

## **AGUA**

AGUA is a San Antonio organization that works to protect the quality of water in the Edwards Aquifer. Low levels of pesticides and other man made contaminants are being detected in both Comal and San Marcos springs.

As a member of the RIP, AGUA will work to ensure that the quality of springflow required by aquatic species, as well as the quantity of springflow, is maintained.

## **JIM BOWER**

After listening to RIP members in the SAWS meeting room (and corridor), reading SB 3 and reading various newspaper accounts of SB 3, one can arrive at only one conclusion: we need facts. We must get away from emotion and self interest.

Obviously we have to determine the minimum spring flow for the endangered species. But that is far from enough. We need information such as Edwards recharge data, the adds and subtractions downstream, and how all of this interacts from the Edwards to the estuaries. You cannot successfully manage the water looking at only one aspect. And, yes, I think it possible that all parties can be satisfied if we all work toward that end.

## **CITIZENS UNITED FOR LAKE PLACID**

Citizens United for Lake Placid (CULP) is organized to unite all members so that they may cooperate with each other in all activities necessary, useful, or expedient to the management and enhancement of the natural beauty of Lake Placid and to promote the prevention or elimination of threats to the enjoyment and safety of said lake and that of the members, by their union, will have greater strength in compelling the attention and assistance of others to this end.

As a member of the RIP, CULP will work to ensure that the quality of spring flow required by aquatic species, as well as the quantity of spring flow, is maintained

## **JOHN M. DONAHUE, PH.D. PROFESSOR OF ANTHROPOLOGY, TRINITY UNIVERSITY, SAN ANTONIO, TX 78212**

### ***The Edwards Aquifer Recovery Implementation Plan: A View from the Trinity Tower***

Academics may live in an ivory tower, but a tower does allow perspective on the forest that is more than a sum of its individual trees. As a cultural anthropologist, observing and writing on water management issues in Central Texas, I have been struck by the variety of cultural definitions of water and its uses that stakeholders bring to the table. These cultural definitions may include individual as well as institutional interests; “project culture” may be as

important to some as the water itself. If water management is to be successful, these interests need to be acknowledged and addressed. The EARIP is an important step in that process. I would hope that the EARIP might define its mission and scope to include the entire ecosystem which depends on and benefits from the Edwards Aquifer. This would be a step in addressing two current cultural contradictions in Texas: the legal separation of groundwater from surface water and the defining of water management on political boundaries that often do not reflect hydrological reality. The EARIP will not resolve these contradictions by itself, but could provide a larger cultural framework in which to talk about the environment and its health on its own terms and not on our particular ones. Let the EARIP reflect the cultural principle that politics and economics are part of the environment and not vice versa.

## **THE EDWARDS AQUIFER RESEARCH & DATA CENTER**

The Edwards Aquifer Research & Data Center is interested in the RIP, since we were established to focus on research on the Edwards Aquifer. We have done so since the late 1970's. Much of our research has dealt with the endangered species of the aquifer and springs and we continue to be interested in this Unique Ecosystem.

## **THE GREATER EDWARDS AQUIFER ALLIANCE**

The Greater Edwards Aquifer Alliance unites forty member groups from throughout the 21 county Edwards region behind a comprehensive plan to protect the Edwards Aquifer, its springs, streams, watersheds, wildlife, and the Texas Hill Country. Member organizations of GEAA include civic, environmental and religious organizations that meet regularly as an alliance to set policy and come to consensus regarding issues affecting our groundwater resources.

GEAA's interest in participating in the EARIP can be summed up by the opening statement of our Edwards Aquifer Protection Plan: "The Edwards Aquifer Ecosystem of Central Texas is one of our most valuable, irreplaceable and endangered public treasures. It is our right and duty to preserve and protect the Aquifer, its contributing Hill Country watersheds, its great springs, and its native biodiversity for the benefit of all residents and all future generations." We believe that maintaining spring flows and insuring that only high quality water enters the aquifer should be among the issues of focus for the EARIP as they are central to preserving the threatened and endangered species.

## **THE GUADALUPE BASIN COALITION**

The Guadalupe Basin Coalition is a voluntary association of businesses, chambers of commerce, governmental and nonprofit entities, and individuals in counties along the Guadalupe, San Marcos, Comal and Blanco rivers. The Coalition is bonded by a common concern for the sustainable viability of these rivers, both economically and environmentally.

The mission of the Coalition is to protect and enhance the value of the Guadalupe River and its tributary rivers from their headwaters to the coast.

The Guadalupe River basin relies on spring flows from the Edwards, especially in times of drought, when spring flows in New Braunfels and San Marcos can comprise 80% or more of river flows needed for downstream municipal water supply, agriculture, industrial operations, and environmental needs in the river itself and in the bay and estuary systems along the coast. The Coalition's objectives in the EARIP process include:

1. Scientific review and, if warranted, refinement, of Comal and San Marcos spring flow levels needed to avoid taking of and jeopardy to protected species.
2. Formulation of a fair, effective and enforceable critical period management plan that will ensure natural spring flow at Comal and San Marcos springs at levels needed for the protected species at all times, including during a repeat of the drought of record. The Coalition understands that full implementation of this plan may be phased to correspond to other EARIP implementation actions.
3. Maximization of federal and cooperative grant funding for EARIP activities and research, and also for program implementation actions which require extensive capital investment, including expanded water conservation and reclaimed water use initiatives, and the development of alternative water supply solutions for the region.

The Coalition looks forward to working with the other aquifer stakeholders on this important program.

## **THE GUADALUPE-BLANCO RIVER AUTHORITY**

The Guadalupe-Blanco River Authority provides stewardship for the water resources in its ten-county statutory district, which begins near the headwaters of the Guadalupe and Blanco Rivers, ends at San Antonio Bay, and includes Kendall, Comal, Hays, Caldwell, Guadalupe, Gonzales, DeWitt, Victoria, Calhoun and Refugio counties.

The Mission of the Guadalupe-Blanco River Authority is to protect, conserve, reclaim and steward the resources of the ten-county District in order to ensure and promote quality of life for those we serve.

Springs from the Edwards Aquifer are the sources of major tributary rivers to the Guadalupe River. Water from the Edwards Aquifer flows from Comal Springs in New Braunfels into the Comal River. Water from the Edwards Aquifer flows from San Marcos Springs in San Marcos into the San Marcos River. The springflow is critical to the endangered species at the springs, the ecology of the Guadalupe River and San Antonio Bay, and the economy of the Guadalupe River Basin.

On average, the annual contribution of Comal and San Marcos Springs discharge to the Guadalupe River is over 335,000 ac-ft. While the contribution of the springs decreases during droughts as surface water runoff is unavailable, it actually increases in terms of the proportion of the flow in the river that is provided during droughts. Springflow is a vital component of the surface water rights in the Guadalupe River Basin that is relied upon by the municipal, agricultural and industrial water users of the basin.

## **CON MIMS**

### **INTERESTS AND OBJECTIVES IN THE EDWARDS AQUIFER RIP PROCESS**

#### Interests:

In the RIP process, my primary interest will be in representing the South Central Texas Regional Water Planning Group (Region L). It is likely that the geographic scope of the Edwards Aquifer RIP will be within the planning area for Region L. The purpose of Region L is to plan for future water supplies while protecting the environment. Critical factors to be considered in Region L planning are the amount of water that may be pumped from the Edwards Aquifer and how that pumpage affects water resources downstream, principally but not exclusively, in the Guadalupe Basin and the San Antonio Bay system. Since the RIP process ultimately may determine Edwards Aquifer pumping limits, my interest is in having the principal water planning group in the region engaged in the process.

Also, as Executive Director of the Nueces River Authority (NRA), I will have an interest in knowing how pumping and recharge of the Edwards Aquifer, as may be considered in the RIP process, may affect spring flows and flood flows in the Nueces Basin and downstream surface water rights, including those held by NRA and the City of Corpus Christi in the Choke Canyon/Lake Corpus Christi reservoir system.

And, as a Director of the Texas Wildlife Association, I will have an interest in ensuring that private property rights are protected in the implementation of RIP measures; and, an interest in promoting voluntary land stewardship and riverbank protection practices as alternatives to increase water supplies, improve water quality, and recover targeted species.

#### Objectives:

Region L planning group members represent 11 categories of interest: public, counties, municipalities, industries, small business, agriculture, environment, water utilities, steam-electric generation, water districts, and river authorities. In the RIP process, my primary objective will be to share with the RIP participants the desires and concerns of our planning group members and, conversely, to keep the planning group apprised of RIP activities and progress. Through such coordination, my objective also will be to facilitate the eventual incorporation of implementation measures resulting from the RIP process into the South Central Texas regional water plan.

My other objectives will be to protect the integrity of the Choke Canyon/Lake Corpus Christi reservoir system, protect private property rights, and promote land stewardship and riparian preservation.

## **NEW BRAUNFELS UTILITIES**

### **Statement of Interest in the EARIP Process**

New Braunfels Utilities is the municipal utility providing water, wastewater and electric service to New Braunfels and the surrounding area within its Certified Service Territory.

The Edwards Aquifer is a major source of domestic water supply for the City of New Braunfels. The Comal Springs and the Comal River, which lie totally within the city limits of New Braunfels, are major economic generators and enhance the quality of life for all the citizens of New Braunfels.

In addition the Comal Springs and Comal River are home to numerous federally threatened and endangered species. For these reasons, New Braunfels Utilities has great interest in the EARIP process and is hopeful that the ultimate outcome will provide a program for the protection of the species and their habitat and for the managed use of the Edwards Aquifer as a sustainable water supply for New Braunfels, downstream users and the entire Edwards region.

## **REGIONAL CLEAN AIR & WATER ASSOCIATION (RCAWA)**

### **Statement on the Memorandum of Agreement (MOA), Statement of "interest" and "objectives" of RCAWA in the RIP process**

#### Concerning the MOA:

The MOA could state that the parties signing the MOA agree to work towards developing a program document and a cooperative agreement, as part of the Recovery Implementation Plan, that would make sure that *all* the options for protecting the species are on the table, and that none of these options that could provide water for species in time of severe drought will be excluded from consideration.

The MOA could accomplish this by stating that the stakeholder parties and USFWS will work towards a "cooperative agreement" and a "program document" to consider all the possible solutions for protecting the threatened and endangered species that are located in or near Comal Springs and San Marcos Springs.

#### Statement of (1) "interest" and (2) "objectives" of RCAWA regarding the RIP process:

(1) The primary "interests" that RCAWA seeks to represent are the "interests" of all the people in the region who need economic firm yield water supply from the Edwards Aquifer in time of severest drought, both now and in the future, while at the same time representing

the "interests" involved in protecting and preserving the threatened and endangered species that are found in or near the springs at New Braunfels and San Marcos in time of severest drought.

(2) The "objectives" of RCAWA regarding the RIP process are to make sure that all the options are fully explored for protecting the threatened and endangered species at the springs in time of severest drought, including but not limited to the options that call for enhanced recharge, recirculation, refugia, springflow augmentation and critical period management of pumping, so that the RIP process does not exclude any option for preserving threatened and endangered species at the springs in time of severest drought while also providing firm yield water supply for people from the Edwards Aquifer.

## **THE RIVER SYSTEMS INSTITUTE AT TEXAS STATE UNIVERSITY**

### **Interests in the Edwards Aquifer RIP Process**

The River Systems Institute has been given the responsibility by Texas State University to manage and protect Spring Lake, the headwaters of the San Marcos River. We are extremely interested in any policies or actions that impact the springflow of the San Marcos springs and the ecosystems found in Spring Lake and the San Marcos River.

Moreover, the River Systems Institute's mission is to develop, analyze, promote and facilitate the holistic management of rivers, including the springs, streams, aquifers and watersheds that feed them, as well as the lakes, bays, and estuaries into which they flow. The RIP is an important tool to assist the Institute fulfill its mission; being involved in the EARIP enables staff of the Institute to become familiar with this tool.

## **SAN ANTONIO RIVER AUTHORITY**

SARA is participating in the Edwards Aquifer RIP:

- to further greater predictability of regulation of the Aquifer. SARA is the administrator and agent for the Regional Water Resources Development Group (RWRDG), a cooperative purchasing program for thirteen governmental water purveyors, that leases and purchases Edwards Aquifer groundwater withdrawal rights. Stable and consistent regulation of the Edwards Aquifer enables these and other users of the aquifer to quantify their existing supply from the aquifer and better plan for additional water supplies.
  
- Region L planning for existing and future water supplies. SARA is a member of the South Central Texas (Region L) planning group and is the designated administrative agency for the planning group. The ability to determine the supply of water from the aquifer under various hydrologic conditions is critical to the work of the Region L planning group. The EA RIP can be a vehicle to identify and evaluate strategies to better manage the aquifer and such strategies could be included in future Region L water plans.

- Strategies developed and implemented through the Edwards Aquifer RIP could impact and benefit spring flow in the San Antonio River basin which in turn support instream flows and bay and estuary inflow.

## **SAN ANTONIO WATER SYSTEM**

### **General Statement of Interests related to the Recovery Implementation Program (RIP)**

- Identification of appropriate requirements to protect target Comal and San Marcos springs endangered and threatened species
- Development of a conservation plan which meets the needs of the regional community by providing regulatory certainty for permitted groundwater withdrawals from the Edwards Aquifer
- Determination of minimum yields for Edwards Aquifer withdrawal permits holders during Demand Management and Critical Period Management Periods

## **SAN MARCOS RIVER FOUNDATION**

SMRF is a nonprofit group formed in 1985 to preserve public access to the San Marcos River and protect the flow, natural beauty and purity of the river, its watershed and its estuaries. In the EARIP process, we hope to participate in a collaborative attempt to examine the scientific studies already done, plus those to come, to provide solutions needed to plan sustainable use of this aquifer. By sustainable we mean that springs should continue to flow. We are interested in the several springs which need to flow to provide adequate habitat for several endangered species as well as to serve many communities and farmers/ranchers with flowing rivers and creeks. We also see the economic and ecological value of the springs to the coastal communities and wildlife, and hope that the EARIP will look at this water situation in a holistic way, including the needs of all those who depend on the aquifer springflow.

## **SOUTH CENTRAL TEXAS WATER ADVISORY COMMITTEE**

### **Statement of Interest, Edwards Aquifer Recovery Implementation Program**

**REVISED ON June 20, 2007**

The South Central Texas Water Advisory Committee was created by the State Legislature in the original Edwards Aquifer Authority Act (Senate Bill 1477 – 1993) to represent interests in the Nueces, San Antonio, and Guadalupe river basins downstream from the Edwards Aquifer region. The Advisory Committee consists of 20 members, 17 appointed by the county commissioners courts and three by the governing bodies of cities in the Advisory Committee's region.

The role of the Advisory Committee as defined in §1.10 of the EAA Act includes the following:

- Advising the EAA Board on downstream water rights and issues
- Assisting the EAA in formulating and implementing demand management plans

The Advisory Committee places high value and priority on the effectiveness of the EARIP process. Generally, the Advisory Committee's objective in the RIP process is to achieve a balance between the interests of those who rely on Aquifer wells and the interests of those who rely on Aquifer springflows. More specifically, the Advisory Committee believes that a successful recovery implementation program must:

1. Protect the endangered and threatened species in their natural habitat at all times, including during a repeat of the drought of record, and in time, recover the species and allow them to be delisted as threatened or endangered species;
2. Provide for the Edwards Aquifer to continue to be a major source of municipal, industrial and agricultural water for the South Central Texas region;
3. Promote the development of water supplies from sources other than the Edwards Aquifer to meet the needs of the regional water users;
4. Provide sustainable, healthy flows for the river systems and coastal bays and estuaries downstream of Comal and San Marcos Springs;
5. Contribute to and sustain a healthy economic climate for all of the South Central Texas region.

## **TEXAS COMMISSION FOR ENVIRONMENTAL QUALITY**

The TCEQ staff will provide scientific and technical expertise for the Recovery Implementation Plan process. Areas of expertise include:

- Developing and implementing programs for preserving the water quality of the Edwards Aquifer and hydrologically connected surface streams to protect existing and potential uses of groundwater and maintain Texas Surface Water Quality Standards.
- Administering the state's water rights permitting program for surface water, including running surface water availability models and processing applications for unappropriated storm water and floodwater that could be used to recharge the Edwards Aquifer.

## **TEXAS DEPARTMENT OF AGRICULTURE**

### **General Statement of Interest**

Texas Agriculture Code Section 12.002 charges the department to encourage the proper development and promotion of agriculture, horticulture, and other industries that grow, process, or produce products in this state. The Texas Department of Agriculture's interest in participating in the Recovery Implementation Program is to highlight the agricultural perspective in the recovery of federally listed endangered species dependent upon springflow from the Comal and San Marcos springs and to support land stewardship and water management strategies that will provide for the recovery of the species while assuring the economic stability of production agriculture and agribusinesses.

## **TEXAS PARKS & WILDLIFE DEPARTMENT**

### **Statement of Interest and Objectives**

An important part of Texas Parks & Wildlife Department's mission is to manage and conserve the state's natural resources. TPWD is the state agency with the primary responsibility for protecting the state's fish and wildlife resources, and the department provides information and makes recommendations to local, state and federal agencies that make decisions affecting fish and wildlife resources.

TPWD's primary goal in the Edwards Aquifer Recovery Implementation Program is to aid in the recovery of federally listed endangered species dependent upon springflow from the Comal and San Marcos Springs. Additional objectives of TPWD are assisting efforts to conserve and efficiently manage Edwards Aquifer water resources, promoting voluntary private land stewardship and other sustainable water management practices and advancing actions that protect instream flows and freshwater inflows.

## **TEXAS WILDLIFE ASSOCIATION**

### **Guiding Principles Regarding the Edwards Aquifer Recovery Implementation Program**

- TWA's interests in the Edwards Aquifer Region include encouraging recovery to down-list endangered species within the aquifer and associated water systems, while balancing the needs of other wildlife and responsible municipal, industrial, and agricultural water users, without compromising private property rights.
- Based upon the needs of the species of interest in the region, we will encourage strategies for recovery that seek to improve the quality and quantity of water **entering** the aquifer (decreased sedimentation, etc).
  - Geographic scope of project should include the recharge areas (Comal, Travis, Kendall, Bandera, Hays, Uvalde Counties, etc)
  - Practices/policies that will result in increased recharge into the aquifer and limit pumping to desirable levels for the species within the Edwards, Comal and San

Marcos Springs will inherently have positive impacts on downstream interests such as the Whooping crane and environmental flows into San Antonio bay. For this reason, the scope of the project needs to go **UP** the watershed, rather than **DOWN**.

- Most importantly, TWA stands firm that the best strategy for improving the quality and quantity of water in the Edwards Aquifer is to ***KEEP PRIVATE LAND STEWARDS ON THE LAND!*** Viable options for keeping the stewards that currently do a great job of “catching” the water that ends up in the Edwards include encouraging and rewarding adoption of the following land management practices:
  - Absorbing Rainfall/Reducing Run-Off/Increasing Base-Flow
  - Properly Using Prescribed Fire
  - Planned/Managed Grazing (Including Deferment...)
  - Appropriate Brush Management (It’s never controlled, and some of it’s important for wildlife!)
  - Erosion Management
  - Reseeding With Natives (As Necessary...)
  - Wildlife and Habitat Management Plans
  - Riparian Management and Restoration
  - Springs and Creek-Banks Protection Strategies
  - Increasing Bio-Diversity
  - Conserving Rare Species
  - Conserving Aquifer Recharge Areas
  - Managing Exotic Species (Flora and Fauna) as Appropriate
- Additionally, the RIP should explore the following options for keeping land stewards on the land:
  - Investigate Existing and New Incentive Programs (PDRs, CRP, GRP, LIP, SAFE, etc.)
  - Assist in Appropriate Estate Planning (Limit Fragmentation!)
  - Develop programs to ease the burden of estate taxes.
  - Encourage Appraisal Districts to cooperate with land stewards who meet basic requirements for "open space" valuation under the law (i.e. to apply intensity tests appropriately for recharge areas).

If we don’t do this, in 20 years, we will all be meeting to develop a RIP for landowners – they are currently on the verge of extinction now – no wonder we’re having problems with the areas downstream!

## **U.S. GEOLOGICAL SURVEY**

USGS Water Resources Discipline Mission is to provide reliable, impartial, timely information that is needed to understand the Nation’s water resources. USGS actively promotes the use of this information by decision makers to –

- Effectively manage ground-water and surface-water resources for domestic,

agricultural, commercial, industrial, recreational, and ecological uses.

- Protect and enhance water resources for human health, aquatic health, and environmental quality.
- Contribute to wise physical and economic development of the Nation's resources for the benefit of present and future generations.
- Minimize the loss of life and property as a result of water-related natural hazards, such as floods, droughts, and land movement.

## **U.S. FISH AND WILDLIFE SERVICE, AUSTIN ECOLOGICAL SERVICES OFFICE**

The interest of the U.S. Fish and Wildlife Service, Austin Ecological Services (ES) Office is, working with others, to conserve, enhance, and protect fish, wildlife, and plants and the ecosystems that support them throughout central and west Texas. Responsibilities of the Austin ES Office include developing and implementing recovery plans for endangered and threatened species; assessing the status of species for listing, downlisting, and de-listing purposes; delineating critical habitat for threatened and endangered species; administering section 6 grants to the State; reviewing applications for scientific permits; facilitating biological research; consulting with Federal agencies for the protection of threatened and endangered species; providing technical assistance to others for conservation of native fish and wildlife resources; partnering with private landowners for habitat enhancement; and working with non-Federal entities to develop Habitat Conservation Plans to minimize and mitigate incidental take of threatened and endangered species.

Our objective for the Edwards Aquifer Recovery Implementation Program is to participate in a collaborative process to address the competing needs for Edwards Aquifer water and the recovery of the species dependent on that water for their existence. Our goal is to conserve the threatened and endangered species of the Edwards Aquifer and to restore them to a secure status in the wild.

## **U.S. FISH AND WILDLIFE SERVICE, SAN MARCOS NATIONAL FISH HATCHERY AND TECHNOLOGY CENTER**

The San Marcos National Fish Hatchery and Technology Center, the Austin Ecological Services Field Office and the Aransas National Wildlife Refuge are all U.S. Fish and Wildlife Service facilities, but each has its own interests and goals. The mission of San Marcos NFHTC is to provide support for, and undertake research on, species that are endangered, threatened, and at risk. The San Marcos NFHTC is a refugium for Texas wild rice, Texas blind salamanders, San Marcos salamanders, fountain darters, and Comal Springs riffle beetles. Culture-related activities for these species are inherent to this mission. Center activities include: (1) collection, maintenance, and propagation of fishes, salamanders, plants, and invertebrates as outlined in the U.S. Fish and Wildlife Service San Marcos/Comal/Edwards Aquifer Rare, Threatened, and Endangered Species Contingency Plan; (2) research on life history, ecological requirements, genetics, and culture of Edwards

Aquifer organisms; (3) research on restoration of refugium species; (4) collection of biological information on the region's aquatic biological resources; (5) research related to invasive exotic species in aquatic ecosystems, especially those that affect listed species; and (6) critical habitat restoration. The San Marcos NFHTC pumps the water it uses from the Edwards Aquifer, so the availability, quality, and wise use of the Edwards Aquifer are of great interest to the facility.

The San Marcos NFHTC's Edwards Aquifer Recovery Implementation Program objectives include: providing information on the life history and environmental requirements of the Edwards Aquifer related listed species and the non-native species that affect the listed species; assisting with the development of plans to manage the Comal and San Marcos rivers' critical habitats; and obtaining a scope of work for the role the NFHTC will play in the recovery and delisting of the Edwards Aquifer related listed species.

## **U.S. FISH AND WILDLIFE SERVICE, UVALDE NATIONAL FISH HATCHERY**

### **Statement of Interest in the EARIP**

The Uvalde National Fish Hatchery's mission is to assist in the recovery efforts of threatened and endangered fish species, and restore native aquatic fish populations within the State of Texas. This will include developing new husbandry techniques, and providing a refuge for imperiled flora and fauna within the Edwards Aquifer System. As part of the U.S. Fish and Wildlife Service, the Uvalde National Fish Hatchery is dedicated towards the protection of both the Edwards Aquifer and the species which rely upon it for their continued existence.

The hatchery will monitor and evaluate its fish stocking programs in a collaborative effort with other Federal, State, Tribal and local agencies, and Non-Governmental organizations. The production of fishes at Uvalde NFH will complement habitat restoration and other resource management strategies for maintaining healthy ecosystems that support healthy fisheries.

The hatchery will conduct public outreach on fishery resource issues and the activities of the National Fish Hatchery System to address those issues.