



**HABITAT
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PLAN**
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AQUIFER

Steward
Newsletter

The Edwards Aquifer Habitat Conservation Plan e-newsletter, "Steward," is published to highlight the efforts underway to protect the Comal and San Marcos Springs and ensure a healthy habitat for the threatened and endangered species.

EAHCP Heads into 2016 with Optimism

The Edwards Aquifer Habitat Conservation Plan (EAHCP) was approved by the U.S. Fish and Wildlife Service (USFWS) as a regional plan to protect the Edwards Aquifer and its species while helping to ensure stability of the Edwards Aquifer as a water supply for the region. After approval of the EAHCP, USFWS issued an Incidental Take Permit under the Endangered Species Act, with an effective date of March 18, 2013.

One of the requirements of the ITP is that a report be submitted each year to USFWS in order to document progress on plan components designed to protect

endangered species. The five permittees include the Edwards Aquifer Authority, City of New Braunfels, City of San Marcos, Texas State University and City of San Antonio which is represented by San Antonio Water System. Each of these organizations has a specific set of programs to implement and work through the EAHCP Implementing Committee to ensure that budgets, plans and tasks are considered and authorized to move forward.

"We take time at the end of each year at a public meeting of the Implementing Committee to review our progress on programs and spend some time previewing work planned for the year ahead," said EAHCP Program Manager Nathan Pence. "And while we provide high level information at this meeting, the details of all programs are laid out in our annual report. We want to ensure that the general public, interested stakeholders and our regulators have access to the work we're doing to maintain the USFWS permit and improve environmental conditions throughout the Edwards region."

The Edwards Aquifer Authority (EAA) is responsible for the applied research program which is designed to increase understanding of the ecology of the Comal and San Marcos ecosystems and supports the development of the Ecological Model which is used for program management decisions. In 2016, the EAA's applied research will include studies on the effects of elevated water temperature and low levels of dissolved oxygen on endangered species. The organization will also analyze current water sampling methods and create a comprehensive database where all study information can be stored and easily retrieved. The EAA will also move the Refugia Program forward. In 2015, a short-term salvage refugia program was initiated with the long-term refugia effort slated to start up in 2016.

The EAA also completed its full complement of bio-monitoring work in 2015, and has a full slate of biological testing programs scheduled for 2016 as well.



Nathan Pence addresses EAHCP Implementing Committee.



Roland Ruiz conducts his first meeting as IC chairman.

All of the ecological, bio-monitoring and model development work is being reviewed by a National Academy of Sciences (NAS) team, which includes experts from around the country. Their insightful recommendations will help the EAHCP achieve the highest level of results in all its scientific studies.

The EAA also manages four water use reduction programs for the EAHCP, which include the Voluntary Irrigations Suspension Option (VISPO), Aquifer Storage and Recovery Leasing Program (ASR), Regional Water Conservation Program and Drought Management Program. The EAA will be studying the effects of VISPO triggering in 2015 resulting in the reduction of 40,000 acre feet of irrigation pumping. ASR Leasing made big strides in acquiring leased water, but will continue its outreach to bring the program closer to its goals in the EAHCP.

The City of New Braunfels completed its Flow-Split project in 2015, which is designed to maintain optimal habitat for endangered species in the Old Channel of the Comal River near Landa Lake. New Braunfels also continued its non-native vegetation and sediment removal programs, increased its aquatic vegetation restoration efforts, restored riparian habitats, and continued removal of non-native species in the Comal system. In Landa Lake alone, 926 square meters of native plant restoration was accomplished which increases the habitat areas for endangered species. For 2016, the City will continue its bio-monitoring studies, vegetation programs, non-native species removal and pollution prevention work. Additionally, a major river bank stabilization program will be implemented to reduce silting potential for the Comal system.

The City of San Marcos and Texas State University are responsible for Texas wild-rice enhancement and restoration, non-native species and sediment removal, native riparian habitat restoration, management of aquatic vegetation and litter, management of recreation in key environmental areas and overall pollution prevention. In 2016, San Marcos and Texas State plan to increase its Texas wild rice coverage by 1,100 square meters, remove 1,000 square meters of sediment, take out 1,500 square meters of non-native plant material, continue the reduction of non-native animal species and promote general environmental protection awareness in the San Marcos spring and river system.

San Antonio Water System manages one of the largest water and wastewater systems in the U.S. and serves more than 1.7 million customers. Part of its current water resources program is an underground water storage facility known as the Twin Oaks Aquifer Storage and Recovery Plant. The EAHCP recognizes this facility's capability to store water for recovery in drought of record conditions, and SAWS has committed to storing water acquired through the EAHCP ASR Leasing Program. In 2015, 11,575 acre feet of water was stored in the system. New ASR Leasing Program elements should help increase the amount of water stored in SAWS' ASR site.

"We've learned a great deal in implementing the EAHCP during near drought of record and flooding conditions in our short, three years of operation," noted EAA General Manager Roland Ruiz, who will chair the Implementing Committee in 2016. "We have very talented and engaged people working these programs across the region, so we're expecting to continue moving forward on all fronts in 2016. We'll use the next few years as well to begin looking forward to Phase 2 of the EAHCP implementation. There are more program decisions to be made then, and I think we're laying very good groundwork that will help the partners make good decisions about how we handle the second half of our 15-year federal permit."