



Cutting edge. Leading edge. Bleeding edge.

If you've lived through enough decades since the 1980s, one of those "edge" descriptions of a company being ahead of its time probably became one of your favorite phrases to use. Business hipsters even tried to spark debates about the differences between the three. But, no matter how you slice the words, Environmental Survey Consulting (ESC) has truly been a pioneer in the ecological restoration field since the mid-1980s by managing land through native habitat restoration. And for the past two years, they have been employing those environmentally forward-thinking techniques as part of the City of New Braunfels and Edwards Aquifer Habitat Conservation Plan (EAHCP) bank stabilization program.

Environmental Survey Consulting - Continued

"I feel very fortunate to be able to work here at Landa Park in helping keep this Texas treasure alive and well," said ESC Crew Chief Riley Wade. "We've been busy in four different locations around the lake and essentially converting large swaths of barren dirt along the bank of Landa Lake into grassy, beautiful areas that both visitors and the endangered species can appreciate. Our job is pretty simple in its mission. We are planting native plants in these areas along the lake to stabilize the banks. Large rainstorms can easily wash sediment into the lake bed, some of which is near spring openings, and that creates a negative impact on the species and their habitats. Once the native plants take hold, though, they will grow large root systems which can break up the tightly compacted soil and allow some nitrogen back into the ground. That is the



best scenario for preventing erosion and harm to the ecosystem."

When assessing a site for restoration, the ESC team will look around for native plants or grasses that might already be doing well there. That gives them some clues about the type and status of soil in the area, and the plants' preference for shade or

sunlight. They'll consider how the land around the site drains which provides information on the amount of moisture the area might be collecting over time.

"After a solid site assessment, we go big when putting our plant list together to present to our client," Chris Newton, an ESC project manager, explained. "There are really a lot of native plants to choose from and so we'd rather have a long list of items to choose from rather than regretting leaving something out after the project is done. Also, we're sometimes limited by native plants that might be available at the time. But, as mentioned, ESC likes to stay ahead of the curve so we have developed our own private nursery to grow native plants so we are not at the mercy of the retail market. Also, we harvest a lot of wild seed on our own so we can always bring a large plant palette to the jobs we do. So, that large plant list I mentioned is also a bio-diverse list. We'll have various grasses, wildflowers, shrubs and other natives to work with. Then we balance the plantings with rock paths that might be needed to accommodate traffic. That type of landscape is not only visually appealing but also works toward stabilizing soils really well."

Once the plants and paths are in, ESC schedules regular site visits to make sure that all is growing to plan. While most of the maintenance work is in removing weeds around the native plants, they will add more plants or move some to different locations if warranted. Most importantly, they are always on the lookout for invasive plant species creeping into their work areas.

Environmental Survey Consulting - Continued

Underscoring ESC's approach to maintenance, Newton noted, "Around Landa Lake, we really need to be tuned in to working with nature and understanding what works here primarily because there is no access to irrigation systems. That is also why we work with as large and bio-diverse set of plants from the beginning as possible. South Texas is notorious for wild weather swings. So, if some plants don't quite make it through a



prolonged drought, we know other plants we installed will. The same goes for extremely wet periods. And no one will forget the deep freeze of 2021. Most landscapes, including the ones we planted, looked pretty desolate after all that snow melted. But, we figured it would just take a little extra time for those natives to come back. And, thankfully, most of them survived and are back to normal now."

Over the past six years, the City of New Braunfels has worked to restore the banks of the Comal River downstream of Landa Lake. The bank stabilization project also included the removal of non-native plants such as elephant ears, Chinese tallow and ligustrum which had crowded out many of the native plants. After a couple of years of native plants growth, visitors can see dramatic improvements on the banks of the Comal River. In the last couple of years, the EAHCP team has moved its efforts upstream of Landa Lake where ESC has its boots on the ground. The final piece in each of those projects along the way has been the planting of native plants and grasses to provide a lasting solution to the erosion issues of the past.

"ESC's roots really are in ecological restoration," Newton concluded. "Our founders learned very early on that getting to know the 10 ecological regions around the state in depth was the key to helping cities like New Braunfels address their environmental issues. And not only have those ecologically sensible principles been transformative for cities, but we've also applied that knowledge to helping some of our private customers as well. When you stop and think about it, a family's back yard or a business' grounds are like small ecosystems. And once you learn how that ecosystem functions at its best, you can not only create an aesthetically pleasing environment, but also sustain that slice of nature for a long, long time."



EAHCP Upcoming Meeting Schedule

Year-End Joint Committee Meeting

Date: December 16, 2021

Time: 10:00 AM

Location: Microsoft Teams

Two Sessom Creek Workdays Happening in December

The upcoming volunteer Sessom Creek workdays for December are scheduled for Thursday, December 16, and Saturday, December 18. Both sessions will run from 9 a.m. - 11 a.m. With the cooler weather approaching, the Sessom Creek workdays will begin to include broadcasting native seed mixes in areas where invasive species removal work is complete. Other tasks to be accomplished will be prepping seeding areas and small invasive species removal as needed. Tools will be provided, but bring a water bottle. Meet at Vie Lofts parking lot (5 designated spots for park users). Parking will also be available along Chestnut, Walnut, and Acorn Streets.

You can RSVP at: https://www.signupgenius.com/go/30e084ba8ae2ca7fc1-habitat.

EAA Office will be closed December 23, 24, and 31

