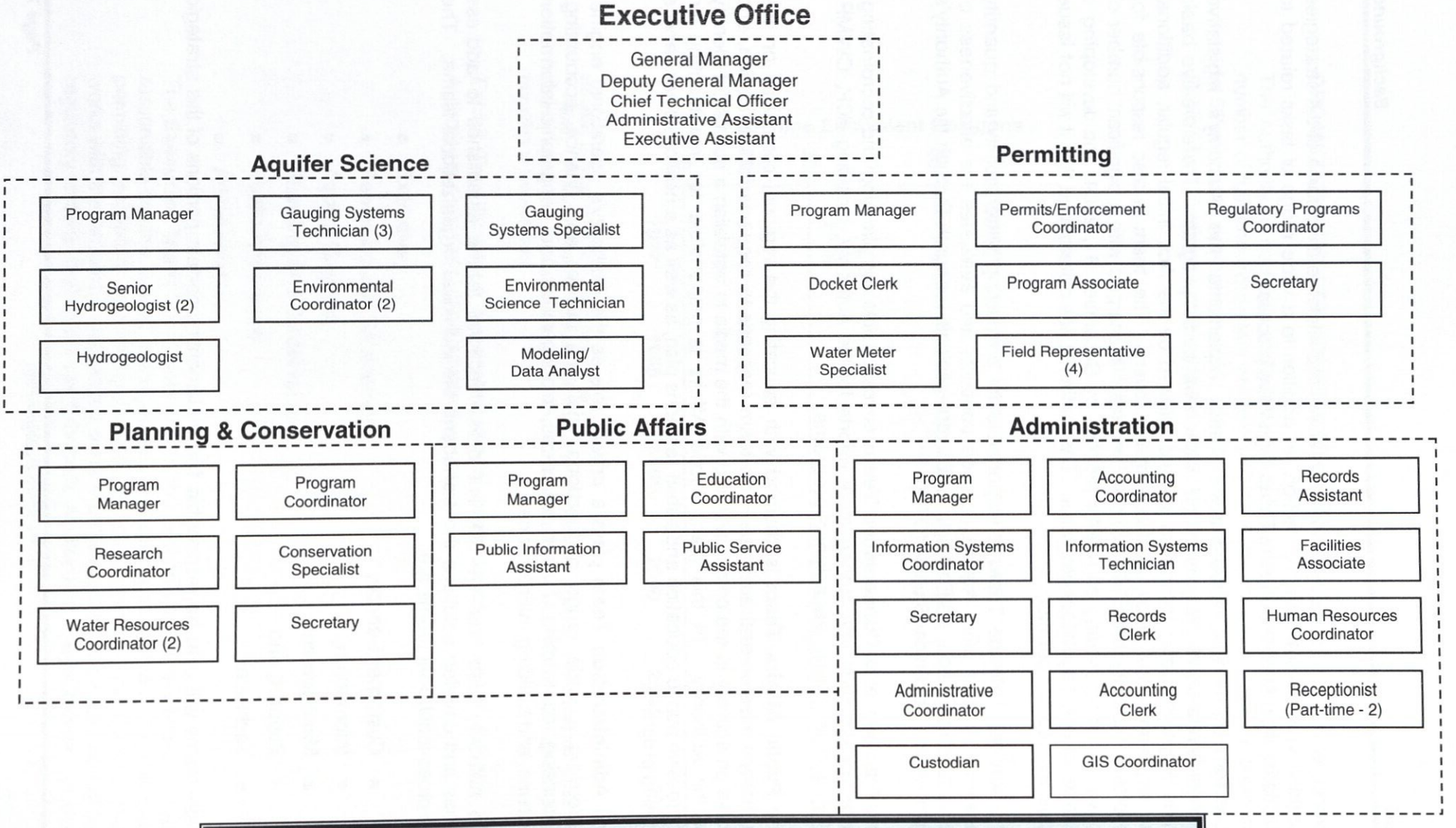
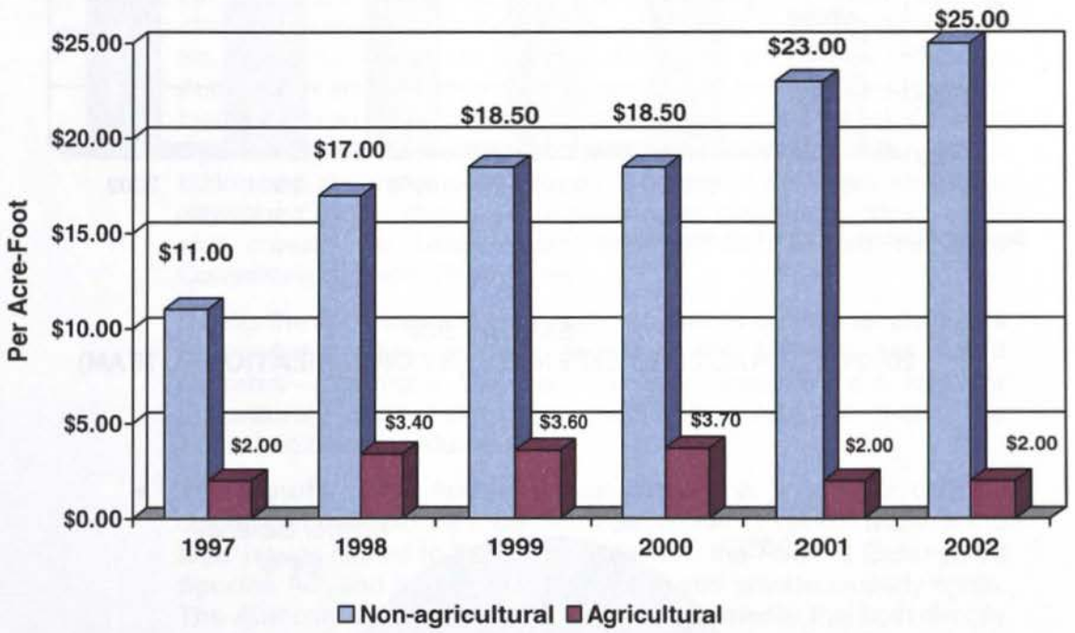


EXHIBIT TWO
EDWARDS AQUIFER AUTHORITY
ORGANIZATIONAL TEAM STRUCTURE
JANUARY 23, 2002

FINANCE AND BUDGET

The Authority is funded by aquifer management fees. Aquifer management fees for non-agricultural users are set by the Authority, while the Act sets the fees for agricultural users at $2 per acre-foot. This limit was added by the 77th Texas Legislature (2001). Aquifer management fees for 2002 are $25.00 per acre-foot for non-agricultural users, and $2.00 per acre-foot for agricultural users. *Exhibit Four* shows management fees for 1997 through 2002.

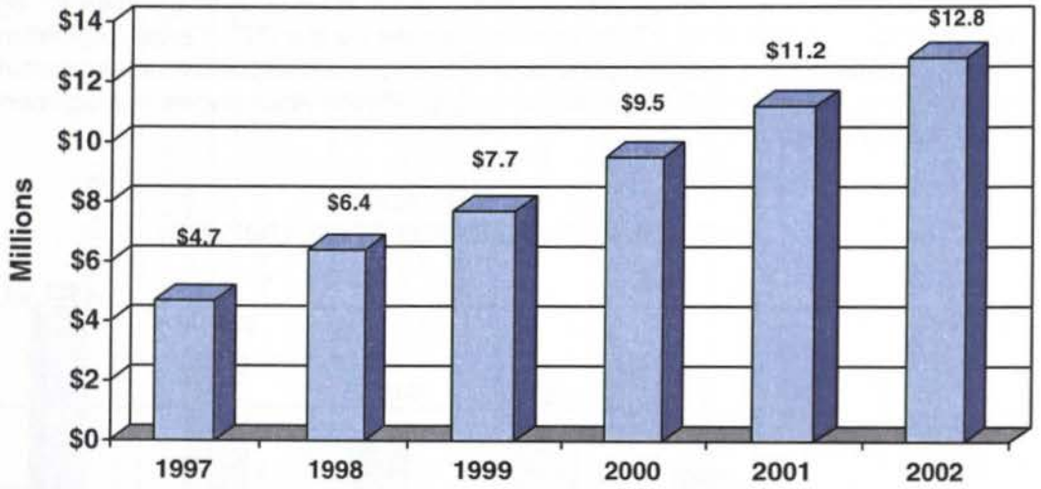
EXHIBIT FOUR
AQUIFER MANAGEMENT FEES, 1997-2002.



***Source**: Edwards Aquifer Authority, January 2002.*

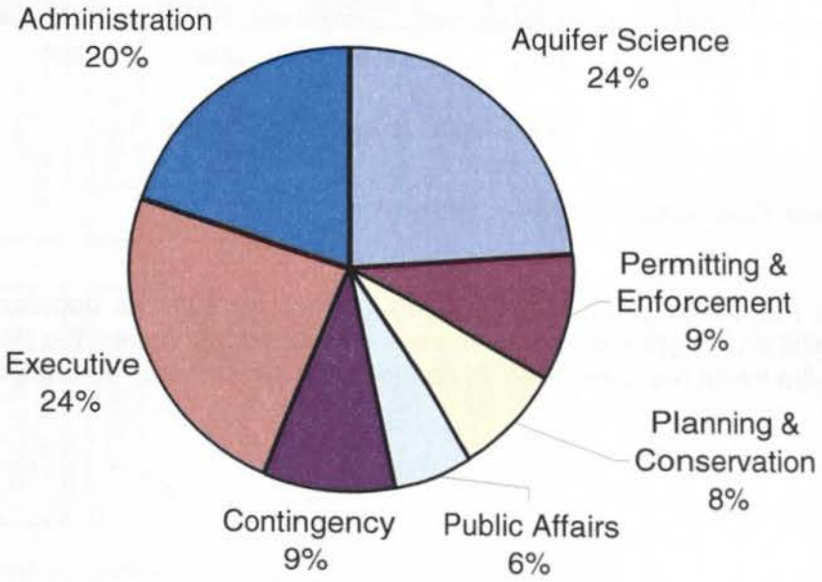
The Authority's proposed operating budget for 2002 is approximately $12.8 million. *Exhibit Five* highlights the Authority's annual budget during the past five years. *Exhibit Six* illustrates the breakdown of spending by the Authority by organizational team.

EXHIBIT FIVE
AUTHORITY ADOPTED ANNUAL BUDGET, 1997-2002.



Source: *Edwards Aquifer Authority, January 2002.*

EXHIBIT SIX
2002 GENERAL FUND EXPENSES (BY ORGANIZATIONAL TEAM)



Source: *Edwards Aquifer Authority, January 2002.*

EXTERNAL FACTORS INFLUENCING THE EDWARDS AQUIFER AUTHORITY

The Authority is influenced by a number of external factors that can and likely will affect the implementation of this strategic plan. Some of these factors, include:

- **The Texas Legislature.** The Authority is a creation of the Texas Legislature, and state policymakers remain keenly interested in its activities and regulatory actions. The Authority is monitored by the Edwards Aquifer Legislative Oversight Committee composed of three House and three Senate members. In addition, each legislative session, bills are passed that directly or indirectly affect the Authority's operations. The state and regional water planning efforts contained in Senate Bill No. 1 (1997) (SB 1) and Senate Bill No. 2 (2001) (SB 2) are just two examples of bills that affect the Authority in an indirect, but critical way. SB 1 created a statewide, regional-based water availability planning process. During the most recent legislative session, Texas lawmakers passed SB 2, which addressed the implementation and financing of the water strategies developed by the state's 16 regional water planning groups. SB 2 also created the Texas Water Advisory Council and the Joint Committee on Water Resources.

  During the 2001 legislative session, legislators passed amendments to the Act that have a direct impact on the Authority and how it operates—specifically the cap on water management fees for agricultural users and the Authority's removal from the Administrative Procedures Act.

- **The Courts.** The Authority was involved in a number of legal challenges even before it became operational in 1996. Many of the legal issues related to the Authority involve the Federal Endangered Species Act, and issues related to water and private property rights. The Authority actively monitors legal developments that both directly and indirectly involve the Authority.

- **Demographic and Economic Changes.** Shifts in population also have an effect on the Authority as it implements this strategic plan and deals with rising demand for water. The population in the San Antonio Metropolitan Statistical Area increased by more than 20 percent between 1990 and 2000. The population of Comal County, grew by 50 percent between 1990 and 2000 (compared to 17.5 percent in Bexar County), while Medina County's population grew by almost 44 percent between 1990 and 2000. The growth of subdivisions and smaller municipal communities between Austin and San Antonio also affect the Authority as it implements this plan.

- **Environmental Groups.** The Sierra Club, and other groups keep a watchful eye on the Authority and its activities. The Authority was served notice by the Sierra Club and the Environmental Defense Fund that a suit may be filed in the future challenging the Authority's efforts to protect endangered species.

- **State and Federal Action**. The Authority is also influenced by the actions taken by governmental entities like the U.S. Fish and Wildlife Service and the Environmental Protection Agency, as well as state government agencies like the Texas Natural Resource Conservation Commission and the Texas Water Development Board.

INTERNAL FACTORS INFLUENCING THE EDWARDS AQUIFER AUTHORITY

Several internal factors also will influence the implementation of this strategic plan. The Authority has greater control over these internal factors than the external factors described earlier. Some of these factors include:

- **Consensus-Building**. As designated by the Act, the Authority's board of directors is diverse. Individual board members represent a wide range of geographic, economic, and political interests. In recent years, the board has made great strides in forging consensus and working collaboratively. This spirit of cooperation and mutual respect must continue for the Authority to remain an effective regulatory agency.
- **Staff Size.** One of the critical decisions facing the Authority is whether or not to increase the size of its workforce, and if so, in what strategic areas. One area of consensus identified at the weekend work session was the need to "ramp up" and become a recognized regulatory agency as quickly as possible. The Authority's 2002 budget includes eight new staff positions.
- **Transferability of Programs and Human Resources**. A significant human resource issue identified during the strategic planning process was the transferability of certain positions as programs or projects are completed. This issue was discussed as new position requests were considered. Examples discussed extensively during the planning process were completion of the initial regular permit issuance process and the Edwards Aquifer Optimization Technical Studies. Transition of existing personnel was also discussed with regard to the Habitat Conservation Plan and the Comprehensive Water Management Plan. The primary question in both scenarios was, "as programs are completed, can the staff primarily assigned to these programs be re-assigned to other programs?"

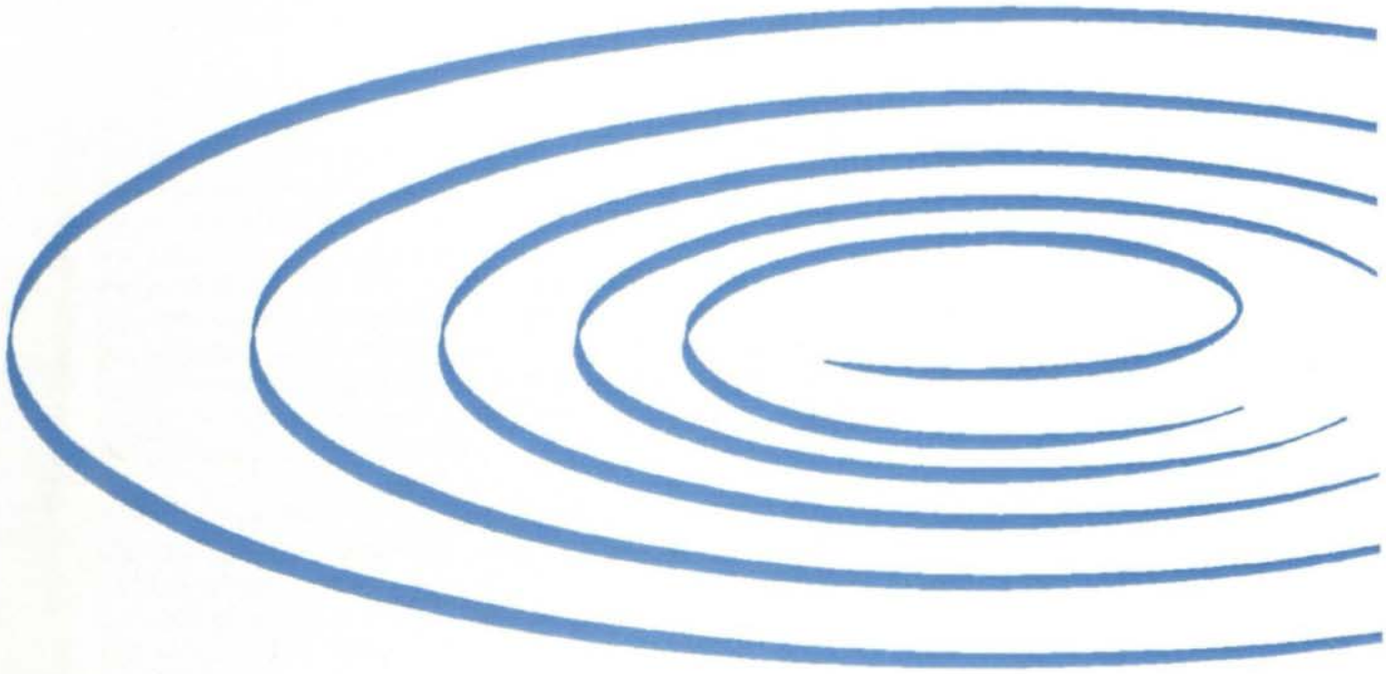
  Authority staff considered the re-assignment question extensively prior to including requests for new personnel in the plan. The conclusion staff offered for consideration was that the Authority is a new regulatory agency in an area of regulation that is not only evolving in this region, but also in the State of Texas. Additionally, a newly formed regulatory agency often discovers there are more duties and requirements for a program than originally anticipated. This discovery usually occurs as the program is being developed.

Another significant factor that makes complete personnel transferability extremely difficult is that once most of the Authority's programs begin, the next phase of the program becomes the operational or maintenance phase. Therefore, these efforts do not come to a close, but actually begin and become part of the agency's annual operations until the board chooses to revise or discontinue these programs. This strategic plan document includes dates when program phases are accomplished, but are not intended to reflect that a program concludes and all work in that area ceases.

There may be opportunities for transferring personnel from one effort to another, but only if the new project or program is timed to begin as the old ones ends. Another important aspect is whether the existing staffs' skills set match the new program needs. As currently scheduled, this plan takes advantage of every opportunity to transfer existing employees to new duties, but in all but one case, they are transitioning from implementation of the program to monitoring and enforcing the program.

- **Office Space.** The physical space at the Authority's current office is limited. Any significant staff expansion would likely require a new arrangement. Authority staff will assess the long-term office space needs, and submit a report to the board by June 30, 2002.
- **Public Trust.** One of the board's eight goals is to "forge solutions that ensure public trust." To ensure the successful implementation of this strategic plan, the Authority should continue to dedicate resources to public outreach and education.
- **Coordination of Planning Efforts**. The planning efforts and actions of other regulatory and governmental entities will affect the Authority's ability to implement this plan. *Appendix Three* illustrates the multiple planning processes affecting the Authority.

GROUNDWATER WITHDRAWAL PERMITS



FUNCTIONAL AREA ONE:
GROUNDWATER WITHDRAWAL PERMIT PROGRAM

Objective 1.1:	**Issue all initial regular permits by December 31, 2004.***
Statutory Authority:	**Sections 1.14; 1.15; 1.16; 1.21; 1.29.**

BACKGROUND

Municipal, industrial and irrigation well owners were required to apply to the Authority for an initial regular permit by filing a declaration of historical use of groundwater withdrawn from the aquifer during the historical period from June 1, 1972 through May 31, 1993.

The board will grant initial regular permits to existing water users if they:

- timely file a declaration of historical use;
- pay all appropriate fees; and
- establish by convincing evidence a beneficial use of underground water from the aquifer during the historical period.

To the extent that water is available for permitting, the board will issue existing users permits to withdraw an amount of water equal to the user's maximum beneficial use of water without waste during any one calendar year of the historical period. If a water user does *not* have historical use for a full year, the Authority will issue a permit for withdrawal based on an amount of water that would normally be beneficially used without waste for the intended purpose for a calendar year. If the total amount of water determined to have been beneficially used without waste exceeds the amount of water available for permitting, the Authority will adjust the amount of water authorized for withdrawal under the permits proportionately to meet the amount available for permitting.

The Act provides that existing irrigation users receive a permit for not less than two acre-feet a year for each acre of land the user actually irrigated in any one calendar year during the historical period. An existing user who has operated a well for three or more years during the historical period will receive a permit for at least the average amount of water withdrawn annually during the historical

BOARD GOALS MET BY THIS OBJECTIVE

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2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* The December 31, 2004 date is not required by the Act. This date is an interim date identified that, if met, would be helpful in meeting the ultimate 450,000 and 4000,000 annual caps by January 1, 2008.

period. The Authority will issue an initial regular permit without a time-limit that will remain in effect until it is abandoned, canceled, or retired.

On November 8, 2000, Authority staff mailed proposed permit actions for 1,084 initial regular permits. Staff proposed that 818 of the applicants receive permits (totaling 532,000 acre-feet), and that 266 permit applicants be denied permits. Protests were filed on 389 of these permit proposals, while the remaining 695 permit proposals were uncontested.

Throughout 2001, the board took action on 691 initial regular permit proposals by approving 530 permits, totaling 216,659 acre-feet, and denying 161 permit applications. The remaining 394 staff permit proposals include 326 contested proposals yet to be resolved and 68 uncontested proposals.

Additional regular permits were authorized by the Act, however, these type permits could only be issued once all initial regular permit amounts are satisfied and remaining groundwater was available below the 450,000 acre-feet cap. Staff anticipates that implementation of an additional regular permit program is highly unlikely since the proposed withdrawal amount for initial regular permits exceeds the 450,000 acre-feet cap and there should be no groundwater available for additional regular permitting.

Authority staff recommended hiring five firms so that each firm could handle one of the contested permit dockets developed to expedite completing these hearings and issuing all final permits. The special counsels' work began mid-December 2001. The contracts for these firms are proposed through December 31, 2002. The Authority approved a contract with the State Office of Administrative Hearings (SOAH) on December 11, 2001 to conduct contested permit hearings.

CHALLENGES

- The Authority cannot complete the initial regular permit process until: (1) all contested cases are complete; (2) the board issues the final permit for the last remaining contested case; and (3) the board can reduce the total groundwater withdrawal amounts to the 450,000 acre-feet cap.
- Unanticipated events, such as legal challenges, could prolong and/or increase the financial expense of the permit issuance process.

RESPONSIBLE PARTIES

Team: Permitting and Enforcement

The Program Manager and Permit and Enforcement Coordinator are primarily responsible for implementing this objective.

STRATEGIES AND TIMELINE

1.1.1	Complete all 389 pre-contest conferences with applicants.	By December 31, 2001
1.1.2	Retain five special counsel law firms to represent staff in 25 contested case proceedings.	By November 15, 2001
1.1.3	Approve contracts with SOAH and administrative law judges to conduct contested permit hearings.	By January 31, 2002
1.1.4	Refer 25 permit protests to contested case hearings.	November 15, 2001 (referral)
	Complete 25 permit protest hearings.	December 31, 2002 (hearing completion)
1.1.5	Issue 26 remaining Municipal & Industrial permits that were originally uncontested.	January 31, 2003
1.1.6	Continue to refer unresolved contested cases for hearing on a quarterly basis, as needed.	Through December 31, 2002
1.1.7	Issue remaining 338 permits as contested case dockets are completed, including conducting settlement conferences with applicants to resolve protests.	Between January 1, 2002 and December 31, 2003
1.1.8	Complete final contested case and issue final permit.	By December 31, 2003
1.1.9	Issue final initial regular permit.	By December 31, 2004

INTERNAL AND EXTERNAL LINKAGES

Completion of this objective relies on reducing permitted pumping to 450,000 acre-feet (Objective 1.3) before the last permit can be issued. The amount of water required as part of a reduction will effect the value of the remaining permitted groundwater rights. Initial regular permit holders are most likely to utilize term and emergency permits (Objective 1.2), recharge credit program (Objective 2.8), and be subject to the rules and regulations of the comprehensive water management planning program (Objective 2.3), conservation (Objective 2.6), recharge zone protection (Objective 4.3), water quality (Objective 4.1), and well construction (Objective 1.7).

Completion of this objective enhances the Authority's ability to work more cooperatively with permit holders with regards to comprehensive water management (Objective 2.0), research (Objective 3.0) and water quality programs (Objective 4.1). Permits from this objective are connected directly to enforcement (Objective 5.2) of water use reporting (Objective 1.10), clarifies transfer program (Objective 1.9) by eliminating interim authorization transfers and enhances the groundwater trust program (Objective 1.8). The final permits will affect any Region L (Objective 2.10) activity and the HCP (Objective 2.1) potentially reducing the amount of groundwater withdrawals further. Permits will be reissued or amended as the reductions to 450,000 acre-feet (Objective 1.3), reductions to 400,000 acre-feet and transfers are implemented or continue. Recharge credits (Objective 2.8) will need to be designed not to adversely effect permits from this program. Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

Authority staff estimates that completing the initial regular permit process will cost approximately $2.9 million during 2002-2003. These funds are above and beyond budgeted amounts and are needed to pay for the SOAH contract, five special counsel law firms, and administrative law judges.

OBJECTIVE 1.1	2002	2003	2004	2005	2006
Issue all initial regular permits.	$ 1,460,000	$ 1,415,000	N/A	N/A	N/A

Objective 1.2:	**Develop program for term and emergency permits by July 1, 2002.**
Statutory Authority:	**Sections 1.15; 1.19; 1.20.**

BACKGROUND

The Authority may issue temporary supplemental permits (known as interruptible term permits) for a period of up to ten years. A term permit holder may not withdraw water from the San Antonio pool of the aquifer unless the level of the aquifer is higher than 665 feet above mean sea level, as measured at Well J-17. A term permit holder may not withdraw water from the Uvalde pool of the aquifer unless the level of the aquifer is higher than 865 feet above mean sea level, as measured at Well J-27.

Additionally, emergency permits may be issued to prevent the loss of life or to prevent severe and imminent threats to public health and/or safety. Emergency permit holders may withdraw water from the aquifer without regard to its effect on other permit holders. The term of an emergency permit may not exceed 30 days, unless it is renewed by the Authority.

The board approved rules for term and emergency permits in 2000. Beginning in 2002, staff will develop the forms and applications for term and emergency permits. Staff anticipates that the review and application process for term permits will be similar to the process used for initial regular permits and will be performed by the same staff. However, technical review for emergency permits will be streamlined so that qualified applicants can take advantage of this type of permit in an expeditious manner.

CHALLENGES

- Assessing the impact of term and emergency permits on initial regular permit holders.
- Ensuring that the issuance of term and emergency permits does not harm initial regular permit holders.
- Developing an effective notification system for term permit holders regarding aquifer levels and interrupted use of term permits.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

RESPONSIBLE PARTIES

Team: Permitting and Enforcement

The Regulatory Programs Coordinator has primary responsibility for implementing this objective. The Secretary and Docket Clerk provide administrative support.

STRATEGIES AND TIMELINE

1.2.1	Develop two application forms and finalize application review process.	By May 31, 2002
1.2.2	Develop one term and one emergency permit information piece to explain purpose and application process to the public.	By February 28, 2003
1.2.3	Prior to issuing permits, the board must determine if additional groundwater is available for term permits.	Ongoing
1.2.4.	Hold three informational workshops.	2002-2006
1.2.5	Conduct targeted public awareness campaign in all Authority counties to let the public know about this program.	2003 2005
1.2.6	Complete administrative and technical review within 30 days of emergency permit application receipt.	2002-2006
1.2.7	Complete administrative and technical review within 90 days of term permit application receipt.	2002-2006
1.2.8	Conduct contested case hearings as necessary.	2002-2006

INTERNAL AND EXTERNAL LINKAGES

Term permits may be critical to alternative water management strategies that could affect buy-down and retirement (Objectives 1.3, 1.4). Term and emergency permits could be part of strategies submitted to Region L (Objective 2.10). Term permits could also be used for conservation credits (Objective 2.6), as part of demand/critical period management (Objective 2.9) or may be used in conjunction with aquifer storage and recovery projects (Objective 2.8). Completion of this objective is reliant upon finding additional groundwater to be permitted on an annual basis (Objectives 1.9, 1.10). Before a permit can be issued it will need to be designed not to adversely effect initial regular permits from this program (Objective 1.1). Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 1.2	2002	2003	2004	2005	2006
Develop program for term and emergency permits.	$1,500 Other Funding Covered Under Strategy 1.1.3	$11,000 Other Funding Covered Under Strategy 1.1.3	$22,000	$29,000	$20,000

Objective 1.3:	**Reduce Edwards Aquifer pumpage to 450,000 acre-feet by December 31, 2004.***
Statutory Authority:	**Sections 1.14; 1.21; 1.29.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

BACKGROUND

To reduce aquifer withdrawals to the levels required by the Act (450,000 acre-feet and eventually 400,000), the Authority must purchase, and subsequently "retire," water rights from existing users. In other words, the Authority will have to purchase water rights and pay permit holders not to pump water from the aquifer. Under the Act, the Authority must limit permitted withdrawals from the aquifer to 450,000 acre-feet annually through December 31, 2007, and to 400,000 acre-feet annually beginning January 1, 2008. The Act also provides that:

- the Authority is solely responsible for the costs to reduce aquifer withdrawals to 450,000 acre-feet, and
- the costs for reducing aquifer withdrawals to 400,000 acre-feet will be shared equally between the Authority and downstream water rights holders.

The reduction to 450,000 acre feet is known as withdrawal reduction or the first "buydown," while the reduction to 400,000 acre-feet is known as permit retirement. Although the Authority has studied the buydown issue, a specific plan of action to meet the state-imposed "cap" still needs to be developed. The exact cost of the buydown is not known at this time and will be determined when the board makes a decision regarding a recommendation from the Ad Hoc Committee on Withdrawal Limit Compliance

The Authority may acquire two types of water rights: unrestricted water rights and base irrigation water rights. Unrestricted water rights can be transferred with Authority approval from person to person on the open market without regard to location or proposed point of withdrawal, place of use, or purpose of use. Base irrigation water rights, on the other hand, apply only to irrigation users and must remain with the land. Base water rights can not be freely transferred on the open market, and therefore have less financial value than unrestricted water rights. In fact, base irrigation water rights appear to have value to only two parties: the water right holder or landowner and the Authority for the purposes meeting the statutory caps. Consequently, the Authority is planning to primarily purchase base irrigation water rights so that the limit on permitted withdrawals can be met in the most cost-effective manner.

* The December 31, 2004 date is not required by the Act. This date is an interim date identified that, if met, would be helpful in meeting the ultimate 450,000 and 400,000 annual caps by January 1, 2008.

Irrigation users qualify for a minimum of two acre-feet of water per acre of land actually irrigated. Under the Act, however, half of the water must stay with the land (base irrigation water right). The other half may be marketed freely and be used for irrigation purposes (unrestricted water right).

CHALLENGES

- Lack of precedence.
- Uncertainty and significance of cost.
- Possible legal challenge to the "base irrigation water" concept. Since base water rights are not as liquid as unrestricted rights, they have a lesser market value. Therefore, it is reasonable to expect that land owners will file a lawsuit challenging any restriction of the marketability of their permits. If landowners prevail in such a lawsuit, the cost of the buydown will increase substantially and the Act would be modified accordingly.
- Base irrigation water may not be available for purchase. If this is the case, the remaining balance of water to "retire" will have to come from unrestricted water, which is considerably more expensive.
- Possible legislative amendments could remove the restriction for the base irrigation acre foot.

RESPONSIBLE PARTIES

Team: Planning and Conservation

The Program Manager is the lead position for implementing this recommendation. The Water Resource Coordinator and a new position for 2002 are responsible for staffing this program.

STRATEGIES AND TIMELINE

1.3.1	Develop contract document that would provide payments to sellers over 20 years beginning the year after the contract is approved.	By December 31, 2002
1.3.2	Enroll voluntary participants to acquire 83,000 acre-feet in water rights. Staff recommends retaining brokers to act as Authority agents.	By December 31, 2004 (Enroll voluntary participants through June 30, 2004)
1.3.3	Adopt rules for mandatory withdrawal reduction.	By December 31, 2003
1.3.4.	Propose proportional adjustments (Phase II) to all permitted water rights if Authority is unable to secure voluntary rights.	By June 30, 2004

INTERNAL AND EXTERNAL LINKAGES

Reducing sufficient groundwater rights will be necessary to complete the issue of all initial regular permits in a timely manner. The cost and amount of groundwater required as part of a reduction to 450,000 acre-feet will affect the costs of reducing groundwater permits to 400,000 acre-feet (Objective 1.4) and may affect adjusting the cap. This reduction may enhance the value of term and emergency permits (Objective 1.2) and recharge credits (Objective 2.8), as well as promote the development of other alternative water resources. As this reduction occurs, critical periods (Objective 2.9) may become less frequent. Enforcement activities (Objective 5.2) associated with over-pumping permitted amounts may become more frequent until the region adjusts by bringing on other alternative water supplies. As this program is completed, staff will focus on enforcement activities related to comprehensive water management planning (Objective 2.3), conservation (Objective 2.6), recharge zone protection (Objective 4.3), groundwater quality (Objective 4.1), well construction (Objective 1.7). Reductions in authorized pumping amounts will be implemented through the transfer process (Objective 1.9).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 1.3	2002	2003	2004	2005	2006
Reduce Edwards Aquifer pumpage to 450,000 acre-feet.	N/A	N/A* Rules Development Funded Under Strategy 5.1.3.	N/A*	N/A*	N/A*

**The exact cost of the buydown is not known at this time and will be determined when the board makes a decision regarding a recommendation from the Ad Hoc Committee on Withdrawal Limit Compliance*

Objective 1.4:	**Reduce Edwards Aquifer Pumpage to 400,00 acre-feet by January 1, 2008.**
Statutory Authority:	**Sections 1.14; 1.21; 1.29.**

BACKGROUND

If by January 1, 2008 the overall volume of water authorized to be withdrawn from the aquifer under regular permits exceeds 400,000 acre-feet, the Authority will reduce the authorized withdrawal amount of each regular permit by an equal percentage to achieve the 400,000 acre-feet cap. This process is known as the second buy-down or permit retirement. The groundwater withdrawal amount reduced may be restored, in whole or in part, as other measures are implemented that maintain overall demand at or below the appropriate level.

To date, the board has not proposed rules for the Permit Retirement Program. The program will be part of the Comprehensive Water Management Plan described elsewhere in this document. Authority staff recommends the board implement a *voluntary* retirement program that allows the Authority to acquire groundwater withdrawal rights and a *mandatory* retirement program if the 400,000 acre-feet goal is not reached by voluntary means. This activity will occur beyond the scope of this five-year plan and will be financed by a special fee.

The Act provides that downstream water right holders (primarily municipalities, power plants and other industrial interests that use water from the Guadalupe River) pay half the cost of the second buydown (400,000 acre-feet by 2008). The Authority is required to develop rules pertaining to this second buydown and to develop a fee schedule. The fees will be assessed on a pro-rata basis based on the South Texas Water Master formula developed by the Texas Natural Resource Conservation Commission (TNRCC). The South Texas Water Master regulates surface water withdrawals.

CHALLENGES

- Uncertainty surrounding the method that will be used to pay for permit retirement/second buydown.
- Need to coordinate Authority efforts with the TNRCC, who will assess the special fee on downstream users.
- Possible statutory changes.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

RESPONSIBLE PARTIES

Team: Planning and Conservation

The Program Manager and the new Water Resource Coordinator have primary responsibility for implementing this objective.

STRATEGIES AND TIMELINE

1.4.1	Adopt rules for regular permit retirement.	By December 31, 2004
1.4.2	Develop special permit retirement fee program in cooperation with the Texas Natural Resource Conservation Commission (TNRCC).	By April 1, 2004
1.4.3	Adopt special permit retirement fee rules.	By December 31, 2004
1.4.4	Submit report to TNRCC regarding status of the program including estimated costs of permit retirement, to reduce annual aquifer withdrawals to 400,000 acre-feet according to Section 1.29(d) of the Act.	By December 1, 2004

INTERNAL AND EXTERNAL LINKAGES

Achieving this objective is contingent upon first reduction to 450,000 (Objective 1.3). The costs of reducing groundwater permits to 400,000 acre-feet (Objective 1.4) should exceed the costs of the first reduction and may promote adjusting the cap. This reduction may enhance the value of term and emergency permits (Objective 1.2) and recharge credits (Objective 2.8), and may promote the development of other alternative water resources. As this reduction occurs (Objective 2.9) periods may become less frequent. Enforcement activities (Objective 5.2) associated with over-pumping permitted amounts may become more frequent until the region adjusts by bringing on other alternative water supplies. Reductions in authorized pumping amounts will be implemented through the transfer process (Objective 1.9). Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

Staff recommends retaining brokers to act as Authority agents. The exact cost of the buydown will be determined when the board makes a decision regarding a recommendation form the Ad Hoc committee on withdrawal limit compliance.

OBJECTIVE 1.4	2002	2003	2004	2005	2006
Reduce Edwards Aquifer Pumpage to 400,00 acre-feet by January 1, 2008.	N/A	N/A	Funding Covered Under Strategy 5.1.5	N/A	N/A

Objective 1.5:	**Develop process for evaluation of adjusting "the cap."**
Statutory Authority:	**Section 1.14.**

BACKGROUND

The Authority has initiated numerous studies to better understand the aquifer and the aquatic ecosystems that depend on aquifer springflow. The studies are part of the Edwards Aquifer Optimization Program (EAOP), and are called Optimization Technical Studies (OTS). The research is designed to provide the Authority with the necessary tools to make decisions based on scientific data regarding the feasibility of adjusting the maximum amount of annual withdrawals from the aquifer (i.e., the cap). The Act authorizes the Authority to adjust the cap based on findings related to these research studies, as well as the implementation of certain water management strategies.

The OTS include seventeen interrelated biologic and hydro-geologic research studies. The studies are designed to:

- evaluate potential technical options for increasing the amount of water stored in the aquifer; and
- identify various methods for optimizing the amount of water available for withdrawal.

The studies are scheduled on an eight-year timeframe, with 2001 being the third year of the original schedule. The studies were initiated and will be completed on a staggered schedule. As the studies are completed, the information will be essential to the decision-making process about adjusting the cap. As of January 2002, only one of the studies, *Statistical Analysis of Hydrologic Data*, had been completed.

Several aquifer management strategies that may be used to adjust the cap are listed in the Act. *Exhibit 1-1* lists the various management strategies and their current status.

Authority rules direct the General Manager to report annually to the board on the status of the OTS and the implementation of water management strategies. The mandated report must include information from completed or ongoing studies and implemented water management strategies, along with a recommendation on whether each study or strategy provides a technical basis for raising the permitted withdrawal cap. The first of the required annual reports was provided to the board in November 2001.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. **Maintain continuous springflow.**
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. **Research and develop additional sources of water.**
8. Provide strong, professional management for the Authority.

In 2003, an objective evaluation of the Authority's OTS and implemented water management strategies will be conducted by an outside consultant. The evaluation will develop a review process and apply the process to each item listed in *Exhibit 1-1.* The study will consider whether existing studies and strategies justify adjusting the cap now and in the future.

EXHIBIT 1-1
STATUS OF CURRENT WATER MANAGEMENT STRATEGIES

WATER MANAGEMENT STRATEGY	CURRENT STATUS
Conservation	■ Agricultural Water Conservation Loan Program is ongoing. ■ The Groundwater Conservation Plan is pending rulemaking, and is currently functioning as a voluntary program. It is anticipated that the Groundwater Conservation Plan rules will be considered by the Aquifer Management and Planning (AMP) Committee in Spring 2002.
Springflow Augmentation	■ No ongoing program.
Diversions Downstream of the Springs	■ No ongoing program.
Reuse	■ San Antonio Water System has an existing wastewater reuse program. The Authority has no specific reuse plan or planned projects.
Supplemental Recharge	■ The Authority has four existing recharge dams. ■ The Authority has an ongoing weather modification program designed to increase recharge to the aquifer and decrease pumping demand.
Conjunctive Management of Surface Water and Groundwater	■ New Braunfels and San Marcos have surface water treatment plants to supplement their groundwater supplies from the Edwards Aquifer.
Demand Management Plans	■ The Authority is in the process of developing demand management/ critical period rules. A proposal for a combined demand management and critical period plan will be presented to the board in February 2002.

CHALLENGES

- Receiving definitive technical information that can guarantee raising the cap will not adversely affect the aquatic species and the economies of the region, including downstream water rights on the Guadalupe River.
- Raising the cap may be contrary to funding alternative water management strategies because it may negate the need for alternative strategies that have been initiated.
- As studies and strategies progress, the technical analysis of the information will require significant resources to hire a consultant or perform the analysis in-house.
- As studies progress, the Authority may need to modify the OTS.

RESPONSIBLE PARTIES

Team: Aquifer Science

The Chief Technical Officer and the Program Manager - Aquifer Science have primary responsibility for implementing this objective.

STRATEGIES AND TIMELINE

1.5.1	Prepare annual additional water supply report and submit report to the board of directors.	By November 30 of each year
1.5.2	Revise the rules to require evaluations in 2004 & 2007 of studies and water management strategies in place of an annual evaluation.	By October 31, 2002 (Revise/Rules) June 30, 2004 By December 31, 2007
1.5.3	Conduct evaluation process of studies and groundwater management strategies and submit report to the board.	By June 30, 2003 (Evaluation due-dates)
1.5.4	Consult with state and federal agencies about the results.	By December 31, 2003
1.5.5	Board considers whether to adopt a resolution to adjust the cap.	By June 30, 2004

INTERNAL AND EXTERNAL LINKAGES

This activity is dependent upon research (Objective 3.0) and aquifer management strategies, including conservation (Objective 2.5), recharge credits (Objective 2.7), and critical period management (Objective 2.8), that will allow the Authority to adjust the cap appropriately. Any adjustments in initial regular permits (Objective 1.1) resulting through this objective will be implemented through the transfer process.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 1.5	2002	2003	2004	2005	2006
Develop process for evaulation of adjusting "the cap."	Funding Covered Under Strategy 5.1.1.	$50,000	N/A	N/A	N/A

Objective 1.6:	**Register all points of withdrawal from the Edwards Aquifer by December 31, 2007.***
Statutory Authority:	**Sections 1.08 (a); 1.15; 1.29; 1.33.**

BACKGROUND

Generally, two categories of wells withdraw groundwater from the aquifer: exempt wells and non-exempt wells. *Exempt* wells consist of domestic and livestock wells that withdraw less than 25,000 gallons per day, and do not require a groundwater withdrawal permit to pump from the aquifer. *Non-exempt* wells require a permit, and include municipal, industrial and irrigation wells.

The Authority's administers a well registration program, which collects information on both exempt and non-exempt wells. Well registration helps the Authority determine the amount of water withdrawn from the aquifer and protect well owners from groundwater contamination that result from hazardous chemical spills and other pollution. By tracking well ownership and location, the Authority can notify well owners in areas of potential contamination when contamination sources are identified.

Existing exempt wells pose the greatest challenge to Authority's well registration program. The Authority estimates that there may be as many as 10,000 - 15,000 existing exempt wells that require registration.

The Authority adopted rules for its Well Registration Program in 2000. The rules provide the regulatory framework for the registration of existing domestic and livestock wells. The rules require a well owner to complete an Authority-approved well registration form for each exempt well. The form includes information such as the name and address of the owner, location of the well, well production rates, well specifications, and purpose of use.

Staff recommends that the board amend the administrative procedures (707) and groundwater withdrawal permit (711) rules by combining the well registration and exempt well status rules. Consolidating rules should streamline the administrative process.

The Authority is planning to initiative a public information campaign in 2002 to increase awareness about the well registration requirement and to increase the number of registrations. The public information campaign will consist of the following activities:

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. **Forge solutions that ensure public trust.**
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

- Publishing program information in local newspapers;
- Providing positive incentives to register;
- Developing informational brochures; and
- Mailing registration information directly to well owners.

In addition to the public information campaign, the Authority is working with county health departments, county clerk offices, and local groundwater districts to analyze Geographic Information System (GIS) data to identify potentially unregistered wells. Once a potentially unregistered well is identified, the Authority conducts field surveys to determine if the wells withdraw groundwater from the aquifer and notifies the owner if the well must be registered.

CHALLENGES

- Public resistance to well registration and perception that registration infringe historical groundwater withdrawal rights
- Lack of knowledge regarding current requirements.
- Staff resources.
- Need to ensure that Authority will remain in compliance with the Act if 707 and 711 rules are consolidated.

RESPONSIBLE PARTIES

Team: Permitting and Enforcement

The Program Manager – Permitting and Enforcement and Regulatory Program Coordinator are responsible for program development. A new Well Registration Associate is proposed for 2004 to administer the Well Registration Program. Documents are prepared by the Regulatory Program Coordinator and filed with the Docket Clerk. Public Affairs will assist in the public information campaign.

STRATEGIES AND TIMELINE

1.6.1	Initiate GIS analysis of wells requiring registration to locate all wells.	By December 31, 2004
1.6.2	Notify identified well owners of registration requirement, and distribute well registration forms to: ■ 1,500 well owners in 2003 ■ 3,500 well owners in 2004 ■ 3,500 well owners in 2005 ■ 1,500 well owners in 2006	2003-2006, and ongoing as needed.
1.6.3	Develop a well registration information piece to explain purpose and application process to the public.	By July 31, 2003

1.6.4	Conduct targeted public awareness campaign in all Authority counties to let the public know about this program.	July and August 2003
1.6.5	Hold one informational workshop with well drillers and real estate agents in each county and one information meeting with county officials.	By March 31, 2003
1.6.6	Identify other methods for locating wells, and locate all wells within each county.	By January 31, 2006
1.6.7	Complete administrative review within 30 days of well registration application receipt.	Beginning January 31, 2003
1.6.8	Make a determination of exempt well status within 90 days of administrative completeness determination.	Ongoing
1.6.9	Identify and register all monitoring wells and issue monitoring wells permits.	By December 31, 2004

INTERNAL AND EXTERNAL LINKAGES

This objective will address the need for information to model aquifer withdrawals (Objective 3.0) and groundwater quality protection and monitoring (Objective 4.1). During well registration, staff anticipates that additional wells will be discovered requiring initial regular permits (Objective 1.1) that will be obtained through the transfer process (1.9). The program will directly affect the water quality program (Objective 4.1) by providing a database of all known aquifer wells in the region (Objective 3.0). In the event of the discovery of groundwater contamination, each registered well owner in the area of the contamination can be notified. Initial regular permit applicants registered their wells in 1996 when they filed their initial regular permit applications. (Objective 1.1). Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

Staff estimates that the total amount of funds needed to implement this objective is $400,000 above base operating costs over five years (2002-2006). Additional funds are primarily for costs associated with the Geographic Information System, and public awareness efforts.

OBJECTIVE 1.6	2002	2003	2004	2005	2006
Register all Points of Withdrawal from the Aquifer.	N/A	N/A	$177,000	$178,000	$45,000

Objective 1.7:	**Establish effective well construction permit program, by December 31, 2002,* for all new wells, modifying existing wells, or plugging wells.**
Statutory Authority:	**Section 1.15.**

BACKGROUND

Under the well construction program, persons must apply for well construction permits before constructing a new well, plugging an abandoned well, or significantly modifying an existing well. The board adopted well construction rules in 2000 to provide a framework for managing new well construction and ultimately new groundwater withdrawals from the aquifer. A well construction permit is not a groundwater withdrawal right from the aquifer. Rather, it is a license to conduct well construction activities, and is not transferable.

The General Manager reviews well construction applications and determines if the proposed well construction project conforms to the Act, Authority rules and other state regulations before authorizing the project and issuing the permit. Board approval is not required for well construction permits.

Since 1997, the Authority has issued approximately 470 well construction permits. Over 90 percent of the new wells being constructed are domestic wells that are exempt from groundwater withdrawal permitting. Currently, Authority staff performs a limited technical review on each application before recommending approval or denial. The technical review has not included site inspection during or after well construction. However, Authority staff believes that site inspection is necessary to ensure that the well construction is completed as authorized by the permit.

In 2000, the board directed Authority staff not only to issue construction permits for wells that withdraw groundwater from the Edwards Aquifer, but also to issue permits for wells that may affect groundwater quality in the Edwards region. Staff anticipates that this policy directive will increase the number of permit applications to the Authority by 300 percent. Authority staff plans to inspect well sites during well construction activities starting in 2002.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

RESPONSIBLE PARTIES

Team: Permitting and Enforcement

The Regulatory Program Coordinator is responsible for program development.

STRATEGIES AND TIMELINE

1.7.1.	Approve program proposal, including application and staff review process.	By April 30, 2002
1.7.2	Adopt rules for well construction, operation and maintenance.	By December 31, 2002
1.7.3	Develop an information piece to explain purpose and application process to the public.	By August 31, 2002
1.7.4	Hold an informational workshop of municipal, industrial and officials in five Authority counties.	By January 31, 2003
1.7.5	Conduct targeted public awareness campaign in all Authority counties to let the public know about this program.	January 1, 2003 through March 31, 2003
1.7.6	Complete administrative and technical review of application within 30 days of application receipt.	Within 30 days
1.7.7	Make a determination of exempt well status within 90 days of administrative completeness determination.	Within 90 days
1.7.8	Inspect each new well, modified well or plugged well within 10 days of completion.	Within 10 days
1.7.9	Issue monitoring well permits as needed.	As needed

INTERNAL AND EXTERNAL LINKAGES

This objective allows the Authority to manage groundwater withdrawals in sensitive areas such as the recharge zone (Objective 4.3) and near springs, and may assist in water quality protection (Objective 4.1) of the aquifer for other well owners (Objectives 1.1, 1.2). Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

Costs listed below are primarily related to public awareness activities, such as the development of brochures and information workshops.

OBJECTIVE 1.7	2002	2003	2004	2005	2006
Establish effective well construction permit program for all new wells, modifying existing wells, or plugging wells.	$3,000 Rules Development Funded Under Strategy 5.1.1	$10,500	$3,000	N/A	$3,000

Objective 1.8:	**Establish a groundwater trust program to facilitate transfers to small users by December 31, 2003.***
Statutory Authority:	**Section 1.22.**

BACKGROUND

The Authority has established a Groundwater Trust ("the trust") for interim withdrawal rights. The goal of the Trust is to facilitate the transfer of water rights by providing the public with a list of individuals interested in marketing their interim withdrawal rights.

The trust consists of a list of potential sellers and lessors, contact numbers, and the amount of withdrawal rights for sale or lease. This list is made available to the public via the Authority web page or by an open records request. Individuals wishing to sell/lease water rights may be added to the trust at any time by completing and submitting a Groundwater Trust information sheet.

The trust is provided to the public solely for the purpose of locating water rights. The Authority plays no role, and is not responsible for any type of business agreement executed between the sellers/lessors listed on the trust and the buyers/lessees using the trust to locate water rights.

CHALLENGES

- Determining the market for leasing and selling water rights to parties that do not choose to pursue acquisition independently.
- Making and keeping the program self-funding.

RESPONSIBLE PARTIES

Team: Planning and Conservation

The new Water Resources Coordinator position will be responsible for this program.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

STRATEGIES AND TIMELINE

1.8.1	Approve program proposal, including guidelines, contracts and fee schedule. This program will be designed to be self-funding.	By June 30, 2002
1.8.2	Adopt groundwater trust rules.	By December 31, 2002
1.8.3	Enroll participants in the program to transfer 2,500 acre-feet, and continue to maintain 2,500 acre-feet in the program annually and expand as necessary.	By April 30, 2003 and Ongoing

FISCAL IMPACT ABOVE BASE OPERATING COSTS

The groundwater trust program is designed to be self-funded.

OBJECTIVE 1.8	2002	2003	2004	2005	2006
Establish a groundwater trust program to facilitate transfers to small users.	N/A	N/A	N/A	N/A	N/A

Objective 1.9:	**Continue water rights transfer program, and conduct annual program reviews by December 31, 2002.***
Statutory Authority:	**Sections 1.22; 1.24; 1.34.**

BACKGROUND

The purpose of the water rights transfer program is to assign aquifer groundwater withdrawal rights from one user to another. The Authority approved its first transfer for groundwater withdrawal rights under interim authorization in March 1998. The transfer program has processed 450 transfers totaling 88,280 acre-feet of groundwater withdrawal rights since the program began.

The Authority's program addresses five types of transfers including changes in:

- Ownership,
- Withdrawal point,
- Place of use,
- Purpose of use, and
- Withdrawal amount.

The following rules apply to the transfers of groundwater withdrawal rights:

- Water withdrawn from the aquifer must be used within the boundaries of the Authority;
- Persons who install water conservation equipment may sell conserved water;
- An irrigation permit holder may not lease more than 50 percent of the irrigation rights initially permitted. The user's remaining irrigation water rights must be used in accordance with the original permit and must pass with transfer of the irrigated land; and
- Transfers of water rights that are from west of the Cibolo to east of the Cibolo Creek must be posted in the Texas Register before approval by the board.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

The responsible parties initiating a groundwater withdrawal rights transfer are required to file a notice with the Authority. The Authority staff reviews the notice to determine if the transferor has the water available for transfer and that the transfer conforms to the requirements of Section 1.34 of the Act. The General Manager then issues a letter acknowledging the receipt of the notice and a statement concerning the transfer's disposition after review of the notice. Beginning in 2002, field representatives will confirm meter readings and well locations prior to approval of transfers.

All data regarding the change of ownership, place of use, purpose of use, point of withdrawal, and the addition of place of use of Edwards water rights are entered and recorded in the Authority database created and maintained by permitting staff. Staff recommends that the Authority secure professional assistance to help modify the Authority's transfer database. The transfer database can be improved by the development of date activated deposit and deduction type accounting software.

CHALLENGES

- Possible legal challenge to the base acre foot sale prohibition.
- Current rules require a special hearing to approve all west-east water transfers. Individuals could challenge this extra procedural step.

RESPONSIBLE PARTIES

Team: Permitting and Enforcement

The Program Associate is responsible for program development and implementation.

STRATEGIES AND TIMELINE

1.9.1	Complete database upgrade.	By June 30, 2002.
1.9.2	Complete administrative and technical review of transfers that do not require hearings within 30 days after receipt of application.	Within 30 days
1.9.3	Complete administrative and technical review of transfers (Cibolo Creek) that may require hearings within 120 days after receipt of application.	Within 120 days
1.9.4	Hold workshops for real estate professional and other interested parties on an on-going basis.	Ongoing
1.9.5	Link transfers to critical period program.	By November 30, 2002
1.9.6	Conduct evaluation of the program's effectiveness and impact of transfers, and submit report to the board.	By December 31, 2002
1.9.7	Perform rules review to determine the effectiveness of the transfer program.	By December 31, 2004

INTERNAL AND EXTERNAL LINKAGES

The transfer program affects all groundwater withdrawals within the Authority (Objectives 1.1, 1.2, 2.8 and 2.9). This objective is the mechanism to develop a groundwater withdrawal right market for moving water rights to pumpers that require additional water supplies (Objective 1.1). The program tracks withdrawals for critical period (Objective 2.9) and annual water use reporting (Objective 1.10). Each transfer addresses the place of use, purpose of use, ownership, groundwater withdrawal amounts and well locations that can be cross referenced with the well registration program (Objective 1.6) and the initial regular permit program (Objective 1.1). Any adjustments to the cap (Objectives 1.3, 1.4) will be implemented through the transfer process. Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 1.9	2002	2003	2004	2005	2006
Continue water rights transfer program, and conduct annual program reviews.	$85,000	$50,000	$50,000	$50,000	$50,000

Objective 1.10:	**Continue to receive and evaluate annual groundwater use information.**
Statutory Authority:	**Section 1.32.**

BACKGROUND

Well owners are required to submit a report documenting water usage by January 31 of each year. Authority staff uses this data to calculate the annual use of water by all users and to monitor overall water usage. This information is critically important since Authority staff use it to track water usage trends.

CHALLENGES

- Gathering accurate data from all water users.
- Enforcing the proper maintenance and installation of water meters.

RESPONSIBLE PARTIES

Team: Permitting and Enforcement

STRATEGIES AND TIMELINE

1.10.1	Coordinate and implement new annual water usage reporting forms.	By March 31, 2002
1.10.2	Distribute water use reporting forms to all initial regular permit holders and applicants.	By December 31 of each year
1.10.3	Receive all water use reports.	By March 1 of each year.
1.10.4	Evaluate water use information for reporting and enforcement purposes.	By April 15 of each year
1.10.5	Inspect every meter.	Twice a year
1.10.6	Maintain over 650 well meters in operational condition, and replace meters as necessary.	Ongoing, as necessary
1.10.7	Complete installation of all remaining irrigation well meters.	By December 31, 2002

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

INTERNAL AND EXTERNAL LINKAGES

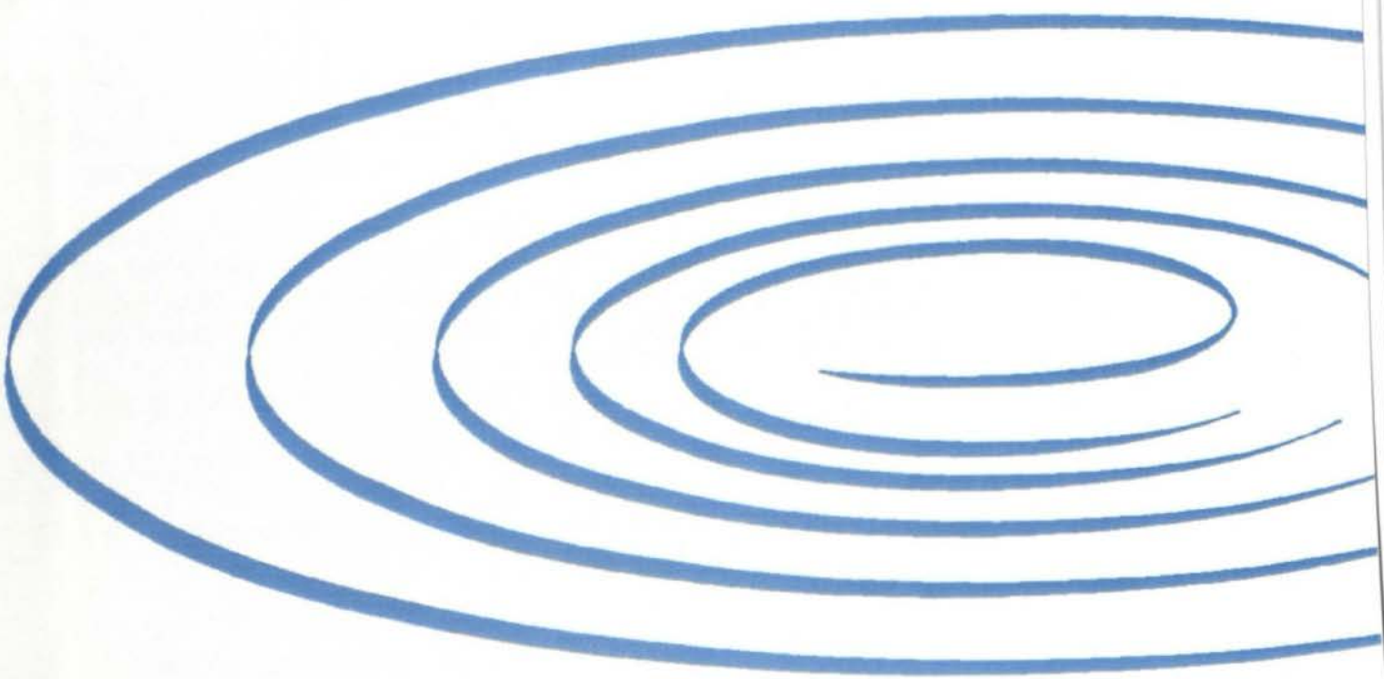
Information collected and evaluated through this program will be used for aquifer research, groundwater withdrawal enforcement (Objective 5.2) of initial regular permits (Objective 1.1) and recharge enhancement credits (Objective 2.8), critical period management planning (Objective 2.9), comprehensive management planning (Objective 2.0), fees (Objective 7.11), water quality programs (Objective 4.1) and conservation planning (Objective 2.6). The data collected also may be used to assist in adjusting the cap (Objectives 1.3, 1.4). Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

The costs listed below relate to the maintenance and replacement of 650 or more well meters.

OBJECTIVE 1.10	2002	2003	2004	2005	2006
Continue to receive and evaluate annual groundwater use information.	$70,000	$40,000	$60,000	$70,000	$70,000

PLANNING



FUNCTIONAL AREA TWO: PLANNING

Objective 2.1:	**Implement the Habitat Conservation Plan, and receive a Section 10A Incidental Take Permit by June 30, 2003.***
Statutory Authority:	**Section 1.11(d)(e).**

BACKGROUND

The Authority is required by law to protect environmental resources while also protecting domestic and municipal water supplies, existing industries, and economic development in Texas. The Authority is required to implement and enforce water management procedures by the end of 2012 to ensure that continuous minimum springflows at Comal Springs and San Marcos Springs are maintained to protect endangered and threatened species as required by federal law. The U.S. Fish and Wildlife Service (USFWS) has established minimum flow limits necessary to protect the endangered species at Comal Springs and San Marcos Springs.

The Habitat Conservation Plan (HCP) would cover the destruction of endangered or threatened species associated with Comal and San Marcos Springs and associated ecosystems that is incidental to otherwise lawful activities. Therefore, the HCP must include measures that minimize and mitigate the effects of any incidental destruction of endangered or threatened species.

The Act provides the Authority with the ability to hold permits under the Endangered Species Act. The common permit issued related to endangered species is known as a Take Permit. A Take Permit is only issued if a habitat conservation plan is developed and approved by the USFWS that will provide adequate protection for listed species at Comal and San Marcos springs.

CHALLENGES

- Agreement on springflow requirements.
- Acceptance by the USFWS that the Authority cannot keep Comal Springs flowing.
- Agreement on minimum level of aquifer withdrawals during a repeat of the drought of record.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. **Research and develop additional sources of water.**
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

- Agreement on the demand/critical period plan.
- Lack of necessary scientific information and inadequate time to gather and analyze scientific data.
- Agreement on interpretations of scientific data.
- Deliberate decision making process in USFWS (Austin).
- Long-term monitoring.
- Costs – amount and equitable distribution of expenses.
- Lawsuits.
- Agreement on "adaptive management."

STRATEGIES AND TIMELINE

2.1.1	Present annual report to the board of directors on the status and coordination of all planning efforts that affect the Edwards Aquifer and the Edwards Aquifer Authority.	By December of each year beginning 2003
2.1.2	Approve the draft Habitat Conservation Plan (HCP) and Environmental Impact Statement (EIS).	By October 31, 2002
	Submit the HCP and EIS to the U.S. Fish and Wildlife Service (USFWS).	By December 31, 2002
2.1.3	Continue discussions with U.S. Fish and Wildlife Service and make adjustments as necessary, with a goal of finalizing the HCP.	By June 30, 2003
2.1.4	Implement long-term plan with Texas Parks and Wildlife Department for monitoring, research & refugia through an interlocal contract.	By March 31, 2003

RESPONSIBLE PARTIES

Teams: Aquifer Science and Planning and Conservation

The Research Coordinator is responsible for completing and implementing the HCP.

INTERNAL AND EXTERNAL LINKAGES

Successful completion and implementation of this objective depends on successful completion of several other objectives in this strategic plan, such as completing the Comprehensive Water Management Plan (Objective 2.3); researching water management strategies (Objective 2.4); implementing the Edwards Aquifer Authority Groundwater Conservation Program (Objective 2.5); establishing a recharge enhancement program (Objective 2.7); establishing a demand management program (Objective 2.8); continued participation in South Central Texas Regional Planning Group activities (Objective 2.9); continued Optimization Technical Studies (Objective 3.2); water quality protection activities (Objective 4.1), as well as public affairs and legislative monitoring. This objective is also dependent on continued enforcement of the Endangered Species Act.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.1	2002	2003	2004	2005	2006
Implement a Habitat Conservation Plan and receive Section 10A Incidental Take Permit.	$414,000	$850,000	$800,000	$800,000	$800,000

Objective 2.2:	**Complete recirculation analysis and submit results to South Central Texas Regional Planning Group by January 31, 2004.***
Statutory Authority:	**Section 1.27.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. **Research and develop additional sources of water.**
8. Provide strong, professional management for the Authority.

BACKGROUND

The Authority is currently analyzing recharge and recirculation (R&R) as a water management/supply option for the aquifer area. Recharge and recirculation is a comprehensive and integrated system of water supply sources, storage, and management or pumping strategies. This further analysis is a result of discussion and direction from the South Central Texas Regional Water Planning Group (SCTRWPG).

Natural recharge to the Edwards Aquifer is increased through a program of constructed recharge structures. This recharge increases the amount of water that can be pumped from the aquifer and increases the amount of springflow from Comal and San Marcos springs. A portion of the increase in springflow or enhanced springflow is captured at some point on the Guadalupe River after the water has been allowed to flow through the springs. This captured, enhanced springflow is re-circulated back to the recharge structures to repeat the process. To protect springflows when natural recharge is down, other water sources, including water from the Carrizo Aquifer, are used to recharge the Edwards Aquifer. Additionally, several management or pumping schemes are employed to "balance" water levels in the aquifer. For instance, when water levels are down in the San Antonio pool of the Edwards Aquifer, aquifer water is pumped from west to east, from the Uvalde pool to the San Antonio pool to take advantage of the hydrologic barrier referred to as the Knippa Gap.

The Authority has organized a group of participants to help direct the R&R analysis. This group, "Investigative Cooperators", is expected to participate financially as well. A second group, "Stakeholders", comprised of all interested parties, functions as advisors. Requests for Qualifications will be solicited in late 2001. A contractor will be selected in early 2002. The deadline for completion of the R&R analysis is December 31, 2003.

* This date is not required by the Act.

CHALLENGES

- Consensus on scope of work among participants.
- Availability of new model. There is a question of whether the new model will be ready in time to completely analyze R&R.
- The Authority may need to include more work than originally envisioned, which may increase costs.
- Agreement to the validity of analysis and conclusions.
- Determining the appropriate role of the Authority in implementing R&R, should the results be favorable.

STRATEGIES AND TIMELINE

2.2.1	Select a contractor to conduct the recharge and recirculation analysis.	By June 30, 2002
2.2.2	Contractor conducts research and prepares a report for the Texas Water Development Board (TWDB) and South Central Texas Regional Water (Region L) Plan, if the results are favorable.	May 1, 2002 - December 31, 2003
2.2.3	Work with TWDB and Region L to incorporate the results into the Region L Plan.	By January 31, 2004
2.2.4	Finalize appropriate documents with necessary parties for implementation of recharge and recirculation program.	By September 30, 2004

RESPONSIBLE PARTIES

Teams: Aquifer Science and Planning and Conservation

The Program Manager - Aquifer Science and Water Resources Coordinator - Planning and Conservation are responsible for implementation of this objective.

INTERNAL AND EXTERNAL LINKAGES

Successful implementation of this objective depends on the completion of several other objectives in this plan, including reducing aquifer pumping to 450,000 acre-feet (Objective 1.3); developing a process for evaluation of adjusting the cap (Objective 1.5); completing the Habitat Conservation Plan (Objective 2.1); completing the Comprehensive Water Management Plan (Objective 2.3); establishing a demand management program (Objective 2.9); continued participation in Region L activities, continuing Optimization Technical Studies (Objective 3.2); and legislative monitoring and preparation (Objective 7.4).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.2	2002	2003	2004	2005	2006
Complete recirculation analysis and submit results to South Texas Regional Planning Group.	Covered Under Strategy 2.10.2	$100,000	BOC	N/A	N/A

Objective 2.3:	**Complete Comprehensive Water Management Plan by December 31, 2002.***
Statutory Authority:	**Section 1.25.**

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

BACKGROUND

The Authority is mandated to develop a Comprehensive Water Management Plan (CWMP). The Act, though vague in describing the process, outlines some specifics to be included in the plan. For instance, the CWMP must include conservation, future supply, and demand management plans. Additionally, the Authority must work with the South Central Texas Water Advisory Committee (SCTWAG), the Texas Water Development Board and underground water conservation districts within the Authority's boundaries to develop a 20-year plan that provides alternative water supplies to the region. The plan must be established with five-year goals and objectives to be implemented by the Authority. The Edwards Aquifer Legislative Oversight Committee and "appropriate" state agencies must annually review this program.

Finally, the Act delineates three general requirements that must be considered in developing the 20-year alternative supply plan component of the CWMP:

- the Authority must thoroughly investigate all alternative technologies;
- the Authority must investigate mechanisms for providing financial assistance for alternative water supplies through the Texas Water Development Board; and
- the Authority must perform a cost-benefit analysis and an environmental analysis.

Many sections of the CWMP are presently being drafted or internally reviewed. Several key sections of the CWMP are dependent upon the development and completion of other planning efforts being conducted by the Authority, such as the Critical Period Management Plan, the Habitat Conservation Plan, and the Strategic Plan. Staff anticipates presenting a draft CWMP, or a portion thereof, to the Authority's Legislative Oversight Committee in early 2002.

* The actual date in the Act has been adjusted and is now June 28, 1998 because of the Barshop decision.

CHALLENGES

- Completion of component plans of the CWMP such as Demand Management/Critical Period Management Plan, and Habitat Conservation Plan.
- Agreements regarding how the component parts are interrelated.
- There will likely be discussion that is centered on the alternative supply plan, especially R&R.
- Integrating/incorporating strategies such as R&R and some type of quarry use that are scheduled for completion after the CWMP completion date and that may affect the implementation of the CWMP.
- Acceptance of 1990 population and demand numbers may be an issue. The delay has put the Authority two years past the 2000 census.
- Additional technical analyses to confirm new and/or modified supply options.
- Securing commitment from applicants/permittees on future water supply plans (this will be important to the HCP).

STRATEGIES AND TIMELINE

2.3.1	Board adopts comprehensive water management plan.	By December 31, 2002
2.3.2	Approve water supply plan component of comprehensive water management plan.	By December 31, 2002 annually
2.3.3	Develop a plan summary to explain purpose and process to the public.	By February 28, 2003
2.3.4	Adopt alternative water supply and pool rules.	By September 30, 2003
2.3.5	Review and revise the Groundwater Management Plan by incorporating it into the comprehensive plan.	By December 31, 2003
2.3.6	Evaluate the effectiveness of the comprehensive plan, and amend the plan, if necessary.	By December 31, 2004 annually

RESPONSIBLE PARTIES

Team: Planning and Conservation

The Water Resources Coordinator is responsible for overseeing the overseeing development of the CWMP.

INTERNAL AND EXTERNAL LINKAGES

Successful completion and implementation of this objective depends on successful completion of several other objectives in this strategic plan:, such as completing the Comprehensive Water Management Plan (Objective 2.3); researching water management strategies (Objective 2.4); implementing the Edwards Aquifer Authority Groundwater Conservation Program (Objective 2.5); establishing a recharge enhancement program (Objective 2.7); establishing a demand management program (Objective 2.8); continued participation in South Central Texas Regional Planning Group activities (Objective 2.9); continued Optimization Technical Studies (Objective 3.2); water quality protection activities (Objective 4.1), as well as public affairs and legislative monitoring. This objective is also dependent on continued enforcement of the Endangered Species Act.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.3	2002	2003	2004	2005	2006
Complete Comprehensive Water Management Plan.	$105,000	$65,000	$50,000	$50,000	$90,000

Objective 2.4: **Research water management strategies by September 30, 2006.***

Statutory Authority: **Section 1.27.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. **Research and develop additional sources of water.**
8. **Provide strong, professional management for the Authority.**

BACKGROUND

The Authority is currently considering four water management strategies: brush management, quarry utilization, precipitation enhancement, and using water from the bad water line.

Brush Management

The Edwards Aquifer Recharge Zone encompasses approximately 5,600 square miles and contains the drainage basins of streams that recharge the aquifer. Research conducted in the San Antonio area has shown that the removal of woody vegetation followed by the establishment of perennial grass cover will result in increased water yields from rangeland watersheds. The initial documented results indicate increased surface-water yield has ranged from 40,000 to 140,000 gallons per acre treated per year depending on the percentage of woody plants removed. This information is based on field scale studies. Additional research would determine if the field scale results are applicable on a watershed scale.

In October 1998, the Authority approved a cooperative agreement with the Natural Resources Conservation Service (NRCS) to support a research program to evaluate woody species best management practices relative to enhancing water quality and increasing aquifer recharge in rangeland watersheds. The primary practice evaluated in this study is cutting cedar, while a secondary practice will include periodic burning to control cedar re-growth. The study is being conducted in three watersheds in the aquifer region and contains watershed drainage areas from 260 acres to 400 acres. The study began in 1999 and will be completed by September 2006.

Quarry Utilization

Quarries are steep-walled pits that offer large storage volumes for a relatively small surface area. There may be a potential benefit in utilizing quarry excavations for recharge and/or water storage facilities.

Currently, several firms actively mine the Edwards limestone located in the Edwards Aquifer Recharge Zone. The mined limestone is crushed and used to make several types of aggregate for construction purposes throughout Texas.

* This date is not required by the Act.

As mines have no room to expand or are mined out, owners look for alternative uses for the quarry pit. In recent years, quarries in the San Antonio area have been used for a theme park, a shopping complex, and a golf course. Examples of alternative uses in other areas include parks, wildlife preserves, flood control and water storage.

The Authority has prepared a scope of work for a feasibility study of utilizing the quarries for recharge and/or water storage facilities. It is anticipated that this initial study is a reconnaissance level study and will help determine if this particular idea is worth pursuing. The Authority anticipates retaining a contractor to conduct the feasibility study late this year or in early 2002. Once the contractor is retained, the study is scheduled to take several months. At the completion of the study, a determination will be made whether or not to pursue further analysis and if so, what type of analysis to conduct. If this project is carried out, it probably would not be completed until 2003. The study, if shown to be feasible, may be incorporated into the Recharge & Recirculation study.

Precipitation Enhancement

The Authority has been conducting an operational Precipitation Enhancement Program (PEP) since 1999. However, the actual benefit has not been determined. Therefore, this water management strategy is included in Objective 2.4 Research and also in Objective 2.5 Implementation. The goal of the Authority's PEP is to decrease demand on the aquifer and increase recharge to the aquifer by seeding clouds from aircraft with agents to increase the rainfall. Most of the annual rainfall in the Edwards Aquifer region occurs from April through September. Consequently, the PEP usually operates during this time period (in 2000, the PEP operated from March through November because it was unusually dry).

While there have been many developments in the understanding of climatology and meteorology and there has been research into the effects of seeding agents in simulated cloud chambers; little progress has been made to corroborate the actual benefits of a PEP using empirical data and scientifically acceptable methodology. Therefore, the Authority commissioned a study in 2001, that will be completed in 2002, and include an evaluation of the PEP from 1999 through 2001.

Use of Water from the "Bad Water" portion of the Edwards Aquifer

Management of the Edwards Aquifer is concentrated on the recharge zone and freshwater portion of the artesian zone as those are the zones containing potable water. However, there is a significant portion of the Edwards Aquifer on the "bad water" side of fresh water/saline water interface (an imaginary line where the water quality, as defined by total dissolved solids (tds), reaches 1000 milligrams per liter (mg/L) total dissolved solids. There is also a significant volume of groundwater that varies in quality from 1000 mg/L tds to 10,000 mg/L tds.

This option would involve withdrawal of water from the aquifer south of the bad water line. The area selected for withdrawal of the water supply would need to be geologically isolated from the fresh water portions of the aquifer to prevent induced migration of freshwater into the saline water zone. The water supply would also require advanced treatment using desalinization processes to reduce total dissolved solids to a level acceptable for specified uses.

Two advantages of this option are:

- potentially large volumes of supply are available in relatively close proximity to demand centers;
- few institutional constraints to implementation; and
- environmental impacts would be relatively small. This option would require additional geologic investigation to determine its technical feasibility as a water supply source and economic analyses to determine its costs relative to other water supply alternatives. The Edwards Aquifer Optimization Program (EAOP) has an ongoing project designed to understand the dynamics of the interface between the freshwater and saline layers of the aquifer and to determine the affect of pumping on the location of the bad water line. Once technical and economic uncertainties are resolved, the option could be implemented within one to five years.

Redistribution of Pumping Centers

Generally, groundwater in the Edwards Aquifer flows from west to east with higher groundwater elevations occurring in Uvalde County than in San Antonio or at the Comal and San Marcos springs. A geological feature known as the Knippa Gap is located just west of the Uvalde/Medina County line. This feature appears to restrict groundwater movement from west to east.

Currently, water for municipal use is withdrawn from the aquifer in close proximity to demand centers with the greatest demand occurring in the San Antonio area. However, separating this relationship by moving pumping centers west of San Antonio, possibly west of the of the Knippa Gap, may prove beneficial during short-term drought to protect flows from Comal and San Marcos springs and minimizing pumping restrictions in the San Antonio Pool.

Limited studies using the GWSIM-IV groundwater model appears to support a short-term benefit to moving pumping centers; however, specific and detailed analysis has not been performed related to long-term impact to the Uvalde area. The Authority is proposing to commission a study in late 2002 for an evaluation of the redistribution of pumping centers.

CHALLENGES

Brush Management

- Verifying the actual water savings from this management technique. More specifically, since this alternative is being considered a supply, it will be necessary to determine the amount of saved water that makes it into the aquifer.
- Finding a means of equitably distributing the costs for implementation of a program.

Quarry Utilization

- Public acceptance. The concept will have to be carefully communicated to the public, landowners, and governmental regulatory bodies.
- Establishing monitoring and watershed plan to alleviate contaminate concerns.
- Engineering to make the quarries in fractured/karst limestone hold water.
- Providing a water source/mechanism to supply quarries.

Precipitation Enhancement

- Verifying the benefit from this program. This will involve trying to determine the additional precipitation created by seeding activities and how they have benefited aquifer users (reduced demand and/or increased recharge).
- Choosing an appropriate level of independence. The Authority will have to choose whether it wants to remain totally dependent on an outside contractor for all aspects of the program or whether it wants to act as a general contractor and hire all professional persons associated with the program and purchase all equipment such as radar and airplanes.

Use of Water from the "Bad Water" portion of the Edwards Aquifer

- Understanding the hydrologic properties of the water from the "bad water" portion of the aquifer. As the water is of inferior quality, it is rarely used and studied. Therefore, the Authority must determine characteristics such as the volume of water potentially accessible, the permeability or areas of differing permeability, subsurface structure and its effect on permeability and hydraulic connectivity with the fresh water portion of the aquifer

Redistribution of Pumping Centers

- Cost of infrastructure. The movement of pumping centers would require a substantial investment in new infrastructure in the region including purchase of land, installation and operation of wells and pumps, and completion of pipelines.
- Legislative restrictions. The Authority's enabling legislation prevents the export of water from western counties to eastern counties.
- Long-term impacts. Moving of pumping centers to west of the Knippa Gap may result in a severe decline in groundwater levels and surface stream flow in Uvalde County in the event of a long-term drought in the region.

STRATEGIES AND TIMELINE

2.4.1	Conduct evaluation of 2001 Precipitation Enhancement Program.	By June 30, 2002
2.4.2	Conduct research to determine recharge benefit from precipitation enhancement program.	By December 31, 2002
2.4.3	Conduct precipitation enhancement program through contract with existing operational programs in the area.	Beginning May 1, 2002
2.4.4	Develop an informational piece to explain precipitation enhancement program to the public.	March 31 of each year
2.4.5	Continue and complete brush management research.	By September 30, 2006
2.4.6	Complete quarry management research.	By September 30, 2002
2.4.7	Conduct and complete research on using water from the other side of the "bad water line."	December 31, 2004
2.4.8	Conduct analysis of redistribution of pumping centers.	By June 30, 2003.

RESPONSIBLE PARTIES

Team: Planning and Conservation

The Water Resources Coordinator and the Program Coordinator are responsible for developing the water management strategies.

INTERNAL AND EXTERNAL LINKAGES

Successful implementation of this objective will depend on implementation of reducing aquifer pumping to 450,000 acre-feet (Objective 1.3); reducing aquifer pumping to 400,000 acre-feet (Objective 1.4); developing a process for adjusting the cap (Objective 1.5); completing the HCP (Objective 2.1); completing the CWMP (Objective 2.3); establishing a demand management program (Objective 2.9); and continuing OTS (Objective 3.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.4	2002	2003	2004	2005	2006
Research water management strategies for possible implementation.	$345,000	$140,000	$130,000	$180,000	$180,000

Objective 2.5:	**Implement Edwards Aquifer Authority Groundwater Conservation Program by March 1, 2006.***
Statutory Authority:	**Sections 1.01; 1.08; 1.21; 1.23; 1.25; 1.26; 1.34.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. **Promote healthy economies in all parts of the region.**
7. **Research and develop additional sources of water.**
8. **Provide strong, professional management for the Authority.**

BACKGROUND

The Act requires the Authority to prepare and implement a regional Groundwater Conservation Plan (GCP). In addition to requiring a regional conservation plan, the Act authorizes the Authority to require permittees to submit individual conservation plans. The Authority's GCP will serve as a guidance for document applicants and permittees to use to develop and implement individual plans. The information obtained from individual conservation plans will be summarized into a report that will be supplied to the Texas Legislature at the beginning of each legislative session.

The purpose of the GCP is to encourage, promote, and document year-round conservation measures in the region. The development and implementation of regional and individual plans will assist the Authority and its applicants with successful management of groundwater consumption. Increasing water demands, extreme weather variability, and mandated water usage reductions that have been enacted in the past few years make year-round conservation a necessary component of regional and individual planning efforts.

Each municipal, industrial, and irrigation user within the Authority's jurisdictional boundaries must implement individual conservation programs to improve water use efficiency. These conservation programs will be documented through preparation of individual plans. Conservation will be achieved through the implementation of best management practices, which are defined as practices that have shown documented improvements in water use efficiency. All applicants will be expected to implement a minimum number of conservation practices within specified time frames.

CHALLENGES

- Monitoring and enforcement. All applicants and permittees are required to submit a conservation plan to the Authority. Finding the time to confirm the conservation plans are complete and sufficient and monitoring compliance and enforcement will be an enormous challenge.

* This date is not required by the Act.

- The issue of "water savings." This issue is a challenge particularly in light of the fact that demand projections and the marketability of water rights will likely result in only a minimum reduction in withdrawal from the aquifer. If savings documentation is to remain an element of the groundwater conservation plan, it is imperative that the water saving documentation be presented in a manner that is understandable to all applicants and permittees. It is also important to make sure that water savings are accurately calculated and verifiable.
- Developing additional conservation efforts without additional personnel if the monitoring and enforcement activities are strenuous.

STRATEGIES AND TIMELINE

2.5.1	Submit Authority Conservation and Reuse Plan to the Texas Legislature by January 1 of each odd-numbered year.	Beginning January 1, 2003
2.5.2	Submit Authority GCP by January 1 of each odd-numbered year.	Beginning January 1, 2003
2.5.3	Conduct five public hearings.	By August 31, 2002
2.5.4	Complete GCP and review for possible revisions every other year.	By June 30, 2002
2.5.5	Board adopts groundwater conservation rules.	By September 30, 2002
2.5.6	Board to award A.O. "Odie" Gilliam Agricultural Water Conservation Award.	By March 31 of each year
2.5.7	Distribute home water audit forms to 200 homes annually.	Beginning July 31, 2002
2.5.8	Develop information pieces on GCP and programs and update as needed.	By March 31, 2003
2.5.9	Require users to submit GCP's to the Authority.	By April 30, 2003 By July 31, 2003 By December 31, 2003
2.5.10	Authority staff reviews all plans for compliance.	By December 31, 2003
2.5.11	Authority staff annually reviews status report forms.	Beginning September 30, 2003
2.5.12	Authority staff continues monitoring compliance with GCP's.	Annually
2.5.13	Implement rainwater harvesting program and xeriscape rebate guidelines.	By December 31, 2004
2.5.14	Implement region-wide turf grass reduction and use of native species on the recharge zone.	By March 30, 2005
2.5.15	Promote miscellaneous conservation activities throughout the region.	Annually

RESPONSIBLE PARTIES

Team: Planning and Conservation

The Conservation Specialist is primarily responsible for strengthening conservation efforts.

INTERNAL AND EXTERNAL LINKAGES

Successful implementation of this objective depends on implementation of the following objectives: completing the HCP (Objective 2.1); completing the CWMP (Objective 2.3); continuing the Agricultural Water Conservation Loan Program (Objective 2.7); establishing a demand management program (Objective 2.9); and continuing basic data collection (Objective 3.1). Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objective 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.5	2002	2003	2004	2005	2006
Implement Edwards Aquifer Authority Groundwater Conservation Program.	$37,600	$33,600	$41,600	$71,600	$76,600

Objective 2.6:	**Continue Agricultural Water Conservation Loan Program and conduct annual review for overall program effectiveness by June 30, 2003.**
Statutory Authority:	**Sections 1.01; 1.08(a); 1.21; 1.23; 1.24; 1.25; 1.34.**

BACKGROUND

The Authority's Agricultural Water Conservation Loan program is one of the programs that promote conservation.

In September 1998, the Texas Water Development Board (TWDB) approved a $3 million loan request by the Authority to make low interest loans available to irrigators to purchase equipment to improve agricultural water use efficiency. In May 2001, the TWDB approved an additional $1 million loan request by the Authority. To date, the Authority has issued 28 loans, totaling about $2.5 million dollars.

The Authority will pay back the TWDB loan over an 8 year-period through the revenue generated from individual loans to irrigators. Individual loans are available for new capital materials and equipment for irrigation water delivery and application mechanisms. Loan amounts up to 90 percent of the value of eligible expenses is available if the security pledged for the loan is equal in value to the amount of the loan. Loans are secured by a first lien on the equipment and/or other forms of collateral equal to or exceeding in value the loan amount in favor of the Authority and the TWDB. Permitted water rights may also be pledged as additional collateral. The program has resulted in improved water use efficiency averaging about 30 percent water savings for participating irrigators.

CHALLENGES

- Dwindling opportunities for installation of new efficient irrigation equipment over time. Irrigation demands are expected to decline over time and, coupled with economic incentives to the irrigator to market conserved water, ultimately all irrigation will achieve maximum efficiency.
- Avoiding a default situation. Adding the water rights as collateral will help.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

STRATEGIES AND TIMELINE

2.6.1	Carry over funds borrowed during the previous year to the next year, and issue 10 loans to cover the $1 million.	By December 31 of each year
2.6.2	Prepare promotional material for the program.	Annually
2.6.3	Conduct efficiency evaluations of all systems installed pursuant to the Authority's loan program, and submit report to the General Manager. Determine if additional money should be obtained from TWDB or if Authority can self-finance.	By November 30 of each year
2.6.4	Conduct evaluation to determine the future of the program.	By June 30, 2003

RESPONSIBLE PARTIES

Team: Planning and Conservation

The Program Coordinator is responsible for overseeing the Agricultural Water Conservation Loan Program.

INTERNAL AND EXTERNAL LINKAGES

Successful implementation of this objective depends on the implementation of the GCP (Objective 2.6).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.6	2002	2003	2004	2005	2006
Maintain Agricultural Water Conservation Loan Program.	$7,000	$7,000	$7,000	$7,000	$7,000

Objective 2.7:	**Establish a recharge enhancement program by January 31, 2003.[6]**
Statutory Authority:	**Sections 1.08; 1.11 (f); 1.44; 1.45.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. **Research and develop additional sources of water.**
8. Provide strong, professional management for the Authority.

BACKGROUND

The Authority may contract with any political subdivision of the state to provide for artificial recharge of the aquifer through injection wells or surface water projects for the subsequent recharged water recovery by the political subdivision or its authorized assignees. The Authority can enter into a cooperative contract if the political subdivision agrees to:

- file with the Authority injection or artificial recharge records;
- protect Aquifer water quality; and
- protect other Aquifer users' rights in designating the injection well or recharge dam location, the injection or recharge method, and the retrieval well location and type.

The political subdivision is entitled to withdraw, during any 12-month period, the measured amount of water actually injected or artificially recharged during the preceding 12-month period, less the amount determined by the Authority to account for the artificially recharged water discharged through springs. It must also compensate the Authority in lieu of owners' fees. The amounts of water withdrawn under a cooperative contract are not subject to the maximum total permitted withdrawals provided by Section 1.14 of the Act.

The Authority also may build or operate recharge dams in the recharge area of the aquifer if the recharge is made to increase the yield of the aquifer and the recharge project does not impair senior water rights or vested riparian rights.

Artificial Recharge, Storage and Recovery Rules are in the draft proposed rule phase. Staff proposes the recharge rules be reviewed by a consultant with engineering experience to determine if the rules will be sufficient to develop recharge projects. Staff also proposed that an engineering consultant review applications as they are submitted, and make recommendations to the General Manager.

[6] This date is not required by the Act.

CHALLENGES

- Ensuring recharge credits are fair and accurate.

STRATEGIES AND TIMELINE

2.7.1	Determine desired skills and services of consultant to administer recharge program.	By May 31, 2002
2.7.2	Complete research necessary to develop rules for artificial recharge, storage, and recovery projects.	By April 30, 2002
2.7.3	Conduct RFP process and award contract for consultant to administer large recharge structure program and conduct technical review of recharge applications.	By May 31, 2002
2.7.4	Develop all aspects of large recharge structure program.	By June 30, 2002
2.7.5	Develop recharge rules.	By July 31, 2002
	Adopt final rules.	By December 31, 2002
2.7.6	Implement recharge program.	By January 31, 2003
2.7.7	Develop and distribute an information piece to explain purpose and process to the public.	By January 15, 2003
2.7.8	Notify all permittees of program and ongoing, as needed.	By February 28, 2003
2.7.9	Review all permits by December 31 each year beginning 2004.	By December 31, annually.
2.7.10	Conduct annual evaluation of the program's effectiveness and submit recommendations to General Manager.	By September 30, 2004
2.7.11	Develop and implement small recharge structure program.	By May 31, 2005

RESPONSIBLE PARTIES

Team: Permitting and Enforcement

The Program Manager and the Regulatory Programs Coordinator are responsible for developing recharge rules.

INTERNAL AND EXTERNAL LINKAGES

Successful implementation of this objective depends on implementation of, implementing the HCP (Objective 2.1); implementing the CWMP (Objective 2.3); establishing a demand management program (Objective 2.9); and continuing to conduct OTS (Objective 3.2). Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.7	2002	2003	2004	2005	2006
Establish a recharge enhancement program.	$50,000	$105,000	$200,000	$200,000	$100,000

Objective 2.8:	**Establish Demand Management/ Critical Period Program by September 30, 2002.***
Statutory Authority:	**Sections 1.25; 1.26.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. **Research and develop additional sources of water.**
8. Provide strong, professional management for the Authority.

BACKGROUND

Article 1.26 of the Act requires the Authority to "prepare and coordinate implementation of a program for critical period management on or before September 1995." The Act requires the program:

- distinguish between discretionary and nondiscretionary water use;
- require reduction of discretionary uses as much as possible;
- require utility pricing that limits discretionary use as much as possible; and
- require reduction of nondicretionary use by permitted or contractual users as much as possible.

The Act uses three terms to refer to aquifer reduction measures intended to slow the rate of decline of aquifer levels and springflows. Aquifer reductions are a necessary element of protection for federally protected species and habitats in Comal and San Marcos springs. The terms are *drought management, demand management* and *critical period management programs.* The Aquifer Management Planning Committee has recommended eliminating the term drought management and combining the terms demand management and critical period to reflect the general concept of the current aquifer reduction program.

The Authority has also been developing critical period rules to implement the program. To assist in that effort, Authority staff established a Critical Period Technical Advisory Group (CPTAG) in October 2000. The group was made up of Authority staff and technical consultants, and charged with:

- evaluating the relationship between precipitation, recharge, aquifer withdrawals, aquifer levels, and spring discharge for numerous low rainfall/low springflow periods for the aquifer; and
- evaluating various water management options using the GWSIM-IV computer simulation model developed by the TWDB.

* This date is not required by the Act.

CHALLENGES

- Developing a program that has measurable benefits to springflows, species and habitats.
- Developing a program that imposes restrictions on aquifer users.
- Developing a program that distributes reduction measures equitably among all aquifer users.

STRATEGIES AND TIMELINE

2.8.1	Develop program that imposes restrictions and submit demand management/critical period program analysis to board.	By February 28, 2002
2.8.2	Board adopts demand management/critical period rules.	By August 31, 2002
2.8.3	Develop and distribute information piece to explain demand management/critical period program to the pumpers and general public.	By September 15, 2002
2.8.4	Develop demand management/critical period program database.	By September 30, 2002
2.8.5	Develop scheduled withdrawal form for permittees and applicants.	By September 30, 2002
2.8.6	Mail scheduled withdrawal forms to all permittees and applicants.	Annually beginning October 31, 2002
2.8.7	Conduct workshops to explain demand management/critical period program forms.	By November 30, 2002
2.8.8	Mail "official" scheduled withdrawal reports to all permittees and applicants by January 1 of each year.	Beginning January 1, 2003
2.8.9	Submit "official" scheduled withdrawal reports for all permittees and applicants to the board on an annual basis.	Beginning January 31, 2003
2.8.10	Make final corrections to scheduled withdrawal report form by March 1 of each year.	Beginning March 1, 2003
2.8.11	Include analysis to compare the cost of limiting withdrawals to that of providing water through augmentation.	By June 30, 2003
2.8.12	Adopt "pool" rules that provide the method for defining the location and extent of pools within the Authority.	By September 30, 2003

RESPONSIBLE PARTIES

Teams: Executive and Permitting and Enforcement.

The Chief Technical Officer and the Regulatory Programs Coordinator are primarily responsible for this program.

INTERNAL AND EXTERNAL LINKAGES

Successful implementation of this objective depends on implementation of reducing aquifer pumping to 450,000 acre-feet (Objective 1.3); reducing aquifer pumping to 400,000 acre-feet (Objective 1.4); developing a process for adjusting the cap (Objective 1.5); implementing the HCP (Objective 2.1); implementing the CWMP (Objective 2.3); establishing a demand management program (Objective 2.9); and, continuing OTS (Objective 3.2). Implementation also depends on continued enforcement of the Endangered Species Act. Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.8	2002	2003	2004	2005	2006
Establish Demand Management/ Critical Period Plan by May 31, 2002.	$17,500	$110,000	$17,000	$10,000	$17,000

Objective 2.9:	**Continue participation in the South Central Texas Regional Planning Group (Region L) activities.**
Statutory Authority:	**Sections 1.08(a); TX. Water Code Ann. 16.053.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. **Research and develop additional sources of water.**
8. Provide strong, professional management for the Authority.

BACKGROUND

On February 19, 1998, the TWDB adopted rules for state and regional water planning and grant assistance, designating 16 regional water planning areas to implement state and regional water planning aspects of Senate Bill 1 (SB 1). The overall goal of SB 1 is to:

> *"develop regional and state water plans that will provide for the orderly development, management, and conservation of water resources, and preparation for and response to drought conditions in order that sufficient water will be available at a reasonable cost to ensure public health, safety, and welfare further economic development, and protect the agricultural and natural resources of the planning area."*

The South Central Texas Regional Water Planning Group (Region L), is one of the 16 regional planning groups established by the TWDB to develop a regional water plan as required by SB 1. The South Central Texas study area, also known as Region L, encompasses twenty and one-half (20 1/2) counties with a total 1990 population of 1,695,584 (1990 US Census Data). The Authority has three representatives on the eleven-member appointed board of the Region L. Numerous river basins, aquifers, and reservoirs are contained partially or completely within the study area.

The Region L is required to develop a regional water plan, establish policies, make decisions, and consider interest groups in the development of the regional water plan. The development of a regional water plan includes studies, decisions, and recommendations regarding the water supply needs, potential water supply options and strategies throughout the area. Recognizing the importance of public participation, the Region L has established a public participation process to achieve stakeholder acceptance of the regional water plan.

Region L developed a regional water supply plan and submitted it to the TWDB for approval. The TWDB formally approved the Region L plan on July 18, 2001. The total capital cost to develop the water management strategies in the Region L plan is $4.72 billion. Region L estimated that the water needs for the region under drought of record conditions to be 494,874 acre-feet/year in 2000. Due to a population growth of 4.5 million people in 2050, the water needs in 2050 increase to 785,725 acre-feet/year.

The Region L plan includes water management strategies that could produce new supplies of up to 744,053 acre-feet/year in 2050. These strategies include municipal and irrigation water conservation, water reuse, transfer of irrigation rights, increased use of Canyon Reservoir, Lower Guadalupe River diversions, Colorado River diversions, Edwards recharge, and groundwater use from Carrizo and Simsboro aquifers.

The Region L consultants are currently working on a scope of work and budget for developing an Infrastructure Financing Report (IFR). The IFR is required in order for the TWDB, and ultimately the legislature to determine, the cast of the water plans and the type of funding mechanisms required. The Region L report is scheduled for completion in May 2002.

The TWDB is scheduled to adopt the State Water Plan on January 5, 2002. Region L will begin working on round 2 of the regional water planning process. Round 2 entails developing and refining a regional water plan to submit to the TWDB in 2006 for the 2007 State Water Plan. The administrator of this planning process, San Antonio River Authority, envisions this process continuing in perpetuity.

CHALLENGES

- Updating the regional water plan based on the results of optimization studies or other directed research.
- Modifying the water supply component of the CWMP based on revisions to the regional water supply plan.
- Funding equity for the regional planning effort.
- Incorporating new options into water supply plan as new information is developed.

STRATEGIES AND TIMELINE

2.9.1	Develop Region L scope of work for next phase of investigations.	By March 31, 2002
2.9.2	Provide recommendation to Region L on Authority recommended water management strategies.	By December 31, 2003
2.9.3	Complete revised Region L draft plan.	By March 31, 2005
2.9.4	Complete Region L regional water plan.	By March 31, 2006

RESPONSIBLE PARTIES

Team: Planning and Conservation

The existing Water Resources Coordinator is responsible for development of this program.

INTERNAL AND EXTERNAL LINKAGES

Successful implementation of this objective depends on implementation of reducing aquifer pumping to 450,000 acre-feet (Objective 1.3); reducing aquifer pumping to 400,000 acre-feet (Objective 1.4); developing a process for adjusting the cap (Objective 1.5); implementing the HCP (Objective 2.1); implementing the CWMP (Objective 2.3); establishing a demand management program (Objective 2.9); and, continuing OTS (Objective 3.2). Implementation also depends on continued enforcement of the Endangered Species Act.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 2.9	2002	2003	2004	2005	2006
Continue participation in the South Central Texas Regional Planning Group (Region L) activities.	$29,000	$50,000	$50,000	$50,000	$50,000

RESEARCH

FUNCTIONAL AREA THREE: RESEARCH

Objective 3.1:	**Continue basic data collection, and conduct annual program evaluation to determine overall program effectiveness.***
Statutory Authority:	**Section 1.27.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. Maintain continuous springflow.
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

BACKGROUND

Authority staff collects surface water and groundwater quality data, groundwater level data, rainfall data, and geophysical well logs at a number of locations within the area of the aquifer. Staff collects water quality data annually from at least 76 wells and four springs to monitor aquifer water quality. Water quality data is also collected from eight stream locations to monitor quality of surface water recharged to the aquifer.

Authority staff collects data in a number of ways throughout the year. For example, the staff:

- monitors groundwater levels with continuous water level monitoring equipment in 36 wells;
- takes monthly water level measurements from 18 wells;
- takes measurements three times annually from approximately 200 wells, taking "synoptic" water level measurements;
- collects rainfall at 63 locations using continuous recording rain gauges; and
- maintains geophysical logging equipment to obtain well construction information and geologic information from wells.

The hydrologic data collected by the Authority is summarized in an annual report.

In addition to the basic data collection performed by Authority staff, the Authority contracts with the United States Geological Survey (USGS) to collect data to gauge streamflow. In the agreement between the Authority and the USGS for 2001-2002, the Authority cooperatively funds 10 continuous streamflow gauges, one reservoir gauge, the installation of two new streamflow gauges, and the periodic measurements at two spring-fed streams. Under the agreement, the

* First annual evaluation to be conducted by July 31, 2002.

USGS also calculates recharge to the aquifer, springflow from the aquifer, and collects stormwater quality samples at locations in New Braunfels and San Marcos.

Though the Authority has established a variety of data collection methods, there are still improvements that need to be made. For example, the basic hydrologic data collected by the Authority is stored electronically but it is not extensively reviewed and it is not stored in a uniform manner. The Authority's basic data collection work needs additional manpower to ensure data quality or the number of data collection sites needs to be reduced until available staff can ensure data quality. Needed improvements to the Authority's basic data collection activities include:

- ***Groundwater quality monitoring.*** The Authority needs a written groundwater quality monitoring plan that outlines its groundwater sampling objectives and includes guidelines on selecting sampling locations, analytical parameters, sampling frequencies, and data quality objectives. Springflow water quality monitoring is recommended.
- ***Groundwater level monitoring plan.*** A written groundwater level monitoring plan is needed that identifies specific wells that are to be monitored on a continuous or periodic basis and outlines specific areas where additional water level recorders are needed. The plan needs to include data quality objectives for water level and Global Positioning System (GPS) data.
- ***Field equipment operations.*** Additional manpower is needed to ensure that each recording device is visited and preventive maintenance is performed on a regular basis. Regular quality assurance checks on the rain gauges are needed. Regular visits to all continuous water level recorders are needed to ensure that data are not lost.
- ***Hydrologic data review and storage.*** The Authority needs to finalize a written hydrologic data management plan and implement the hydrologic data management system. The system will encompass methodologies for data quality assurance, data storage formats and data queries. The hydrologic data management plan and system should be formatted similar to those of the TWDB. Additional manpower is required to perform quality assurance on all data collected and ensure that the data is being stored in the correct format and the correct location. These data management activities need to be performed on an ongoing basis.

CHALLENGES

- Obtaining access to private property to sample wells.
- Maintaining the large amount of recording equipment in the field.
- Manpower availability on a daily basis that can operate and perform maintenance on the data collection equipment.
- Manpower availability to prepare and review the annual data report in a timely manner.

- Manpower to ensure that all appropriate operating plans are in place and are kept current. These plans include a water quality sampling plan and a water level monitoring plan.
- Manpower to ensure that data quality is maintained.

STRATEGIES AND TIMELINE

3.1.1	Continue data collection systems in place. Review hydrologic data collection program and remote gauging system.	Annually
3.1.2	Review all data collection efforts currently under way to ensure that all efforts are necessary, properly performed, and properly staffed.	By May 31, 2002
3.1.3	Develop a written hydrologic data management plan and submit to General Manager for approval.	By July 31, 2002
3.1.4	Based on hydrologic data management plan, implement new hydrologic data management system.	December 31, 2002
3.1.5	Complete groundwater level monitoring plan that specifies monitoring wells, additional equipment needed, and data quality objectives for water level and global positioning system data.	By July 31, 2002
3.1.6	Complete groundwater quality monitoring plan that outlines its groundwater sampling objectives, guidelines for selecting sampling locations, analytical parameters, sampling frequencies, and data quality objectives.	By July 31, 2002
3.1.7	Implement groundwater-monitoring programs.	By August 31, 2002
3.1.8	Complete annual hydrologic data report and update of Edwards Aquifer Bibliography.	By June 30 of each year
3.1.9	Prepare and release other groundwater analysis such as a groundwater quality trend analysis report and a synoptic water level measurement report.	Throughout the year
3.1.10	Conduct annual program evaluation to determine program effectiveness.	By August 31 of each year

RESPONSIBLE PARTIES

Team: Aquifer Science

The Aquifer Science Team oversees continuation of and improvements to basic data collection.

INTERNAL AND EXTERNAL LINKAGES

Implementation of this objective has an impact on the quantification of water savings in the conservation plan (Objective 2.5), aquifer pollution potential being assessed by the water quality programs (Objective 4.1), yield of the weather modification program (Strategy 2.4.1) and the HCP (Objective 2.1).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 3.1	2002	2003	2004	2005	2006
Continue basic data collection and conduct annual program evaluation to determine overall program effectiveness.	$416,000	$440,000	$450,000	$460,000	$470,000

Objective 3.2:	**Continue Optimization Technical Studies (OTS) schedule, and conduct annual program evaluation to determine program effectiveness.***
Statutory Authority:	**Section 1.27.**

BACKGROUND

In April 1999, the board approved funding for Optimization Technical Studies (OTS). The OTS includes a series of seventeen interrelated, mission-directed biologic and hydrogeologic research studies. The studies are designed to evaluate potential technical options for increasing the amount of water in the aquifer and identifying methods for increasing the amount of water available for withdrawal. Data and information from the OTS provide aquifer managers with the tools necessary to make scientifically sound decisions to benefit aquifer users and preserve the environment supported by the aquifer, including the Comal and San Marcos springs and downstream aquatic habitats. The studies are on an eight-year schedule; 2001 was the third year of the original schedule.

The Edwards Aquifer optimization concept originated from the San Antonio Mayor's Citizens Advisory Committee on Water Policy, assembled in the mid-1990s to discuss water policy. The committee identified aquifer data gaps and a technical advisory group was formed to identify and prioritize studies to address the data gaps. The seventeen OTS are the result of the group's work. A May 1999 OTS report describes the studies and includes a proposed budget and schedule for the studies.

The Authority is the primary funding agency for the OTS. However, several agencies including the San Antonio Water System (SAWS), the United States Geological Survey (USGS), and Department of Defense (DOD) provide significant amounts of funding for various studies.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. **Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.**
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. **Research and develop additional sources of water.**
8. Provide strong, professional management for the Authority.

With a few exceptions, the OTS are being initiated pursuant to a set schedule. Many of the studies scheduled to begin in 1999 were not initiated until 2000, so the process is roughly one year behind the original schedule. The Texas Wild-rice mapping project and the well sampling for aquifer biota projects are not receiving Authority funding for various reasons. The focused flow path studies are behind schedule primarily because specific work scopes have not been developed. The Authority adopted the original list of studies and their estimated budgets and schedules approximately two and a half years ago.

* First annual evaluation to be conducted by July 31, 2002. See attached OTS table *(Appendix Four)*.

Staff must assess other research needs, prioritize those needs, and put a process in place to ensure that all research activities are coordinated within the agency and with other relevant agencies. The Authority will discuss any new research initiatives with the technical advisory group since representatives from most area water-related agencies are members of this group. New research initiatives that may be considered within the next five years include:

- Aquifer flow path studies at Hueco Springs, northern Bexar County, Leona Springs, the Knippa Gap area, Comal Springs, and San Marcos Springs. These studies may be incorporated in the focused flow path studies of the OTS.
- Studies regarding the connection between the Trinity Aquifer and the Edwards Aquifer.
- Water quality studies to assess the effect of development on the Edwards Aquifer Recharge Zone.
- Water quality studies to assess the effectiveness of best management practices (BMPs) structures for controlling stormwater runoff-bound pollutants.
- Focused recharge studies.

CHALLENGES

- Integrating the OTS into the Authority's comprehensive water management plan (CWMP) to ensure that the OTS provide information needed for alternative management strategies.
- Determining what studies need to be removed or added to the OTS list so that the process supports the CWMP. If a study does not support the CWMP, Authority funding should be reconsidered.
- Building a consensus within the TAG regarding a revised list of studies and their budgets and schedules.
- Further defining the focused flow path studies.
- Manpower to develop scopes of work for new research initiatives.
- Manpower to perform or provide contract oversight for new research initiatives.
- Building a consensus with other agencies and the TAG regarding the scope of new research initiatives.
- Obtaining cooperative funding from other agencies to assist with new research initiatives.

STRATEGIES AND TIMELINE

3.2.1	Continue OTS as adopted by board of directors per Appendix Four.	Ongoing
3.2.2	Review all OTS currently on schedule to determine if each study is still necessary.	By January 31, 2002
3.2.3	Determine relative importance of completing each study and develop priority list.	By February 28, 2002
3.2.4	Develop scope of work for each study, identify all resources needed to complete each study, and total budgetary requirements.	By May 31, 2002
3.2.5	Present revised OTS schedule to the TAG.	By April 30, 2002
3.2.6	Present Edwards Aquifer Optimization Overview, and revised OTS schedule, along with accompanying budget information, to the board for consideration and approval.	By July 31, 2002
3.2.7	Implement revised OTS schedule.	By August 31, 2002
3.2.8	Review list of other possible studies, and determine the relative importance of completing each study to the Authority's work, and develop a priority list.	By September 30, 2002
3.2.9	For each additional study identified, develop a scope of work that includes the duration of the study, required resources, and total budgetary needs.	By December 31, 2002
3.2.10	Present the schedule for other studies, along with accompanying budget information, to Authority board for approval.	By February 28, 2003
3.2.11	Present the approved OTS schedule to the TAG.	March 31, 2003
3.2.12	Implement new OTS schedule.	April 30, 2003
3.2.13	Develop OTS collateral material summarizing each study and results to date.	By June 30, 2003
3.2.14	Perform other OTS studies as scheduled each year and conduct program effectiveness review.	By September 30 of each year

RESPONSIBLE PARTIES

Team: Aquifer Science

The Program Manager – Aquifer Science is primarily responsible for implementing this objective.

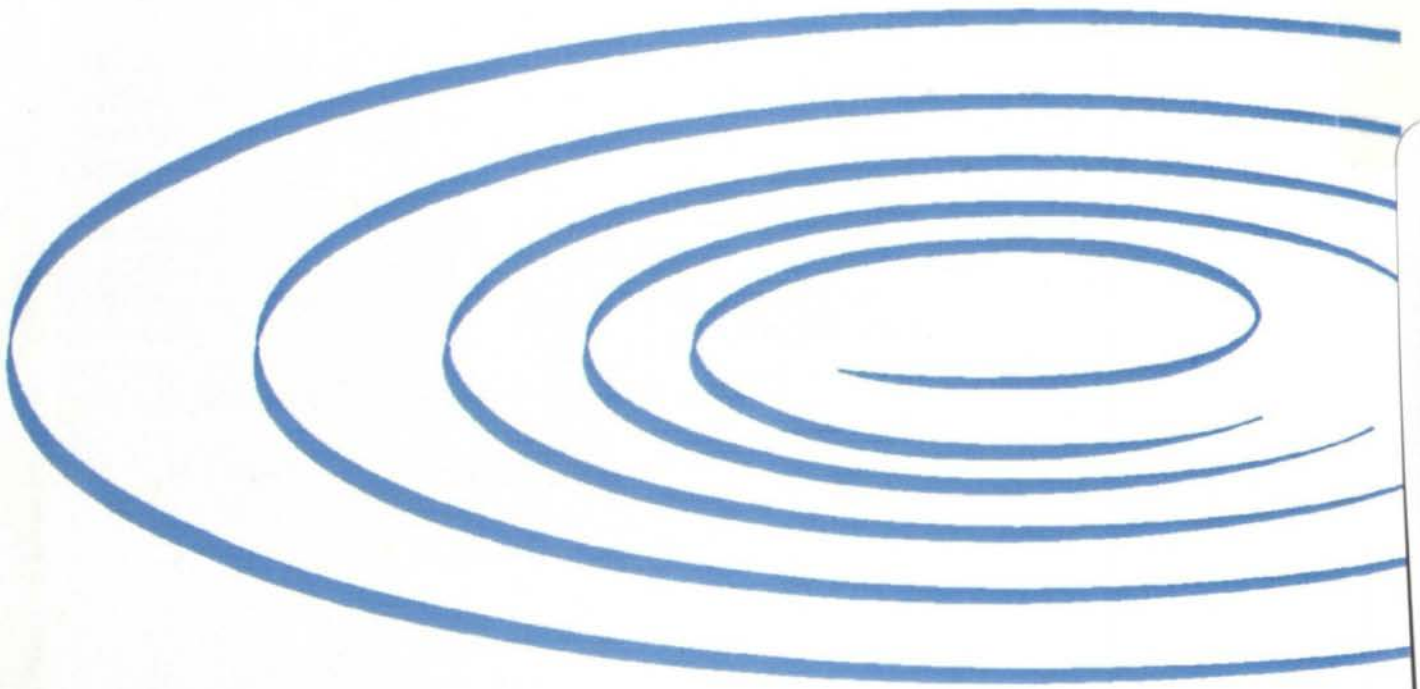
INTERNAL AND EXTERNAL LINKAGES

Implementation of this objective affects the strategies selected for the regional planning process and the 30-year Water Supply Plan (Strategy 2.9.2). Implementation also affects on the decision to adjust the permitted aquifer withdrawal cap (Strategy 1.5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 3.2	2002	2003	2004	2005	2006
Continue Optimization Technical Studies (OTS) and conduct annual program evaluation to determine overall program effectiveness.	$1,517,764	$1,037,500	$910,000	$766,000	$575,000

WATER QUALITY



FUNCTIONAL AREA FOUR: WATER QUALITY

Objective 4.1:	**Establish Edwards Aquifer Water Quality Program by December 31, 2002.***
Statutory Authority:	**Sections 1.03 (17) and (21); 1.08 (a); 1.11 (d)(8), (10), and (11); 1.14; 1.15; 1.35; 1.44.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

BACKGROUND

The Act grants the Authority relatively broad powers in the area of water quality protection. Section 1.08(a) of the Act states that:

> *"The authority has all of the powers, rights and privileges necessary to manage, conserve, preserve, and protect the aquifer and to increase the recharge of, and prevent the waste or pollution of water in the aquifer."*

However, the statute does not clearly delineate the specific role that the Authority should play in the area of water quality protection. As such, one of the critical policy decisions facing the board is defining the role of the agency in water quality protection. A goal of the Authority's water quality program will be to develop a comprehensive plan for Edwards Aquifer water protection for the entire jurisdiction area.

To help the board determine the Authority's future role in water quality protection, Authority staff has developed an inventory of existing and future water quality protection regulatory activities. The inventory identifies the governmental body that is currently responsible for administering the regulatory program (e.g., federal, state, local), and includes the following activities:

- Water Well Construction Regulations,
- Septic Tank Regulations,
- Water Pollution Abatement Plan Review,
- Impervious Cover Regulations,
- Water Quality/Pollution Discharge Elimination System Programs,
- Open/Illegal Dumps,

* This date is not required by the Act.

- Flood Plan Protection,
- Sediment Control,
- Wellhead/Source Water Protection,
- Water Supply Contingency Planning,
- Underground Storage Tank Regulation,
  - Installation;
  - Monitoring; and
  - Corrective Measures;
- Resource Conservation and Recovery Act;
  - Landfills; and
- Hazardous Materials Responses.

CHALLENGES

- The Authority needs to ensure that it has the technical expertise necessary to develop any new water quality regulations. Authority regulations will be scrutinized by various governmental bodies, permit holders, builders, and the public-at-large, and it is important that any regulation be grounded in sound science.
- Thoughtful and effective communication among regulatory agencies and the general public.
- Each water quality program will require personnel to design the program, draft rules, review applications, observe implementation, and monitor compliance.

RESPONSIBLE PARTIES

Teams: Chief Technical Officer and Aquifer Science

The Chief Technical Officer and Aquifer Science Team are responsible for implementing this objective.

STRATEGIES AND TIMELINE

4.1.1	Hire consultant to assist in defining and developing Authority's water quality role.	By March 15, 2002
4.1.2	Develop a matrix for General Manager that lists all existing water quality regulations, lead agency responsible for these regulations, brief overview of the regulation/program, recommended Authority role, and additional Authority staffing costs associated with that recommended role.	Approval of matrix by May 15, 2002
4.1.3	After working with board committee and stakeholders throughout the region, board considers adoption of recommendations for Authority water quality program.	By October 31, 2002

4.1.4	Staff incorporates new program into overall Authority regulatory and research programs and initiatives.	By January 31, 2003

INTERNAL AND EXTERNAL LINKAGES

This objectives affects the available supply for 30-year Water Supply Plan (Strategy 2.9.2) by working to ensure the availability of high quality aquifer water. Affects species and habitat protection measures (Objective 2.1) by working to ensure high quality aquifer water as springflow. Work performed to achieve this objective will also abate any potential risks to water quality from development over the recharge zone. Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

The $15,000 cost in 2002 is for hiring a consultant.

OBJECTIVE 4.1	2002	2003	2004	2005	2006
Establish Edwards Aquifer Water Quality Program.	$15,000	N/A	N/A	N/A	N/A

Objective 4.2:	**Establish petroleum storage tank (PST) regulation program by September 30, 2002.***
Statutory Authority:	**Sections 1.03 (17) and (21); 1.08; 1.35.**

BACKGROUND

The Texas Natural Resource Conservation Commission (TNRCC) currently regulates the installation of petroleum storage tanks. However, Authority staff believes that current regulations are inadequate. The board has directed Authority staff to develop rules to ban petroleum storage tanks on the recharge zone. In Fall 2001, Authority staff developed a concept memo that explains the environmental hazards posed by the location of petroleum storage tanks over the recharge zone. Authority staff believes that *new* storage tanks should be banned in the future because Edwards limestone is extremely susceptible to spills (existing tanks would be allowed). The Authority's General Manager is currently reviewing the concept memo.

CHALLENGES

- Potential resistance from new petroleum storage tank owners.
- Individuals may resist new rules since the TNRCC already regulates the installation of petroleum storage tanks.

RESPONSIBLE PARTIES

Teams: Chief Technical Officer and Aquifer Science

The Chief Technical Officer and Aquifer Science Team are responsible for implementing this objective.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. **Forge solutions that ensure public trust.**
6. **Promote healthy economies in all parts of the region.**
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

STRATEGIES AND TIMELINE

4.2.1	Develop all aspects of the petroleum storage tank (PST) regulation program.	By December 1, 2001
4.2.2	Develop PST rules.	By January 31, 2002
4.2.3	Board adopts PST rules.	By October 31, 2002
4.2.4	Implement PST regulation program.	By January 31, 2003
4.2.5	Develop and distribute information piece to explain purpose and process to the public.	By April 30, 2003

INTERNAL AND EXTERNAL LINKAGES

This objectives affects the available supply for 30-year Water Supply Plan (Strategy 2.9.2) by working to ensure the availability of high quality aquifer water. This objective affects species and habitat protection measures (Objective 2.1) by working to ensure high quality aquifer water as springflow. Work performed to achieve this objective will also abate any potential risks to water quality from development over the recharge zone. Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

Costs for 2003 are for the preparation of an informational brochure.

OBJECTIVE 4.2	2002	2003	2004	2005	2006
Establish petroleum storage tank (PST) regulation program.	Funding Covered Under Strategy 5.1.1	$5,000	N/A	N/A	N/A

Objective 4.3:	**Establish Edwards Aquifer Authority Recharge Zone Protection Program by March 31, 2003.***
Statutory Authority:	**Sections 1.03 (17) and (21); 1.08 (a), 1.35.**

BACKGROUND

Since the early 1980s, the TNRCC has regulated development over the Edwards Aquifer Recharge Zone and certain activities on the Edwards Aquifer transition and contributing zones through a series of rules codified in Chapter 213 of the Texas Administrative Code.

Chapter 213 rules require that all regulated development over the recharge zone obtain a Water Pollution Abatement Plan (WPAP) from the TNRCC. In addition to the WPAP, organized sewage collection systems and petroleum storage tanks located on the recharge zone, require additional plans and approvals.

Currently, the Authority has one staff position (Environmental Coordinator) that is primarily responsible for monitoring recharge zone development. However, the Environmental Coordinator has numerous other duties, and because of limited staffing, the WPAP review process consists primarily of entering information into a database and writing comment letters to the TNRCC as necessary. The Authority does not currently have the resources to conduct onsite inspections of development sites to evaluate the completeness of proposed WPAPs or to ensure compliance with existing WPAPs.

The TNRCC Chapter 213 rules also contain a process by which the administration of the rules can be assigned to a local government entity. However, fees collected from the regulated community by the TNRCC for administering the development regulations would not be assigned to the local government entity. The lack of funding by the TNRCC detracts from the Authority's interest in seeking administration of the Chapter 213 rules.

CHALLENGES

- Those who pay fees to the Authority may resist paying the Authority to operate this program since the TNRCC is already operating a program.

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

- If the Authority were to take over the WPAP program from the TNRCC, it would not receive the fees paid to the TNRCC by the regulated community.

RESPONSIBLE PARTIES

Teams: Chief Technical Officer and Aquifer Science

The Chief Technical Officer and Aquifer Science Team are responsible for implementing this objective.

STRATEGIES AND TIMELINE

4.3.1	Develop all aspects of the Authority's Recharge Zone Protection Program and prepare staff concept paper. Program elements to include recommended "best management practices" for development over the recharge zone, and a policy regarding the use of recycled wastewater on the recharge zone.	By March 31, 2002
4.3.2	Submit draft proposed rules to committee and to the board for adoption.	By September 30, 2002 (Submit rules to committee) By March 31, 2003 (Board adopt rules)
4.3.3	Begin program implementation.	April 30, 2003
4.3.4	Finalize rules guidance manuals and petition TNRCC for designation to operate program.	By December 31, 2003
4.3.5	Begin to require permits for development on the recharge zone.	By March 31, 2004
4.3.6	Seek TNRCC delegation of Edwards Aquifer protection program to the Authority.	By December 31, 2004.
4.3.7	Recharge Zone Protection Program fully operational.	By March 31, 2005

INTERNAL AND EXTERNAL LINKAGES

This objectives affects the available supply for 30-year Water Supply Plan (Strategy 2.9.2) by working to ensure the availability of high quality aquifer water. Affects species and habitat protection measures (Objective 2.1) by working to ensure high quality aquifer water as springflow. Work performed to achieve this objective will also abate any potential risks to water quality from development over the recharge zone. Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

Major costs include the development and distribution of a document describing program rules and guidelines to the public, and for compliance monitoring (e.g., collection of samples related to inspections).

OBJECTIVE 4.3	2002	2003	2004	2005	2006
Establish Edwards Aquifer Authority Recharge Zone Protection Program.	N/A	$100,000	$200,000	$400,000	$400,000

Objective 4.4:	**Establish wellhead protection and well spacing program by December 31, 2003.***
Statutory Authority:	**Sections 1.03 (17) and (21); 1.11 (d) (8) (10) and (11); 1.14; 1.15; 1.35; 1.44.**

BACKGROUND

The Authority has not adopted rules regulating the physical space surrounding wellheads to ensure adequate protection from contaminants and proper maintenance, or interference from adjacent wells. Although water purveyors are subject to TNRCC rules, private well owners are not currently regulated.

CHALLENGES

- Private well owners could interpret regulations as excessive government intrusion into private property.

RESPONSIBLE PARTIES

Teams: Chief Technical Officer and Aquifer Science

The Chief Technical Officer and Aquifer Science Team are responsible for implementing this objective.

STRATEGIES AND TIMELINE

4.4.1	Determine all elements of the program and complete a staff concept paper on rules development.	By June 30, 2003
4.4.2	Present draft rules to the Committee.	By September 30, 2003
4.4.3	Present rules to committee.	By September 30, 2003
	Present rules to board for adoption.	By March 31, 2004
4.4.4	Develop program.	By March 31, 2004

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

4.4.5	Wellhead protection and well spacing program operational.	Beginning March 2004
4.4.6	Develop and distribute an information piece to explain purpose and process to the public.	By January 15, 2004

INTERNAL AND EXTERNAL LINKAGES

This objectives affects the available supply for 30-year Water Supply Plan (Strategy 2.9.2) by working to ensure the availability of high quality aquifer water. Affects species and habitat protection measures (Objective 2.1) by working to ensure high quality aquifer water as springflow. Work performed to achieve this objective will abate any potential risks to water quality from development over the recharge zone. Authority rules developed as a result of this objective may require enforcement actions by the Authority (Objectives 5.1 and 5.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

Major costs include the development and distribution of a document describing program rules and guidelines to the public, and for compliance monitoring (e.g., collection of samples related to inspections).

OBJECTIVE 4.4	2002	2003	2004	2005	2006
Establish wellhead protection and well spacing program.	N/A	N/A Funding Rules Covered Under Strategy 5.1.3 $5,000	N/A Funding Rules Covered Under Strategy 5.1.5 $30,000	$20,000	$20,000

Objective 4.5:	**Formalize hazardous materials spill response program by December 31, 2002.***
Statutory Authority:	**Sections 1.03 (17) and (21); 108 (a); 1.35.**

BACKGROUND

The Authority does not have a formal hazardous material spill response program, with specific Standard Operating Procedures that delegate responsibilities and establish protocol and coordination efforts. Currently, the TNRCC contacts Authority staff when there is a hazardous material spill over the aquifer. Authority staff is immediately activated to assess the damage and work with the TNRCC or the EPA to remediate or abate the situation. The implementation of a formal hazardous material spill response program and Standard Operating Procedures should improve Authority response time and allocation of staff resources.

The hazardous materials spill response program will simply formalize the procedures of the Authority's current method of responding to environmental incidents.

CHALLENGES

- Coordination with other agencies.

RESPONSIBLE PARTIES

Teams: Chief Technical Officer and Aquifer Science

The Chief Technical Officer and Aquifer Science Team are responsible for implementing this objective.

STRATEGIES AND TIMELINE

4.5.1	Develop hazardous materials response program to support TNRCC operations.	By December 31, 2002
4.5.2	Hazardous materials response program operational.	By December 31, 2002

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

INTERNAL AND EXTERNAL LINKAGES

This objectives affects the available supply for 30-year Water Supply Plan (Strategy 2.9.2) by working to ensure the availability of high quality aquifer water. Affects species and habitat protection measures (Objective 2.1) by working to ensure high quality aquifer water as springflow. Work performed to achieve this objective will abate any potential risks to water quality from development over the recharge zone.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

The costs anticipated below for 2003-2006 are for equipment and supplies (e.g., meters, spill containment equipment).

OBJECTIVE 4.5	2002	2003	2004	2005	2006
Formalize hazardous materials spill response program.	N/A	$5,000	$1,000	$1,000	$1,000

Objective 4.6:	**Continue to acquire land over the recharge zone to protect water quality.**
Statutory Authority:	**Section 1.11 (d) (8).**

BACKGROUND

In 2001, the board set aside $500,000 for land acquisition in the Edwards Aquifer Recharge Zone, which was used to fund a conservation easement in the City of San Marcos. The board allocated $500,000 in land acquisition funds for FY 2002. The board also established an ad-hoc committee to establish a clear policy on land acquisition.

Authority staff does not actively seek opportunities for land acquisition. Rather, the Authority responds to requests for funding. No opportunities are currently being considered by the Authority.

CHALLENGES

- Coordination with other conservation-oriented agencies on land acquisition opportunities.

RESPONSIBLE PARTIES

Teams: Chief Technical Officer and Aquifer Science

The Chief Technical Officer and Aquifer Science Team are responsible for implementing this objective.

STRATEGIES AND TIMELINE

4.6.1	Continue to review land acquisition opportunities provided by others and fund opportunities that meet the criteria of existing board policy.	Ongoing
4.6.2	Request board comments regarding staff review of land acquisition opportunities and determine if a more quantitative assessment is preferred.	By March 31, 2002

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. **Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.**
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

4.6.3	If board requests a more quantitative assessment of land acquisition opportunities, provide the new assessment format.	By July 31, 2002
4.6.4	Develop and distribute an information piece to explain purpose and process to the public.	By January 15, 2003

INTERNAL AND EXTERNAL LINKAGES

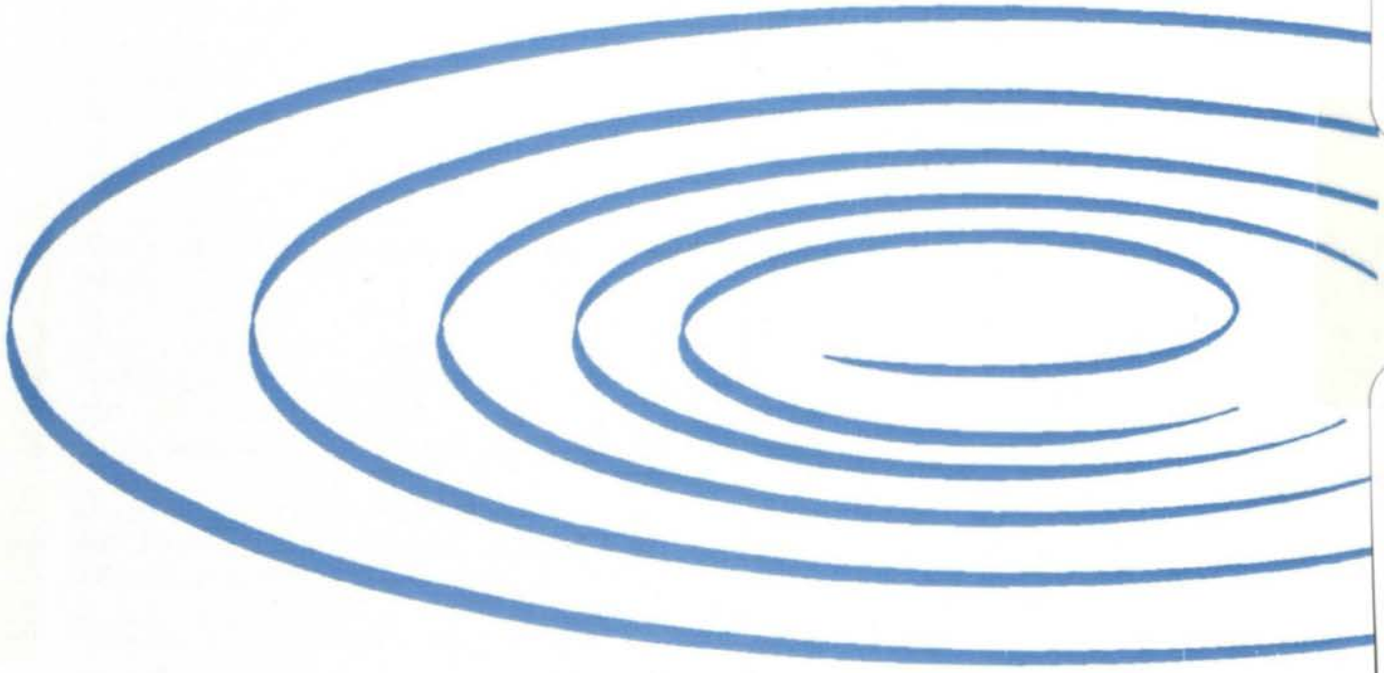
This objectives affects the available supply for 30-year Water Supply Plan (Strategy 2.9.2) by working to ensure the availability of high quality aquifer water. Affects species and habitat protection measures (Objective 2.1) by working to ensure high quality aquifer water as springflow. Work performed to achieve this objective will abate any potential risks to water quality from development over the recharge zone.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 4.6	2002	2003	2004	2005	2006
Continue to acquire land over the recharge zone to protect water quality.	$500,000	$0*	$0*	$0*	$0*

**The land acquisition program will be funded in 2003-2006 with up to $500,000 of carry-over funds from the previous year's budget, if available.*

ENFORCEMENT & COMPLIANCE



FUNCTIONAL AREA FIVE: ENFORCEMENT AND COMPLIANCE

Objective 5.1:	**Adopt all rules required by the Edwards Aquifer Authority Act by June 30, 2004.* Please see the attached Rulemaking Schedule.**
Statutory Authority:	**Section 1.11(a).**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

BACKGROUND

Rules are essential to the operation and functioning of regulatory agencies. Through rulemaking, the Authority implements the statutory mandates established by the Texas Legislature. The Authority possesses broad rulemaking authority. In its most general grant of rulemaking authority, Section 1.11 (a) of the Act directs the Authority board to "adopt rules necessary to carry out the authority's powers and duties under this article, including rules governing procedures of the board and authority." The Act also authorizes the Authority to issue rules in several specific areas.

The Authority is not a "state agency" as that term is defined by the Texas Administrative Procedure Act (APA). The legislature has also expressly provided that the Authority is not subject to the requirements of the APA. Accordingly, when it adopts rules, the Authority need not comply with the procedural rulemaking requirements of the APA. Instead, it is required to comply with specific rulemaking procedures set out in Section 1.15 of the Act.

Many entities are involved in the development of the Authority's rules:

Board of Directors. The board makes the official and final legal and factual decisions concerning the rulemaking process, including, but not limited to, program development, policy, draft proposed rules, proposed rules, regulatory assessments, and final rules.

Board Committees. For rules within their respective jurisdictions, the board committees make recommendations to the full board regarding pending rulemaking actions.

General Manager. The General Manager makes program, policy, and rulemaking recommendations to the committees and the board, manages the preparation of

* This is not required by the Act.

appropriate documents to support the rulemaking process, directs and manages all activities of staff and contractors, and implements directives of the committees and the board.

Deputy General Manager. The Deputy General Manager provides day-to-day management support for the rulemaking process as directed by the General Manager.

Chief Technical Officer. The Chief Technical Officer provides technical support for the rulemaking process as directed by the General Manager.

General Counsel. The General Counsel provides legal support for the rulemaking process as directed by the General Manager.

Docket Clerk. The docket clerk maintains the Authority's rulemaking compliance files, rules index, and rules on the website. The docket clerk also publishes rulemaking notices and compiles and prepares public comments.

Staff. Authority staff provides administrative, technical, economic, and environmental support for the rulemaking process as directed by the General Manager.

Rules Assessment Consultants. The rules assessment consultants provide technical, economic, and environmental assessment support to the General Counsel, as requested by the General Manager.

Advisory Conferences, Committees or Work Groups. Advisory conferences, committees, or work groups provide policy, issues, alternatives, technical, economic, and environmental information, and other relevant general information to the General Manager during the information gathering phase for potential rulemaking.

In accordance with the Act, Authority staff has been directed by the board to develop proposed sets of rules. Adoption of all rules is slated for completion by June 30, 2004. (see *Appendix Four* for the rulemaking schedule).

CHALLENGES

- If any new rules appear to overlap with those of other regulatory agencies and/or with other statutes, it will be imperative to coordinate carefully with the other agencies affected.
- Potential litigation could be filed on any given set of rules and/or the rules adoption process.
- Program priorities of the board could shift, causing the Authority to have to revise the schedule by either moving up a set of rules or pushing their development back.
- Unanticipated reaction to any set of rules could cause re-drafting of some part of the rules based on reaction/comments the Authority receives, even before the rules are formally proposed for public comment.
- If the board chooses to adopt water quality rules, this will present a major expansion of the Authority's enforcement activities and capabilities.

RESPONSIBLE PARTIES

The appropriate program managers, along with the General Counsel, have responsibility for development and implementation of rules.

STRATEGIES AND TIMELINE

5.1.1	Repeal, amend and re-codify rules 701 (General Provisions), 702 (General Definitions), 703 Rulemaking Procedures), 705 (Jurisdiction of the Authority), 707 (Procedure Before the Authority), 709 (fees-subchapters A-D), and 711 (Groundwater Withdrawal Permits-subchapters A-I, K-M). Adopt the following rules by December 31, 2002: 711 (Groundwater Withdrawal Permits) (subchapter J); 713 (Water Quality-subchapters. A–D, and G) (Phases I and II); and 715 (Comprehensive Management Plan Implementation Rules-subchapters. A–C and E).	By December 31, 2002
5.1.2	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in Strategy 5.1.1.	By December 31, 2002
5.1.3	Adopt rules 713 (Water Quality-subchapters E and F) and 715 (Comprehensive Water Management Plan Implementation Rules-subchapters D, F, H, and I).	By December 31, 2003
5.1.4	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in Strategy 5.1.3.	By December 31, 2003
5.1.5	Adopt rules 709 (Fees-subchapter E), 713 (Water Quality-subchapters E and F), 715 (Comprehensive Water Management Plan Implementation Rules-subchapter G), and 717 (Enforcement).	By December 31, 2004
5.1.6	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in Strategy 5.1.5.	By December 31, 2004
5.1.7	Conduct biennial rules review to determine overall program effectiveness.	September 30 of each odd numbered year

INTERNAL AND EXTERNAL LINKAGES

Completion of this objective will provide a complete set of rules to govern all Authority operations including General Provisions, General Definitions (Objectives 1.1, 1.2, 1.3, 1.4, 1.5), Rulemaking Procedures, Jurisdiction of the Authority (Objective 5.2), Procedure before the Authority, Fees (Objective 7.11), Groundwater Withdrawal Permits (Objectives 1.1,1.2, 2.8), Water Quality (Objective 4.1), Comprehensive Management Plan implementation (Objective 2.0), and enforcement (Objective 5.2).

The product of this objective also will be used to enforce rules and programs developed under objectives 1.6, 1.7, 1.9, 1.10, 2.5, 2.7, 2.8, 4.1- 4.6.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

The cost for developing and implementing rules or formally adopting current procedures is for expenses incurred in disseminating proposed rules such as issuance of public notices, public meetings, copies, supplies and postage.

OBJECTIVE 5.1	2002	2003	2004	2005	2006
Adopt all rules required by the Edwards Aquifer Authority Act.	$549,700	$530,000	$70,000	N/A	N/A

Objective 5.2:	**Continue enforcement program, and conduct annual program evaluation to determine overall program effectiveness.**
Statutory Authority:	**Sections 1.11 (b), (c), (d) (3)(10); 1.36; 1.37; 1.38; 1.40.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

BACKGROUND

The Act allows the Authority to assess an administrative penalty against a person who violates the Act or a rule adopted or order issued under the Act in an amount of not less than $100 or more than $1,000 for each violation and for each day of a continuing violation. The administrative process for doing so is outlined in detail in Section 1.37 of the Act.

Presently, the Authority is conducting enforcement activities pursuant to informal procedures adopted by the board. To date, the Authority has not adopted formal enforcement rules. The current procedure used to enforce violations is summarized below.

- When an alleged violation is observed or reported, the Permits/Enforcement Coordinator (PEC) sets up a field inspector for a site inspection.
- Based upon the results of the inspection, a letter is sent to the alleged violator notifying him/her of the violation and requesting corrective action prior to the violation being placed on the Permit Committee's meeting agenda.
- The PEC meets with the alleged violator before the Permits Committee meeting to discuss any violations identified by Authority staff.
- A settlement amount, calculated by the PEC and the program manager and approved by the General Manager, is proposed to the Permits Committee.
- After approval by the committee, the PEC notifies the alleged violator by telephone (with a follow up in writing) of the proposed settlement agreement and sets up information meetings, as appropriate, with the PEC, program manager and general manager.
- The PEC puts the enforcement item on the next board agenda.
- Following board approval, the PEC mails the proposed settlement offer to the violator.
- Once the settlement is signed and monies are received, the violator is notified in writing that the matter is settled. If the proposed settlement is not signed, Legal Counsel is notified by the General Manager to begin civil proceedings in accordance with Section 1.40 of the Act.

This present procedure for conducting enforcement activities allows the Authority to resolve violations in a streamlined manner, while still allowing the option of pursuing matters through the courts if settlements cannot be reached with violators.

CHALLENGES

- If new enforcement rules are adopted pursuant to Objective 5.1 overlap with those of other regulatory agencies and/or with other statutes, it will be imperative to coordinate carefully with the other agencies affected.
- If the board adopts enforcement rules, the internal administrative process for doing so will require more personnel to ensure adequate, timely follow up and action on outstanding violations. Depending on the enforcement rules/process adopted, conducting enforcement activities could require a more labor-intensive process.

STRATEGIES AND TIMELINE

5.2.1	Adopt enforcement rules.	By May 31, 2004
5.2.2	Notify Permits Committee of verified potential violation and make recommendation for board action.	Within 60 days
5.2.3	Settle all alleged violations.	Within 30 days of board action
5.2.4	Develop informational materials explaining program enforcement and distribute annually.	By May 31, 2003
5.2.5	Begin to conduct informational workshops in each county and disseminate information regarding enforcement.	By December 31, 2003

RESPONSIBLE PARTIES

The appropriate program managers, along with the General Counsel, have responsibility for the development of enforcement rules.

INTERNAL AND EXTERNAL LINKAGES

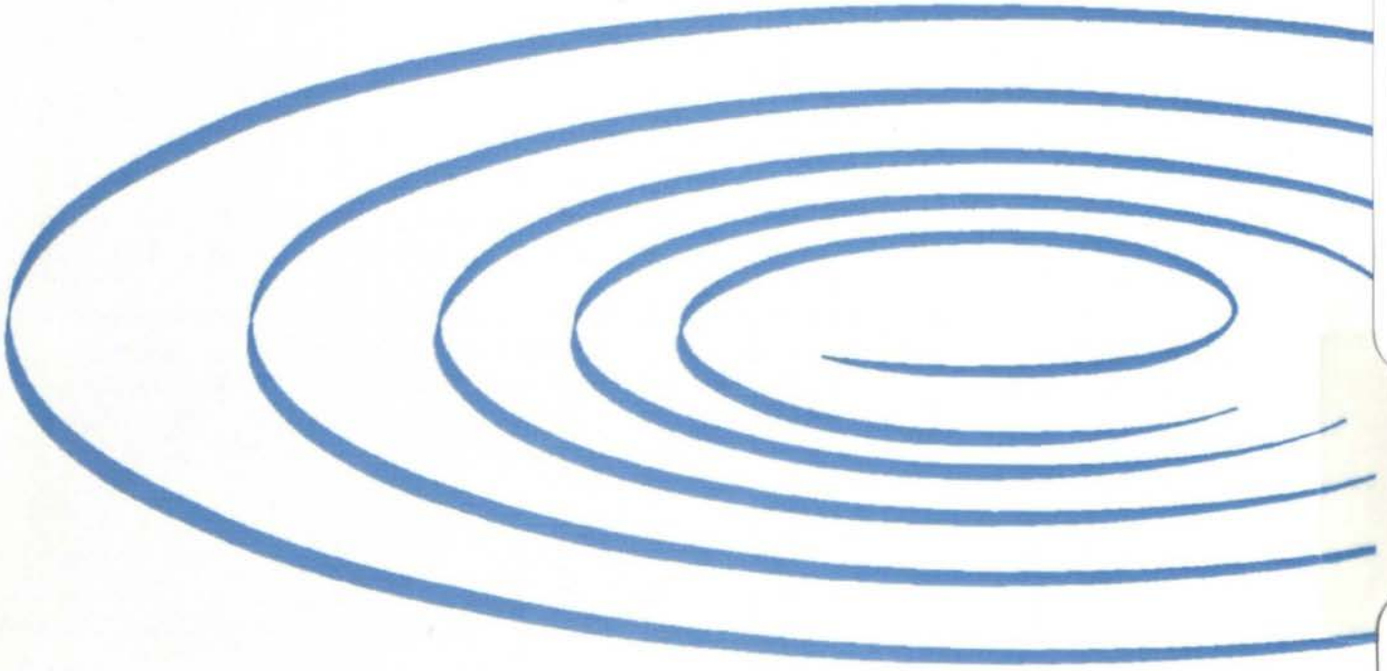
This objective is tied to all rules promulgated by the Authority. Staff anticipates this objective will be connected to all Groundwater Withdrawal Permits (Objectives 1.1, 1.2, 1.8, 2.8), Comprehensive Water Management (Objective 2.0), Water Quality (Objective 4.0) Enforcement and Compliance, and Administrative rules (Objective 5.1).

The product of this objective will be used to enforce rules and programs developed under objectives 1.6, 1.7, 1.9, 1.10, 2.5, 2.7, 2.8, 4.1 - 4.6.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 5.2	2002	2003	2004	2005	2006
Continue enforcement program, and conduct annual program evaluation to determine overall program effectiveness.	$9,000	$3,000	$3,000, In Addition Funding Covered Under Strategy 5.1.5	$3,000	$3,000

PUBLIC AFFAIRS



FUNCTIONAL AREA SIX: PUBLIC AFFAIRS

Objective 6.1	**Increase overall public awareness of the Edwards Aquifer Authority by December 31, 2004.***
Statutory Authority:	**Sections 1.08 (a); 1.11.**

BACKGROUND

The purpose of the Authority's public awareness effort is to:

- Establish a purposeful identity of the Authority;
- Communicate critical issues clearly and concisely through interviews and articles; and
- Increase pro-active efforts to build partnerships with the news media throughout the region.

These initiatives are achieved by:

- Forming relationships with the news media in the region that routinely covers Authority activities;
- Providing a presence in the community that is outside the regulatory nature of the Authority;
- Being active in the region through workshops, community events and the Authority's speakers' bureau; and
- Responding to requests for educational information on Authority programs and projects.

Through increased knowledge and awareness, the public at large can make better choices in their water management and use. Public support and understanding of water issues will help ensure that the community residents and future generations will always have access to clean, fresh water.

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* This date is not required by the Act.

CHALLENGES

- Lack of public interest, except on those occasions where residents are directly impacted (i.e., critical period/drought).
- Difficulty in communicating complex scientific issues to the public at large.
- High cost of purchasing media for specific campaigns.
- Lack of understanding of issue by the media.

STRATEGIES AND TIMELINE

6.1.1	Formulate goals and theme of an Authority three-year awareness campaign, based on results of the 2001 public opinion survey.	By April 30, 2002
6.1.2	Board to approve public awareness campaign consultants and expenditures, campaign to begin implementation, and completion.	By July 31, 2002, October 1, 2002, and September 30, 2006, respectively
6.1.3	Conduct public opinion surveys to assess effectiveness of program and to develop recommendations for adjustments to campaign messages.	By June 30, 2003, June 30, 2004 and June 30, 2006
6.1.4	Revise campaign concept to address key aquifer issues and work on new campaign.	By January 31, 2005
6.1.5	Board approves public awareness campaign consultants and expenditures. Begin implementation of new awareness campaign.	By June 30, 2006, October 1, 2006, respectively

RESPONSIBLE PARTIES

Team: Public Affairs

The Program Manager - Public Affairs is responsible for expansion of public relations efforts. Additionally, either a current committee of the board or a new ad hoc committee will work with Authority staff to formulate the goals and theme of the public awareness campaign. Contract consultants will be retained to develop the awareness campaign.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 6.1	2002	2003	2004	2005	2006
Increase overall public awareness of the Edwards Aquifer Authority.	$100,000	$115,000	$115,000	$100,000	$240,000

Objective 6.2	**Continue to support implementation of all Authority programs, and conduct annual evaluation of overall program effectiveness.***
Statutory Authority:	**Sections 1.08 (a); 1.11.**

BACKGROUND

The Public Affairs Team plays a critical role in ensuring that the Authority programs and decisions are effectively communicated to the regulated community, the news media, and the general public.

The Public Affairs Team conducts a proactive media and public outreach campaign to ensure that Authority activities are portrayed accurately. The campaign includes monthly board press releases, a monthly general managers report, the development and distribution of brochures and other communication materials, and the development and maintenance of timely and accurate website content.

Public Affairs evaluates its communications and public relations activities on an ongoing basis.

CHALLENGES

- Describing complex, scientific and technical issues in a way that is understandable and interesting to the media and general public.
- Large volume of Authority activities, decisions, and actions.

RESPONSIBLE PARTIES

Team: Public Affairs

The Program Manager - Public Affairs works closely with other program managers to ensure that material is both accurate and relevant.

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* First annual evaluation to occur by April 30, 2003

STRATEGIES AND TIMELINE

6.2.1	Continue on-going media relations throughout the region by issuing at least twenty press releases per year; providing daily aquifer level updates; requesting three editorial board meetings throughout the year; placing three opinion editorial pieces throughout the year; creating news angles on Authority programs and activities as needed, following established media protocol, and responding to media requests within one hour of receiving the request.	Ongoing annually
6.2.2	Continue on-going community relations efforts, including sponsorship of one event in five of the eight Authority counties annually.	Ongoing annually
6.2.3	Continue to produce collateral materials each year to provide general Authority information, including the General Manager's Report, board brochure, tabloid, xeriscape brochure, annual report, website updates, board support materials, Aquifer Science Bulletin, Authority fact sheet, staff biography statements, employee directory, on-hold messages, targeted water conservation brochure, Authority advertisement creation and placement, etc.	Ongoing annually
6.2.4	Distribute, in Authority region, Authority collateral materials including pens, pencils, water conservation products and kits.	Ongoing annually
6.2.5	Continue to produce collateral materials and graphic presentations in support of Authority's speaker's bureau and continue program to appear before 25 homeowners' associations and 25 other community groups each year.	Ongoing annually
6.2.6	Begin research on establishing additional signage over the recharge zone. Program Implementation begin May 1, 2004	January 1, 2003

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 6.2	2002	2003	2004	2005	2006
Continue to support implementation of all Authority programs, and conduct annual evaluation of overall program effectiveness.	$106,000	$109,000	$146,250	$143,500	$140,750

Objective 6.3:	**Increase public education on management and protection of the Edwards Aquifer by December 31, 2005.***
Statutory Authority:	**Sections 1.08 (a) and 1.11.**

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

BACKGROUND

The purpose of the Authority's public education program is to work with students and teachers throughout the region to educate them on water and water conservation. WaterWise, which was developed by the non-profit National Energy Foundation, to provide educational materials for the classroom serves this purpose.

WaterWise employs both traditional and innovative educational methods. The program supplies homes with water saving products that are installed by students and their parents. Educational materials, workshops and field trips for area teachers are a key component of the Authority's Education Program. The Education Coordinator visits schools throughout the region to present information about the Edwards Aquifer, the Authority and its programs.

In addition to the printed materials available the Authority also has three educational videos available for teachers, interested individuals and community groups:

- "A Journey through the Edwards Aquifer" (grades 1-5);
- "The Edwards Aquifer, A Texas Treasure" (grades 6-adult);
- "Inside the Edwards Aquifer" (grades 9-adult).

The Authority is also home to an extensive and rare collection of books, reports and other materials regarding the Edwards Aquifer. In addition, the library also provides information on groundwater resources specific to this area as well as provides a number of audiovisual materials to the public.

CHALLENGES

- Making all schools/school districts in the Authority's region aware of the Authority's education program.

* [8] This date is not required by the Act.

- Generating interest among educators to include information and activities about the Edwards Aquifer into their established curricula.
- The costs involved in expanding the Authority's education program for more school participation.
- Time restraints due to academic calendar, school hours, and teacher's schedule.
- Making the WaterWise program self-funded.

STRATEGIES AND TIMELINE

6.3.1	Conduct one teacher workshop/training session per year and participate in at least two training sessions in the region per year.	Beginning May 31, 2002
6.3.2	Offer sponsorships for classes in exchange for conservation credits to make the WaterWise Program self-funded.	By January 1, 2004
6.3.3	Continue to increase participation in Authority-funded WaterWise Program.	By December 31, 2005.
6.3.4	Visit at least three schools per month (at least two schools in each county per year) during the school year to promote aquifer awareness that includes workshops, fairs, and career days held in schools throughout the region.	Ongoing, 2002-2006
6.3.5	Distribute curriculum and other educational materials, including videos, maps, books, bookmarks, and other items as requested to schools in the Authority region.	Ongoing, 2002-2006
6.3.6	Complete restructure of existing library materials with new software.	By October 31, 2002
6.3.7	Compile all documents referenced in the Edwards Aquifer Bibliography and integrate them into the library.	By October 31, 2004
6.3.8	Implement a girl scout and boy scout Edwards Aquifer education program.	By December 31, 2003
6.3.9	Continue Authority book cover contest in regional schools and distribute 350,000 book covers each year.	Annually, 2002-2006
6.3.10	Update existing Authority educational displays located throughout the region. One display is to be updated each year; a fifth display will be completed for placement in either Medina or Uvalde counties. Develop Authority educational portable display for use at community events.	Annually, by November 1; November 2006; June 30, 2003, respectively

6.3.11	Update the three existing Authority videos and produce one new video on wellhead protection for Edwards Aquifer wells.	By December 31, 2006
6.3.12	Continue Authority participation in regional groundwater festivals.	Ongoing
6.3.13	Continue Authority participation in five area educational community events throughout the region each year, such as watershed festivals, environmental fairs and other events.	Annually, by December 31, 2002-2006
6.3.14	Create and distribute Edwards Aquifer education simulation software program.	By August 31, 2005
6.3.15	Conduct program evaluation to determine overall program effectiveness.	By September 30, annually, 2002-2006

RESPONSIBLE PARTIES

Team: Public Affairs

The education coordinator is responsible for expanding public education efforts.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 6.3	2002	2003	2004	2005	2006
Increase public education on management and protection of the aquifer.	$321,100	$632,500	$681,000	$661,500	$673,000

Objective 6.4:	**Continue Authority customer service program, and conduct annual evaluation of overall program effectiveness.***
Statutory Authority:	**Sections 1.08 (a); 1.11.**

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
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8. **Provide strong, professional management for the Authority.**

BACKGROUND

The purpose of the Authority's customer service program is to improve working relationships and maintain open lines of communication between itself and all its constituencies.

This effort is achieved by:

- addressing all inquiries and complaints promptly, positively and effectively;
- increasing staff accessibility;
- soliciting feedback from customers; and
- actively maintaining working relationships with outside agencies that are vital to the service provided to customers of the Authority.

Traditionally, there was not a customer service division or office at the Authority, nor had there been established procedures for customer service. As a result, in the past, inquiries and complaints have not been addressed to the satisfaction of the customer.

In 2001, a new customer service program was developed at the Authority. The position of public service assistant was created to address inquiries and complaints that were not fully addressed by Authority staff. The first task for this position was to create customer service guidelines for the Authority.

This recently created position operates under the supervision of the public affairs manager. The position will identify program areas and staff members for appropriate referral of inquiries and complaints. The public service assistant will coordinate the Authority's customer service program, and serve as the liaison to outside agencies when necessary to process customer requests.

* First annual evaluation to occur by May 31, 2003.

CHALLENGES

- Authority staff have many responsibilities in the course of their work day, and may not always view customer service as a priority.
- Authority staff is currently not trained in customer service.

STRATEGIES AND TIMELINE

6.4.1	Prepare Authority customer service procedures.	By January 31, 2002
6.4.2	Implement customer service program.	By March 31, 2002, and ongoing
6.4.3	Begin preparing a quarterly report to the board of customer feedback received during the previous quarter and determine if adjustments need to be made.	By April 30, 2002, and ongoing
6.4.4	Begin submitting an internal monthly report of customer feedback received during the previous month.	By April 30, 2002, and ongoing
6.4.5	Develop and implement an Authority employee customer service recognition program.	By May 31, 2003, and ongoing
6.4.6	Conduct customer service training for all staff.	Annually, by June

RESPONSIBLE PARTIES

Team: Public Affairs

The public service assistant has the primary responsibility for meeting this objective.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 6.4	2002	2003	2004	2005	2006
Continue Authority customer service program, and conduct annual evaluation of program effectiveness.	$28,000	$29,000	$29,500	$30,000	$30,500

Objective 6.5:	**Conduct biennial Edwards Aquifer symposium in October of even-numbered years starting in 2004.***
Statutory Authority:	**Sections 1.08 (a); 1.11.**

BACKGROUND

The purpose of the water symposium, first held in 2001, is to assist the Authority in providing a stable water future through reducing dependency on the aquifer and integrating a comprehensive management strategy.

The symposium is designed to provide attendees with the most recent information on the progress of rules, long-term water supplies, conservation, integration of water sources, endangered species mitigation and weather modification. Leaders in the field of water resources are invited to present papers, make presentations to educate water resource planners in the aquifer region, and provide information for those dependent on the Edwards Aquifer.

In 2001, the symposium drew less than half the number of attendees it had anticipated. Additionally, while the symposium was originally planned to cover costs through attendance registration fees, the costs exceeded the planned budget and would not have been covered even if the attendance projections had been met.

The Authority has determined that it will conduct the symposium biennially in even-numbered years starting in 2004.

CHALLENGES

- Finding a "niche" for the Authority in this area. There are numerous other established water conferences in the region already.
- Securing partners to help underwrite the event.
- Securing businesses interested in purchasing exhibit space.

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
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4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
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7. Research and develop additional sources of water.
8. Provide strong, professional management for the Authority.

* [9] This date is not required by the Act.

STRATEGIES AND TIMELINE

6.5.1	Board considers approval of location and date for the symposium.	By January 31, 2004; By January 31, 2006
6.5.2	Board approves theme, plan and schedule for one-day symposium.	By March 31, 2004; By March 31, 2006
6.5.3	Review and finalize budget for symposium.	By April 30, 2004; By April 30, 2006
6.5.4	Secure presenters, sponsors, and exhibitors.	By April 30, 2004; By April 30, 2006
6.5.5	Order all support/print materials for symposium.	By June 30, 2004; By June 30, 2006
6.5.6	Make final confirmations and hold symposium.	By October, 2004; By By October, 2006
6.5.7	Submit follow-up report to the board on the effectiveness of the symposium.	By November 15, 2004; By November 15, 2006

RESPONSIBLE PARTIES

Team: Executive

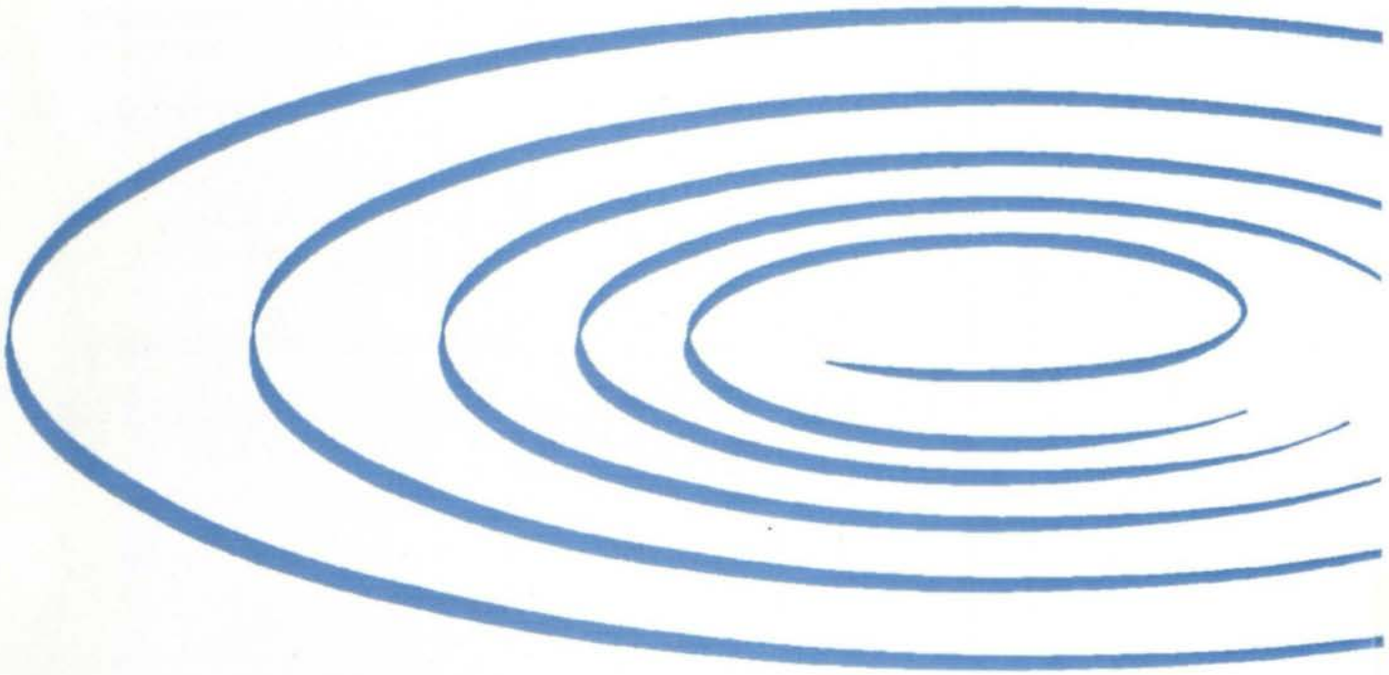
The Executive Team will approve the budget and expenses for the symposium.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

The 2004 symposium is estimated to cost $60,000 above base operating costs. The 2006 symposium is estimated to cost $85,000 above base operating costs.

OBJECTIVE 6.5	2002	2003	2004	2005	2006
Conduct biennial water symposium October of even-numbers of years.	N/A	N/A	$75,000	N/A	$85,000

ADMINISTRATION



FUNCTIONAL AREA SEVEN: ADMINISTRATION

Objective 7.1:	**Adopt new single-member district lines by March 31, 2002, if necessary.***
Statutory Authority:	**Section 1.094.**

BACKGROUND

The Act authorizes the board to modify director district lines after each decennial census, and lists the conditions with which the Authority must comply for redistricting.

Once the Authority obtains the relevant census information, the board can determine if adjustments to the districts need to be made. In 2001, the Authority retained a consultant to obtain 2000 census data and match this data to the current directors' district lines to examine their districts' demographics. These demographic statistics were then compared to the demographic information for districts using 1990 census data. The next step is to determine if the Authority needs to make any adjustments to these lines.

Assuming the lines are modified in 2002, the Authority does not anticipate revising these lines again until the next decennial census is completed in 2010.

CHALLENGES

- The Authority's new lines could be challenged in court. If that occurs, Authority staff litigation funding estimates would have to be developed for litigation costs to be factored into the budget.

STRATEGIES AND TIMELINE

7.1.1	Board considers any director district line changes based on 2000 demographic information analysis and submits for U.S. Department of Justice pre-clearance.	By April 1, 2002
7.1.2	Publish new maps with updated director district lines; correct publications with new lines as needed.	By July 1, 2002

BOARD GOALS MET BY THIS OBJECTIVE

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4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

* This date is not required by the Act.

RESPONSIBLE PARTIES

Team: Executive

A consultant or consultants will be retained to finalize line changes, prepare the proper maps and assist Authority staff with their submission to the U.S. Department of Justice for pre-clearance. The Deputy General Manager, the Administrative Assistant, and legal counsel will work on district line modification issues and U.S. Department of Justice pre-clearance.

INTERNAL/EXTERNAL LINKAGES

This objective is linked to next objective (Objective 7.2).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.1	2002	2003	2004	2005	2006
Adopt new single-member district lines if necessary.	$30,000	N/A	N/A	N/A	N/A

Objective 7.2:	**Conduct biennial director elections in November of even-numbered years.**
Statutory Authority:	**Section 1.09.**

BACKGROUND

The Act requires the board to order elections for the appropriate numbers of directors on the uniform election date in November of each even-numbered year. To conduct these elections the Authority contracts with election officials in counties affected by these elections. After each election, the Authority holds an oath of office ceremony, and publishes new public information material on the board.

CHALLENGES

- The Authority can not anticipate when board vacancies might occur (i.e. because to resignation) that require the filling of unexpired terms. When a vacancy occurs, the board must advertise the position, accept and review applications, interview selected candidates and appoint a candidate to fill the vacancy until the next general election. The costs incurred in filling a vacancy (i.e. for advertising the position) are then factored into the next Authority director election budget.

STRATEGIES AND TIMELINE

7.2.1	Board calls November election for district director terms expiring on December 1 of that year.	By July 31, 2002; By July 31, 2004; By July 31, 2006
7.2.2	Contract with all county election officials to conduct Authority elections.	By August 31, 2002; By August 31, 2004; By August 31, 2006
7.2.3	Hold elections.	November 2002; November 2004; November 2006
7.2.4	Conduct oath of office ceremony.	December 2002; December 2004; December 2006

BOARD GOALS MET BY THIS OBJECTIVE

1. Fully implement the requirements of the Edwards Aquifer Authority Act.
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

RESPONSIBLE PARTIES

Team: Executive

The board will call the election. The legal counsel and the Administrative Assistant will work to contract with election officials in those counties where elections will be held to conduct the elections, and will coordinate the Authority's election.

INTERNAL/EXTERNAL LINKAGES

This objective is linked to the previous objective (Objective 7.1).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.2	2002	2003	2004	2005	2006
Conduct biennial director elections in November of even-numbered years.	$313,000	N/A	$315,000	N/A	$315,000

Objective 7.3:	**Continue to provide legal support to all Authority programs as needed.**
Statutory Authority:	**Sections 1.08(a); 1.11.**

BACKGROUND

Section 1.11 of the Act establishes the general powers and duties of the board and the agency. Section 4.07 of the Authority's bylaws provides that the board hire all legal consultants.

Currently, general and legal counsel assist in the development, implementation and enforcement of various Authority programs. Additionally, the board authorized the General Manager to engage five law firms to represent the staff in administrative hearings on contested initial regular permits.

CHALLENGES

- The Authority is developing programs that are being implemented for the first time in Texas. Therefore, the possibilities of new legal issues being raised are constant.

STRATEGIES AND TIMELINE

7.3.1	Include budget for general legal services in the annual Authority budget being prepared for the next year, to cover general, program and litigation legal expenses.	Annually, by August 31
7.3.2	Conduct annual review of general counsel engagement letter to see if any adjustments need to be made to the agreement.	Annually, by August 31

RESPONSIBLE PARTIES

Teams: Executive

The board is responsible for hiring general counsel, and the board's executive committee recommends any adjustments to the general counsel engagement letter. The General Counsel works with the General Manager, and staff on a daily basis.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
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4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
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FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.3	2002	2003	2004	2005	2006
Continue to provide legal support to all Authority programs as needed.	$560,000	$600,000	$575,000	$550,000	$525,000

Objective 7.4:	**Continue to prepare for legislative sessions and monitor related activities in non-session years.**
Statutory Authority:	**Section 3.01.**

BACKGROUND

Section 3.01 of the Act creates the Edwards Aquifer Legislative Oversight Committee made up of three senators appointed by the lieutenant governor and three members of the House of Representatives appointed by the speaker of the house. Members to the oversight committee were appointed and the oversight committee met for the first time on March 1, 2001.

In addition to keeping these six members informed on Edwards Aquifer and Authority issues, the Authority maintains regular communication with federal, state and local elected officials and stakeholders in the region. To assist with this communications effort, the Authority engages the services of a legislative consultant, and also budgets funding to prepare information packets geared toward communicating with these groups on general or key issues.

CHALLENGES

- Because of the sensitive nature of Authority programs, it is important to be proactive in communicating with its key stakeholders. It is important to keep elected officials and stakeholders informed so that they have the information necessary to accurately discuss matters with their constituents. It is also important to keep legislators informed as Authority programs and rules are being developed so that they have the opportunity to provide input.

STRATEGIES AND TIMELINE

7.4.1	Submit reports to the Edwards Aquifer Legislative Oversight Committee and regional legislators on the status of Authority activities.	By March 1, annually
7.4.2	Continue proactive efforts to communicate with federal, state and local officials and stakeholders in the region on Edwards Aquifer and Authority issues.	Ongoing as needed throughout the year

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
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RESPONSIBLE PARTIES

Team: Executive

The General Manager and legislative consultant are responsible for maintaining ongoing legislative communications of the Authority.

INTERNAL/EXTERNAL LINKAGES

This objective is linked to preparing for the Texas sunset review process (Objective 7.7).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.4	2002	2003	2004	2005	2006
Continue to prepare for legislative sessions and monitor related activities in no-session years.	$64,000	$105,000	$75,000	$115,000	$80,000

Objective 7.5:	**Fund and provide information to consultant preparing the SCTWAC report on the effectiveness of the Edwards Aquifer Authority by October 31 or each even-numbered year.**
Statutory Authority:	**Sections 1.10, 1.29(i).**

BACKGROUND

The Act requires the South Central Texas Water Advisory Committee (SCTWAC) to create a report assessing the Authority's effectiveness, and submit that report to the TNRCC and the Authority by October 31 of each even-numbered year. The report is to assess the effect on downstream water rights of management of the aquifer. This report is prepared independently of the Authority. Authority staff, however, does prepare an advance assessment of accomplishments for the prior two-year period, and responds to information requests from the consultants retained to prepare this report.

The Act directs the Authority to consider the report in managing the Authority's affairs. The statute requires the Authority provide funding up to five percent of the money collected special aquifer management fees, to finance SCTWACs' administrative expenses and programs.

The SCTWAC committee submitted reports in 1998 and 2000.

CHALLENGES

- Difficulty retaining qualified consultant to prepare the report that is not already employed by the Authority.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. **Maintain continuous springflow.**
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. **Forge solutions that ensure public trust.**
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

STRATEGIES AND TIMELINE

7.5.1	Fund SCTWAC assessment report.	By October 31, 2002; By October 31, 2004; By October 31, 2006
7.5.2	Work with SCTWAC representative to retain consultant to conduct assessment.	By January 31, 2002; By January 31, 2004; By January 31, 2006
7.5.3	Prepare information and respond to consultant regarding Authority operations and programs from the previous two-year period.	January 1-November 1, 2002; January 1-November 1, 2004; January 1-November 1, 2006
7.5.4	Board approves Authority response to SCTWAC assessment report.	By December 15, 2002; By December 15, 2004; By December 15, 2006

RESPONSIBLE PARTIES

The SCTWAC is responsible for completing the report.

Team: Executive

The Deputy General Manager and the Program Manager for Administration are responsible for working with SCTWAC representatives on the contractual issues associated with retaining the consultant. The General Manager, Deputy General Manager, Chief Technical Officer and all program managers are responsible for working with the consultant on Authority information submitted for assessment.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.5	2002	2003	2004	2005	2006
Fund and provide information to consultant preparing the SCTWAC report on the effectiveness of the Authority.	$50,000	N/A	$55,000	N/A	$60,000

Objective 7.6:	**Conduct competitive procurement process and manage Authority contracts.**
Statutory Authority:	**Sections 1.08(a); 1.11 (e).**

BACKGROUND

The Act requires that the Authority make a "good faith effort" to award at least 20 percent of its total contracts to historically underutilized businesses (HUBs). In addition, the board has established a target of 30 percent.

The Act requires that the Authority submit a report by October 31 of even-numbered years to the governor, the house of representatives, and the senate on its HUB contract activity and efforts made to meet the state targets. The report must include the following information from the previous two years:

- The total number of contracts issued by the Authority;
- The total dollar amount of the contracts issued by the Authority;
- The purpose of the contracts issued by the Authority; and
- The total number of businesses submitting bids or proposals related to the contracts issued by the Authority.

The information listed above must be reported for the following categories of businesses:

- All businesses;
- Minority-owned businesses (classified by minority group); and
- Women-owned businesses.

In addition to developing this biennial report, Authority staff develops an annual report for the board.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
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7. Research and develop additional sources of water.
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The Authority has had a difficult time meeting the state and board-established HUB targets, but met the 20 percent target for the first time during calendar year 2000. The Authority has taken proactive steps to increase its volume of HUB contracts. For example, the Authority sits on the board of the South Central Texas Regional Certification Agency (SCTRCA), a regional group composed of both public and private sector organizations in the San Antonio region that works to expand the availability of minority vendors, and register and certify HUBs. The SCTRCA maintains a database of HUB vendors, which the Authority consults on a regular basis.

CHALLENGES

- Identified qualified HUB engineering firms with the necessary specialized expertise.
- Many HUBs are too small to compete effectively on price.

STRATEGIES AND TIMELINE

7.6.1	Maintain membership in South Central Texas Regional Certification Agency and participate in area events to cultivate relationships with historically underutilized businesses (HUBs).	Ongoing
7.6.2	Compile previous year data on HUBs.	Annually, by March 31
7.6.3	Report previous year HUB experience to board.	Annually, by May 31
7.6.4	Prepare and submit report of previous two-years' experience for HUB contracts to the Governor's Office.	By October 31, 2002; By October 31, 2004; By October 31, 2006
7.6.5	Conduct competitive procurement process and execute contracts for professional and non-professional services and equipment purchases as needed, and maintain general procurement program for the Authority.	Ongoing

RESPONSIBLE PARTIES

Team: Administration

The Administrative Coordinator is primarily responsible for this program.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.6	2002	2003	2004	2005	2006
Conduct competitive procurement process and manage Authority contracts.	$30,500	$31,500	$32,500	$33,500	$34,500

Objective 7.7:	**Prepare for review under Chapter 325, Government Code (Texas Sunset Act). Review to be conducted as if board scheduled to be abolished September 1, 2005.**
Statutory Authority:	**Section 1.12.**

BACKGROUND

The sunset review process is the regular assessment by the Texas legislature of the continuing need for a state agency. The process works by establishing a date on which an agency will "expire" unless legislation is passed to continue its functions, creating a unique opportunity for the legislature to closely examine Texas state agencies, and make fundamental changes to an agency's mission or operations. Agencies are typically reviewed every 12 years. Between 20 to 30 agencies undergo the sunset process each legislative session.

The Sunset Advisory Commission is composed of five members of the Texas Senate and five members of the Texas House of Representatives, and two public members appointed by the lieutenant governor and the speaker of the house. The Sunset Advisory Commission staff assists the Commission by developing reports that assess each agency's programs and functions, and recommend necessary changes.

Although the Authority is not a state agency, the Act subjects the board to the sunset review process. The board may not be abolished, but the directors' term of office will expire on September 1, 2005 unless continued by legislative act. If lawmakers fail to pass legislation continuing the terms of office, all existing directors' terms will expire, and a new board will be appointed. The Authority is scheduled to go through sunset review during the 2004-2005 interim.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

CHALLENGES

- It is unclear how the sunset review process will differ for the Authority since the Act prohibits its dissolution.
- The sunset review process is comprehensive and could consume significant staff time.
- Effectively communicating the Authority's unique challenges and achievements during the past five years in a way that resonates with Texas lawmakers.

STRATEGIES AND TIMELINE

7.7.1	Receive notification of upcoming sunset review and begin preparing information for review.	By December 31, 2003
7.7.2	Work with representatives of the Sunset Advisory Commission, submit requested information regarding Authority programs and operations and receive final Authority report.	By December 31, 2004
7.7.3	Respond to inquiries regarding Authority Sunset Advisory Commission report and work with members of the Texas Legislature regarding this report.	Ongoing

RESPONSIBLE PARTIES

Team: Executive

The General Manager and the Authority's legislative consultant will play the lead role in implementing this objective. Individual program managers will provide technical support.

INTERNAL/EXTERNAL LINKAGES

This objective is linked to the Authority's legislative communication efforts (Objective 7.4).

FISCAL IMPACT ABOVE BASE OPERATING COSTS

None

Objective 7.8:	**Submit report to the governor, lieutenant governor, and speaker of the house of representatives on the extent to which other entities have cooperated with or assisted the Authority.**
Statutory Authority:	**Section 3.04.**

BACKGROUND

The Act directs all state and local governmental entities to: "cooperate with the Authority to the maximum extent practicable." The Act also requires that the Authority submit a report to the governor, lieutenant governor, and speaker of the house of representatives before January 1, 1995 that evaluates "the extent to which other entities have cooperated with and assisted the Authority."

The report referenced above has not yet been developed since the deadline was changed by one of the lawsuits challenging the Authority. Authority staff plans to submit this report to the appropriate parties no later than January 1, 2003.

CHALLENGES

None.

STRATEGIES AND TIMELINE

7.8.1	Staff prepares recommendation and draft report and submits draft report to the board.	By September 30, 2002
7.8.2	Board approves final report; submits report.	By November 30, 2002; January 1, 2003, respectively

RESPONSIBLE PARTIES

Team: Executive

The General Manager and the Authority's legislative consultant will play the lead role in implementing this objective. Individual program managers will provide technical support.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
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5. Forge solutions that ensure public trust.
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8. **Provide strong, professional management for the Authority.**

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.8	2002	2003	2004	2005	2006
Submit report to the governor, lieutenant governor and speaker of the house of representatives on the extent to which other entities have cooperated with and assisted the Authority.	$2,000	N/A	N/A	N/A	N/A

Objective 7.9:	**Actively manage all Authority documents.**
Statutory Authority:	**Sections 1.08(a); 1.11.**

BACKGROUND

The Authority's document retention schedule identifies agency policy on the length of time different types of written materials and records are retained before they are destroyed. The Authority's retention schedule follows Texas State Library guidelines.

The Texas Local Government Code directs the Authority to submit an annual report to the Texas State Library on its document retention schedule. In addition, the board reviews and approves the retention schedule annually.

CHALLENGES

None.

STRATEGIES AND TIMELINE

7.9.1	Manage and maintain the Authority's records system.	Ongoing
7.9.2	Conduct annual review of records retention schedule for board approval.	Annually, by July 31
7.9.3	Destroy Authority documents according to the Authority's retention schedule.	Ongoing
7.9.4	Implement Authority disaster recovery plan, and review the program annually.	By April 30, 2002 (develop initial plan) Annually, by April 30 (review program)

RESPONSIBLE PARTIES

Team: Administration

The records assistant is primarily responsible for implementing this objective.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
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4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
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7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.9	2002	2003	2004	2005	2006
Actively manage all Authority documents.	$22,400	$23,000	$24,000	$25,000	$26,000

Objective 7.10:	**Ensure accurate financial accounting for Authority operations.**
Statutory Authority:	**Sections 1.08(a); 1.11.**

BACKGROUND

Every year the board approves a contract for an outside party to perform a financial audit of the Authority. The audit is required by the Texas Water Code. The purpose of the audit is to ensure that the Authority is following its own internal procedures and that it is in compliance with generally accepted accounting practices.

To date, the Authority has received excellent audits without any negative findings or comments.

CHALLENGES

- A negative audit could affect the operations of the Authority.

STRATEGIES AND TIMELINE

7.10.1	Board selects and retains auditor.	Annually, by October 31
7.10.2	Conduct annual financial audit for previous year.	Annually, by March 31
7.10.3	Board approves financial audit.	Annually, by April 30
7.10.4	Submit financial audit to TNRCC.	Annually by April 30
7.10.5	Board approves Authority central depository bank contract.	By September 30, 2002 By September 30, 2004 By September 30, 2006
7.10.6	Board approves Authority property and casualty insurance coverage.	Annually by April 1
7.10.7	Provide high-quality accounting services to maintain strong fiscal accountability.	Ongoing

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

RESPONSIBLE PARTIES

Team: Executive

The board is responsible for hiring the auditor.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

If the Authority acquires additional office space, property and casualty insurance premiums may rise accordingly. This change is reflected in the difference between 2004-2005.

OBJECTIVE 7.10	2002	2003	2004	2005	2006
Ensure accurate financial accounting for Authority operations.	$68,475	$74,600	$81,800	$107,000	$118,200

Objective 7.11:	**Adopt annual budget and aquifer management fees for the Authority by November of each year.**
Statutory Authority:	**Sections 1.08(a); 1.29.**

BACKGROUND

The Authority's budget process begins each year during the late summer and early fall, at which time staff identifies the budget needs for the upcoming fiscal year. The staff then holds a series of budget meetings with the financial committee and board before releasing a draft budget and management fee schedule for public comment. The public comment process typically takes place during October, and involves a series of regional meetings. In the past, regional meetings were held in all of the Authority's counties, and at the San Antonio headquarters. The Authority held meetings in three locations in 2001. Following the public comment period, Authority staff summarizes the input received and distributes the information to the committee and the board. The staff and board then adjust the budget to reflect some of the input received. The committee recommends a budget the full board during the November board meeting.

CHALLENGES

- Creating a process for soliciting meaningful input from the public.

STRATEGIES AND TIMELINE

7.11.1	Board adopts budget preparation and adoption schedule.	By March 31, 2002
7.11.2	Begin preparing upcoming annual budget; board considers adoption of budget and fees.	Annually, by August 1 and November 30, respectively
7.11.3	Distribute annual withdrawal contracts; have contracts returned.	Annually, by September 1 and October 1, respectively
7.11.4	Send out copies of annual budget to directors and SCTWAC.	Annually, within 30 days of adoption
7.11.5	Send out non-agricultural user aquifer management fee statements.	Annually, by December 31

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
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4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
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6. Promote healthy economies in all parts of the region.
7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

RESPONSIBLE PARTIES

Team: Administration and Executive

All program managers are involved in the budget process.

INTERNAL/EXTERNAL LINKAGES

This objective is linked to the annual strategic planning assessment outlined in Objective 7.15.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.11	2002	2003	2004	2005	2006
Adopt annual budget and aquifer management fees for the Authority.	$2,100	$2,200	$2,300	$2,400	$2,500

Objective 7.12:	**Maintain positive work environment by retaining qualified trained professional employees, and by providing a comfortable work environment.**
Statutory Authority:	**Sections 1.08(a); 1.11.**

BACKGROUND

Maintaining a positive work environment and retained talented and experienced employees is a challenge facing many organizations in both the public and private sector. The Authority is considered a good employer by current staff, and had regularly conducted salary surveys (1999 and 2001) to ensure that wages are both appropriate and competitive. In the future, the Authority will conduct salary surveys every three years.

Staff turnover was a problem in 1996, largely due to the uncertainty surrounding the Authority's future. However, in recent years, turnover has improved, and as of November 9, 2001, the Authority's turnover rate was 8.5 percent—less than the board's established goal of ten percent.

One way the Authority works to retain and upgrade its staff is through ongoing professional training. In 2001, the Authority spent approximately $68,000 in staff training, compared to $49,000 in 2001. These training costs include items like conference and seminar attendance, computer training, and other specialized training.

The Authority currently has three offices: the main building, a lab facility (6 persons), and a leased field office in Hondo (4 persons). The Authority plans on closing the Hondo office in the near future. Two reasons for the closure of this office are decreased levels of foot traffic, and the conclusion of the irrigation meter installation process.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
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7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

One of the major administrative facing the Authority is the acquisition of office space that will meet the organization's long-term needs. In the immediate-term, the Authority plans to keep the lab and locate office space for 12 persons within one mile of the current main building. In the short-term, the board will be asked to approve a lease for office space that will consolidate *all* Authority staff into a *single* facility, and to sell the Authority's two buildings. A contract will be presented to the finance and administration committee before going to the full board.

In the long-term, the Authority plans to consider either:

- Leasing a building;
- Constructing a new building; or
- Purchasing an existing building.

During the next planning period, the board will be asked to approve funding to select an architect or space planner to help the Authority determine the most cost-effective way to proceed.

CHALLENGES

- Recruitment of qualified staff.
- Identifying appropriate training opportunities for Authority staff. Currently, individual staff members must locate their own training programs.
- Affordable space that is conveniently located.
- Locating a space with the necessary telecommunications infrastructure, such as T-1 lines.
- The relocation/transition process could be temporarily disruptive.

STRATEGIES AND TIMELINE

7.12.1	Close Hondo field office.	
7.12.2	Consolidate employees in San Antonio offices by May 30, 2002, and continue to lease office space through December 31, 2004, or until long-term consolidated office space is constructed.	By May 30, 2002
7.12.3	Assess long-term needs and submit report to the board.	By June 30, 2002
7.12.4	Find site for consolidated Authority office space for maximum employment as outlined by the strategic plan, construct or purchase new office facility.	By December 31, 2005
7.12.5	Purchase new and replacement vehicles according to the needs of the Authority.	Ongoing
7.12.6	Provide high-quality administrative services to maintain positive work environment.	Ongoing
7.12.7	Recruit staff to fill vacant positions as needed.	Ongoing as needed
7.12.8	Conduct salary survey of all positions.	By August 31 of every third year beginning in 2004
7.12.9	Develop internal training and safety program.	By December 31, 2003

7.12.10	Review organization and assess personnel needs.	Annually by August 31.
7.12.11	Conduct annual team building.	Annually

RESPONSIBLE PARTIES

Team: Administration

The Program Manager is primarily responsible for implementing this objective.

INTERNAL/EXTERNAL LINKAGES

The amount of space needed to accommodate Authority staff and the number of vehicles is linked to the entire strategic plan.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.12	2002	2003	2004	2005	2006
Maintain positive work environment by retaining qualified trained professional employees, and by providing a comfortable work environment.	$212,200	$643,400	$2,264,600	$105,800	$67,100

Objective 7.13:	**Maintain management information systems that enhance staff effectiveness.**
Statutory Authority:	**Sections 1.08(a); 1.11.**

BACKGROUND

The Authority maintains a local area network (LAN) for its management and geographic information system, as well as several different servers. The management information system portion is used by all staff members for email, internet access, and basic office functions like word processing. The geographic information system portion is used primarily by the Aquifer Science team, and others with more technical duties.

CHALLENGES

- Staying up to date with the latest technology.
- Developing a regular technology maintenance and replacement program.
- Ensuring that Authority servers are stable and secure, and that data is properly backed-up.
- Keeping the website operational and up-to-date.

STRATEGIES AND TIMELINE

7.13.1	Conduct annual assessment of information management needs and prepare recommendations for General Manager approval.	Annually, by August 31
7.13.2	Upgrade telephone and computer system to allow interactive reporting of permit-related data.	By November 1, 2003
7.13.3	Update inventory of Authority computer equipment.	Annually, by December 31
7.13.4	Replace 25 percent of computer hardware each year.	Annually, by November 30
7.13.5	Upgrade hardware and software for network servers and desktop computers.	Annually as needed

BOARD GOALS MET BY THIS OBJECTIVE

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4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
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7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

7.13.6	Repair and replace computer hardware as needed.	Ongoing
7.13.7	Provide computer training for Authority staff.	Ongoing
7.13.8	Establish a T-1 connection for Authority data communication.	By April 30, 2002

RESPONSIBLE PARTIES

Team: Administration

The Information Systems Coordinator is primarily responsible for implementing this objective.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.13	2002	2003	2004	2005	2006
Maintain management information systems that enhance staff effectiveness.	$178,900	$237,200	$182,500	$189,300	$194,700

Objective 7.14:	**Maintain geographic information systems that enhance staff effectiveness.**
Statutory Authority:	**Sections 1.08(a); 1.11.**

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
3. Maintain continuous springflow.
4. Protect and ensure the quality of ground to surface water in the Authority's jurisdiction.
5. Forge solutions that ensure public trust.
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7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

BACKGROUND

The Authority maintains GIS technology to support its technical studies, and graphic/mapping needs. In general, GIS helps staff graphically demonstrate the information contained in the various databases. Information such as water quality and geologic data can be projected on various base maps to assist in the analysis of the information. The GIS also has many powerful analytical tools that are not normally used by the Authority.

The GIS currently is a distributed system that consists of software licenses from the Environmental Systems Research Institute (ESRI) for ArcView and ArcView extensions, ArcInfo, and ArcIMS. GIS hardware includes a server, and large format plotter. Several employees are trained to use ArcView, and they prepare maps of well locations, synoptic water levels, precipitation, petroleum storage tanks, geology maps, and other graphics. Maps for the annual hydrologic data report are created with the GIS. In addition, employees respond to open records requests for GIS products.

The GIS server is used to store data sets from a variety of sources such as the Texas Natural Resources Information System (TNRIS), the Texas Department of Transportation road maps, USGS geologic maps, digital raster graphics (topographic maps), and census data. The Authority frequently obtains GIS data sets from other local, state, and federal agencies and also provides aquifer data sets to others.

The GIS currently consists of a conglomerate of base maps, data sets from external sources, and GIS projects created by previous and current users of the system. The Authority has recognized that while industry standard software is in use, improvements are needed to include an industry standard system design, database organization, and database documentation. The Authority hired IT Nexus, Inc. to perform a GIS needs analysis that was completed in August 2001. The analysis made several recommendations the Authority needed to improve its GIS, including:

- Fill the currently vacant GIS coordinator position;
- Design a standard GIS format and consolidate all GIS projects into the standard format;

- Develop and implement standard user applications for distribution through an Intranet and the Authority's website;
- Acquire certain software and hardware upgrades to make the Authority GIS more efficient; and
- Move into a standardized GIS operating mode where the GIS interact with a standardized data management system.

CHALLENGES

- Hiring a GIS Coordinator with experience in both GIS and database operations and maintenance.
- Designing, standardizing, and documenting GIS operations.
- Training employees in the use of ArcView and demonstrating the value of GIS in routine operations. Training classes will be offered both inside and outside the Authority.
- Install ArcIMS and developing standard applications. A contractor has initiated the installation.
- Integrate the GIS into the existing data management system. The Modeler/Data Analyst is currently implementing a Data Management System Plan.

STRATEGIES AND TIMELINE

7.14.1	Hire new GIS Coordinator.	By June 30, 2002
7.14.2	Obtain all software and hardware upgrades.	By May 31 of each year beginning in 2002
7.14.3	Design a standardized GIS format, consolidate projects into a standard format, and properly document data sets and continue to acquire and maintain data sets.	By March 31, 2003
7.14.4	Integrate GIS with data management system.	By December 31, 2003.
7.14.5	Develop standard GIS applications.	By June 30, 2003.
7.14.6	Perform routine GIS operations as scheduled each year, and conduct overall program effectiveness review.	By June 30 of each year beginning in 2003.

RESPONSIBLE PARTIES

Teams: Aquifer Science and Administration

The Information Systems Coordinator is primarily responsible for implementing this objective.

FISCAL IMPACT ABOVE BASE OPERATING COSTS

OBJECTIVE 7.14	2002	2003	2004	2005	2006
Maintain geographic information systems that enhance staff effectiveness.	$110,000	$65,000	$35,000	$35,000	$35,000

Objective 7.15:	**Annually assess organizational performance pursuant to adopted strategic plan and make adjustment to the plan as necessary by June 30 of each year.**
Statutory Authority:	**Sections 1.08(a); 1.11.**

BACKGROUND

This strategic plan is the Authority's first long-range planning document. The purpose of the plan and the entire planning process is to provide Authority staff with a clear set of directives that reflect the will of the board.

To maximize the benefits of the strategic planning process, the Authority and the board need to commit to the plan, and use it as a living document during the next five years. For example, Authority staff and the finance committee should use the strategic plan as a guide for each year's draft budget. In addition, the Authority must develop a mechanism to monitor staffs' progress toward achieving the plan's objectives and implementing the individual strategies. The Authority should reports to the board on an annual basis on the status of plan implementation.

Approximately one year prior to the end of the current strategic planning period, the Authority should retain a consultant to facilitate the 2007-2011 planning process.

CHALLENGES

- Ensuring that the Authority systematically uses the strategic plan to guide its actions.
- Ensuring that new directors who were not on the board during the initial strategic planning process have the opportunity to provide appropriate input.

BOARD GOALS MET BY THIS OBJECTIVE

1. **Fully implement the requirements of the Edwards Aquifer Authority Act.**
2. Develop an effective, comprehensive management plan based on sound, consensus-based scientific research and technical data.
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7. Research and develop additional sources of water.
8. **Provide strong, professional management for the Authority.**

STRATEGIES AND TIMELINE

7.15.1	Conduct assessment of strategic plan.	Annually, by June 1
7.15.2	Board approves revisions/updates to the strategic plan for budget planning and forecasting purposes.	Annually, by July 31
7.15.3	Publish and distribute revised strategic plan, as necessary.	Annually, by August 31
7.15.4	Each staff organizational team develops work plan for the upcoming year.	Annually, by December 31
7.15.5	Retain consultant and prepare strategic plan for the next five-year period (2007-2011).	June 30, 2006

RESPONSIBLE PARTIES

Team: Executive

The Deputy General Manager, along with individual program managers, is primarily responsible for implementing this objective.

INTERNAL/EXTERNAL LINKAGES

This objective is linked to the budget process (Objective 7.11).

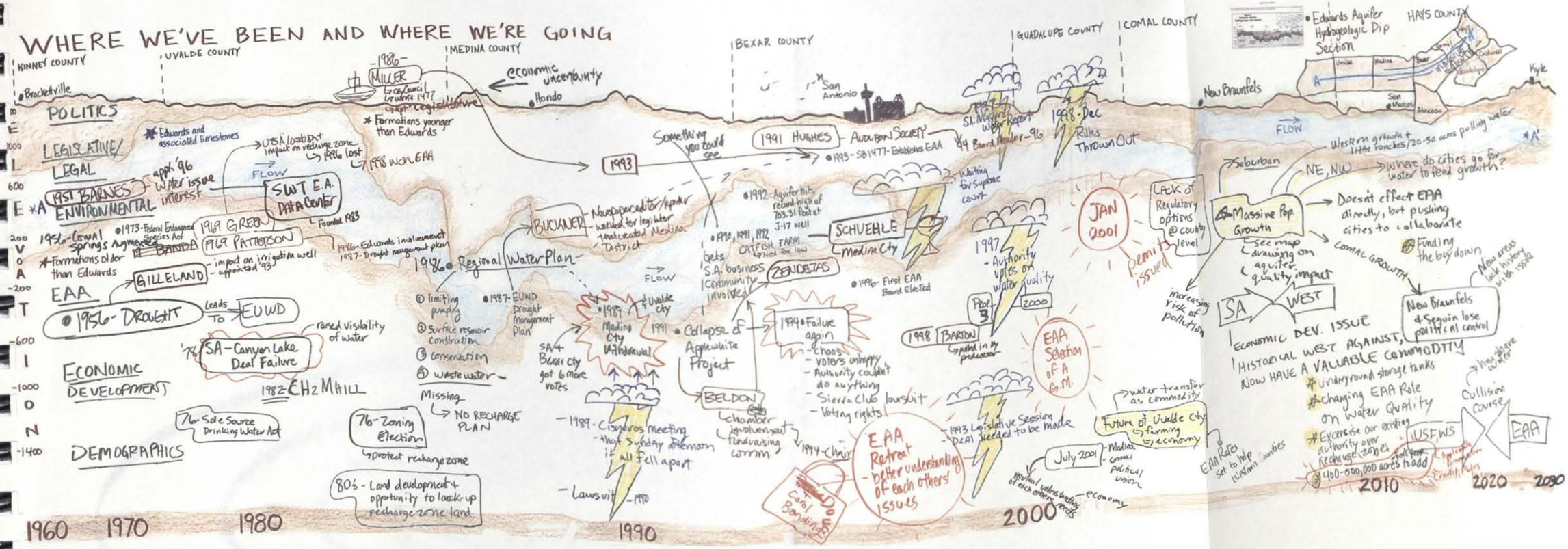
FISCAL IMPACT ABOVE BASE OPERATING COSTS

Conducting an assessment to revise the strategic plan each year is estimated to cost $10,000 per year beyond base operating costs. Publishing and distributing the revised plan each year is estimated to cost $2,000 beyond base operating costs per year. Retaining the consultants for the next five-year plan is estimated to cost $87,000 beyond base operating costs.

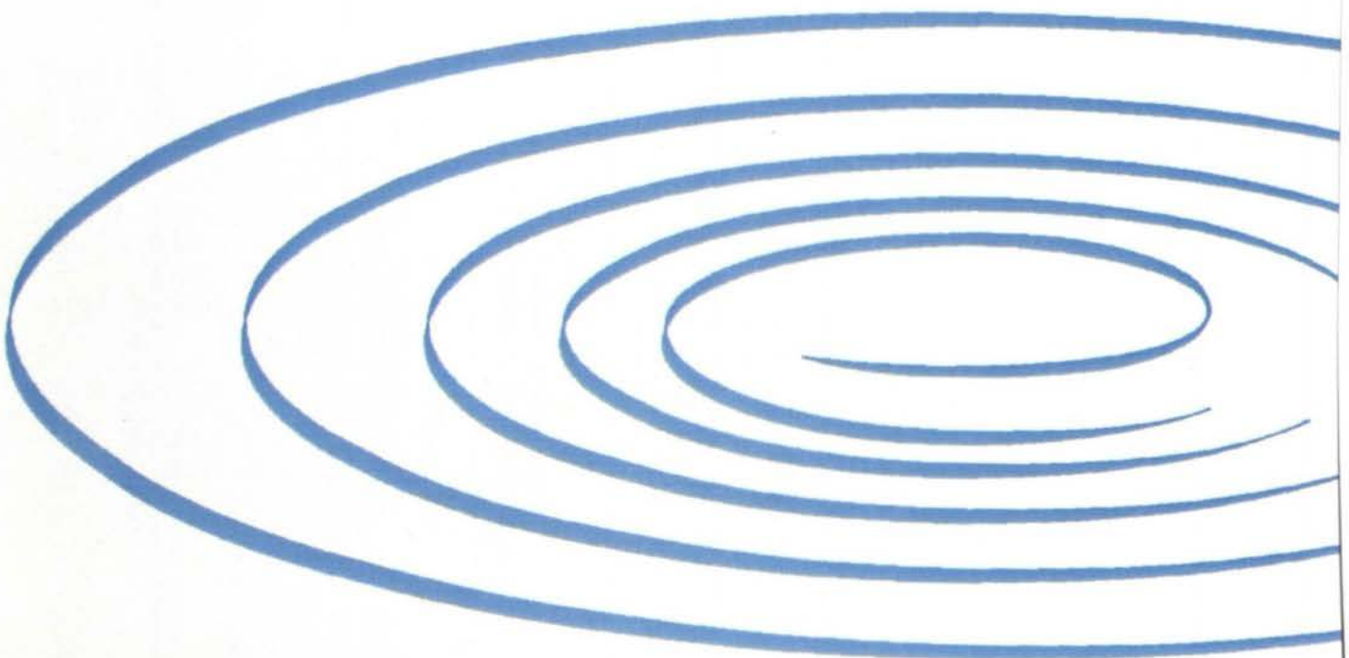
OBJECTIVE 7.15	2002	2003	2004	2005	2006
Annually assess organizational performance pursuant to adopted strategic plan, and make adjustments to the plan as necessary.	$12,000	$12,000	$12,000	$12,000	$87,000

APPENDIX 1:
HISTORICAL CONTEXT MAP

APPENDIX 1: HISTORICAL MAP



APPENDIX 2:
PLAN IMPLEMENTATION MATRIX



APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

I. GROUNDWATER WITHDRAWAL PERMITS

	Objective/Strategy	2002	2003	2004	2005	2006
1.1	**Issue all initial regular permits by December 31, 2004.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
1.1.1	Complete all 389 pre-contest conferences with applicants by December 31, 2001.	N/A	N/A	N/A	N/A	N/A
1.1.2	Retain five special counsel law firms by November 15, 2001 to represent staff in 25 contested case proceedings.	$1,045,000	$1,000,000	N/A	N/A	N/A
1.1.3	Approve contracts with State Office of Administrative Hearings and administrative law judges by January 31, 2002 to conduct contested permit hearings.	$300,000	$150,000	N/A	N/A	N/A
1.1.4	Refer 25 permit protests to contested case hearings by November 15, 2001, for hearing completion by December 31, 2002.	BOC	N/A	N/A	N/A	N/A
1.1.5	Issue 26 remaining M&I permits that were originally uncontested by January 31, 2003.	BOC	N/A	N/A	N/A	N/A
1.1.6	Continue to refer unresolved contested cases for hearing on a quarterly basis through December 31, 2002, as needed.	BOC	BOC	N/A	N/A	N/A
1.1.7	Issue remaining 338 permits as contested case dockets are completed, including conducting settlement conferences with applicants to resolve protests between January 1, 2002 and December 31, 2003.	$15,000	$15,000	N/A	N/A	N/A
1.1.8	Complete final contested case and issue final permit by December 31, 2003.	$100,000	$250,000	N/A	N/A	N/A
1.1.9	Issue final initial regular permit by December 31, 2004.	BOC	BOC	BOC	N/A	N/A
	Total Objective 1.1	**$1,460,000**	**$1,415,000**	**$0**	**$0**	**$0**
1.2	**Develop program for term and emergency permits by July 1, 2002.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
1.2.1	Develop two application forms and finalize application review process by May 31, 2002.	BOC	BOC	BOC	BOC	BOC
1.2.2	Develop one term and one emergency permit informational piece by February 28, 2003, to explain purpose and application process to the public.	N/A	$6,000	N/A	$6,000	N/A
1.2.3	Prior to issuing permits the board must determine if additional groundwater is available for term permits.	BOC	BOC	BOC	BOC	BOC

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

I. GROUNDWATER WITHDRAWAL PERMITS

	Objective/Strategy	2002	2003	2004	2005	2006
1.2.4	Hold three informational workshops.	$1,500	$2,000	$2,000	BOC	BOC
1.2.5	Conduct targeted public awareness campaign in all Authority counties to let the public know about this program.	N/A	$3,000	N/A	$3,000	N/A
1.2.6	Complete administrative and technical review within 30 days of emergency permit application receipt.	BOC	BOC	BOC	BOC	BOC
1.2.7	Complete administrative and technical review within 90 days of term permit application receipt.	BOC	BOC	BOC	BOC	BOC
1.2.8	Conduct contested case hearings as necessary.	Funding covered under strategy 1.1.3	Funding covered under strategy 1.1.3	$20,000	$20,000	$20,000
	Total Objective 1.2	**$1,500**	**$11,000**	**$22,000**	**$29,000**	**$20,000**
1.3	**Reduce Edwards Aquifer pumpage to 450,000 acre-feet by December 31, 2004.**					
	NEW POSITIONS	**Water Resources Coordinator (2002-01)**				
1.3.1	Develop contract document by December 31, 2002 that would provide payments to sellers over 20 years beginning the year after the contract is approved.	BOC	N/A	N/A	N/A	N/A
1.3.2	Enroll voluntary participants by June 30, 2004 to acquire 83,000 acre-feet in water rights through December 31, 2004. Staff recommends retaining brokers to act as Authority agents.	N/A	N/A*	N/A*	N/A*	N/A*
1.3.3	Adopt rules for mandatory withdrawal reduction by December 31, 2003.	N/A	Funding for rules covered under strategy 5.1.3	N/A	N/A	N/A
1.3.4	Propose proportional adjustments (Phase II) to all permitted water rights by June 30, 2004 if Authority is unable to secure voluntary rights.	N/A	N/A	BOC	N/A	N/A
	Total Objective 1.3	**$0**	**$0**	**$0**	**$0**	**$0**

NOTE: ** The cost of the buydown is not known at this time and will be determined when the board makes a decision regarding a recommendation from the Ad Hoc Committee on Withdrawal Limit Compliance.*

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2002 - 2006

April 2002

I. GROUNDWATER WITHDRAWAL PERMITS

	Objective/Strategy	2002	2003	2004	2005	2006
1.4	**Reduce Edwards Aquifer pumpage to 400,000 acre-feet by January 1, 2008.**					
	NEW POSITIONS	**Water Resources Coordinator (2002-01)**				
1.4.1	Adopt rules for regular permit retirement by December 31, 2004.	N/A	N/A	Funding for rules covered under strategy 5.1.5	N/A	N/A
1.4.2	Develop special permit retirement fee program in cooperation with the Texas Natural Resource Conservation Commission (TNRCC) by April 1, 2004.	N/A	BOC	BOC	N/A	N/A
1.4.3	Adopt special permit retirement fee rules by December 31, 2004.	N/A	N/A	Funding for rules covered under strategy 5.1.5	N/A	N/A
1.4.4	Submit report to TNRCC regarding status of the program including estimated cost of permit retirement, to reduce annual aquifer withdrawals to 400,000 acre-feet according to Section 1.29(d) of the Act by December 1, 2004.	N/A	N/A	BOC	BOC	N/A
	Total Objective 1.4	**$0**	**$0**	**$0**	**$0**	**$0**
1.5	**Develop process for evaluation of adjusting "the cap."**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
1.5.1	Prepare annual additional water supply report and submit report to the board of directors by November 30 of each year.	BOC	BOC	BOC	BOC	BOC
1.5.2	Revise the rules by October 31, 2002 to require an evaluation by June 30, 2004 and again by December 31, 2007 in place of an annual evaluation.	Funding for rules covered under strategy 5.1.1	N/A	N/A	N/A	N/A
1.5.3	Conduct evaluation process of studies and groundwater management strategies and submit report to the board by June 30, 2003.	N/A	$50,000	N/A	N/A	N/A

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April 2002

I. GROUNDWATER WITHDRAWAL PERMITS

	Objective/Strategy	2002	2003	2004	2005	2006
1.5.4	Consult with state and federal agencies about the results by December 31, 2003.	N/A	BOC	N/A	N/A	N/A
1.5.5	Board to consider whether to adopt a resolution to adjust the cap by June 30, 2004.	N/A	N/A	BOC	N/A	N/A
	Total Objective 1.5	**$0**	**$50,000**	**$0**	**$0**	**$0**
1.6	**Register all points of withdrawal from the Edwards Aquifer by December 31, 2007.**					
	NEW POSITIONS	**Field Representative (2002-02)**		**Well Registration Associate (2004-01)**		
1.6.1	Initiate GIS analysis of wells requiring registration to locate all wells by December 31, 2004.	BOC	BOC	$116,000	$116,000	N/A
1.6.2	Notify identified well owners of registration requirement, and distribute well registration forms to 1,500 well owners in 2003, 3,500 well owners in 2004, 3,500 well owners in 2005, 1,500 well owners in 2006, and ongoing as needed.	N/A	N/A	$3,000	$7,000	$7,000
1.6.3	Develop a well registration information piece by July 31, 2003, to explain purpose and application process to the public.	N/A	N/A	$3,000	N/A	$3,000
1.6.4	Conduct targeted public awareness campaign in all Authority counties to let the public know about this program in July and August 2003.	N/A	N/A	$20,000	$20,000	$20,000
1.6.5	Hold one informational workshop with well drillers and real estate agents in each county and one information meeting with county officials by March 31, 2003.	NA	NA	$5,000	$5,000	$5,000
1.6.6	Identify other methods for locating wells, and locate all wells within each county by January 31, 2006.	N/A	N/A	$10,000	$10,000	$10,000
1.6.7	Complete administrative review within 30 days of well registration application receipt beginning January 31, 2003.	N/A	N/A	BOC	BOC	BOC
1.6.8	Make a determination of exempt well status within 90 days of administrative completeness determination.	BOC	BOC	BOC	BOC	BOC
1.6.9	Identify and register all monitoring wells and issue monitoring wells permits by December 31, 2004.	BOC	BOC	$20,000	$20,000	N/A
	Total Objective 1.6	**$0**	**$0**	**$177,000**	**$178,000**	**$45,000**

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I. GROUNDWATER WITHDRAWAL PERMITS

	Objective/Strategy	2002	2003	2004	2005	2006
1.7	**Establish effective well construction permit program by December 31, 2002, for all new wells, modifying existing wells, or plugging wells.**					
	NEW POSITIONS	**Field Representative (2002-02)**	All existing field representative positions will be shifted to handle field inspections from initial regular permits in 2003.			
1.7.1	Approve program proposal, including application and staff review process, by April 30, 2002.	BOC	N/A	N/A	N/A	N/A
1.7.2	Adopt rules for well construction, operation and maintenance by December 31, 2002.	Funding for rules covered under strategy 5.1.1	N/A	N/A	N/A	N/A
1.7.3	Develop an information piece by August 31, 2002, to explain purpose and application process to the public.	$3,000	N/A	$3,000	N/A	$3,000
1.7.4	Hold an informational workshop of municipal, industrial and officials in five Authority counties by January 31, 2003.	N/A	$500	N/A	N/A	N/A
1.7.5	Conduct targeted public awareness campaign from January 1, 2003 through March 31, 2003, in all Authority counties to let the public know about this program.	N/A	$10,000	N/A	N/A	N/A
1.7.6	Complete administrative and technical review of application within 30 days of application receipt.	BOC	BOC	BOC	BOC	BOC
1.7.7	Make a determination of exempt well status within 90 days of administrative completeness determination.	BOC	BOC	BOC	BOC	BOC
1.7.8	Inspect each new well, modified well or plugged well within 10 days of completion.	BOC	BOC	BOC	BOC	BOC
1.7.9	Issue monitoring well permits as needed.	BOC	BOC	BOC	BOC	BOC
	Total Objective 1.7	**$3,000**	**$10,500**	**$3,000**	**$0**	**$3,000**

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2002 - 2006

April 2002

I. GROUNDWATER WITHDRAWAL PERMITS

	Objective/Strategy	2002	2003	2004	2005	2006
1.8	**Establish a groundwater trust program to facilitate transfers to small users by December 31, 2003.**					
	NEW POSITIONS	**Water Resources Coordinator (2002-01)**				
1.8.1	Approve program proposal, including guidelines, contracts and fee schedule by June 30, 2002. This program will be designed to be self-funding.	BOC	BOC	BOC	BOC	BOC
1.8.2	Adopt groundwater trust rules by December 31, 2002.	Funding for rules covered under strategy 5.1.1	BOC	BOC	BOC	BOC
1.8.3	Enroll participants in the program to transfer 2,500 acre-feet by April 30, 2003, and continue to maintain 2,500 acre-feet in the program annually and expand as necessary.	Self-funded	Self-funded	Self-funded	Self-funded	Self-funded
	Total Objective 1.8	**$0**	**$0**	**$0**	**$0**	**$0**
1.9	**Continue water rights transfer program, and conduct annual program reviews by December 31, 2002.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
1.9.1	Complete database upgrade by June 30, 2002.	$10,000	N/A	N/A	N/A	N/A
1.9.2	Complete administrative and technical review of transfers that do not require hearings within 30 days after receipt of application.	BOC	BOC	BOC	BOC	BOC
1.9.3	Complete administrative and technical review of transfers (Cibolo Creek) that may require hearings within 120 days after receipt of application.	$50,000	$50,000	$50,000	$50,000	$50,000
1.9.4	Hold workshops for real estate professionals and other interested parties on an on-going basis.	BOC	BOC	BOC	BOC	BOC
1.9.5	Link transfers to critical period program by November 30, 2002.	BOC	BOC	BOC	BOC	BOC
1.9.6	Conduct evaluation of the program's effectiveness and impact of transfers, and submit report to the board by December 31, 2002.	$25,000	N/A	N/A	N/A	N/A
1.9.7	Perform rules review by December 31, 2004 to determine the effectiveness of the transfer program.	BOC	N/A	BOC	N/A	N/A
	Total Objective 1.9	**$85,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**

Note: *The $50,000 for 2002 may require a $25,000 budget amendment.*

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April 2002

I. GROUNDWATER WITHDRAWAL PERMITS

	Objective/Strategy	2002	2003	2004	2005	2006
1.10	**Continue to receive and evaluate annual groundwater use information.**					
	NEW POSITIONS	**Well Meter Specialist (2002-03)**				
1.10.1	Coordinate and implement new annual water usage reporting forms by March 31, 2002.	BOC	N/A	N/A	N/A	N/A
1.10.2	Distribute water use reporting forms to all initial regular permit holders and applicants by December 31 of each year.	BOC	BOC	BOC	BOC	BOC
1.10.3	Receive all water use reports by March 1 of each year.	BOC	BOC	BOC	BOC	BOC
1.10.4	Evaluate water use information for reporting and enforcement purposes by April 15 of each year.	BOC	BOC	BOC	BOC	BOC
1.10.5	Inspect every meter twice a year.	BOC	BOC	BOC	BOC	BOC
1.10.6	Maintain over 650 well meters in operational condition, and replace meters as necessary	$20,000	$40,000	$60,000	$70,000	$70,000
1.10.7	Complete installation of all remaining irrigation well meters by December 31, 2002.	$50,000	N/A	N/A	N/A	N/A
	Total Objective 1.10	**$70,000**	**$40,000**	**$60,000**	**$70,000**	**$70,000**
TOTAL	**GROUNDWATER WITHDRAWAL PERMITS**	**$1,619,500**	**$1,576,500**	**$312,000**	**$327,000**	**$188,000**
TOTAL	**NEW POSITIONS**	**3**	**0**	**1**	**0**	**0**

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II. PLANNING

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	Objective/Strategy	2002	2003	2004	2005	2006
2.1	**Implement Habitat Conservation Plan and receive a Section 10A Incidental Take Permit by June 30, 2003.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
2.1.1	By December 31 of each year beginning 2003, present annual report to the board of directors on the status and coordination of all planning efforts that affect the Edwards Aquifer and the Edwards Aquifer Authority.	N/A	BOC	BOC	BOC	BOC
2.1.2	Approve the draft Habitat Conservation Plan (HCP) and Environmental Impact Statement (EIS) by October 31, 2002. Submit the HCP and EIS to the U.S. Fish & Wildlife Service by December 31, 2002.	$414,000	N/A	N/A	N/A	N/A
2.1.3	Continue discussions with U.S. Fish & Wildlife Service and make adjustments as necessary, with a goal of finalizing the HCP by June 30, 2003.	N/A	$50,000	N/A	N/A	N/A
2.1.4	Implement long-term plan with Texas Parks and Wildlife Department for monitoring, research & refugia by March 31, 2003 through an interlocal contract.*	N/A	$800,000	$800,000	$800,000	$800,000
	Total Objective 2.1	**$414,000**	**$850,000**	**$800,000**	**$800,000**	**$800,000**

NOTE: ** Of the annual $800,000 cost for 2.1.4, $300,000 is contingent on aquifer conditions*

2.2	**Complete recirculation analysis and submit results to South Central Texas Regional Planning Group by January 31, 2004.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
2.2.1	Select contractor to conduct the recharge and recirculation analysis by June 30, 2002.	BOC	N/A	N/A	N/A	N/A
2.2.2	Beginning May 1, 2002, contractor to conduct research and prepare a report by December 31, 2003, for the Texas Water Development Board (TWDB) and South Central Texas Regional Water (Region L) Plan, if the results are favorable.	Funding covered under strategy 3.2.1	$100,000	N/A	N/A	N/A
2.2.3	Work with TWDB and Region L to incorporate the results into the Region L plan by January 31, 2004.	BOC	BOC	BOC	N/A	N/A
2.2.4	Finalize appropriate documents with necessary parties for implementation of recharge and recirculation program by September 30, 2004.	N/A	N/A	BOC	N/A	N/A
	Total Objective 2.2	**$0**	**$100,000**	**$0**	**$0**	**$0**

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	Objective/Strategy	2002	2003	2004	2005	2006
2.3	**Complete Comprehensive Water Management Plan by December 31, 2002.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
2.3.1	Board adopts comprehensive water management plan by December 31, 2002.	$105,000	N/A	N/A	N/A	N/A
2.3.2	Approve water supply plan component of Comprehensive Water Management Plan annually by December 31 beginning in 2002.	BOC	BOC	BOC	BOC	BOC
2.3.3	Develop a plan summary by February 28, 2003, to explain purpose and process to the public.	N/A	$40,000	N/A	N/A	$40,000
2.3.4	Adopt alternative water supply and pool rules by September 30, 2003.	N/A	Funding for rules covered under strategy 5.1.3	N/A	N/A	N/A
2.3.5	Review and revise the Groundwater Management Plan by incorporating it into the comprehensive plan by December 31, 2003.	N/A	$25,000	N/A	N/A	N/A
2.3.6	Evaluate the effectiveness of the comprehensive plan, and amend the plan if necessary by December 31 each year beginning 2004.	N/A	N/A	$50,000	$50,000	$50,000
	Total Objective 2.3	**$105,000**	**$65,000**	**$50,000**	**$50,000**	**$90,000**
2.4	**Research water management strategies by September 30, 2006.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
2.4.1	Conduct evaluation of 2001 Precipitation Enhancement Program by June 30, 2002.	$40,000	N/A	N/A	N/A	N/A
2.4.2	Conduct research to determine recharge benefit from precipitation enhancement program by December 31, 2002.	$40,000	N/A	N/A	N/A	N/A
2.4.3	Conduct precipitation enhancement program through contract with existing operational programs in the area beginning May 1, 2002.*	$205,000	$125,000	$125,000	$125,000	$125,000
2.4.4	Develop an information piece by March 31 of each year to explain precipitation enhancement program to the public.*	$5,000	$5,000	$5,000	$5,000	$5,000
2.4.5	Continue and complete brush management research by September 30, 2006.	Funding covered under strategy 3.2.1	Funding covered under strategy 3.2.1	Funding covered under strategy 3.2.1	Funding covered under strategy 3.2.1	Funding covered under strategy 3.2.1
2.4.6	Complete quarry management research by September 30, 2002.*	$50,000	N/A	N/A	N/A	N/A

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II. PLANNING **April 2002**

	Objective/Strategy	2002	2003	2004	2005	2006
2.4.7	Conduct and complete research on using water from the other side of the "bad water line" by December 31, 2004.	N/A	N/A	N/A	$50,000	$50,000
2.4.8	Conduct analysis of redistribution of pumping centers by June 30, 2003.*	$5,000	$10,000	N/A	N/A	N/A
	Total Objective 2.4	**$345,000**	**$140,000**	**$130,000**	**$180,000**	**$180,000**
	NOTE: ** Funding for strategies 2.4.4 and 2.4.6 may require a budget amendment in 2002.*					
2.5	**Implement Edwards Aquifer Authority Groundwater Conservation Program by March 1, 2006.**					
	NEW POSITIONS		**Secretary (2003-01)**			
2.5.1	Submit Authority Conservation and Reuse Plan to the Texas Legislature by January 1 each odd-numbered year beginning 2003.	BOC	N/A	BOC	N/A	BOC
2.5.2	Submit Authority groundwater conservation plan by January 1 of each odd-numbered year beginning in 2003.	N/A	BOC	N/A	BOC	N/A
2.5.3	Conduct 5 public hearings by August 31, 2002.	$3,000	N/A	$3,000	$3,000	$3,000
2.5.4	Complete groundwater conservation plan by June 30, 2002, and review for possible revisions every other year.	$18,000	N/A	$5,000	N/A	$5,000
2.5.5	Board adopts groundwater conservation rules by September 30, 2002.	Funding for rules covered under strategy 5.1.1	N/A	N/A	N/A	N/A
2.5.6	Board to award A.O. "Odie" Gilliam Agricultural Water Conservation Award by March 31 of each year.	$10,500	$10,500	$10,500	$10,500	$10,500
2.5.7	Distribute home water audit forms to 200 homes each year beginning July 31, 2002.	$500	BOC	BOC	BOC	BOC
2.5.8	Develop information pieces on groundwater conservation plan and programs by March 31, 2003, and update them as appropriate.	N/A	$2,500	$2,500	$2,500	$2,500
2.5.9	Require users to submit groundwater conservation plans to the Authority by April 30, 2003, July 31, 2003 and December 31, 2003.	N/A	$15,000	N/A	N/A	N/A
2.5.10	Authority staff to review all plans for compliance by December 31, 2003.	N/A	BOC	BOC	BOC	BOC
2.5.11	Authority staff to annually review status report forms by September 30, beginning in 2003.	N/A	BOC	BOC	BOC	BOC

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II. PLANNING **April 2002**

	Objective/Strategy	2002	2003	2004	2005	2006
2.5.12	Authority staff to continue monitoring compliance with groundwater conservation plans every year.	N/A	BOC	BOC	BOC	BOC
2.5.13	Implement rainwater harvesting program and xeriscape rebate guidelines by December 31, 2004.	N/A	N/A	$15,000	$37,500	$37,500
2.5.14	Implement region-wide turf grass reduction and use of native species on the recharge zone programs by March 31, 2005.	N/A	N/A	N/A	$12,500	$12,500
2.5.15	Each year, promote miscellaneous conservation activities throughout the region.	$5,600	$5,600	$5,600	$5,600	$5,600
	Total Objective 2.5	**$37,600**	**$33,600**	**$41,600**	**$71,600**	**$76,600**
2.6	**Continue Agricultural Water Conservation Loan Program, and conduct annual program review for overall program effectiveness by June 30, 2003.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
2.6.1	Carry over funds borrowed during the previous year to the next year, and issue 10 loans to cover the $1 million by December 31 of each year.	BOC	BOC	BOC	BOC	BOC
2.6.2	Annually prepare promotional material for the program.*	**$7,000**	$7,000	$7,000	$7,000	$7,000
2.6.3	Conduct efficiency evaluations on all systems installed pursuant to the Authority's loan program, and submit report to the General Manager by November 30 of each year. Determine if additional money should be obtained from TWDB or if Authority can self-finance.	BOC	BOC	BOC	BOC	BOC
2.6.4	Conduct evaluation of program by June 30, 2003, to determine the future of the program.	N/A	BOC	N/A	N/A	N/A
	Total Objective 2.6	**$7,000**	**$7,000**	**$7,000**	**$7,000**	**$7,000**
	NOTE: ** Funding for strategy 2.6.2 may require a budget amendment in 2002.*					
2.7	**Establish a recharge enhancement program by January 31, 2003.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
2.7.1	By May 31, 2002, determine desired skills and services of consultant to administer the recharge program.	BOC	N/A	N/A	N/A	N/A
2.7.2	Complete research necessary to develop rules for artificial recharge, storage and recovery projects, by April 30, 2002.	BOC	N/A	N/A	N/A	N/A
2.7.3	Conduct RFP process and award a contract by May 31, 2002, for consultant to administer large recharge structure program and conduct technical review of recharge applications.	$50,000	N/A	N/A	N/A	N/A

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April 2002

	Objective/Strategy	2002	2003	2004	2005	2006
2.7.4	Develop all aspects of large recharge structure program by June 30, 2002.	BOC	N/A	N/A	N/A	N/A
2.7.5	Develop recharge rules by July 31, 2002, and adopt final rules by December 31, 2002.	Funding for rules covered under strategy 5.1.1	N/A	N/A	N/A	N/A
2.7.6	Implement a recharge program by January 31, 2003.	N/A	$100,000	$100,000	$100,000	$0
2.7.7	Develop and distribute an information piece by January 15, 2003, to explain purpose and process to the public.	N/A	$5,000	N/A	N/A	N/A
2.7.8	Notify all permittees of program by February 28, 2003, and ongoing as needed.	N/A	BOC	N/A	N/A	N/A
2.7.9	Review all permits by December 31 each year beginning 2004.	N/A	N/A	$25,000	$25,000	$25,000
2.7.10	Conduct evaluation of program effectiveness by September 30, 2004 and submit recommendation to General Manager.	N/A	N/A	$25,000	$25,000	$25,000
2.7.11	Develop and implement small recharge structure program by May 31, 2005.	N/A	N/A	$50,000	$50,000	$50,000
	Total Objective 2.7	**$50,000**	**$105,000**	**$200,000**	**$200,000**	**$100,000**

NOTE: **Spending the $100,000 in 2003, 2004, and 2005 for 2.7.6 is contingent upon the number and complexity of recharge zone applications.*

2.8	**Establish demand management/critical period program by September 30, 2002.**					
	NEW POSITIONS		**Program Associate (2003-02)**			
2.8.1	Develop plan that imposes restrictions and submit demand management/critical period program analysis to board by February 28, 2002.	Funding for rules covered under strategy 5.1.1	N/A	N/A	N/A	N/A
2.8.2	Board adopts demand management/critical period rules by August 31, 2002.	Funding for rules covered under strategy 5.1.1	N/A	N/A	N/A	N/A
2.8.3	Develop and distribute information piece by September 15, 2002, to explain demand management/critical period program to pumpers and general public.	$7,000	N/A	$7,000	N/A	$7,000
2.8.4	Develop demand management/critical period program database by September 30, 2002.	BOC	N/A	N/A	N/A	N/A

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II. PLANNING

April 2002

	Objective/Strategy	2002	2003	2004	2005	2006
2.8.5	Develop scheduled withdrawal form for permittees and applicants by September 30, 2002.	$10,000	N/A	N/A	N/A	N/A
2.8.6	Mail scheduled withdrawal forms to all permittees and applicants by October 31, 2002 of each year beginning in 2002.	BOC	BOC	BOC	BOC	BOC
2.8.7	Conduct workshops by November 30, 2002, to explain demand management/critical period program forms.	$500	N/A	N/A	N/A	N/A
2.8.8	Mail "official" scheduled withdrawal reports to all permittees and applicants by January 1 of each year beginning in 2003.	BOC	$10,000	$10,000	$10,000	$10,000
2.8.9	Submit "official" scheduled withdrawal reports for all permittees and applicants to the board by January 31 of each year beginning in 2003.	N/A	BOC	BOC	BOC	BOC
2.8.10	Make final corrections to scheduled withdrawal report form by March 1 of each year beginning in 2003.	N/A	BOC	BOC	BOC	BOC
2.8.11	Include analysis to compare the cost of limiting withdrawals to that of providing water through augmentation by June 30, 2003.	BOC	$100,000	N/A	N/A	N/A
2.8.12	Adopt "pool" rules by September 30, 2003 that provide the method for defining the location and extent of pools within the Authority.	N/A	Funding for rules covered under strategy 5.1.3	N/A	N/A	N/A
	Total Objective 2.8	**$17,500**	**$110,000**	**$17,000**	**$10,000**	**$17,000**
2.9	**Continue participation in the South Central Texas Regional Planning Group (Region L) activities.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
2.9.1	Develop Region L scope of work by March 31, 2002, for the next phase of investigations.	$29,000	$50,000	$50,000	$50,000	$50,000
2.9.2	Provide recommendation to Region L on Authority-recommended water management strategies by December 31, 2003.	N/A	BOC	N/A	N/A	N/A
2.9.3	Completed revised draft Region L plan by March 31, 2005.	BOC	BOC	BOC	BOC	BOC
2.9.4	Complete Region L regional water plan by March 31, 2006.	BOC	BOC	BOC	BOC	BOC
	Total Objective 2.9	**$29,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**
TOTAL	**PLANNING**	**$1,005,100**	**$1,460,600**	**$1,295,600**	**$1,368,600**	**$1,320,600**
TOTAL	**NEW POSITIONS**	**0**	**2**	**0**	**0**	**0**

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

III. RESEARCH **April 2002**

	Objective/Strategy	2002	2003	2004	2005	2006
3.1	**Continue basic data collection, and conduct annual program evaluation to determine overall program effectiveness. First annual evaluation to be conducted by July 31, 2002.**					
	NEW POSITIONS	**Senior Hydrogeologist (2002-04) Gauging Systems Technician (2002-05) Environmental Science Technician (2002-06)**				
3.1.1	Continue data collection systems in place – review hydrologic data collection program and remote gauging system each year.	$413,600	$437,500	$447,500	$457,500	$467,500
3.1.2	Review all data collection efforts currently underway by May 31, 2002, to ensure that all efforts are necessary, properly performed, and properly staffed.	BOC	N/A	N/A	N/A	N/A
3.1.3	Develop written hydrologic data management plan and submit for General Manager approval by July 31, 2002.	BOC	N/A	N/A	N/A	N/A
3.1.4	Based on hydrologic data management plan, implement new hydrologic data management system by December 31, 2002.	BOC	N/A	N/A	N/A	N/A
3.1.5	Complete groundwater level monitoring plan by July 31, 2002, that specifies monitoring wells, additional equipment needed, and data quality objectives for water level and GPS data.	BOC	N/A	N/A	N/A	N/A
3.1.6	Complete groundwater quality monitoring plan by July 31, 2002, that outlines sampling objectives, guidelines for selecting sampling locations, analytical parameters, sampling frequencies, and data quality objectives.	BOC	N/A	N/A	N/A	N/A
3.1.7	Implement groundwater-monitoring programs by August 31, 2002.	BOC	BOC	BOC	BOC	BOC
3.1.8	Complete annual hydrologic data report and the update of the Edwards Aquifer bibliography by June 30 of each year.	$1,500	$1,500	$1,500	$1,500	$1,500

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

IV. WATER QUALITY

	Objective/Strategy	2002	2003	2004	2005	2006
4.1	**Establish Edwards Aquifer Water Quality Program by December 31, 2002.**					
	NEW POSITIONS	**Environmental Coordinator (2002-07)**				
4.1.1	Hire consultant to assist in defining and developing water quality role by March 15, 2002.	**$15,000**	N/A	N/A	N/A	N/A
4.1.2	Develop a matrix for General Manager approval by May 15, 2002, that lists all existing water quality regulations, lead agency responsible for these regulations, brief overview of the regulation/program, recommended Authority role, and additional Authority staffing costs associated with that recommended role.	BOC*	N/A	N/A	N/A	N/A
4.1.3	After working with board committee and stakeholders throughout the region, board to consider adoption of recommendations for Authority water quality program by October 31, 2002.	BOC	N/A	N/A	N/A	N/A
4.1.4	By January 31, 2003, staff to incorporate this new program into overall Authority regulatory and research programs and initiatives.	N/A	BOC	BOC	BOC	BOC
	Total Objective 4.1	**$15,000**	**$0**	**$0**	**$0**	**$0**

NOTE: ** Funding for strategy 4.1.1 may require a budget amendment in 2002.*

4.2	**Establish petroleum storage tank (PST) regulation program by September 30, 2002.**					
	NEW POSITIONS		**Environmental Coordinator (2003-04)**			
4.2.1	Develop all aspects of the petroleum storage tank (PST) regulation program by December 1, 2001.	BOC	N/A	N/A	N/A	N/A
4.2.2	Develop PST rules by January 31, 2002.	BOC	N/A	N/A	N/A	N/A
4.2.3	Board to adopt PST rules by October 31, 2002.	Funding for rules covered under strategy 5.1.2	N/A	N/A	N/A	N/A
4.2.4	Implement PST regulation program by January 31, 2003.	BOC	BOC	BOC	BOC	BOC

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

III. RESEARCH

April 2002

	Objective/Strategy	2002	2003	2004	2005	2006
3.1.9	Prepare and release other groundwater analysis reports throughout the year, such as a groundwater quality trend analysis report, and a synoptic water level measurement report.	$900	$1,000	$1,000	$1,000	$1,000
3.1.10	Conduct annual program evaluation to determine overall program effectiveness by August 31 of each year.	BOC	BOC	BOC	BOC	BOC
	Total Objective 3.1	**$416,000**	**$440,000**	**$450,000**	**$460,000**	**$470,000**
3.2	**Continue Optimization Technical Studies (OTS), and conduct annual program evaluation to determine overall program effectiveness. First annual evaluation to be conducted by July 31, 2002. Please see attached OTS table, Appendix Four.**					
	NEW POSITIONS		**Senior Hydrogeologist (2003-03)**			
3.2.1	Continue OTS as adopted by board of directors per Appendix 4.	$1,517,764	$931,500	$810,000	$660,000	$475,000
3.2.2	Review all OTS currently on schedule by January 31, 2002, to determine if each study is still necessary.	BOC	N/A	N/A	N/A	N/A
3.2.3	Determine relative importance of completing each study and develop a priority list by February 28, 2002.	BOC	N/A	N/A	N/A	N/A
3.2.4	By May 31, 2002, develop scope of work for each study, identify all resources needed to complete each study, and total budgetary requirements.	BOC	N/A	N/A	N/A	N/A
3.2.5	Present revised OTS to the Technical Advisory Group by April 30, 2002.	BOC	N/A	N/A	N/A	N/A
3.2.6	Present Edwards Aquifer Optimization Overview, and revised OTS schedule, along with accompanying budget information, to the board for consideration and approval by July 31, 2002.	BOC	N/A	N/A	N/A	N/A
3.2.7	Implement revised OTS by August 31, 2002.	BOC	N/A	N/A	N/A	N/A
3.2.8	Review list of other possible studies, and determine the relative importance of completing each study to the Authority's work, and develop a priority list by September 30, 2002.	BOC	N/A	N/A	N/A	N/A
3.2.9	For each additional study identified, develop a scope of work that includes the duration of the study, required resources, and total budgetary needs by December 31, 2002.	BOC	N/A	N/A	N/A	N/A
3.2.10	By February 28, 2003, present the schedule for other studies, along with accompanying budget information, to the board for approval.	BOC	BOC	N/A	N/A	N/A

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

IV. WATER QUALITY

	Objective/Strategy	2002	2003	2004	2005	2006
4.3.7	Recharge Zone Protection Program fully operational by March 31, 2005.	BOC	$100,000	$200,000	$400,000	$400,000
	Total Objective 4.3	**$0**	**$100,000**	**$200,000**	**$400,000**	**$400,000**
4.4	**Establish wellhead protection and well spacing program by December 31, 2003.**					
	NEW POSITIONS			**Environmental Coordinator (2004-09)**		
4.4.1	Determine all elements of the program and complete a staff concept paper on rules development by June 30, 2003.	N/A	BOC	N/A	N/A	N/A
4.4.2	Present draft rules to committee by September 30, 2003.	N/A	BOC	N/A	N/A	N/A
4.4.3	Present draft rules to the committee by September 30, 2003, for board adoption by March 31, 2004.	N/A	Funding for rules covered under strategy 5.1.3	Funding for rules covered under strategy 5.1.5	N/A	N/A
4.4.4	Develop program by March 31 2004.	N/A	BOC	N/A	N/A	N/A
4.4.5	Wellhead protection and well spacing program operational beginning March 2004.	N/A	N/A	$30,000	$20,000	$20,000
4.4.6	Develop and distribute an information piece by January 15, 2004 to explain purpose and process to the public.	N/A	$5,000	BOC	N/A	N/A
	Total Objective 4.4	**$0**	**$5,000**	**$30,000**	**$20,000**	**$20,000**
4.5	**Formalize hazardous materials spill response program by December 31, 2002.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
4.5.1	Develop hazardous materials response program to support TNRCC operations by December 31, 2002.	BOC	N/A	N/A	N/A	N/A
4.5.2	Hazardous materials response program operational by December 31, 2002.	N/A	$5,000	$1,000	$1,000	$1,000
	Total Objective 4.5	**$0**	**$5,000**	**$1,000**	**$1,000**	**$1,000**
4.6	**Continue to acquire land over the recharge zone to protect water quality.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
4.6.1	Continue to review land acquisition opportunities provided by others and fund opportunities that meet the criteria of the existing board policy.	$500,000	$0*	$0*	$0*	$0*

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

IV. WATER QUALITY

	Objective/Strategy	2002	2003	2004	2005	2006
4.2.5	Develop and distribute an information piece by April 30, 2003, to explain purpose and process to the public.	BOC	$5,000	N/A	N/A	N/A
	Total Objective 4.2	**$0**	**$5,000**	**$0**	**$0**	**$0**
4.3	**Establish Edwards Aquifer Authority Recharge Zone Protection Program by March 31, 2003.**					
	NEW POSITIONS		**Two Senior Environmental Coordinators (2003-05; 2003-06)**	**Two Professional Engineers (2004-02; 2004-03) Three Inspectors (2004-04; 2004-05; 2004-06) Secretary (2004-07) Records Clerk (2004-08)**		
4.3.1	Develop all aspects of the Authority's recharge zone protection program and prepare staff concept paper by May 15, 2002. Program elements to include recommended "best management practices" for development over the recharge zone, and a policy regarding the use of recycled wastewater on the recharge zone.	BOC	N/A	N/A	N/A	N/A
4.3.2	Submit draft proposed rules to committee by September 30, 2002, for board adoption by March 31, 2003.	Funding for rules covered under strategy 5.1.2	Funding for rules covered under strategy 5.1.4	N/A	N/A	N/A
4.3.3	Begin implementation of program by April 30, 2003.	N/A	BOC	BOC	BOC	BOC
4.3.4	Finalize rules guidance manuals and petition TNRCC for designation to operate program by December 31, 2003.	N/A	BOC	BOC	BOC	BOC
4.3.5	Begin to require permits for development on the recharge zone by March 31, 2004	N/A	N/A	BOC	BOC	BOC
4.3.6	Seek TNRCC delegation of Edwards Aquifer protection program to the Authority by December 31, 2004.	N/A	N/A	BOC	N/A	N/A

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

III. RESEARCH **April 2002**

	Objective/Strategy	2002	2003	2004	2005	2006
3.2.11	Present the approved OTS schedule to the Technical Advisory Group by March 31, 2003.	BOC	BOC	N/A	N/A	N/A
3.2.12	Implement the new OTS schedule by April 30, 2003.	N/A	BOC	N/A	N/A	N/A
3.2.13	Develop OTS collateral material by June 30, 2003, summarizing each study and results to date.	N/A	$6,000	N/A	$6,000	N/A
3.2.14	Perform other OTS studies as scheduled each year, and conduct overall program effectiveness review by September 30 of each year.	BOC	$100,000	$100,000	$100,000	$100,000
	Total Objective 3.2	**$1,517,764**	**$1,037,500**	**$910,000**	**$766,000**	**$575,000**
TOTAL	**RESEARCH**	**$1,933,764**	**$1,477,500**	**$1,360,000**	**$1,226,000**	**$1,045,000**
TOTAL	**NEW POSITIONS**	**3**	**1**	**0**	**0**	**0**

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

V. ENFORCEMENT AND COMPLIANCE

	Objective/Strategy	2002	2003	2004	2005	2006
5.1	**Adopt all rules required by the Edwards Aquifer Authority Act by June 30, 2004. Please see the attached Rulemaking Schedule (Appendix Five).**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
5.1.1	Repeal, amend, and re-codify the following rules by December 31, 2002: 701 – General Provisions; 702 – General Definitions; 703 – Rulemaking Procedures; 705 – Jurisdiction of the Authority; 707 – Procedure Before the Authority; 709 – Fees (subchs. A – D); and 711 – Groundwater Withdrawal Permits (subchs. A-I, K-M). Adopt the following rules by December 31, 2002: 711 - Groundwater Withdrawal Permits (subch. J); 713 – Water Quality (subchs. A – D, and G (Phases I and II); and 715 – Comprehensive Management Plan Implementation Rules (subchs. A – C and E).	$515,000	N/A	N/A	N/A	N/A
5.1.2	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in strategy 5.1.1 by December 31, 2002.*	**$34,700**	N/A	N/A	N/A	N/A
5.1.3	Adopt the following rules by December 31, 2003: 713 – Water Quality (subchs. E and F); 715 – Comprehensive Management Plan Implementation Rules (subchs. D, F, H and I).	N/A	$510,000	N/A	N/A	N/A
5.1.4	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in strategy 5.1.3 by December 31, 2003.	N/A	$20,000	N/A	N/A	N/A
5.1.5	Adopt the following rules by December 31, 2004: 709 - Fees (subch. E); 713 - Water Quality (subchs. E and F); 715 - Comprehensive Water Management Plan Implementation Rules (subch. G); and 717 - Enforcement.	N/A	N/A	$50,000	N/A	N/A

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

V. ENFORCEMENT AND COMPLIANCE

	Objective/Strategy	2002	2003	2004	2005	2006
5.1.6	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in strategy 5.1.5 by December 31, 2004.	N/A	N/A	$20,000	N/A	N/A

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

V. ENFORCEMENT AND COMPLIANCE

	Objective/Strategy	2002	2003	2004	2005	2006
5.1.7	Conduct biennial rules review to determine overall program effectiveness by September 30 of each odd year.	N/A	BOC	N/A	BOC	N/A
	Total Objective 5.1	**$549,700**	**$530,000**	**$70,000**	**$0**	**$0**

NOTE: ** Funding for 5.1.2 in 2002 may require a $14,000 budget amendment.*

5.2	**Continue enforcement program, and conduct annual program evaluation to determine overall program effectiveness. First annual evaluation to be conducted by November 30, 2002.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
5.2.1	Adopt enforcement rules by May 31, 2004.	N/A	N/A	Funding for rules covered under strategy 5.1.5	N/A	N/A
5.2.2	Notify Permits Committee within 60 days of verified potential violation and make recommendation for board action.	BOC	BOC	BOC	BOC	BOC
5.2.3	Settle all alleged violations within 30 days after board action.	$9,000	BOC	BOC	BOC	BOC
5.2.4	Develop informational materials explaining program enforcement by May 31, 2003, and distribute annually.	N/A	$3,000	$3,000	$3,000	$3,000
5.2.5	By December 31, 2003, begin to conduct informational workshops in each county and disseminate information regarding enforcement.	N/A	BOC	BOC	BOC	BOC
	Total Objective 5.2	**$9,000**	**$3,000**	**$3,000**	**$3,000**	**$3,000**
TOTAL	**ENFORCEMENT AND COMPLIANCE**	**$558,700**	**$533,000**	**$73,000**	**$3,000**	**$3,000**
TOTAL	**NEW POSITIONS**	**0**	**0**	**0**	**0**	**0**

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

IV. WATER QUALITY

	Objective/Strategy	2002	2003	2004	2005	2006
4.6.2	By March 31, 2002, request board comments regarding staff review of land acquisition opportunities and determine if a more quantitative assessment is preferred.	BOC	N/A	N/A	N/A	N/A
4.6.3	If board requests a more quantitative assessment of land acquisition opportunities, provide the new assessment format by July 31, 2002.	BOC	N/A	N/A	N/A	N/A
4.6.4	Develop and distribute an information piece by January 15, 2003, to explain purpose and process to the public.	BOC	$5,000	N/A	N/A	N/A
	Total Objective 4.6	**$500,000**	**$5,000**	**$0**	**$0**	**$0**
	NOTE: **This program will be funded with up to $500,000 of carry over funds from the previous year's budget, if available.*					
TOTAL	**WATER QUALITY**	**$515,000**	**$120,000**	**$231,000**	**$421,000**	**$421,000**
TOTAL	**NEW POSITIONS**	**1**	**3**	**8**	**0**	**0**

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

V. ENFORCEMENT AND COMPLIANCE

	Objective/Strategy	2002	2003	2004	2005	2006
5.1	**Adopt all rules required by the Edwards Aquifer Authority Act by June 30, 2004. Please see the attached Rulemaking Schedule (Appendix Five).**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
5.1.1	Repeal, amend, and re-codify the following rules by December 31, 2002: 701 – General Provisions; 702 – General Definitions; 703 – Rulemaking Procedures; 705 – Jurisdiction of the Authority; 707 – Procedure Before the Authority; 709 – Fees (subchs. A – D); and 711 – Groundwater Withdrawal Permits (subchs. A-I, K-M). Adopt the following rules by December 31, 2002: 711 - Groundwater Withdrawal Permits (subch. J); 713 – Water Quality (subchs. A – D, and G (Phases I and II); and 715 – Comprehensive Management Plan Implementation Rules (subchs. A – C and E).	$515,000	N/A	N/A	N/A	N/A
5.1.2	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in strategy 5.1.1 by December 31, 2002.*	**$34,700**	N/A	N/A	N/A	N/A
5.1.3	Adopt the following rules by December 31, 2003: 713 – Water Quality (subchs. E and F); 715 – Comprehensive Management Plan Implementation Rules (subchs. D, F, H and I).	N/A	$510,000	N/A	N/A	N/A
5.1.4	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in strategy 5.1.3 by December 31, 2003.	N/A	$20,000	N/A	N/A	N/A
5.1.5	Adopt the following rules by December 31, 2004: 709 - Fees (subch. E); 713 - Water Quality (subchs. E and F); 715 - Comprehensive Water Management Plan Implementation Rules (subch. G); and 717 - Enforcement.	N/A	N/A	$50,000	N/A	N/A

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

V. ENFORCEMENT AND COMPLIANCE

	Objective/Strategy	2002	2003	2004	2005	2006
5.1.6	Fulfill all public notice and hearing requirements for all Proposed and Final Rules included in strategy 5.1.5 by December 31, 2004.	N/A	N/A	$20,000	N/A	N/A

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
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April 2002

V. ENFORCEMENT AND COMPLIANCE

	Objective/Strategy	2002	2003	2004	2005	2006
5.1.7	Conduct biennial rules review to determine overall program effectiveness by September 30 of each odd year.	N/A	BOC	N/A	BOC	N/A
	Total Objective 5.1	**$549,700**	**$530,000**	**$70,000**	**$0**	**$0**

NOTE: ** Funding for 5.1.2 in 2002 may require a $14,000 budget amendment.*

5.2	**Continue enforcement program, and conduct annual program evaluation to determine overall program effectiveness. First annual evaluation to be conducted by November 30, 2002.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
5.2.1	Adopt enforcement rules by May 31, 2004.	N/A	N/A	Funding for rules covered under strategy 5.1.5	N/A	N/A
5.2.2	Notify Permits Committee within 60 days of verified potential violation and make recommendation for board action.	BOC	BOC	BOC	BOC	BOC
5.2.3	Settle all alleged violations within 30 days after board action.	$9,000	BOC	BOC	BOC	BOC
5.2.4	Develop informational materials explaining program enforcement by May 31, 2003, and distribute annually.	N/A	$3,000	$3,000	$3,000	$3,000
5.2.5	By December 31, 2003, begin to conduct informational workshops in each county and disseminate information regarding enforcement.	N/A	BOC	BOC	BOC	BOC
	Total Objective 5.2	**$9,000**	**$3,000**	**$3,000**	**$3,000**	**$3,000**
TOTAL	**ENFORCEMENT AND COMPLIANCE**	**$558,700**	**$533,000**	**$73,000**	**$3,000**	**$3,000**
TOTAL	**NEW POSITIONS**	**0**	**0**	**0**	**0**	**0**

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

VI. PUBLIC AFFAIRS

	Objective/Strategy	2002	2003	2004	2005	2006
6.1	**Increase overall public awareness of the Edwards Aquifer Authority by December 31, 2004.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
6.1.1	By April 30, 2002, formulate goals and theme of an Authority three – year awareness campaign based on the results of the 2001 public opinion survey.	BOC	N/A	N/A	N/A	N/A
6.1.2	Board to approve public awareness campaign consultants and expenditures, by July 31, 2002. Campaign to begin implementation by October 1, 2002, and completion by September 30, 2006.	$100,000	$100,000	$100,000	$100,000	$100,000
6.1.3	Conduct public opinion surveys by June 30, 2003, June 30, 2004 and June 30, 2006, to assess effectiveness of program and develop recommendations for adjustments to campaign messages.	N/A	$15,000	$15,000	N/A	$15,000
6.1.4	By January 31, 2005, Revise campaign concept to address key aquifer issues, and work on new campaign.	N/A	N/A	N/A	BOC	N/A
6.1.5	Board to approve public awareness campaign consultants and expenditures, by June 30, 2006. Begin implementation of new awareness campaign by October 1, 2006.	N/A	N/A	N/A	N/A	$125,000
	Total Objective 6.1	**$100,000**	**$115,000**	**$115,000**	**$100,000**	**$240,000**
6.2	**Continue to support implementation of all Authority programs, and conduct annual evaluation of overall program effectiveness. First annual evaluation to occur by April 30, 2003.**					
	NEW POSITIONS		**Public Information Coordinator (2003-07)**			
6.2.1	Continue on-going media relations throughout region by issuing at least 20 press releases per year, providing daily aquifer level updates, requesting 3 editorial board meetings throughout the year, placing 3 opinion editorial pieces throughout the year, creating news angles on Authority programs and activities as needed, following established media protocol, and responding to media requests within one hour of receiving the request.	BOC	BOC	BOC	BOC	BOC

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

VI. PUBLIC AFFAIRS

	Objective/Strategy	2002	2003	2004	2005	2006
6.2.2	Continue on-going community relations efforts, including sponsorship of one event in five of the eight Authority counties annually.	$6,500	$7,000	$7,250	$7,500	$7,750
6.2.3	Continue to produce collateral materials each year to provide general Authority information, including the General Manager's Report, board brochure, tabloid, xeriscape brochure, annual report, web-site updates, board support materials, Aquifer Science Bulletin, Authority fact sheet, staff bio statements, employee directory, on-hold messages, targeted water conservation brochure, Authority advertisement creation and placement, etc.	$59,500	$60,000	$60,000	$60,000	$60,000
6.2.4	Distribute in Authority region, Authority collateral material including pens, pencils, water conservation products and kits.	$40,000	$42,000	$44,000	$46,000	$48,000
6.2.5	Continue to produce collateral materials and graphic presentations in support of Authority speaker's bureau, and continue program to appear before 25 homeowner's associations and 25 other groups each year.	BOC	BOC	BOC	BOC	BOC
6.26	January 1, 2003 begin research on establishing additional signage over the recharge zone. Program implementation will begin May 1, 2004.	N/A	BOC	$35,000	$30,000	$25,000
	Total Objective 6.2	**$106,000**	**$109,000**	**$146,250**	**$143,500**	**$140,750**
6.3	**Increase public education on management and protection of the Edwards Aquifer by December 31, 2005.**					
	NEW POSITIONS		**Secretary (2003-01)**	**Public Education Assistant (2004-10)**		
6.3.1	Conduct one teacher workshop/training session per year beginning May 31, 2002, and participate in at least two training sessions in the region per year.	$5,000	$5,500	$6,000	$6,500	$7,000
6.3.2	Offer sponsorships for classes in exchange for conservation credits to make the WaterWise Program self-funded January 1, 2004.*	BOC	BOC	BOC	BOC	BOC
6.3.3	Continue to increase participation in Authority-funded WaterWise Program by December 31, 2005.	$200,000	$400,000	$400,000	$400,000	$400,000

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

VI. PUBLIC AFFAIRS

	Objective/Strategy	2002	2003	2004	2005	2006
6.3.4	Visit at least 3 schools per month (at least 2 schools in each county per year) during the school year to promote aquifer awareness that includes workshops, fairs, and career days held in schools throughout the region.	BOC	BOC	BOC	BOC	BOC
6.3.5	Distribute curriculum and other educational materials, including videos, maps, bookmarks, and other items as requested to schools in the Authority region.	$53,000	$120,000	$125,000	$130,000	$135,000
6.3.6	By October 31, 2002, complete re-structure of existing library materials with new software.	$2,500	BOC	BOC	BOC	BOC
6.3.7	By October 31, 2004, compile all documents referenced in the Edwards Aquifer Bibliography, and integrate them into the library.	$6,600	$2,000	$2,000	$1,000	$1,000
6.3.8	Implement a girl scout and boy scout Edwards Aquifer education program by December 31, 2003.	N/A	$2,000	$2,000	$2,000	$2,000
6.3.9	Continue Authority book cover contest in regional schools, and distribute 350,000 book covers each year.	$34,000	$35,000	$36,000	$37,000	$38,000
6.3.10	Update existing Authority educational displays located throughout the region. One display is to be updated each year by November 1. A fifth display will be completed by November 2006 for placement in either Medina or Uvalde counties. By June 30, 2003, develop Authority educational portable display for use at community events.	$20,000	$25,000	$30,000	$35,000	$40,000
6.3.11	By December 31, 2006, update three existing Authority videos, and produce one new Authority video on wellhead protection for Edwards Aquifer wells.	N/A	$40,000	$40,000	$40,000	$40,000
6.3.12	Continue participating in regional groundwater festivals.	BOC	BOC	BOC	BOC	BOC
6.3.13	Continue Authority participation in 5 area educational community events such as watershed festivals, environmental fairs and other events by December 31 of each year.	BOC	BOC	BOC	BOC	BOC
6.3.14	Create and distribute Edwards Aquifer education simulation software program by August 31, 2005.	N/A	$3,000	$40,000	$10,000	$10,000
6.3.14	Conduct annual program evaluation to determine overall program effectiveness by September 30 of each year.	BOC	BOC	BOC	BOC	BOC
	Total Objective 6.3	**$321,100**	**$632,500**	**$681,000**	**$661,500**	**$673,000**

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

VI. PUBLIC AFFAIRS

	Objective/Strategy	2002	2003	2004	2005	2006
6.4	**Continue Authority customer service program, and conduct annual evaluation of overall program effectiveness. First annual evaluation to occur by May 31, 2003.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
6.4.1	Prepare Authority customer service procedures by January 31, 2002.	BOC	N/A	N/A	N/A	N/A
6.4.2	Implement customer service program by March 31, 2002. This item will become an on-going item.	$24,000	$24,000	$24,000	$24,000	$24,000
6.4.3	By April 30, 2002, begin preparing a quarterly report to the board of customer feedback received during the previous quarter, and determine if adjustments need to be made. This item will become an on-going item.	BOC	BOC	BOC	BOC	BOC
6.4.4	By April 30, 2002, begin submitting an internal monthly report of customer feedback received during the previous month. This item will become an on-going item.	BOC	BOC	BOC	BOC	BOC
6.4.5	Develop and implement an Authority employee customer service recognition program by May 31, 2003. This item will become an on-going item.	N/A	$500	$500	$500	$500
6.4.6	Conduct customer service training for all staff by June of each year.	$4,000	$4,500	$5,000	$5,500	$6,000
	Total Objective 6.4	**$28,000**	**$29,000**	**$29,500**	**$30,000**	**$30,500**
6.5	**Conduct bienniel Edwards Aquifer symposium in October of even-numbered years starting in 2004.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
6.5.1	Board to consider approval of location and date for symposium by January 31 of each even-numbered year.	N/A	N/A	BOC	N/A	BOC
6.5.2	Board to approve theme, plan and schedule for one-day symposium by March 31 of each even-numbered year.	N/A	N/A	BOC	N/A	BOC
6.5.3	Review and finalize budget for symposium by April 30 of each even-numbered year.	N/A	N/A	$60,000	N/A	$65,000
6.5.4	Secure presenters, sponsors, and exhibitors by April 30 of each even-numbered year.	N/A	N/A	BOC	N/A	BOC
6.5.5	Order all support/print materials for symposium by June 30 of each even-numbered year.	N/A	N/A	$15,000	N/A	$20,000
6.5.6	Make final confirmations and hold symposium in October of each even-numbered year	N/A	N/A	BOC	N/A	BOC

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

VI. PUBLIC AFFAIRS

	Objective/Strategy	2002	2003	2004	2005	2006
6.5.7	Submit follow-up report to the board on the effectiveness of the symposium by November 15 of each even-numbered year	N/A	N/A	BOC	N/A	BOC
	Total Objective 6.5	**$0**	**$0**	**$75,000**	**$0**	**$85,000**
TOTAL	**PUBLIC AFFAIRS**	**$555,100**	**$885,500**	**$1,046,750**	**$935,000**	**$1,169,250**
TOTAL	**NEW POSITIONS**	**0**	**1**	**1**	**0**	**0**

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

VII. ADMINISTRATION

	Objective/Strategy	2002	2003	2004	2005	2006
7.1	**Adopt new single-member district lines by March 31, 2002, if necessary.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.1.1	Board to consider any director district line changes based on 2000 demographic information analysis and submit for U.S. Department of Justice pre-clearance by April 1, 2002.	$25,000	N/A	N/A	N/A	N/A
7.1.2	Publish new maps with updated director district lines by July 1, 2002, and correct publications with new lines as needed.	$5,000	N/A	N/A	N/A	N/A
	Total Objective 7.1	**$30,000**	**$0**	**$0**	**$0**	**$0**
7.2	**Conduct biennial director elections in November of even-numbered years.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.2.1	By July 31 of even-numbered years board to call November election for director district terms expiring on December 1 of that year.	BOC	N/A	BOC	N/A	BOC
7.2.2	By August 31, contract with all county election officials to conduct Authority elections.	BOC	N/A	BOC	N/A	BOC
7.2.3	Hold elections in November.	$313,000	N/A	$315,000	N/A	$315,000
7.2.4	Conduct oath of office ceremony in December of even-numbered years.	BOC	N/A	BOC	N/A	BOC
	Total Objective 7.2	**$313,000**	**$0**	**$315,000**	**$0**	**$315,000**
7.3	**Continue to provide legal support to all Authority programs as needed.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.3.1	By August 31 of each year, include a budget for general legal services in the annual budget being prepared for the next year to cover general, program and litigation legal expenses.	$560,000	$600,000	$575,000	$550,000	$525,000
7.3.2	Conduct annual review of general counsel engagement letter by August 31 of each year to see if any adjustments need to be made to the agreement.	BOC	BOC	BOC	BOC	BOC
	Total Objective 7.3	**$560,000**	**$600,000**	**$575,000**	**$550,000**	**$525,000**

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

VII. ADMINISTRATION

	Objective/Strategy	2002	2003	2004	2005	2006
7.4	**Continue to prepare for legislative sessions, and monitor related activities in non-session years.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.4.1	Every year, submit report to the Legislative Oversight Committee and regional legislators on the status of Authority activities by March 1.	$4,000	$5,000	$5,000	$5,000	$5,000
7.4.2	Continue proactive efforts to communicate with federal, state and local elected officials and stakeholders in the region on Edwards Aquifer and Authority issues, as needed throughout the year.	$60,000	$100,000	$70,000	$110,000	$75,000
	Total Objective 7.4	**$64,000**	**$105,000**	**$75,000**	**$115,000**	**$80,000**
7.5	**Fund and provide information to the consultant preparing the South Central Texas Water Conservation Advisory Committee report on the effectiveness of the EAA by October 31 or each even-numbered year.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.5.1	Fund SCTWAC assessment report.	$50,000	N/A	$55,000	N/A	$60,000
7.5.2	Work with SCTWAC representative to retain consultant by January of even-numbered years to conduct assessment.	N/A	BOC	N/A	BOC	N/A
7.5.3	Prepare information and respond to consultant from January 1 through November 1 regarding Authority operations and programs for the previous two-year period.	N/A	BOC	N/A	BOC	N/A
7.5.4	Board to approve Authority response to SCTWAC assessment report by December 15 of each even-numbered year.	BOC	N/A	BOC	N/A	BOC
	Total Objective 7.5	**$50,000**	**$0**	**$55,000**	**$0**	**$60,000**
7.6	**Conduct competitive procurement process and manage Authority contracts.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.6.1	Maintain membership in South Central Texas Regional Certification Agency and participate in area events to cultivate relationships with historically underutilized businesses (HUBs).	$5,500	$5,500	$5,500	$5,500	$5,500
7.6.2	Compile previous year data on HUBs by March 31 of each year.	BOC	BOC	BOC	BOC	BOC
7.6.3	Report previous year HUB experience to the board by May 31 of each year.	BOC	BOC	BOC	BOC	BOC
7.6.4	Prepare and submit report of previous two years' experience for HUB contracts to the Governor's Office by October 31 of every even-numbered year.	BOC	N/A	BOC	N/A	BOC

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IMPLEMENTATION MATRIX: STRATEGIC PLAN
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VII. ADMINISTRATION

	Objective/Strategy	2002	2003	2004	2005	2006
7.6.5	Conduct competitive procurement process and execute contracts for professional and non-professional services and equipment purchases as needed, and maintain general procurement program for the Authority.	$25,000	$26,000	$27,000	$28,000	$29,000
	Total Objective 7.6	**$30,500**	**$31,500**	**$32,500**	**$33,500**	**$34,500**
7.7	**Prepare for review under Chapter 325, Government Code (Texas Sunset Act). Review to be conducted as if board scheduled to be abolished September 1, 2005.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.7.1	Receive notification of upcoming sunset review and begin preparing information for review by December 31, 2003.	BOC	BOC	BOC	BOC	BOC
7.7.2	Work with representatives of the Sunset Advisory Commission, submit requested information regarding Edwards Aquifer Authority programs and operations, and receive final Authority report by December 31, 2004	BOC	BOC	BOC	BOC	BOC
7.7.3	Respond to inquiries regarding Authority Sunset Advisory Commission report, and work with members of the Texas Legislature regarding the report.	BOC	BOC	BOC	BOC	BOC
	Total Objective 7.7	**$0**	**$0**	**$0**	**$0**	**$0**
7.8	**Submit a report to the governor, lieutenant governor, and speaker of the house of representatives, by January 1, 2003, on the extent to which other entities have cooperated with and assisted the Authority. (Note: EAA Act required this report to be submitted by January 1, 1995.)**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.8.1	Staff to prepare recommendation and draft report, and submit draft to board by September 30, 2002.	$2,000	N/A	N/A	N/A	N/A
7.8.2	Board to approve final report by November 30, 2002, and submit report to Legislature by January 1, 2003.	BOC	BOC	N/A	N/A	N/A
	Total Objective 7.8	**$2,000**	**$0**	**$0**	**$0**	**$0**

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
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VII. ADMINISTRATION

	Objective/Strategy	2002	2003	2004	2005	2006
7.9	**Actively manage all Authority documents.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.9.1	Manage and maintain the Authority's records system.	$22,400	$23,000	$24,000	$25,000	$26,000
7.9.2	Conduct annual review of records retention schedule for board approval by July 31 of each year.	BOC	BOC	BOC	BOC	BOC
7.9.3	Destroy Authority documents according to the Authority's retention schedule.	BOC	BOC	BOC	BOC	BOC
7.9.4	Implement an Authority Disaster Recovery Plan by April 30, 2002, and review the program annually by April 30 of each year.	BOC	BOC	BOC	BOC	BOC
	Total Objective 7.9	**$22,400**	**$23,000**	**$24,000**	**$25,000**	**$26,000**
7.10	**Ensure accurate financial accounting for Authority operations.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.10.1	Board selects and retains auditor by October 31 of each year.	BOC	BOC	BOC	BOC	BOC
7.10.2	Conduct annual financial audit for previous year by March 31 each year.	$20,000	$22,000	$24,000	$26,000	$29,000
7.10.3	Board approves financial audit by April 30 of each year.	BOC	BOC	BOC	BOC	BOC
7.10.4	Submit financial audit to TNRCC by April 30 of each year.	BOC	BOC	BOC	BOC	BOC
7.10.5	Board approves Authority central depository bank contract by September 30 of every even-numbered year.	BOC	BOC	BOC	BOC	BOC
7.10.6	Board approves Authority property and casualty insurance coverage by April 1 of each year.	$43,000	$47,000	$52,000	$75,000	$83,000
7.10.7	Provide high-quality accounting services to maintain strong fiscal accountability.	$5,475	$5,600	$5,800	$6,000	$6,200
	Total Objective 7.10	**$68,475**	**$74,600**	**$81,800**	**$107,000**	**$118,200**
7.11	**Adopt annual budget and aquifer management fees for the Authority by November of each year.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.11.1	Board adopts budget preparation and adoption schedule by March 31, 2002.	BOC	BOC	BOC	BOC	BOC
7.11.2	Begin preparing upcoming annual budget no later than August 1 of each year, and have the board consider adoption of the budget and fees by November 30 of each year.	$2,100	$2,200	$2,300	$2,400	$2,500
7.11.3	Distribute annual withdrawal contracts by September 1 to be returned by October 1 of each year.	BOC	BOC	BOC	BOC	BOC
7.11.4	Send out copies of annual budget to directors and SCTWAC within 30 days after adoption.	BOC	BOC	BOC	BOC	BOC

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
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VII. ADMINISTRATION

	Objective/Strategy	2002	2003	2004	2005	2006
7.11.5	Distribute non-agricultural user aquifer management fee statements by December 31 of each year.	BOC	BOC	BOC	BOC	BOC
	Total Objective 7.11	**$2,100**	**$2,200**	**$2,300**	**$2,400**	**$2,500**
7.12	**Maintain positive work environment by retaining qualified, trained professional employees, and by providing a comfortable work environment.**					
	NEW POSITIONS	**Custodian (2002-08)**		**Staff Development Specialist (2004-11)**		
7.12.1	Close Hondo field office.	N/A	N/A	N/A	N/A	N/A
7.12.2	Consolidate employees in San Antonio offices by May 30, 2002, and continue to lease office space through December 31, 2004, or until long-term consolidated office space is constructed.	$55,000	$80,000	$135,000	N/A	N/A
7.12.3	Assess long-term needs and submit report to the board by June 30, 2002.	$75,000	N/A	N/A	N/A	N/A
7.12.4	Find site for consolidated Authority office space for maximum employment as outlined by the strategic plan, construct or purchase new office facility by December 31, 2005.	N/A	$500,000	$2,000,000	$20,000	N/A
7.12.5	Purchase new and replacement vehicles according to the needs of the Authority.	$45,000	$25,000	$75,000	$45,000	$25,000
7.12.6	Provide high-quality administrative services to maintain positive work environment.	$20,250	$20,900	$21,500	$22,100	$22,800
7.12.7	Recruit staff to fill vacant positions as needed.	$11,950	$12,300	$12,700	$13,100	$13,500
7.12.8	Conduct salary survey of all positions by August 31 of every third year beginning in 2004.	N/A	N/A	$15,000	N/A	N/A
7.12.9	Develop internal training and safety program by December 31, 2003.	BOC	BOC	BOC	BOC	BOC
7.12.10	Review organization each year and assess personnel needs by August 31.	BOC	BOC	BOC	BOC	BOC
7.12.11	Conduct annual team building and other training every year.	$5,000	$5,200	$5,400	$5,600	$5,800
	Total Objective 7.12	**$212,200**	**$643,400**	**$2,264,600**	**$105,800**	**$67,100**

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
2002 - 2006

April 2002

VII. ADMINISTRATION

	Objective/Strategy	2002	2003	2004	2005	2006
7.13	**Maintain management information system that enhances staff effectiveness.**					
	NEW POSITIONS			**Information Systems Technician (2004-12)**		
7.13.1	Conduct annual assessment of information management needs and prepare recommendations for General Manager approval by August 31 each year	BOC	BOC	BOC	BOC	BOC
7.13.2	Upgrade telephone and computer system to allow interactive reporting of permit-related data by November 1, 2003.	N/A	$60,000	N/A	N/A	N/A
7.13.3	Update inventory of Authority computer equipment each year by December 31.	BOC	BOC	BOC	BOC	BOC
7.13.4	Replace 25% of computer hardware by November 30 each year.	N/A	$21,000	$24,000	$28,500	$31,500
7.13.5	Upgrade hardware and software for network servers and desktop computers each year as needed.	$95,000	$70,000	$70,000	$70,000	$70,000
7.13.6	Repair and replace computer hardware as needed.	$38,900	$40,100	$41,300	$42,500	$43,800
7.13.7	Provide computer training for Authority staff.	$10,000	$10,000	$10,000	$10,000	$10,000
7.13.8	Establish a T-1 connection for Authority data communication by April 30, 2002.	$35,000	$36,100	$37,200	$38,300	$39,400
	Total Objective 7.13	**$178,900**	**$237,200**	**$182,500**	**$189,300**	**$194,700**
7.14	**Maintain geographic information system technology that enhances staff effectiveness.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.14.1	Hire new GIS Coordinator by June 30, 2002.	BOC	N/A	N/A	N/A	N/A
7.14.2	Obtain all software and hardware upgrades by May 31 of each year beginning in 2002.	$10,000	$15,000	$15,000	$15,000	$15,000
7.14.3	Design standardized GIS format, consolidate projects into standard format, and properly document data sets by May 31, 2003, and continue to acquire and maintain data sets.	$100,000	$50,000	$20,000	$20,000	$20,000
7.14.4	Integrate GIS with data management system by December 31, 2003.	BOC	BOC	N/A	N/A	N/A
7.14.5	Develop standard GIS applications by June 30, 2003.	BOC	BOC	N/A	N/A	N/A

APPENDIX 2
IMPLEMENTATION MATRIX: STRATEGIC PLAN
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April 2002

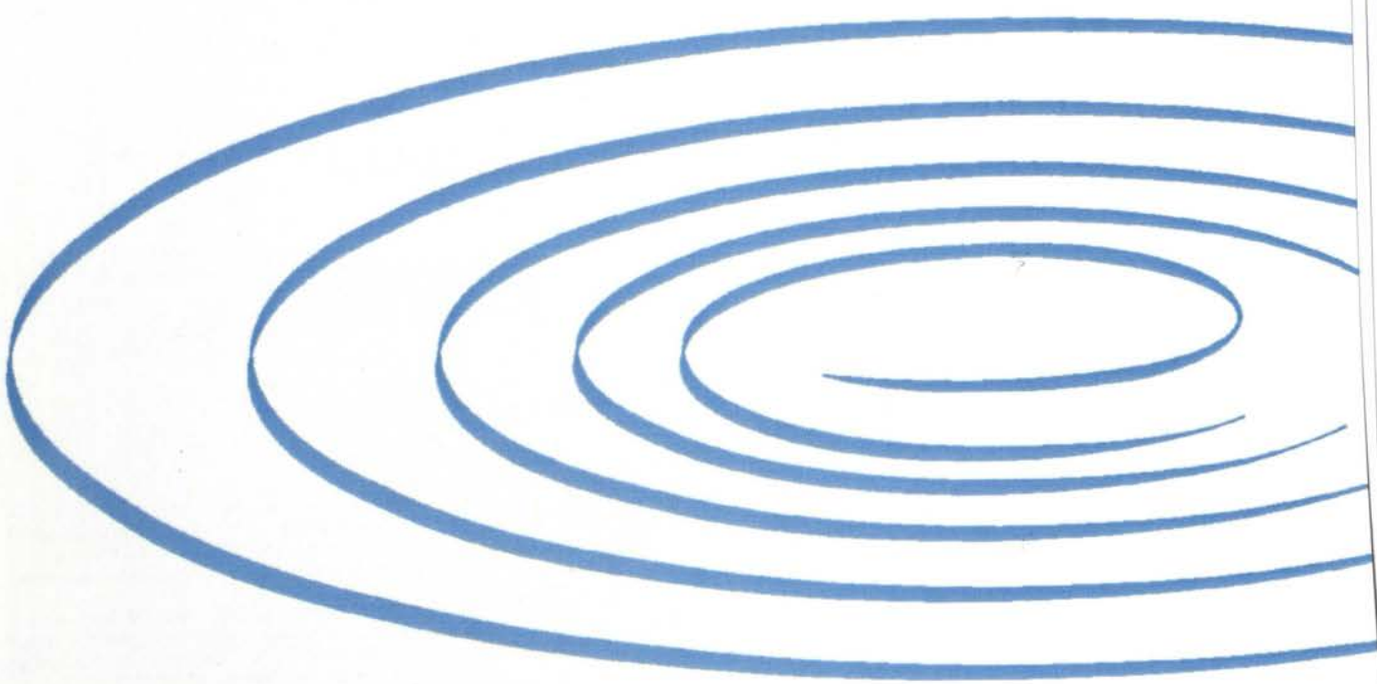
VII. ADMINISTRATION

	Objective/Strategy	2002	2003	2004	2005	2006
7.14.6	Perform routine GIS operations as scheduled each year, and conduct overall program effectiveness review by June 30 of each year beginning in 2003.	N/A	BOC	BOC	BOC	BOC
	Total Objective 7.14	**$110,000**	**$65,000**	**$35,000**	**$35,000**	**$35,000**
7.15	**Annually assess organizational performance pursuant to adopted strategic plan, and make adjustments to the plan as necessary by June 30 of each year.**					
	NEW POSITIONS	**None needed for this objective during this planning period.**				
7.15.1	Conduct assessment of strategic plan by June 1 of each year.	$10,000	$10,000	$10,000	$10,000	$10,000
7.15.2	Board approves revisions/updates to strategic plan by July 31 for budget planning and forecasting purposes.	BOC	BOC	BOC	BOC	BOC
7.15.3	Publish and distribute revised strategic plan by August 31 of each year.	$2,000	$2,000	$2,000	$2,000	$2,000
7.15.4	By December 31, each organizational team develops annual work plan for the upcoming year.	BOC	BOC	BOC	BOC	BOC
7.15.5	Retain consultant and prepare strategic plan for the next five-year period (2007 – 2011) by June 30, 2006.	N/A	N/A	N/A	BOC	$75,000
	Total Objective 7.15	**$12,000**	**$12,000**	**$12,000**	**$12,000**	**$87,000**
TOTAL	**ADMINISTRATION**	**$1,655,575**	**$1,793,900**	**$3,654,700**	**$1,175,000**	**$1,545,000**
TOTAL	**NEW POSITIONS**	**1**	**0**	**2**	**0**	**0**

	2002	2003	2004	2005	2006	5-Year Totals
I GROUNDWATER WITHDRAWAL PERMITS						
Expenses	$1,619,500	$1,576,500	$312,000	$327,000	$188,000	$4,023,000
Positions	3	0	1	0	0	4
II PLANNING						
Expenses	$1,005,100	$1,460,600	$1,295,600	$1,368,600	$1,320,600	$6,450,500
Positions	0	2	0	0	0	2
III RESEARCH						
Expenses	$1,933,764	$1,477,500	$1,360,000	$1,226,000	$1,045,000	$7,042,264
Positions	3	1	0	0	0	4
IV WATER QUALITY						
Expenses	$515,000	$120,000	$231,000	$421,000	$421,000	$1,708,000
Positions	1	3	8	0	0	12
V ENFORCEMENT & COMPLIANCE						
Expenses	$558,700	$533,000	$73,000	$3,000	$3,000	$1,170,700
Positions	0	0	0	0	0	0
VI PUBLIC AFFAIRS						
Expenses	$555,100	$885,500	$1,046,750	$935,000	$1,169,250	$4,591,600
Positions	0	1	1	0	0	2
VII ADMINISTRATION						
Expenses	$1,655,575	$1,793,900	$3,654,700	$1,175,000	$1,545,000	$9,824,175
Positions	1	0	2	0	0	3
FUNCTIONAL AREA SUBTOTALS	$7,842,739	$7,847,000	$7,973,050	$5,455,600	$5,691,850	
BASE OPERATING COSTS (3% increase)	$4,310,903	$4,440,230	$4,573,437	$4,710,640	$4,851,959	
Expense Subtotal	$12,153,642	$12,287,230	$12,546,487	$10,166,240	$10,543,809	
CONTINGENCY (10% of Expense Subtotal)	$1,124,938	$1,229,000	$1,255,000	$1,017,000	$1,054,000	
GRAND TOTAL	**$13,278,580**	**$13,516,230**	**$13,801,487**	**$11,183,240**	**$11,597,809**	
POSITIONS	**56**	**63**	**75**	**75**	**75**	
Non-agricultural Aquifer Management Fee (per acre-foot)	$25.00	$39.00	$40.00	$32.00	$33.00	
Difference between Grand Total and Budget		463,800				
Unbudgeted things:	(116,000)			$463,800		
Quarry research						
Rules						
Total Unbudgeted items		(116,000)				

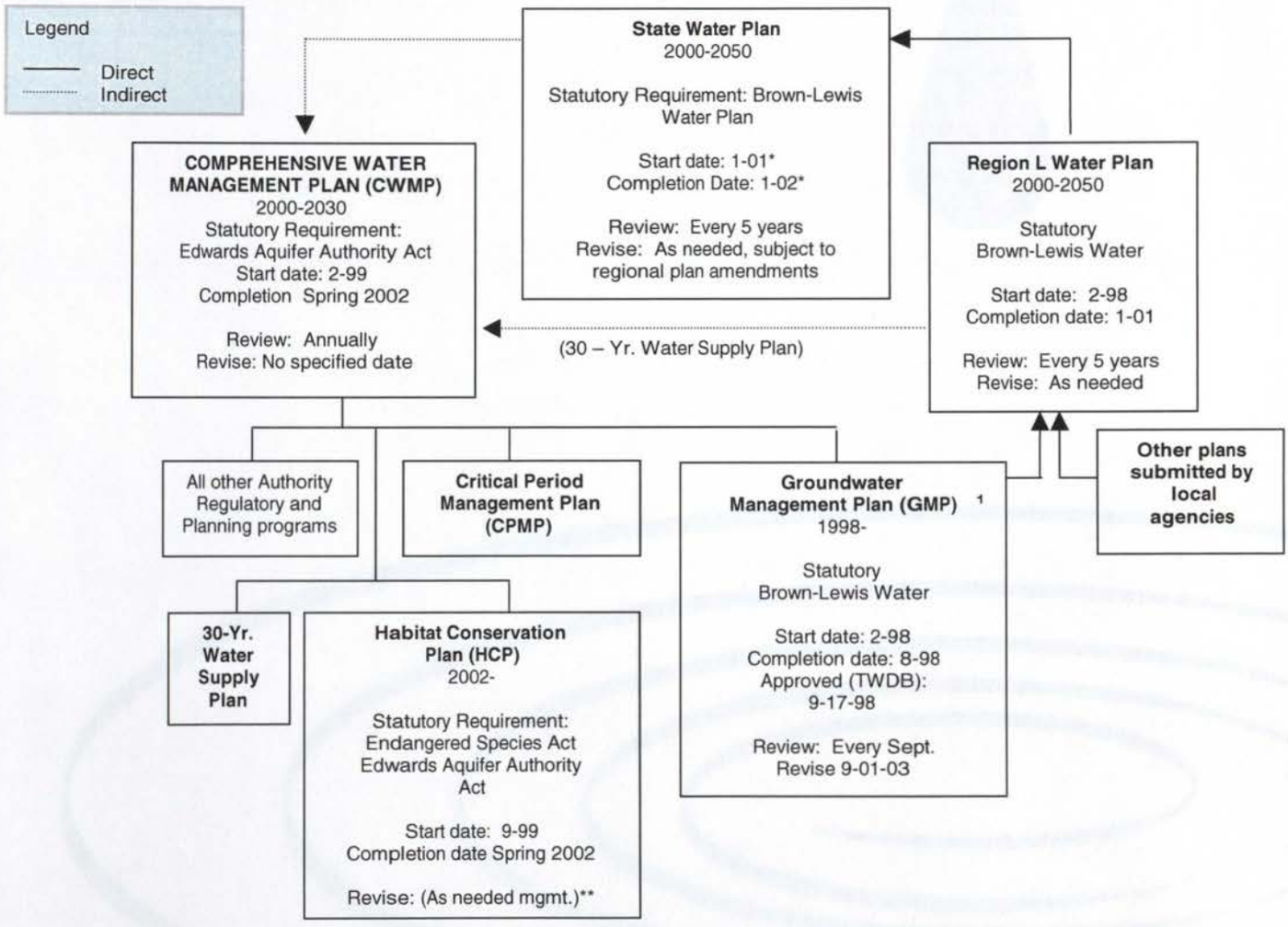
Adjusted difference	347,800

APPENDIX 3:
PLANNING FLOWCHART



APPENDIX 3: PLANNING FLOWCHART

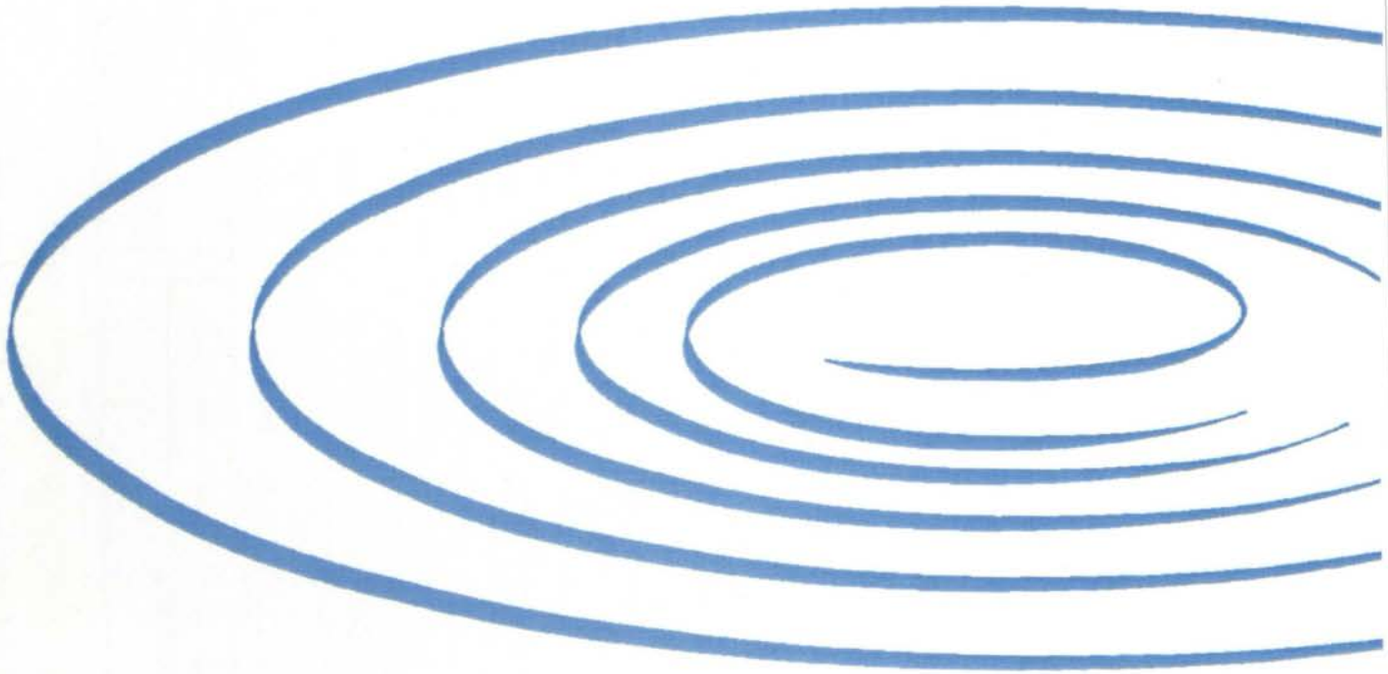
Relationship of Planning Efforts of the Edwards Aquifer Authority



* Officially with submission of 16 regional plans; however, process began with completion of groundwater management plans.
** The USFWS broadly defines adaptive management as a method for examining alternative strategies for meeting biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what learned.

1 – The GMP is the first step for regional water plans and State Water Plan. These plans are required to have management objectives & performances for 5 goals: efficiency, prevention of waste, conjunctive use of surface & groundwater, natural resource issues and controlling subsidence. The Authority elected to include 4 additional goals. The GMP provides initial input to the CWMP and the Regional Water Plan. When the GMP is revised, elements of the CWMP and the regional plan may be incorporated into the document.
2 - – The CWMP is the Authority's most comprehensive planning effort and is the core of the Authority's management and regulatory responsibilities. The 30-year water supply plan of the CWMP was completed on a parallel track as, and must be consistent with, the regional water plan. As the ultimate management plan, all plans (HCP, GMP, CPMP, etc.) and regulatory activities (rules, administrative procedures, etc.) will be guided by and located within the CWMP.
3 – The HCP will receive from and provide input to, the CWMP and provide input to the regional water plan. The HCP is a component of the CWMP.

APPENDIX 4: OPTIMIZATION TECHNICAL STUDIES (OTS) SCHEDULE



APPENDIX 4: SCHEDULE AND COST OF OPTIMIZATION STUDIES IN SUPPORT OF THE EDWARDS AQUIFER OPTIMIZATION PROGRAM (April, 2002)

OPTIMIZATION TECHNICAL STUDY	Project Duration	Estimated Study Cost Total	Estimated EAA Costs Total	Year 1 (1999)	Year 2 (2000)	Year 3 (2001)	Year 4 (2002)	Year 5 (2003)	Year 6 (2004)	Year 7 (2005)	Year 8 (2006)
BIOLOGICAL ASSESSMENTS:											
Texas Wild-rice Mapping (4)	1 year	$ 50,000	$ -								
Texas Wild-rice Growth and Reproduction (1,2)	5 years	$ 300,000	$ 300,000			$ 27,500	$ 26,500	$ 27,500			
Assessment of Baseline Water Quality Data for Biological Resources Leading to Evaluation of Aquifer Optimization Strategies and Effects of Variable Flow on Biological Resources (1,3)	3 years	$ 1,365,000	$ 1,365,000		$ 280,000	$ 500,000	$ 535,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000
Cagle's Map Turtle Flow Requirements (1)	5 years	$ 248,000	$ 100,000		$ 30,000	$ 50,000	$ 20,000				
Well Sampling of Aquifer Biota (4)	3 years	$ 241,929	$ 13,000			$ 13,000					
FLOWPATH/MODELDING STUDIES:											
Management Model/GIS Data Sets (1)	3.5 years	$ 670,818	$ 294,000		$ 52,925	$ 64,686	$ 74,883	$ 101,506			
Model Blue Ribbon Panel (1)	5 years	$ 135,000	$ 135,000	$ 15,000	$ 30,000	$ 56,000	$ 60,000	$ 30,000			
Model Parameter Estimation (1)	2 years	$ 134,710	$ 67,355		$ 67,355						
Model Recalibration	0.5 years	$ 100,000	$ 100,000						$ 100,000		
Saline Water Study (1)	10 years	$ 9,742,324	$ 1,500,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000
Recharge/Flowpath Study in North Medina County (1)	5 years	$ 600,000	$ 300,000		$ 40,000	$ 75,000	$ 75,000	$ 75,000	$ 35,000		
Focused Flowpath Studies: Knippa Gap, San Marcos Springs, and Comal Springs	6 years	$ 1,725,000	$ 925,000				$ 100,000	$ 325,000	$ 400,000	$ 300,000	$ 200,000
Recharge Methodology (1)	3 years	$ 300,000	$ 300,000			$ 130,000	$ 100,000	$ 70,000			
Statistical Analysis of Hydrologic Data (1)	0.25 years	$ 40,000	$ 28,000		$ 28,000						
Fracture/Conduit Study	0.67 years	$ 75,000	$ 75,000			$ 7,500	$ 40,000	$ 27,500			
3-D Interactive Visualization (Phase I)	1 year	$ 85,000	$ 85,000							$ 85,000	
RECHARGE ENHANCEMENT STUDIES:											
Range Management of Woody Species (1)	8 years	$ 2,200,000	$ 200,000	$ 25,000	$ 25,000	$ 25,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
Springflow Recirculation/Recharge Enhancement	1 year	$ 100,000	$ 100,000				$ 100,000				
Springflow Augmentation	0.5 years	$ 50,000	$ 50,000				$ 100,000				
Total Estimated Costs		$ 18,162,781	$ 5,937,355	$ 190,000	$ 703,280	$ 1,098,686	$ 1,481,383	$ 931,506	$ 810,000	$ 660,000	$ 475,000

1 Projects in progress.
2 Texas Wild-rice reproduction study is underway; Texas Wild-rice growth study not underway because growth chamber not available, total project costs may be much less than $300,000.
3 Costs after year four may vary depending on monitoring requirements.
4 Edwards Aquifer Authority not providing funding for this project.
Shaded area indicates estimated Edwards Aquifer Authority costs.

EDWARDS AQUIFER AUTHORITY

APPENDIX 5:
EDWARDS AQUIFER AUTHORITY RULE-MAKING SCHEDULE

APPENDIX 5:
EDWARDS AQUIFER AUTHORITY
RULEMAKING SCHEDULE

Chapter	Rules	SP Objective	Committee	EAA Staff	Date to Staff	Date to Committee	Final Rules Adoption
703	**Rulemaking Procedures** *(repeal; amendment; recodification)*	5.1.1	Executive	VRD	August 2001	September 2001	December 31, 2002
701	**General Provisions**	5.1.1	Executive	VRD	January 2002	February 2002	December 31, 2002
702	**General Definitions** *(amendment; recodification)*	5.1.1	Executive	SDW	January 2002	February 2002	December 31, 2002
705	**Jurisdiction of the Authority** *(repeal; amendment; or recodification, as appropriate)*	5.1.1	Executive	VRD	January 2002	February 2002	December 31, 2002
707	**Procedure Before the Authority:** Subchapter A: Definitions Subchapter B: General Provisions Subchapter C: Meetings of the Board Subchapter D: Requirements to File Applications and Registrations Subchapter E: Requirements for Applications and Registrations Subchapter F: Actions on Applications and Registrations Subchapter G: Procedures for Contested Case Hearings *(repeal; amendment; or recodification, as appropriate)*	5.1.1	Executive	VRD/SDW	January 2002	February 2002	December 31, 2002
709	**Fees:** Subchapter A: Definitions Subchapter B: Registration Fees Subchapter C: Permit Application Fees Subchapter D: Aquifer Management Fees *(repeal; amendment; or recodification, as appropriate)*	5.1.1	Finance / Administrative	BJC	January 2002	February 2002	December 31, 2002

APPENDIX 5:
EDWARDS AQUIFER AUTHORITY
RULEMAKING SCHEDULE

711	**Groundwater Withdrawal Permits:** Subchapter A: Definitions Subchapter B: General Provisions Subchapter C: Exempt Wells Subchapter D: Interim Authorization Subchapter E: Permitted Wells Subchapter F: Standard Groundwater Withdrawal Conditions Subchapter G: Groundwater Available for Permitting; Proportional Adjustments; Equal Percentage Reductions Subchapter H: Abandonment Subchapter I: General Prohibition Subchapter K: Additional Groundwater Supplies Subchapter L: Transfers Subchapter M: Meters; Alternative Measuring Methods; Reporting *(repeal; amendment; or recodification, as appropriate)*	5.1.1 1.5.2	Permits	SDW GS/JH	January 2002	February 2002	December 31, 2002

APPENDIX 5:
EDWARDS AQUIFER AUTHORITY
RULEMAKING SCHEDULE

713	**Water Quality:** Subchapter G: Recharge Zone Protection (Phase I - PST)	4.2.3	Research & Technology	GS/JH	January 2002	February 2002	October 31, 2002
715	**Comprehensive Management Plan Implementation Rules:** Subchapter A: Definitions Subchapter B: General Provisions Subchapter D: Demand Management and Critical Period Management Rules	2.9.2	Aquifer Management & Planning	GS/SDW	March 2002	April 2002	September 30, 2002
715	**Comprehensive Water Management Plan Implementation:** Subchapter C: Groundwater Conservation And Reuse Rules	2.6.1	Aquifer Management & Planning	RI	March 2002	April 2002	September 30, 2002
711	**Groundwater Withdrawal Permits:** Subchapter N: Groundwater Trust	1.8.2	Finance / Administrative	RI	March 2002	April 2002	September 30, 2002

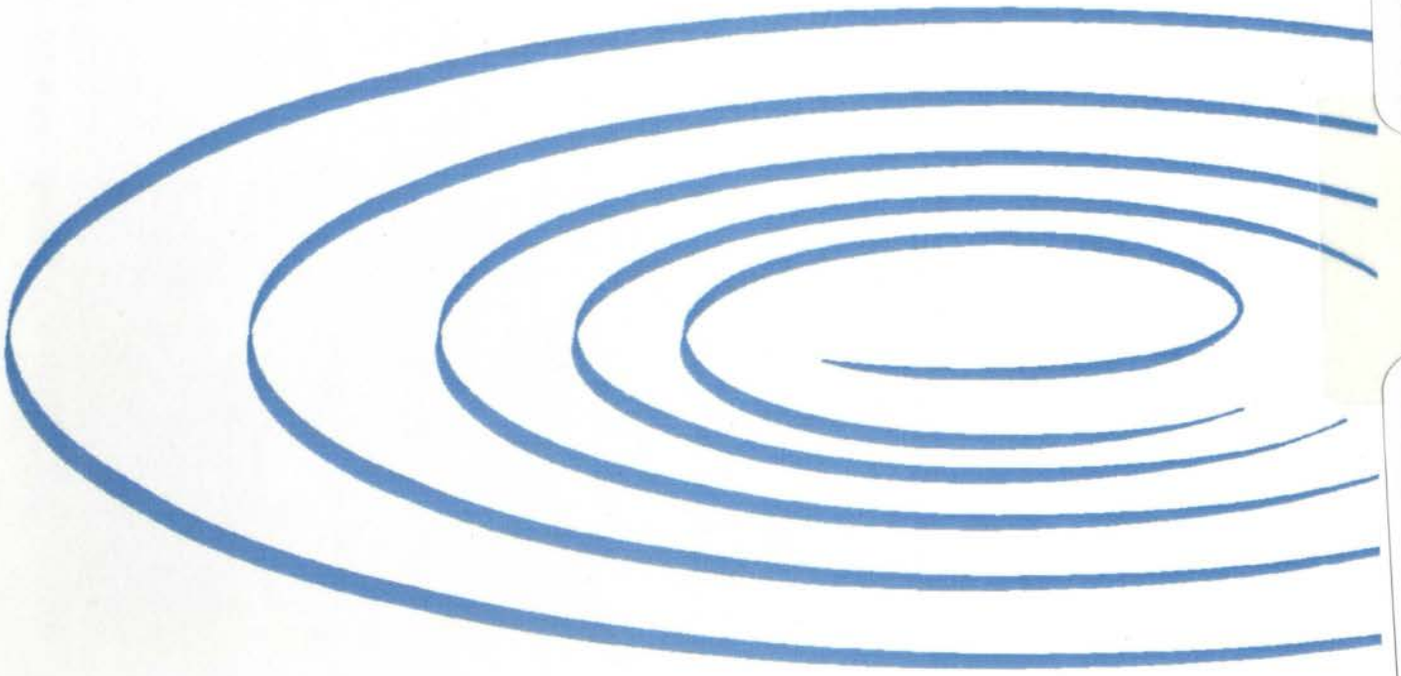
APPENDIX 5:
EDWARDS AQUIFER AUTHORITY
RULEMAKING SCHEDULE

713	**Water Quality:** Subchapter A: Definitions Subchapter B: General Provisions Subchapter C: Well Construction, Operation and Maintenance; Abandoned Wells; Well Closures Subchapter D: Abandoned Wells; Well Closures	1.7.2	Research & Technology	GS/JH	April 2002	May 2002	October 31, 2002
711	**Groundwater Withdrawal Permits:** Subchapter J: Aquifer Recharge, Storage and Recovery Projects	2.8.5	Permits	GS/SDW	May 2002	June 2002	November 30, 2002
713	**Water Quality:** Subchapter G: Recharge Zone Protection (Phase II)	4.3.2	Research & Technology	GS/JH	August 2002	September 2002	February 28, 2003
715	**Comprehensive Water Management Plan Implementation:** Subchapter G: Alternative Water Supply Rules Subchapter H: Pools	2.3.3	Aquifer Management & Planning	JH	January 2003	February 2003	June 30, 2003
715	**Comprehensive Water Management Plan Implementation:** Subchapter E: Withdrawal Reduction Rules	1.3.3	Withdrawal Limit Compliance	RI	April 2003	May 2003	October 31, 2003
713	**Water Quality:** Subchapter E: Well Spacing Subchapter F: Well Head Protection	4.5.3	Research & Technology	GS/JH	August 2003	September 2003	February 28, 2004
717	**Enforcement**	5.2.1	Permits	SDW	October 2003	November 2003	April 30, 2004
709	**Fees:** Subchapter E: Special Permit Retirement Fees	1.4.3	Finance	BJC	April 2004	May 2004	October 31, 2004

APPENDIX 5:
EDWARDS AQUIFER AUTHORITY
RULEMAKING SCHEDULE

715	**Comprehensive Water Management Plan Implementation:** Subchapter F: Regular Permit Retirement Rules	1.4.1	Permits	RI	May 2004	June 2004	November 30, 2004

APPENDIX 6:
EDWARDS AQUIFER AUTHORITY PERSONNEL SCHEDULE



APPENDIX 6: EDWARDS AQUIFER AUTHORITY PERSONNEL SCHEDULE

Year/ Position No.	Title	Organizational Team/Program Responsibilities	Annual Salary Plus Benefits
2002-01	Water Resources Coordinator	**Planning & Conservation Team** – This position will coordinate all Authority efforts to purchase water rights to reduce permit rights to 450,000 acre-feet per year, and begin to develop permit retirement program to reduce permitted rights to 400,000 acre-feet per year. (SP Objectives 1.3, 1.4 & 1.8)	$41,434.00
2002-02	Field Representative	**Permitting & Enforcement Team –** This position will support the Authority enforcement programs by performing inspection and other fieldwork. This position is needed to provide the minimum level of personnel required to perform inspections. (SP Objectives 1.6 & 1.7)	$28,300.00
2002-03	Well Meter Specialist	**Permitting & Enforcement Team –** This position will support the completion of the irrigation meter installation program, organize the Authority's meter maintenance program, and coordinate the municipal and industrial meter approval and inspection program. The Authority irrigation meter network is one of the largest water well flow meter networks owned by a governmental entity in the U.S. (SP Objective 1.10)	$33,417.00
2002-04	Senior Hydrogeologist	**Aquifer Science Team** – This position will coordinate Authority Optimization Technical Studies, and perform research and data analysis as needed. (SP Objective 3.1)	$49,415.00
2002-05	Gauging Systems Technician	**Aquifer Science Team** – This position is needed to ensure adequate personnel are available to perform routine maintenance and repairs for gauges. This position will also assist with the installation of new gauges targeted for installation during this planning period. (SP Objective 3.1)	$28,300.00
2002-06	Environmental Science Technician	**Aquifer Science Team** – This position is needed to improve the Authority's basic data collection efforts. This position will enable the Authority to install more water level monitoring equipment and increase the frequency of site visits to existing water level monitors. (SP Objective 3.1)	$28,300.00
2002-07	Environmental Coordinator	**Aquifer Science Team** – This position will be responsible for coordinating and developing the Authority's water quality program, from recharge zone protection rules to helping to determine what the Authority's role and programs will be for all water quality-related efforts. (SP Objective 4.1)	$46,732.00
2002-08	Custodian	**Administrative Team** – This position will be responsible for performing facility cleaning and minor maintenance work, and will perform all routine landscape maintenance work. (SP Objective 7.12)	$20,557.00
		2002 TOTAL NEW POSITIONS = 8 FULL TIME POSITIONS	$276,455.00
2003-01	Secretary	**Planning & Conservation and Public Affairs Teams** – Responsible for providing secretarial support to professional staff that includes: preparation of correspondence, processing calls, making appointments and travel arrangements and providing back-up assistance to the other secretaries. (SP Objectives 2.5* and 6.3)	$31,208.56
2003-02	Program Associate	**Permitting & Enforcement Team –** This position will work with other authority staff to organize and maintain system for groundwater withdrawal reporting during critical period, enforce critical period rules and regulations, supervisor consultants related to critical period management and assist in the analysis of the effectiveness of the rules and program. (SP Objective 2.8)	$42,122.33

Year/ Position No.	Title	Organizational Team/Program Responsibilities	Annual Salary Plus Benefits
2003-03	**Senior Hydrogeologist**	**Aquifer Science Team** – This position will support Authority Optimization Technical Studies and other Authority research, data analysis, and monitor Authority data collection activities as needed. (SP Objective 3.2)	$60,133.07
2003-04	**Environmental Coordinator**	**Aquifer Science Team –** This position will support the Authority's petroleum storage tank regulation activities and monitor environmental incidents that have the potential to impact Edwards Aquifer water quality. (SP Objective 4.2)	$48,068.32
2003-05	**Senior Environmental Coordinator**	**Aquifer Science Team –** This position will support the start-up and operation of the Authority's recharge zone protection program including the development of regulatory guidance documents and the review of water pollution abatement plans required by Authority rules. (SP Objective 4.3)	$60,133.07
2003-06	**Senior Environmental Coordinator**	**Aquifer Science Team** – This position will support the start-up and operation of the Authority's recharge zone protection program including the development of regulatory guidance documents and the review of water pollution abatement plans required by Authority rules. (SP Objective 4.3)	$60,133.07
2003-07	**Public Information Coordinator**	**Public Affairs Team** – This position will assist the Public Affairs Program Manager with the Authority's public relations effort. This will include but is not limited to writing articles, brochures and press releases, assisting in the design of public information materials and handling media calls/inquiries. (SP Objective 6.2)	$48,068.32
		2003 TOTAL NEW POSITIONS = 7 FULL TIME POSITIONS	**$349,866.74**
2004-01	**Well Registration Associate**	**Permitting & Enforcement Team** – This position will support the planning and implementation of the well registration program for all existing domestic and livestock wells, and identify existing wells that require groundwater withdrawal permits. (SP Objective 1.6)	$ 42,122.33
2004-02	**Professional Engineer**	**Aquifer Science Team** – This position will support the Authority's recharge zone protection program including the review of best management practices (BMP) construction plans and organized sewage system collection plans. (SP Objective 4.3)	$65,845.71
2004-03	**Professional Engineer**	**Aquifer Science Team –** This position will support the Authority's recharge zone protection program including the review of best management practices (BMP) construction plans and organized sewage system collection plans. (SP Objective 4.3)	$65,845.71
2004-04	**Inspector**	**Aquifer Science Team** – This position will support the field inspection requirements for water quality protection best management practices (BMPs), organized sewage collection systems, and other water pollution abatement plans required by Authority recharge zone protection rules. (SP Objective 4.3)	$35,434.26
2004-05	**Inspector**	**Aquifer Science Team** – This position will support the field inspection requirements for water quality protection best management practices (BMPs), organized sewage collection systems, and other water pollution abatement plans required by Authority recharge zone protection rules. (SP Objective 4.3)	$35,434.26
2004-06	**Inspector**	**Aquifer Science Team** – This position will support the field inspection requirements for water quality protection best management practices (BMPs), organized sewage collection systems, and other water pollution abatement plans required by Authority recharge zone protection rules. (SP Objective 4.3)	$35,434.26

Year/ Position No.	Title	Organizational Team/Program Responsibilities	Annual Salary Plus Benefits
2004-07	Secretary	**Aquifer Science Team** – This position will assist with the increased administrative workload that will result from the Authority's recharge zone protection rules. (SP Objective 4.3)	$31,208.56
2004-08	Records Clerk	**Aquifer Science Team** – This position will support the file management requirements that will result from the Authority's recharge zone protection rules. (SP Objective 4.3)	$26,455.47
2004-09	Environmental Coordinator	**Aquifer Science Team** – This position will support the Authority program that results from the Authority's wellhead protection rules. (SP Objective 4.4)	$48,068.32
2004-10	Public Education Assistant	**Public Affairs Team** – This position will assist the Education Coordinator with the Authority's education efforts. This will include attending education-related events, assisting with the Water Wise effort, assisting in the Authority library and helping to fill requests from teachers within the region. (SP Objective 6.3)	$42,122.33
2004-11	Staff Development Specialist	**Administrative Team** – Responsible for providing human resources support to professional staff that includes staff training and development programs, and coordinating the Authority's safety program. (SP Objective 7.12)	$42,122.00
2004-12	Information Systems Technician	**Administrative Team** – Responsible for providing support for increased size of information management network, and to support professional staff. (SP Objective 7.13)	$41,751.00
		2004 TOTAL NEW POSITIONS = 12 FULL TIME POSITIONS	**$511,844.21**
2005	N/A	**No new positions requested during this planning period.**	N/A
2006	N/A	**No new positions requested during this planning period.**	N/A
		TOTAL NUMBER OF NEW FULL-TIME POSITIONS REQUESTED FOR PLANNING PERIOD	**27**
		TOTAL COST FOR ALL POSITIONS REQUESTED FOR PLANNING PERIOD	**$1,138,165.95**

** These positions are proposed to handle overall increased workload of the organization, including the workload associated with the specific objective(s) identified above.*

APPENDIX 7: BENCHMARKING ANALYSIS

APPENDIX 7: BENCHMARKING

The Authority is a unique political and regulatory entity, and therefore, finding a truly reflective set of peer organizations is nearly impossible. However, to gain some perspective on the Authority and how it compares to fairly similar type organizations in basic areas like staffing, revenues, and expenditures, MGT conducted some comparative research. As illustrated in the graphics below, the Authority is a relatively small agency, when compared to some of Texas' larger river authorities. Please note that the research conducted for this analysis was completed prior to the Authority adopting its 2002 budget.

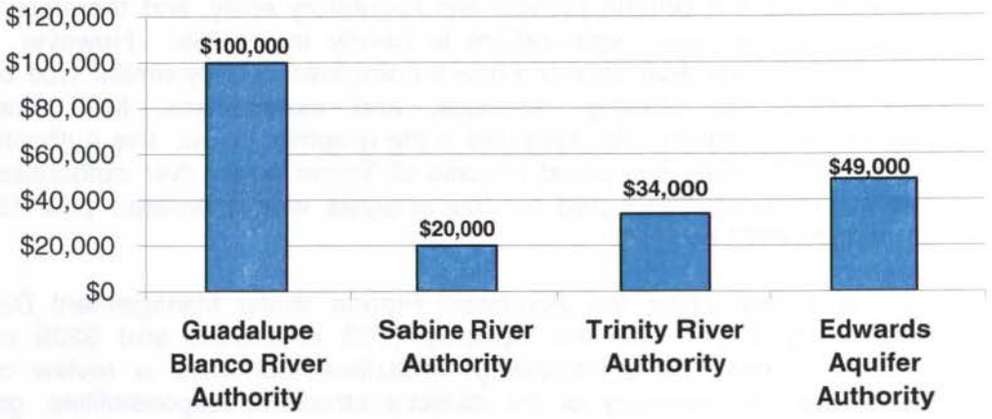
MGT also researched the Southwest Florida Water Management District, which is considerably larger than the Authority (763 employees and $239 million budget). However, it does have interesting similarities that make a review of its practices illuminating. A summary of the district's structure, responsibiities, governance and innovative practices is discussed at the end of this section.

EXHIBIT 1:
EAA COMPARISON WITH RIVER AUTHORITIES

ORGANIZATION	PROJECTED REVENUES (2001)	PROJECTED SPENDING (2001)	NUMBER OF EMPLOYEES 2001
Edwards Aquifer Authority	**$8.6 million**	**$7.9 million**	**47.5 FTEs**
Guadalupe Blanco River Authority	$22.2 million	16.9 million	■ 130 Full-time ■ 2 Part-time
Sabine River Authority	$26 million	$25.5 million	■ 115 Full-time ■ 5 Part-time
Trinity River Authority	$131.3 million	$132.2 million	■ 350 Full-time ■ 33 Part-time

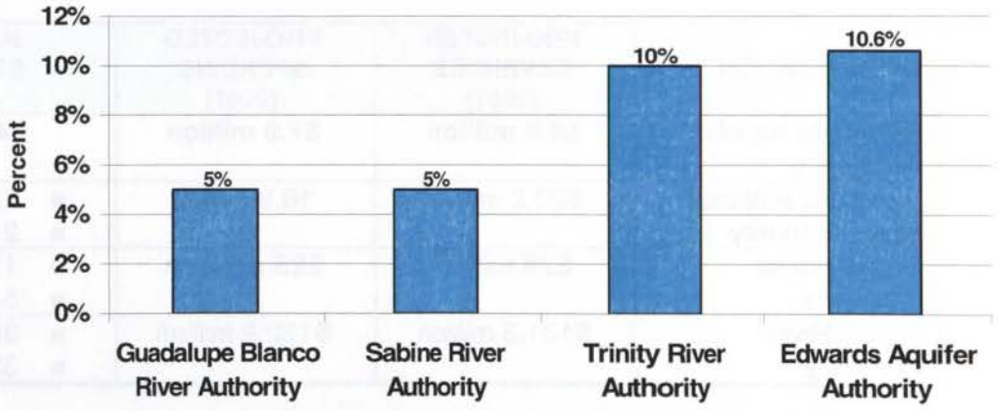
***Source**: MGT Of America, Fall 2001.*

EXHIBIT 2:
ANNUAL SPENDING ON STAFF TRAINING



Source: MGT of America, Fall 2001

EXHIBIT 3:
STAFF TURNOVER RATES (2000)



Source: MGT of America, Fall 2001

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

OVERVIEW

The **Southwest Florida Water Management District ("the District")** encompasses a 16-county area in west central Florida (9,659 square miles) and is one of five regional water management districts charged by Florida law with the preservation and protection the state's water resources. Approximately one-fourth of the state's population resides within the District. The District was established in 1961 by a special act of the Florida Legislature. The District authorizes permits for consumptive use of water, well construction, surface water management, and the protection of the wetlands.

MISSION

"The mission of the Southwest Florida Water Management District is to manage water and related natural resources to ensure their continued availability while maximizing environmental, economic, and recreational benefits. Central to this mission is maintaining the balance between the water needs of current and future users while protecting and maintaining water and related natural resources which provide the District with its existing and future water supply."

GOVERNING STRUCTURE

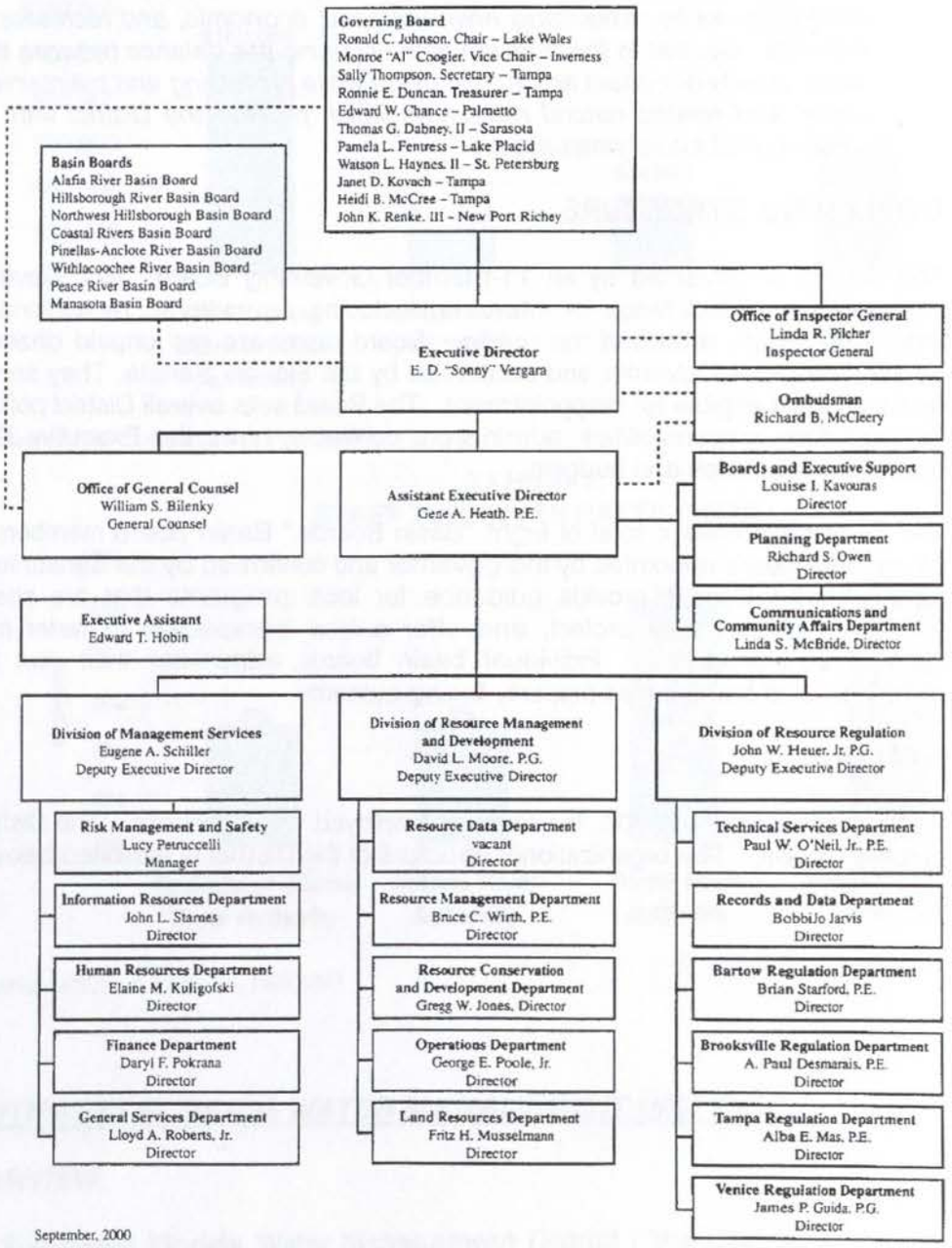
The District is governed by an 11-member Governing Board. The Governing Board represents a broad range of interests, including agricultural, recreational, business, industrial, urban, rural and the public. Board members are unpaid citizen-volunteers appointed by the Governor and confirmed by the Florida Senate. They serve four-year terms and are eligible for reappointment. The Board sets overall District policy, executes its regulatory responsibilities, administers contracts, hires the Executive Director, and authorizes tax levies and budgets.

The District also has a total of eight "Basin Boards." Basin Board members are unpaid citizen volunteers appointed by the governor and confirmed by the Senate for three-year terms. These Boards provide guidance for local programs that are specific to the watershed basins they protect, and offer a local perspective to water management projects and programs. Individual basin boards administer their own budget and programs, and have limited property taxing authority.

STAFFING

As of September 30, 2000, the District employed 763 persons. The District has four satellite offices. The organizational structure of the District is exhibited below.

EXHIBIT 4:
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT ORGANIZATION

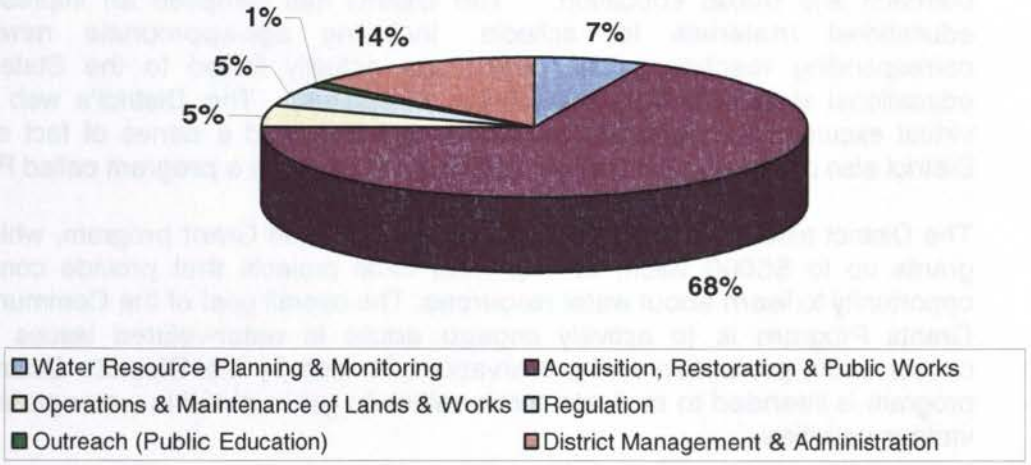


September, 2000

FUNDING AND EXPENDITURES

The total budget for the District in FY 2001 was approximately $239 million, compared to $197 million in FY 2000. The District is funded by a combination of local property taxes, state funding through the sale of state debt, sharing of documentary stamp revenues, and the approval of various annual grants and entitlements. In FY 2001, the District adopted a tax rate of 0.422, unchanged since FY 1994.

EXHIBIT 5:
FY 2001 PROGRAM BUDGET EXPENDITURE BREAKDOWN



INNOVATIVE PRACTICES

Discussion Boards

The District has created an online mechanism called "Discussion Panels" which enable interested parties to electronically access and monitor communications among the chairman of the District and independent peer review panel members. The independent review panel was created to review the scientific or technical data and methodologies utilized by the District in establishing minimum flows and levels for certain water bodies.

One of the purposes of the discussion panels is to provide local governments, other agencies,, watershed activists, and other interested parties have an opportunity to participate in the process and provide input,

The Input Group conferences on this web board will allow sharing of ideas, data, and technical analysis between the facilitated meetings, among District staff and those interested persons and groups who attend the meetings. This will help expedite the technical work necessary to establish minimum flows for the scheduled water bodies by the end of the year, and allow others to monitor the process and to be kept apprized of the development of the plan of study for the Hillsborough River.

Permitting Assistance

The District's permit program is linked to MYFLORIDA, the state's new portal for government information. This portal is designed to expedite the permit process and to make information more easily accessible. Permit applications may be downloaded online, along with a series of publications designed to provide "hints and tips" on how to navigate the permit process.

Education and Outreach

The District spends more than $3 million, approximately 1.4 percent of its budget on outreach and public education. The District has compiled an impressive array of educational materials for schools, including age-appropriate newsletters and corresponding teacher guides, which are actually linked to the State of Florida's educational standards (Sunshine State Standards). The District's web site includes virtual excursions, suggested classroom activities, and a series of fact sheets. The District also offers teacher training opportunities through a program called Project WET.

The District also administers a Community Education Grant program, which distributes grants up to $5000 each, to help fund local projects that provide communities the opportunity to learn about water resources. The overall goal of the Community Education Grants Program is to actively engage adults in water-related issues pertaining to conservation, protection and preservation. Funded by the District's Basin Boards, the program is intended to motivate communities to get involved in water protection through various activities

.

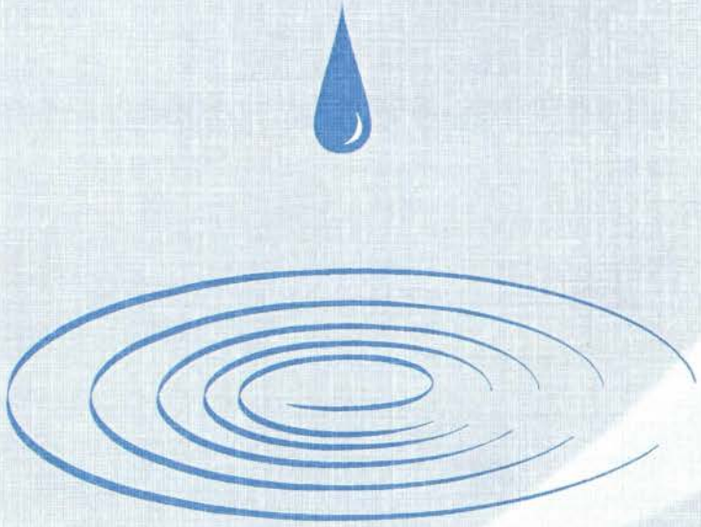
The grants will be available to individuals and groups concerned about water-related issues in their communities. Grants are issued in several areas including, water quality, water supply, natural systems, and flood protection.

Customer Service

The District employs a full-time ombudsman.

CONTACT INFORMATION:

Southwest Florida Water Management District
2379 Broad Street, Brooksville, FL 34604
352-796-7211
Web Site: www.swfwmd.state.fl.us



EDWARDS AQUIFER
AUTHORITY

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210.222.2204 or 1.800.292.1047
www.edwardsaquifer.org