



he idea of going "back to the future" has always been a bit of a head scratcher. But, that odd turn of phrase may just be applicable to this story about three outside sources of funding benefitting the Edwards Aquifer Habitat Conservation Plan (EAHCP).

Nearly 15 years ago, City of San Marcos environmental staffer Melani Howard discovered some funding opportunities for aquatic ecosystem restoration projects in the somewhat complicated U.S. Army Corps of Engineers budget.

Long Time Comin' - Continued



Even though the EAHCP had not officially started operations, she knew that extra funding could help the City of San Marcos accelerate their efforts to help protect endangered species by managing non-native vegetation from the San Marcos River corridor. After a decade of dealing with the ups and downs of government-funded programs, the Corps approved a project for the San Marcos River and the City of San Marcos agreed to supply matching resources to finally get the \$3.8 million eco-restoration project off the ground. The Corps of Engineers brought \$2.5 million to the table and the City of San Marcos committed to meet the remaining project funding requirements through various means.

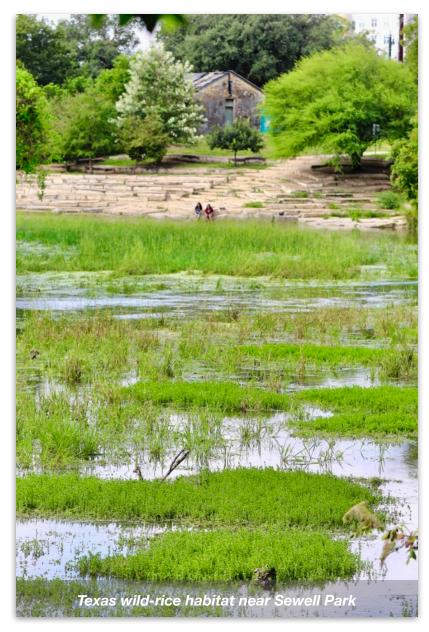
"We are on the final leg of completing this project which runs from City Park just downstream of Texas State University to the San Marcos wastewater plant downstream of I-35," said Mark Enders, EAHCP program manager for the City of San Marcos. "Because the EAHCP work focused on the upstream portions of the river, the Corps spent its resources primarily on the stretch of the river downstream of I-35 that hadn't yet been addressed through the EAHCP. So much credit for this project coming to fruition has to go to Melani. She shepherded this effort over many years with lots of speed bumps to endure along the way. The future she saw 15 years ago is paying big dividends now. So, we're thankful to her for her persistence, and she knows that we'll work hard to ensure its success for years to come."

Overall, there are 13 sections to the project encompassing about 40 acres of land along the San Marcos River being treated. Much of the work has consisted of the removal of non-native vegetation negatively impacting the San Marcos River and endangered species habitat. That includes eliminating elephant ear plants from the banks of the river and non-native trees and understory growth from the riparian areas near the river. After the non-natives are taken out, native plants are installed and maintained so a South Texas native ecosystem is restored and in a good place to be preserved.

Long Time Comin' - Continued

Enders explained that while the City of San Marcos is a consulting partner, this is a U.S. Corps of Engineers project. The Corps managed the design process, hired and managed contractors to accomplish the field work and obtained all necessary permits for the project. In addition to the riparian improvements, the Corps performed improvements at two existing stormwater outfalls that discharge to the San Marcos River. These improvements will help control erosion of soil that typically would wash into the river over time resulting in the degradation of endangered species habitat within the river.

"When the scope of this project is completed, the City of San Marcos will be responsible for maintaining the improvements," Enders noted. "As we have seen in our experience with EAHCP projects over the last decade, non-native plants are hard to completely eradicate. They tend to reemerge after a few years, and if we let that go for too long, we'd be back at step one. So, we're looking at including these maintenance activities as part of our EAHCP programming in the future to ensure the native plants always have a leg up on the nonnative varieties."



While the Corps of Engineers project is a very nice addition to funding assets and ecosystem riparian restoration, improvements of aquatic ecosystem in the river was also in need.

"Melani Howard's fingerprints are also on a few other funding grants we sought in order to continue the removal of non-native species and replacement with natives in the river itself," said Dr. Kimberly Meitzen, Geography and Environmental Studies associate professor with Texas State University. "With the advent of the Corp of Engineers work, Melani and I teamed up in 2019 to locate some dollars to help accomplish the instream work along the same stretch of the San Marcos River where the Corps of Engineers were doing their improvements. The fist grant was from the Southeast Aquatic Resource Partnership (SARP) and that helped us work in the lower parts of the San Marcos River. We contracted with the Texas State University Meadows Center to remove submerged non-native plants growing in the riverbed and replace them with endangered Texas wild-rice and a few other Texas native aquatic plants. The second grant came about in an unexpected fashion. We presented the SARP grant story and its successes at a symposium in San Marcos. At the conclusion of that conference, a representative from Texas Parks and Wildlife Department contacted us about their state agency's Habitat and Angler Access Program (HAAP[KM1]) Grant. We applied and were successful there as well. Those HAAP funds are helping us with work downstream of I-35."

Long Time Comin' - Continued



Dr. Kimberly Meitzen takes a look at Texas wild-rice seeds they harvest for replanting in the San Marcos.

Meitzen, who also chairs the Stakeholder Committee for the EAHCP, explained that as the Corps of Engineers removed non-native trees in the riparian areas, more sunlight was able to get through to the plants growing in the river. This allows native plantings to become well established and spread creating more natural habitats for the endangered fountain darter. In fact, Meitzen said that with the expansion of Texas wild-rice stands, the habitat for the fountain darter could be extended almost all the way to the confluence of the San Marcos and Blanco Rivers. Meitzen also described the partnership with the U.S. Fish and Wildlife Service's (USFWS) San Marcos Aquatic Resources Center, headed up by Tom Heard, where their Ecological Research Group volunteers with Chris Hathcock on the Texas Wild-rice seed collection efforts. The team has conducted three harvests this year and only a fraction of mature seed have been sampled. Part of the collected seed is used by USFWS to ensure genetic diversity, and some is used by the Ecological Research Group to grow plants used in the HAAP restoration projects.

"A great example of how Corps of Engineers project helped the EAHCP is that, with much more sunlight on the river resulting from the removal of non-native trees, we've been able to put in about a thousand Texas wild-rice plants in establishing 17 new wild-rice stands," Meitzen described. "The SARP grant helped us with the Texas wild-rice planting and the HAAP grant provided the resources to diversify the river's aquatic vegetation with other native plants that include cabomba, heterantha and ludwigia. As for the non-native species, through this process we've been able to remove huge amounts of hydrilla and elephant ears. In the Corps of Engineers project, they will continue to remove elephant ears as they reemerge along the banks of the river. And for our downstream projects, we have taken out lots of hydrilla. Overall, the big benefits accrue to the endangered species, their habitats and the entire community of San Marcos as we're restoring the San Marcos River to a more natural state and ensuring its viability for decades to come."













Listen to this month's EAHCP Steward Podcast by clicking here.

EAHCP Contractor Featured on Texas Country Reporter

For 52 years, Texas Country Reporter has been bringing great stories about Texans and their work to their fellow Texans. Recently, one of those stories featured EAHCP contractor Nick Menchaca. The EAHCP Steward featured Nick's work to remove nonnative fish from Landa Lake and other Edwards Aquifer fed waterways a few years ago. So, we're happy that his (and our) mission is now being chronicled for a statewide audience.

You can watch the episode here.

EAHCP Event Highlights

2024 Sacred Springs Powwow: Oct. 5, 10-5 PM and Oct. 6., 11-5 PM

The Sacred Springs Powwow is a 2-day cultural celebration of regional and local Native tribes, including the Coahuiltecan who have lived in the San Marcos area for thousands of years. Over 100 Native dancers, storytellers, and musicians from across Texas will perform, vendors will feature indigenous art, food, and drinks. More information about the <u>Sacred Springs Powwow here</u>, admission is free for children under 12, \$8 tickets can be <u>purchased here</u>.

San Marcos River Fall River Clean-up: Sat. Oct. 5, 8:30 AM-Noon

Annual fall river clean-up for the Upper San Marcos River watershed and its major tributaries on Saturday, October 5th, 8:30- noon. Use the link below to register and select your section. Register here or contact Amy Thomaides (athomaides@sanmarcostx.gov) or Jon Lopez (ilopez@sanmarcostx.gov).

Dos Rios Watershed Cleanup: Sat. Oct. 12, 9-Noon

8th Annual Dos Rios Watershed Cleanup, volunteers will clean litter in various riverfront park areas along the Comal Springs System and the Guadalupe River in New Braunfels. Volunteers will receive breakfast, cleanup supplies, and a participation gift. More information is available here: https://newbraunfels.gov/dosrios or contact Phillip Quast (pquast@newbraunfels.gov).

The National HCP Coalition is seeking abstracts for the 10th annual meeting. Interesting in participating in this year's event? Please visit www.nhcpcoalition.org to learn more.

SMRF Riverside Social: Sat. Oct. 26, 1-5 PM

San Marcos River Foundation (SMRF) is hosting their 2nd Annual Riverside Social event in Martindale on Saturday, October, 1-5 PM. The SMRF fundraiser event will feature live music, silent auction, food by Root Cellar, and drinks from Middleton Brewery. <u>Tickets and more information here</u>.

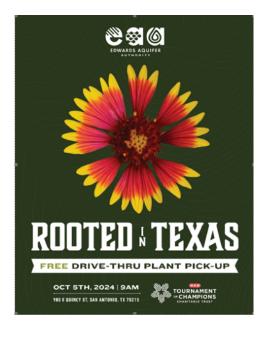
How to Access EAHCP Committee Documents

The EAHCP Committee documents are available at this link.

2024 EAHCP Calendar: https://www.edwardsaquifer.org/habitat-conservation-plan/eahcp-calendar/



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Edwards Aquifer Authority Holding a Texas Native Plant Pickup Oct. 5

The event is called Rooted in Texas and is being hosted by the Edwards Aquifer Authority (EAA) Saturday, October 5, beginning at 9 a.m. It is a free Drive-Thru Plant Pick featuring Texas native plants. The event is also sponsored by H-E-B Tournament of Champions.

This plant pickup will take place at the EAA headquarters building located at 900 East Quincy Street in San Antonio. They will be giving away TWO FREE Texas native plants per person plus a bag full of EAA information and helpful giveaway items, while supplies last.

Guests will receive a random combination of one sun plant and one shade plant from these offerings: Zexmenia, Gregg's Mistflower, Purple Coneflower, Lyre Leaf Sage, Turk's Cap, Cedar Sage.