

2013 Regional Water Conservation Program Work Plan

I. Long-term Program Objective

The goal of the Regional Water Conservation Program is to achieve the long-term conservation of 20,000 acre-feet per year of permitted and/or exempt Edwards Aquifer withdrawals. In order to be eligible to participate in the Regional Water Conservation Program, participants are required to commit that 50% of their achieved savings will remain unused and in the aquifer for up to 15 years. This will ultimately result in a total of 10,000 acre-feet saved over the term of the Habitat Conservation Plan (HCP).

To allow the program to have immediate impact on springflow, SAWS and Uvalde have agreed to lend the Program 8,250 acre-feet of water to stay in the Aquifer. Efforts are underway to obtain similar agreements for an additional 1,750 acre-feet. This water will be released back to the donors as water is conserved in the program.

II. Program Administration

A. 2013 Targets/Performance Measures

The goal for 2013 will be to fully develop, and begin implementation of the four individual elements of the Regional Water Conservation Program: Lost Water and Leak Detection; High-Efficiency Plumbing Fixtures and Toilet Distribution; Commercial/Industrial Retrofit Rebate; and Water Reclamation for Efficient Water Use. The first year of the program, which begins January 1, 2013, will be primarily dedicated to putting into place all program elements and to begin actual implementation during the third quarter of 2013. It is anticipated that the Program may conserve up to 1000 acre-feet in 2013.

B. Staffing

The program will be managed by a Conservation Manager employed and housed at EAA. The implementation of the conservation measures will be performed by experienced contractors who have the proven ability to develop and implement specific elements of the Program to achieve the required savings. The Conservation Manager will work closely with the contractors in the implementation of the Program.

The general duties of the Conservation Manager will include, but not be limited to, the following:

- Prepare and manage the Program budget;
- Conduct needs assessments;
- Develop, with the Program Manager, the strategy for implementing the elements of the Program using performance measurements to guide strategic and operational decision making;
- Manage all fund development activities, including grant writing and identifying new funding sources;

- Conduct meetings of the Regional Conservation Committee to collect and utilize input as per the HCP.
- Oversee and support the administrative components, including contract negotiations, and contract and grant reporting;
- Monitor implementation of the Regional Conservation Program and working with the Assistant Program Manager, correct any deficiencies through the Adaptive Management Process;
- Meet with industrial and commercial entities using Edwards Aquifer water to solicit participation in the Commercial/Industrial Retrofit Element;
- Develop and prepare Requests for Proposals (RFPs) and Requests for Qualifications (RFQs);
- Prepare and submit monthly progress reports and annual report; and
- Coordinate with the contractors including monitoring their progress.

During 2013, an evaluation will be made to determine whether or not a conservation coordinator should be added to the EAA staff in lieu to replace some of the consultant work.

C. Methodology

The general approach will be to conduct conservation needs assessments for municipalities, water purveyors, and industrial permittees. The needs assessment will solicit participation in the four Program elements. The municipalities also will be encouraged to develop high efficiency plumbing fixtures and toilet distribution programs for exempt well users in their vicinity and to identify potential interest in the Water Reclamation for Efficient Water Use Element.

Uvalde and Universal City have agreed to work with designated members of the Regional Conservation Committee and the Conservation Manager in 2012 to produce the initial Conservation assessments. The Regional Conservation Monitoring Committee will be consulted during this process.

In 2013, contractors will be used to implement the program elements where needs are identified. Meanwhile, the Conservation Manager, with assistance from the Program Coordinator, if needed, and SAWS, City of New Braunfels, City of San Marcos will continue to conduct additional needs assessments of priority municipalities and purveyors identified by EAA.

The following specific tasks are projected to be completed during 2013.

1. Continue to conduct Regional Water Conservation Needs Assessments on a priority basis;
2. Establish agreements with municipalities and other permit holders;
3. Issue Requests for Proposals (RFP) and Requests for Qualifications (RFQ);
4. Issue Contracts for program materials and/or services;
5. Develop program materials;
6. Establish all Conservation Elements and begin implementing those elements where appropriate;
7. Conduct community meetings; and

8. Conduct commercial and industrial audits.

D. 2013 ESTIMATED BUDGET

The funding available for the Regional Water Conservation Program in 2013 is \$793,250. The amount allocated for 2013 in Table 7.1 of the HCP is \$493,250. EAA has a \$300,000 grant that will be used to augment the \$493,250. The estimated 2013 Budget broken down per activity is as follows:

Consultant Costs	\$200,000 ¹
Development & Printing of Program Materials	\$50,000
Implementation of Program Elements	\$519,250
Advertising	<u>\$24,000</u>
TOTAL HCP COSTS	\$793,250

By October 2012, the Conservation Manager will be hired by EAA to administer the Regional Water Conservation Program using Program Management funds. The person will work exclusively on the Regional Water Conservation Program. The estimated additional Program Management costs needed to cover the Conservation Manager position are as follows:

2012

EAA Conservation Manager (with benefits)	\$19,795 (\$15,369 without benefits)
Manager Travel	\$4,000
Manager Communications and Computer	<u>\$2,500</u>
	\$26,295

2013

EAA Conservation Manager (with benefits)	\$79,181 (\$61,475 without benefits)
Manager Travel	\$12,000
Manager Communications	<u>\$1,200</u>
	\$92,381

The total estimated Program Management costs for 2012 will increase from \$335,586 to \$361,613. The total Program Management costs for 2012 are limited by the Funding and Management Agreement to \$375,000. The total estimated Program Management costs for 2013 will increase from \$560,023 to \$650,390. The allocated Program Management costs in Table 7.1 for 2013 are \$750,000.

III. Program Implementation**A. Lost Water and Leak Detection Element**

Where a water purveyor has estimated a total volume or percentage of water produced that is lost in transmission and identified where the loss is most likely occurring, the purveyor may submit

¹ Assumes the equivalent 1.5 FTE in fees (@ \$50/hour), reasonable overhead, and expenses including travel.

an application to the EAA with a plan to reduce the lost water and a request for technical assistance. If the purveyor agrees to commit half of the saved water to remain unutilized for up to 15 years, then a one-time assistance of \$500 for each acre foot saved will be provided. The EAA will also seek to identify funding sources available to small water purveyors to help enhance or supplant any financial assistance provided by the EAA under this measure, or to organize other funding.

Where purveyors have the capability to identify or estimate water lost in the distribution system, the EAA will enter into contracts with SAWS, the City of San Marcos, the City of New Braunfels, or other interested parties or contractors to provide assistance with distribution system leak detection and lost water survey for the participating purveyor. The EAA, recipient purveyor, and staff from the surveying entity, as appropriate, will use the gathered data to prepare a lost water analysis and improvement plan for the targeted purveyors. These purveyors would then request assistance from the EAA with this plan to reduce water lost during transmission.

If the permit holder agrees to commit half of the saved water to remain unutilized for up to 15 years, then a one-time assistance of \$500 for each acre-foot saved will be provided.

The following are specific tasks that will be accomplished in implementing the Lost Water and Leak Detection Element in 2013:

- The needs assessment process will be used to contact municipal permit holder and water purveyor to solicit input related to development of the actual program, as well as to solicit participation in this element of the program.
- Information will be compiled related to previous lost water surveys, pumped water versus billed water and estimated potential per municipal permit holder.
- Efforts will be made to identify potential providers of Lost Water Survey services, both public and private. Either a RFQ or RFP will be developed for the purpose of securing a contract or contracts with public and/or private sources.
- Research into leak detection technology, smart meters and other best management practices will be undertaken and materials developed that will serve as a resource for program participants.
- The Texas Water Development Board (TWDB) owns leak detection equipment that can be loaned out to municipal water utilities at no cost. Efforts will be made to establish an agreement with the TWDB to provide equipment and training for participating municipalities.
- A total reduction goal in acre-feet will be developed for the program.

B. High-Efficiency Plumbing Fixtures and Toilet Distribution Element

The goal will be to distribute high efficiency toilets, showerheads, and aerators to both commercial and residential end users. The performance measure for 2013 will be to bring all program components into full implementation by the end of 2013, with the programs actually available to end users by the start of the second quarter.

Residential programs will target those homes within the region that were built prior to 1990 and that have not been retrofitted under other existing conservation programs. Commercial programs will target industrial, commercial and institutional (ICI) customers with buildings constructed prior to 1990. ICI Customers include: multifamily residential establishments, retail establishments, local, State, and Federal government facilities, schools, colleges and universities, non-profit organizations, hospitals, hotels, restaurants, office buildings and industrial facilities

The following are specific tasks that will be accomplished in implementing the High-Efficiency Plumbing Fixtures and Toilet Distribution Plan in 2013:

- The needs assessment process will be used to contact municipalities and water purveyors holding permits to solicit input related to development of the actual program, as well as to solicit participation in this element of the program. Those contacted will be encouraged to establish or participate in a high efficiency plumbing distribution program for exempt well users.
- Efforts will be made to use existing municipal contracts for high efficiency fixtures where possible and where beneficial to the EAA.
- Where the ability to use existing contracts is not possible or practical, Requests for Proposals (RFP) will be issued for the purchase of program materials, and to execute purchase contracts with regional distributors.
- Program brochures and materials will be designed and printed.
- A total reduction goal in acre-feet will be developed for each participant in the Element.

To the extent that a high efficiency plumbing distribution program is developed for exempt well users, a mechanism will have to be put in place to ensure that these users actually leave 50% of the water savings in the Aquifer.

C. Commercial/Industrial Retrofit Rebate Element

Commercial and industrial processes are often large users of water. Many processes which use water as an input or as part of the production practice have alternative water-saving means available. The type of business or industrial activity that may be updated with water-saving equipment or process varies widely, and each interested participant will require unique consideration of the individual circumstance, goal, and capacity.

The Commercial/Industrial Retrofit Rebate Program will offer incentives, in the form of rebates, for qualifying permit holders or their qualifying customers instituting new water saving processes or installing new water saving equipment. Rebates will be calculated and provided at a rate of \$400 per acre-foot of water saved or 50% of the project's installed cost, whichever is less.

The Conservation Manager or consultant will make the contacts with prospective commercial and industrial permittees and have responsibility for the planning and implementation process.

The performance measure for 2013 will be to bring all program components into full implementation by the end of 2013, with the programs actually available to end users by the start of the fourth quarter.

The following are specific tasks that will be accomplished in pulling together the Commercial/Industrial Retrofit Rebate Plan in 2013:

- Efforts will be made to contact potential commercial and industrial participants to solicit their participation in the program.
- A complete regional conservation assessment will be conducted in order to identify and target those participants with the greatest potential for significant water savings.
- All program guidelines will be developed with the intent to have an active program by the beginning of the fourth quarter.
- Program brochures and materials will be designed and printed.
- Water use audits will be offered at no charge to ICI customers within the region for the purpose of identifying water conservation opportunities and soliciting program involvement.
- A total reduction goal in acre-feet will be developed for each participant.

D. Water Reclamation for Efficient Water Use Element

The needs assessment process will seek to identify permitted users that are willing to implement technologies such as rainwater harvesting, gray water reuse and condensate recovery with a small subsidy. The subsidy of \$400 per acre-foot saved is similar to that for the other conservation programs but is unlikely to cover a significant portion of the total cost of the technology. Nevertheless, people regularly approach various water conservation information events throughout the region inquiring about these practices. A participant will have to commit to leaving 50% of the water savings in the Aquifer for up to 15 years.

This element of the Regional Water Conservation Program may be attractive to exempt well owners. The needs assessment process can be used to identify such potential participants. A mechanism will have to be put into place to ensure that these users actually leave 50% of the water savings in the Aquifer.

The Conservation Manager or the contractor will have expertise in technologies such as rainwater harvesting, gray water reuse and condensate recovery. They will provide technical expertise, to include site surveys, recommended storage capacity assessments, identification of local contractors and materials, and a one-time contribution of up to \$400 per acre-foot of water saved.

The performance measure for 2013 will be to bring all program components into full implementation by the end of 2013, with the programs actually available to end users by the start of the fourth quarter.

IV. Initial Loans of Water

All acre-feet of the 10,000 acre-feet committed to ensure springflow protection from the outset of the HCP will be in place in the Edwards Aquifer Authority Groundwater Trust (Trust); ownership of the committed groundwater will remain in the person making the commitment. No Aquifer Management Fees will be assessed with respect the acre-feet committed to the Trust. Annually, EAA, in consultation with the Regional Conservation Monitoring Committee, will make an assessment of the water conserved by the Program. Fifty percent of the water conserved during the previous year will be released from the Trust and returned on a *pro rata* basis to those making the initial commitment. However, those who make the initial commitment and also participate in the program will have their committed water released before any *pro rata* releases are made. The Edwards Aquifer Authority will consider whether to adopt any additional incentives presented to it regarding crediting committed water against Critical Period Management that are feasible and consistent with the expected springflow protection objectives of the Program.