

**COMMENTS OF THE EDWARDS AQUIFER RECOVERY IMPLEMENTATION
PROGRAM REGARDING ITS IMPLEMENTATION OF THE REQUIREMENTS OF
HOUSE/SENATE BILL 3**

**HOUSE COMMITTEE ON NATURAL RESOURCES
NOVEMBER 12, 2008**

The following are the comments of Edwards Aquifer Recovery Implementation Program (“RIP”) regarding its implementation of the requirements of Article 2 of House Bill 3 and Article 12 of Senate Bill 3 (“H.B./S.B. 3”) adding section 1.26A to the Edwards Aquifer Authority Act. These comments address the accomplishments the RIP has achieved to date, the work that is underway, and the problems facing the RIP which relate to its budget.

I. Accomplishments to Date

H.B./S.B. 3 sets out a very ambitious agenda for the RIP. The RIP, however, has accomplished perhaps more than anyone could have reasonably expected in the 14 months since H.B./S.B. 3 was enacted into law. Let me briefly describe for you some of those accomplishments.

First, the initial directives mandated by H.B./S.B. 3 for the RIP have been met in the timeframe required by the legislation:

- Members of the RIP convened a Steering Committee composed of the twenty-one members designated by H.B./S.B. 3. Relying on the authority provided by the Legislature, that Committee has been enlarged by five members to provide even more diversity in the interests represented on that Committee.
- The RIP has hired a Program Manager.
- Thirty-eight stakeholder groups, including all statutorily mandated participants, have signed a Memorandum of Agreement (*see* Attachment 1), and the Steering Committee has approved Program Operational Rules.
- The RIP has appointed fifteen well-respected scientists to serve as the Science Subcommittee (*see* Attachment 2).
- The Science Subcommittee has completed its recommendations for the Steering Committee and other stakeholders regarding the issues in subsection (k) of H.B./S.B. 3.

These accomplishments, along with others, are set out in more detail in Attachment 3.

Second, the stakeholders in the RIP have contributed over \$218,000 to date, and have made commitments for an additional \$211,000, to cover program management expenses through 2009. The Institute of Renewable Natural Resources at Texas A&M has made a significant contribution towards enabling us to fund the program management function by reducing its usual 26 percent overhead on these costs to five percent. In addition, we have raised over \$300,000 to pay for various technical projects required for successful development of the program document (*i.e.*, the Habitat Conservation Plan or “HCP”).

Third, and perhaps most importantly, the stakeholders have accomplished all of these actions in the collaborative spirit that the Legislature expected of them. Time and time again the individual stakeholders have been willing to look past their immediate interests to keep the process functioning effectively. They are to be commended for their enthusiastic and tireless efforts.

II. What's Next

Attachment 4 is a tentative schedule for meeting H.B./S.B. 3's 2012 deadline. The following discusses three tasks that are underway to meet the 2012 deadline.

First, as discussed previously, the Science Subcommittee has finalized its recommendations regarding the issues identified in subsection (k) of H.B./S.B. 3. The RIP has arranged to have these recommendations reviewed by an independent panel of scientists. At the completion of this review, the RIP will have a critical piece of information to inform its future decision-making.

Second, the RIP has set up its Recharge Facility Subcommittee as directed by H.B./S.B. 3 (*see* Attachment 5). This subcommittee is examining all of the options for enhancing recharge. The options considered will not be limited to physical structures but will also include land management strategies as well. In establishing this subcommittee, we have gone outside the immediate stakeholder community and included other potentially affected interests such as the City of Corpus Christi, the Uvalde County Underground Water Conservation District, the Medina County Groundwater Conservation District and a representative from GMA-9.

Finally, the RIP, with the Edwards Aquifer Authority acting as its contracting agent, has retained a team of eminent scientists to evaluate the impacts of in-stream flows and other impacts from recreation, flood events and other factors on species in the Comal and San Marcos Springs systems. Each of the scientists on the team has worked extensively on the listed species in the springs. The team is led by Dr. Thomas Hardy from Utah State University. Dr. Hardy is the principal author on two studies on the impacts of in-stream flows on the fountain darter at Comal and San Marcos Springs and the Texas wild rice at San Marcos Springs. Dr. Hardy also served on the National Research Council's panel that reviewed the Texas In-stream Flow Program in 2005. Some of the other scientists on the team include:

- **Mr. Ed Oborny**, a Principal at BIO-WEST, Inc., is the Project Manager for the multi-discipline flows and water quality study for EAA that included research into the population dynamics of the fountain darter, Texas wild rice and Comal Springs riffle beetle. He also participated in a study of the distribution of the endangered Comal Springs riffle beetle.
- **Mr. Kenneth Saunders** is a Natural Resources Specialist with the Texas Parks and Wildlife Department. He was the Project Leader for the San Marcos River Instream Flow Study and participated in a population estimate of the fountain darter in the Comal River.
- **Ms. Jackie Poole** is a botanist at the Texas Parks and Wildlife Department. She is an acknowledged expert on Texas wild rice.

- **Dr. Timothy Bonner** is the Director of the Aquatic Station at Texas State University. His publications include papers on the effects of parasites and temperature on the fountain darter.
- **Dr. Miguel Mora** is a Professor in the Department of Wildlife & Fisheries Sciences at Texas A&M University. He is an ecotoxicologist who is currently working on a model to study toxicity with respect to the fountain darter.
- **Dr. Tom Brandt** is the Director of the United States Fish and Wildlife Service's ("FWS's") National Fish Hatchery and Technology Center in San Marcos, Texas. He has published numerous papers regarding fish biology including several significant papers on the fountain darter.

In addition, the RIP has retained United States Geological Survey ("USGS") to participate in the study process to ensure that the results will serve both the needs of the RIP in preparing its program document and the United States Fish and Wildlife Service in reviewing it. To qualify for timely approval by FWS of the program document, it is essential that the program document be supported by information that meets federal requirements.

Information developed by the team will be reviewed by the RIP's Science Subcommittee and will be used by the Science Subcommittee to make recommendations to the Steering Committee and other stakeholders as required by H.B./S.B. 3 regarding withdrawals from the Edwards Aquifer during critical periods. We plan to have both the Hardy Study and the Science Subcommittee recommendations regarding the withdrawal adjustments peer-reviewed by independent scientists.

We have obtained \$180,000 from the Edwards Aquifer Authority, San Antonio Water Systems, Guadalupe-Blanco River Authority, and San Antonio River Authority to pay for Dr. Hardy's study and for USGS participation in the process. Further, the Texas Water Development Board, as its contribution to the EARIP, has approved a grant for \$127,000 that will pay the remaining cost of Dr. Hardy's study. The River Systems Institute at Texas State University and other state agencies have contributed to this project. Texas State, through the River Systems Institute, has agreed to serve as the contractor for the project and to use its overhead to pay the overhead of the subcontractors so that the RIP does not have to pay "double overhead" for the work. Texas State is not alone in its contribution to the Hardy study. Texas Parks and Wildlife Department will be providing at no cost a number of very knowledgeable scientists experienced in the species in the springs and in-stream flow impacts. Likewise, the Edwards Aquifer Authority will be providing, at no cost, expertise and other assistance for the project.

III. Budgetary Problems Facing the RIP

H.B./S.B. 3 directed that the stakeholders engage in a "recovery implementation program" and prepare a "program document" by September 2012 for managing the Aquifer to preserve the listed species at Comal and San Marcos Springs that has been approved by FWS. As a practical matter, this means that the program document will take the form of a "Habitat Conservation Plan" that satisfies the requirements of § 10 of the Endangered Species Act and contributes to the recovery of the species. Currently, we estimate that the total cost of such a plan will be close to \$3 million. *See* Attachment 6. Our proposed sources for funding these needs are set out in

Attachment 7 and include \$500,000 that we expect to be seeking from the Legislature in the upcoming session.

The following is a brief explanation of our most pressing budgetary needs.

Project Management:

The total cost of the project management function is estimated to be close to \$1 million. The RIP stakeholders have raised \$430,000 to pay for project management function through 2009. We believe that the stakeholders will be able to raise the money to meet the future project management costs through 2012.

Development of the HCP and associated documentation:

To obtain approval of the HCP, the RIP must prepare a draft Environmental Impact Statement (“EIS”) that will satisfy the requirements of the National Environmental Policy Act (“NEPA”). Like the HCP, itself, an EIS is very costly to prepare. We estimate that the cost of preparing the HCP and NEPA documentation will be approximately \$1.25 million. This work must be done by a consultant experienced in preparing such documents. We have applied to FWS for a Section 6 Habitat Conservation Planning Assistance Grant, pursuant to the Endangered Species Act, to pay for some of these costs. This application must compete nationally for a relatively small amount of funds. Thus, the RIP cannot count on receiving this grant.

In any event, even if we were successful in being awarded such a grant, we would still have to find a source of funding for the 25 percent cost-share or about \$315,000. We currently have no source to pay for the cost-share. Because the stakeholders have already made, and will continue to make, significant contributions for project management and have paid for the Hardy/USGS study and for peer review of the “k” charge recommendations, we do not believe we can raise this money directly from the stakeholders. We will need assistance from the Legislature in addressing this budgetary shortfall.

Structured Decision-making:

FWS has strongly encouraged the RIP to reach its decisions through the use of a facilitated decision-making process known as “structured decision-making.” The RIP agrees that such a process would be useful in helping the various interest groups to identify a suite of actions that will form the basis of the HCP. The cost of that process will probably be close to \$160,000. We have included the cost of the structured decision making process in our Habitat Conservation Planning Assistance Grant application. However, even if the FWS grant is awarded, we still will need to find a source to fund the \$40,000 cost-share. We currently have no source to pay for the cost-share. We also will need assistance from the Legislature in addressing this budgetary shortfall.

Peer Review:

At least three scientific studies in the RIP process will play a critical role in defining the suite of actions that forms the basis for the HCP:

- The recommendations of the Science Subcommittee regarding the “k” charges.
- Study by Dr. Thomas Hardy on the impacts of flows and other factors such as recreation, flood flows, and other activities near the springs.
- The recommendations of the Science Subcommittee on withdrawal limitations during critical periods as a function of recharge and withdrawal levels.

It is important that all stakeholders are confident regarding the results of these studies. The RIP has decided to have independent peer review of all of these scientific studies to enhance their acceptability to the RIP stakeholders and others and to improve prospects for making agreed-upon decisions based on the results of the studies.

The RIP has contracted, through Texas A&M, to have the recommendations of the Science Subcommittee on the “k” charges reviewed by an independent panel of scientists. This work will cost approximately \$38,000. The San Antonio Water System has contributed money to the RIP to pay for this work. The review of the Hardy study and the work of the Science Subcommittee on the “j” charges will be far more involved. We estimate that this peer review will cost at least \$125,000. We will need assistance from the Legislature in addressing this budgetary problem.

It is important to note that if we are successful at obtaining funding from the projected sources, the stakeholders in the RIP have directly contributed over to \$1.25 million or 43 percent of the total costs of complying with the requirements of H.B./S.B. 3. The Texas Water Development Board Grant will pay \$127,000 or 4 percent of the total costs. The federal government would be paying close to \$1.1 million dollars, or 36 percent of the total costs. Thus, while we anticipate asking the Texas Legislature to appropriate \$500,000 to help pay the cost of complying with H.B./S.B. 3, that amount represents only 17 percent of the total cost.

IV. Conclusion

In summary, the RIP is committed to submitting a completed program document and NEPA documentation to FWS in time for the FWS to be able to review the HCP and approve it by September 2012. That HCP will be supported by the best available science through Dr. Hardy’s study and the work of the Science Subcommittee and by the work of the Recharge Facility Subcommittee. In order for the RIP to meet that commitment, we must obtain the necessary funding to keep the process moving ahead.

We welcome the opportunity to discuss these comments with the Committee and to answer any additional questions it may have.

PARTICIPANTS IN THE EDWARDS AQUIFER RECOVERY IMPLEMENTATION PROGRAM

The following thirty-eight Stakeholders have executed the 2007 Memorandum of Agreement with the United States Fish and Wildlife Service regarding participation in the Edwards Aquifer Recovery Implementation Program:

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| Aquifer Guardians in Urban Areas | Nueces River Authority |
| Alamo Cement Company | New Braunfels Utilities |
| Bexar County | Regional Clean Air and Water Association |
| Bexar Metropolitan Water District | San Antonio River Authority |
| Carol G. Patterson | San Antonio Water System |
| City of Garden Ridge | San Marcos River Foundation |
| City of New Braunfels | South Central Texas Water Advisory Committee |
| City of San Marcos | South Texas Farm and Ranch Club |
| City of Victoria | Texas Bass Federation |
| Comal County | Texas Commission on Environmental Quality |
| CPS Energy | Texas Department of Agriculture |
| East Medina Special Utility District | Texas Living Waters Project |
| Edwards Aquifer Authority | Texas Parks and Wildlife Department |
| Gilleland Farms | Texas Water Development Board |
| Greater Edwards Aquifer Alliance | Texas Wildlife Association |
| Greater San Antonio Chamber of Commerce | Union Carbide Corporation |
| Guadalupe Basin Coalition | |
| Guadalupe-Blanco River Authority | |
| Guadalupe County Farm Bureau | |
| John M. Donahue, Ph.D. | |
| Larry Hoffman | |
| Mary Q. Kelly | |

ATTACHMENT 2

Edwards Aquifer Recovery Implementation Program Science Subcommittee Members

Members with biological or ecological expertise

Norman Boyd (Texas Parks and Wildlife Department)

Doyle Mosier (Texas Parks and Wildlife Department)

Jackie Poole (Texas Parks and Wildlife Department)

Michael Gonzales (San Antonio River Authority)

Tom Brandt (U.S. Fish and Wildlife)

Ed Oborny (Bio-West)

Glenn Longley (Texas State University)

Members with geological or hydrological expertise

Mary Musick (TCEQ – retired)

Rene Barker (Texas State University)

Alan Dutton (University of Texas at San Antonio)

Ron Green (Southwest Research Institute)

Robert Mace (Texas Water Development Board)

Sam Vaughn (HDR Engineering Inc.)

John Waugh (San Antonio Water System)

Susan Aragon-Long (U.S. Geological Survey)

Charlie Kreitler (non-voting member LBG-Guyton)

Susan Aragon-Long from the U.S. Geological Survey chairs the Science Subcommittee.

ACTIVITIES OF THE EDWARDS AQUIFER RECOVERY IMPLEMENTATION PROGRAM

H.B./S.B. 3 established the following tasks and deadlines for the Edwards Aquifer Recovery Implementation Program (“EARIP”):

- Create a Steering Committee by September 30, 2007
- Hire a program manager by October 31, 2007
- Enter into a Memorandum of Agreement not later than December 31, 2007
- Appoint an expert Science Subcommittee by December 31, 2007
- The Science Subcommittee must submit to the EARIP and Steering Committee initial recommendations and responses to questions outlined in subsection “k” of H.B./S.B. 3 by December 31, 2008
- Establish a Recharge Facility Subcommittee
- Enter into an implementing agreement to develop a program document by December 31, 2009
- Prepare a program document that may be in the form of a Habitat Conservation Plan and have it executed by EAA, TCEQ, TPWD, TDA, TWDB, and USFWS by September 1, 2012.

The EARIP has completed the first six tasks. On September 6, 2007, Members of the EARIP convened a Steering Committee composed of twenty-one members. At its April 10, 2008 meeting, the Steering Committee voted to enlarge the Steering Committee to include the Nueces River Authority, Guadalupe Basin Coalition, San Marcos River Foundation, Regional Clean Air & Water Association and City of Garden Ridge.

At its meeting on November 8, 2007, the Steering Committee approved the hiring of Robert Gulley as the Program Manager.

At its meeting on December 13, 2008, the Steering Committee approved a memorandum of agreement (“MOA”). USFWS executed the agreement on December 21, 2007. At its meeting on January 10, 2008, the Steering Committee obtained the requisite signatures to make the MOA effective. Currently, thirty-eight stakeholder groups have signed the MOA. On April 10, 2008, the Steering Committee approved Program Operational Rules for the RIP Steering Committee and RIP stakeholders.

At its January 10, 2008 meeting, the Steering Committee appointed a seven member Science Subcommittee. At its February 14, 2008 meeting, the Steering Committee enlarged the Science Subcommittee membership to 15 based on the recommendations of the original subcommittee members. On November 11, 2008, the Science Subcommittee completed its recommendations to the Steering Committee and other stakeholders on the issues required by § (k)(1)-(3) of H.B./S.B. 3.

The EARIP has established a Recharge Facility Subcommittee in accordance with H.B./S.B. 3 and a Public Outreach Subcommittee.

**EDWARDS AQUIFER RECOVERY IMPLEMENTATION PROGRAM
RECHARGE FACILITY FEASIBILITY SUBCOMMITTEE**

The Recharge Subcommittee is charged with recommending how to calculate the amount of recharge to the aquifer made available from recharge projects, what entities should build the projects, and how they should be funded. Members of the Recharge Facility Feasibility Subcommittee include 18 representatives from environmental groups, land stewardship groups, regional/river authorities, water purveyors, the Edwards recharge and contributing zones, and general stakeholders. In addition, 3 state agencies and 4 federal agencies participate in the subcommittee.

Voting Members

Environmental Groups

- _____ George Rice, AGUA
- _____ Tyson Broad, Sierra Club

Land Stewardship Groups

- _____ Jenny Sanders, Texas Wildlife Association
- _____ Cary Dupuy, Texas Department of Agriculture
- _____ Gene Richardson, Texas Farm Bureau
- _____ Linda Campbell, Texas Parks and Wildlife

Regional/River Authorities

- _____ Steve Raabe, San Antonio River Authority
- _____ Con Mims, Nueces River Authority

Water Purveyors

- _____ Humberto Ramos, Bexar Met
- _____ Jerry James, City of Victoria
- _____ Darren Thompson, SAWS
- _____ Gus Gonzales, City of Corpus Christi

General Stakeholders

- _____ Dan Laroe, Guadalupe Basin Coalition
- _____ Kirk Patterson, Regional Clean Air and Water

Contributing Zone

- _____ Ronald Fiesler, GMA 9

Recharge Zone

- _____ Vic Hilderbran, Uvalde County Underground Water Conservation District
- _____ Robert Rothe, Medina County Groundwater Conservation District

Business Interests

- _____ Mary Kelly, Greater San Antonio Chamber of Commerce

Non-Voting Members

- _____ Cary Betz, Texas Commission on Environmental Quality
- _____ George Ozuna, US Geological Survey
- _____ Mark Mosely, Natural Resources Conservation Service

- _____ Will Amy, US Fish and Wildlife Service
- _____ Marcia Hackett, US Army Corps of Engineers
- _____ Roberto Anaya, Texas Water Development Board

Steve Raabe from the San Antonio River Authority chairs the Recharge Facility Subcommittee