



EAHCP STEWARD

News from the Edwards Aquifer Habitat Conservation Plan - May 2021



Pumping Up Progress

Edwards Aquifer Region making major strides in protecting endangered species via new water supply projects. Left to right - Earl Parker, Patrick Shriver and Darren Thompson.

“U

nique” always seems to be a word associated with descriptions of the Edwards Aquifer. It is one of the most prolific artesian aquifers in the world. Even today, it continues to be the major source of water for the Edwards Aquifer Region that includes a major agricultural center, the seventh largest city in the U.S. and free-flowing springs that are home to numerous endangered species. The story behind the current management system of the Edwards Aquifer could also be included in a “one-of-a-kind” portrayal.

Continued on the following page.

Texas Stream Team - Continued

After all, the road to today's status quo is lined with water wars, major court battles, claims that the Edwards Aquifer could supply the entire State of Texas with water, and enough colorful characters to create a best-seller. And while the Edwards Aquifer story has evolved into a more collaborative construct, today's managers think it is critically important for future users of this fresh water to understand its history is quite the success story.

"There are really two parts to the Edwards Aquifer water use story," said Edwards Aquifer Authority (EAA) Director of Regulatory Affairs Earl Parker. "From the 1940s to about 1997, we saw the amount of water being withdrawn from the Edwards on an upward path. Once we hit the peak withdrawals in late 1980s of about 550,000 acre-feet, those water use numbers flatten out and then begin to reduce for the following two decades. Actually, we have a chart that demonstrates this incredible journey in a glance. The logical follow



Agua Vista Pump Station is a major component of the Vista Ridge project.

up question is why this impressive turnaround occurred. The answer is people from around the region were brought to the table after the federal government found the Edwards Region was violating the Endangered Species Act in the early 1990s. Rather than giving up control of the Aquifer to the federal government, local officials went to the state legislature to get a water

management system

put in place. That was the beginning of the Edwards Aquifer Authority and the start of people focusing on collaborative solutions to our water issues. Since the EAA began regulating pumping from the Edwards Aquifer, we have never seen more than 450,000 acre-feet withdrawn in a single year."

One of the first tasks the EAA accomplished was establishing the water rights permitting system. The State of Texas is a "rule of capture" state meaning that landowners have the right to pump the water beneath their property. However, settling the Endangered Species Act lawsuit required a water management system for the Edwards Aquifer. Establishing that permit system was the single-most important part of a larger plan to protect the endangered species supported by the Edwards Aquifer. The second task included the creation of the Edwards Aquifer Habitat Conservation Plan (EAHCP), which took nearly half a decade to establish. By 2013, the EAHCP was submitted to the U.S. Fish and Wildlife Service (USFWS) and the Edwards Region received a 15-year permit known as an "Incidental Take Permit."

"The establishment of the Edwards Aquifer water permits and the issuance of the Incidental Take Permit were two high water marks for the region," Parker noted. "But the major accomplishments were just beginning. San Antonio Water System (SAWS), which is responsible for the City of San Antonio's water supply and management, took some major steps forward after their water rights permits were issued. And we're definitely seeing the fruits of that work today."

Texas Stream Team - Continued

Darren Thompson, SAWS Water Resources Director, explained that their Edwards permits gave them some sense of certainty in knowing what they could expect to use from the Edwards Aquifer from then on. However, those limits also created an immediate need to find additional supplies of water to meet the demands of a growing major American city.



Aquifer Storage and Recovery facility in South Bexar County.

“My first task with SAWS was in helping solidify our historical pumping rights,” Thompson commented. “When we were done, it became quite obvious we didn’t have enough water to meet the City of San Antonio’s growing requirements over the next 20 years. We had to get creative in short order to make sure our water resources were where they needed to be. Water conservation was the cheapest and quickest way to make more water available. Then, SAWS built one of the largest water recycling programs in the country. After that, we built the Aquifer Storage and Recovery Project (ASR), which is now not only a key water storage

asset for SAWS but for the EAHCP as well. About a decade ago, we began building the 50,000 acre-foot Vista Ridge Project, which is a gigantic step forward for ensuring San Antonio has plentiful water for the next 25 years or so. When you bring on that much water for customers, our need to pump water from the Edwards Aquifer diminished dramatically. That obviously keeps more water in the Edwards [Aquifer] and has a direct benefit to springflows in [the Comal River] in New Braunfels and San Marcos [River] where the endangered species live. In the last three years alone, our reliance on the Edwards Aquifer has gone from 77 percent to 58 percent. That’s definitely the lowest it has been in modern times.”

Thompson and Parker agreed that over the years, the Edwards Aquifer Authority has transitioned to becoming more of a facilitator of water management and research than strictly a regulator.

“We still know job one for the EAA is ensuring that water rights holders do not over-pump their permits, but we also know that innovation and solid science will be the driver of how this region continues to meet its future water demands with the population growing each year,” Parker said. “The success of the EAHCP is critical to the region being able to renew its Incidental Take Permit in the next few years. So, we not only want to be a great partner there, but we want to be the center for excellent scientific research and data to give water managers accurate decision-making tools to use.

“Looking back at where we came from, you quickly realize that everyone in the region has made great water management strides. The agricultural community is way more efficient at irrigating crops and has embraced the use of technology in doing so. SAWS has become a leader in the nation in water conservation and water recycling, plus it has invested in bringing on a major water supply project and a huge water storage facility. The leadership in New Braunfels and San Marcos has aggressively taken out non-native plants and animals in the spring areas to help restore the ecosystem to its native environment which benefits the endangered species. And all of this has been accomplished by people working together. It is quite a success story and an instructive one at that.”

Dare we call it a “unique” success story?

EAHCP STEWARD SHORT TAKES

Thank You Jackie Poole and Doyle Mosier

The EAHCP wants to send a heart-felt “thank you” to Jackie Poole and Doyle Mosier for their extensive service on the Science Committee. Both have announced they will be leaving the committee.

Jackie is a taxonomist by training, and worked for several years curating the herbarium collections at Harvard University and the University of Texas at Austin. In 1983 she began working as a botanist for the Texas Natural Heritage Program which eventually became the Wildlife Diversity Program of the Texas Parks and Wildlife Department.



Jackie Poole



Doyle Mosier

Doyle has been actively involved in both water quality and water quantity issues since 1985 when he accepted a position as an aquatic biologist at the Lower Colorado River Authority. He has worked extensively on field studies related to aquatic habitat and the development of instream flow needs for Texas’ rivers and streams and freshwater inflow needs for bays and estuaries.

EAHCP Stakeholder and Implementing Committees Meeting Set - May20

A joint meeting of the Edwards Aquifer Habitat Conservation Plan (EAHCP) Stakeholder and Implementing Committees will be held Thursday, May 20, 2021 at 10:00 A.M. on Microsoft Teams. The Implementing Committee will convene after the Stakeholder Committee.

Implementation of Condition M

On December 10, 2020, flow in the San Marcos River dropped below 120 cfs, as recorded by the USGS gauge #08170500 San Marcos River at San Marcos, Texas (Sewell Park). This flow rate activated Condition M of our Incidental Take Permit (ITP) #TE63663A-I, which limits certain activities until flow increases and stabilizes above the designated trigger of 120 cfs. Due to recent rainfall, the springflow has increased slightly above the Condition M trigger. EAHCP staff continue to monitor the flow rate in the San Marcos River as conditions begin to stabilize.

EAHCP STEWARD SHORT TAKES

U.S. Fish and Wildlife Service 5-Year Review

The U.S. Fish and Wildlife Service (USFWS) has published a 5-year review of the Texas blind salamander (*Typhlomolge rathbuni*) and fountain darter (*Etheostoma fonticola*).

The purpose of the 5-year review is to assess the species' status as required by section 4(c)(2) of the Endangered Species Act. Based on the evaluation of species, a recommendation could be made to remove a species from the threatened and endangered species list or suggest a change in the status. The USFWS concluded that the Texas blind salamander and the fountain darter remain listed as endangered.

Follow the links below to view and download these reports:

Texas blind salamander: [Texas Blind Salamander 5-Year Review \(fws.gov\)](#)

Fountain darter: [950.pdf \(fws.gov\)](#)