



EAHCP STEWARD

News from the Edwards Aquifer Habitat Conservation Plan - June 2022



Looking Back to Move Forward

*EAHCP Springflow Protection Measures
Poised for Endangered Species Preservation*

Javier Hernandez, EAA's Manager of the ASR and VISPO Programs

The week we interviewed Javier Hernandez for this month's EAHCP Steward, the weather forecast called for a solid string of triple digit temperatures in South Texas with no rain relief in sight. Additionally, Edwards Aquifer levels had started out on a slow note for 2022 and the region was nearing Stage 3 critical period drought levels, and summer had not officially begun. These are the times for which the Edwards Aquifer Habitat Conservation Plan's (EAHCP) group of springflow protection measures were designed.

Looking Back to Move Forward - Continued

“This year the EAHCP is celebrating 10 years of successful habitat conservation and it comes at a time when the region is going through a very dry period,” Hernandez, said. “But that’s the way it is in South Texas, and we’re prepared now more than ever. Over the last decade the entire Edwards Region has pitched in to develop and maintain the springflow protection measures which are designed to ensure the



springs in New Braunfels and San Marcos continue to flow, even in another drought of record. That’s no easy feat to accomplish but our incidental take permit with the U.S. Fish and Wildlife Service depends on these programs working. And the good news is that so far we’ve accomplished that goal.”

Hernandez manages the Aquifer Storage and Recovery (ASR) and Voluntary Irrigation Suspension Program Option (VISPO) programs for the Edwards Aquifer Authority (EAA). The other two components of the springflow protection measures include the Regional Water Conservation Program (RWCP) and Stage V Critical Period Management Plan (CPM).

The CPM is divided into five stages in which percentages of pumping reductions become more restrictive as water levels in the Edwards Aquifer decline. The J-17 index well in San Antonio, the United States Geological Survey (USGS) San Marcos springflow gauge, the USGS Comal springflow gauge and the J-27 index well in Uvalde provide water level data which trigger the implementation of the CPM. There are two monitoring wells because scientists determined that there are distinctive “pools” in the Edwards Aquifer. The Uvalde pool supports Uvalde County while the San Antonio pool supports Medina, Bexar, Comal and Hays and parts of Guadalupe, Atascosa and Caldwell Counties. In Uvalde, Stage 1 of the CPM is triggered when that index well averages a reading of 850 feet at mean sea level (MSL) or less for 10 days. Stage 1 in the San Antonio pool is triggered when averages are 660 feet MSL or lower for 10 days. The springflow gauges at San Marcos and Comal Springs can also trigger Stage I when the 10-day average at the San Marcos Springs falls below 96 cubic feet per second (cfs) and at Comal Springs, below 225 cfs. Getting out of the various stages also includes the consideration of a 10- day average.

“Originally, the Critical Period Management Plan was developed with four stages of pumping reductions based on Edwards Aquifer trigger levels,” Hernandez explained. “However, as part of the EAHCP, the region added Stage V to the CPM which calls for a 44 percent reduction in Edwards Aquifer water use. While the San Antonio pool has not reached its 625’ trigger level over the last 10 years, the Uvalde pool hit Stage V in 2013 and stayed there for almost two years before we began to get enough rainfall to get us out of trouble. Many people remember that during the drought of the 1950s, the Edwards Aquifer level got to its lowest reading of 612’ at J-17 and the Comal Springs went dry for six months.”

Looking Back to Move Forward - Continued

The RWCP is also one of four springflow protection measures in the EAHCP intended to reduce aquifer withdrawals to protect endangered species in the Comal Springs and San Marcos Springs during a drought of record. The RWCP's goal in the EAHCP was to conserve 20,000 acre-feet of Edwards water. The RWCP started out with traditional conservation programs like toilet and other water fixture retrofits in cities around the region. However, the program took a giant leap forward in 2016 as the EAHCP and San Antonio Water

System (SAWS) reached an agreement for SAWS to invest an additional \$18 million in its water leak detection and repair program through 2028. That one program alone will help preserve 20,000 acre-feet of Edwards water.

“While it takes all four of the springflow protection measures to make sure the Comal Springs do not dry up during another drought of record, the ASR and VISPO programs are by far the most critical,” Hernandez stated. “In fact, The EAA’s updated computer model verified that the ASR and VISPO programs were the most effective in helping the Comal and San Marcos Springs continue to flow even under drought of record conditions.”

VISPO was launched in 2014 and had an overall program goal of 40,000 acre-feet, which later was increased to 41,795 acre-feet (13.6 billion gallons). It has always been a forbearance type of program meaning that if water levels at the J-17 index well in San Antonio were at or below 635 feet on October 1, the VISPO participants would be required to suspend the use of the amount of water enrolled in the program for the following year. Participants in VISPO are paid a stand-by fee each year, even if the program does not trigger. If the program triggers, participants receive an additional compensation for not using water enrolled in the program the following year.

As for the ASR program, the EAHCP requires that 126,000 acre-feet of water (41 billion gallons) be stored in the SAWS ASR facility in South Bexar County, with the EAA controlling an additional 50,000 acre-feet (16.2 billion gallons) accrued through forbearance agreements. The 126,000 acre-foot goal was achieved by allowing water permit holders to lease their water over defined periods of time. The smallest lease was for less than one acre-foot and the largest agreement contains thousands of acre-feet. All of that water was pumped by SAWS from its wells and stored in its ASR facility. That water will remain there until the region faces another drought of record. Within the last two years, forbearance agreements have reached the 50,000 acre-feet goal (16.3 billion gallons). There are a few ASR leases that will expire in the next couple of years, but the majority of the agreements will run through 2028 when the EAHCP incidental take permit will be renewed.

“While the participants in ASR and VISPO programs are being paid to enroll their (groundwater) rights in the programs, they are also helping the entire Edwards Region protect its main source of water during times of extreme drought,” Hernandez concluded. “And that benefit accrues not only to the endangered species in the Edwards Aquifer spring systems, but to approximately two million people and thousands of businesses throughout the region as well. No one knows what the future holds, but we can be very confident in knowing that all of these springflow protection measures make us much more prepared for another drought of record than the region was the first time around. And in South Texas with strings of 100-plus degree temperatures and no rain in sight, that could happen at any time.”



Tommy Boehme was one of the first agribusiness people to join ASR, VISPO.

EAHCP STEWARD SHORT TAKES

EAHCP Listen and Learn Workshops Scheduled

The EAHCP Incidental Take Permit (ITP) Renewal Process includes a series of Listen & Learn Workshops. Each workshop will focus on specific topics and will be conducted in a 3-hr open house format to gather public input. The following table includes the date, time, and location for each workshop.

Meeting materials for these open houses will be posted on the EAHCP website as they become available. For more information, please visit: www.edwardsaquifer.org/habitat-conservation-plan/permit-renewal

Workshop	Topic Discussed	Date	Time	Location
1	Permit Renewal Approach	August 2, 2022	3:30 PM – 6:30 PM	San Antonio
2	Biological Goals & Objectives	August 30, 2022	3:30 PM – 6:30 PM	Hondo
3	Climate Change & System Vulnerability	September 22, 2022	3:30 PM – 6:30 PM	San Marcos
4	Conservation Measures	October 4, 2022	3:30 PM – 6:30 PM	New Braunfels

Welcome EAHCP Intern Olivia Branson



Please welcome Olivia Branson, Intern for EAHCP Administration, effective June 7, 2022.

Olivia is currently pursuing a Bachelor of Science degree in Biology from Baker University with an expected graduation date of May 2023. Olivia was previously an intern for Baker University Wetlands where she assisted with invasive species management, and studied the effects of time under restoration on the soil microbial communities in a tall-grass prairie ecosystem.

In her spare time, Olivia enjoys MMA, wrestling, weights, hiking, and house plants.

EAHCP 10 Years of Habitat Protection Featured on EAA Podcast

The EAA Recharge Zone Podcast features a two-part episode featuring the EAHCP and the 10 years of habitat protection. [You can listen to it here.](#)

San Marcos Prospect Park Work Day Set for Saturday, June 18

Our upcoming volunteer workday at Prospect Park is scheduled on Saturday June 18, from 8-10 am. Tasks will include removing invasive trees, building log terraces, and litter removal. Tools will be provided, but bring a water bottle. Meet at 1410 Progress St. Parking also available on Columbia Ave. and Wall St.

[RSVP here.](#)