



What's Happening?

Around the Bend.

Updates from the Coastal Bend Bays & Estuaries Program

June 2026

Volunteers at Kate's Hole Oyster and Living Shoreline Restoration Create 300-feet of Oyster Reef

Padre Island, TX –With much of the Texas Coast experiencing impacts of coastal erosion along shorelines, reducing habitat and changing the landscape, we've been putting resources to shoreline protection projects across the bays of South Texas in recent years. In between the rain showers of early June, CBBEP hosted an all-new volunteer opportunity for the program, getting volunteers hands-on experience restoring habitat and protecting the shoreline. The completion of this project was the result of two years of planning and permitting alongside close partnership and strong support from Citgo, CCA Texas, Poncho Outdoors, Sink Your Shucks, the Harte Research Institute, and the Coastal Conservation and Restoration Ecology Lab.

The need for habitat protection and restoration here was first brought up during the FY 24 Implementation Team meeting and was highly ranked among other suggested projects. The vibrant habitat at Kate's Hole shapes a highly valued access point for recreators on Padre Island, whether they're wade fishing, bird watching, or gliding their kayak across the immense grass flats and sandy potholes. Today, you'll regularly find several vehicles at the caliche parking lot that creates the popular launch point, but this stretch of the Upper Laguna Madre has a storied history that goes back to the early days of settlement on Padre Island. Even then, the underwater habitat supported a productive ecosystem that provided sustenance and livelihoods for the community. When one local fishing family was struck with tragedy at the father's passing, his wife, Kate, filled the late captain's spot to continue supporting her children. The tightly knit commercial fishing community came together and decided to help the family, agreeing to keep their lines out of area and leave the fishing to Kate, dubbing the area Kate's Hole. Today, fishermen still find success pulling redfish, black drum, flounder, and speckled trout out of the deep hole.



With the impacts of erosion threatening the parking lot and public access, protecting the area quickly became a high priority for CBBEP's Land Conservation and Stewardship Program. Though oyster projects are nothing new to the program, no restoration project has looked quite like this. Before construction could begin, careful design, mapping, and permitting laid the foundation for the work to come, laying out a pathway and structural design that could withstand the wave energy while avoiding impacts to nearby seagrass beds. While working through the permitting process, another key piece of the puzzle fell into place, oyster shell was stock piled at the Nueces Delta Preserve. To ensure the shells are clean and ready to be recycled back into the bay, they need to be exposed to sunlight for 6 months to dry and remove any unwanted bacteria or organic materials.

Once the shells completed their sunbaked cleanse, the time came to get them to the placement path that lies nearly 100 feet from the shoreline. Using techniques developed by Sink Your Shucks, the best method to transfer the shell to the placement area with the least impact on the seafloor is by passing bags of the shell along a line of volunteers, like a conveyor belt. Once the bags reach the end of the line, designated staff members place the bags along the permitted pathway of the oyster reef, leaving two on the seafloor with one on top. With all the pieces in place, there was nothing left to do but roll up our sleeves and get our feet wet. The date was set for June 6th and over 70 volunteers committed their time to the cause, shuttling to the site at 9 am.



Volunteers were able to use stretches of 10'' PVC to funnel the dumped shell into the organic biodegradable bags, which take roughly 12 months to break down and leave behind only the reef of oyster shell. Using the oyster



shells as the material for the breakwater structure provides multiple benefits for the project, offering a solid natural material to stop the wave energy and also reintroduces valuable structure back into the habitat. Research shows that juvenile oysters typically prefer attaching and growing from other oyster shells compared to rock, concrete, or other surfaces. Encouraging the new oyster larvae to attach on the reef will help the structure grow, offer habitat, and protect the valuable public access opportunity. Once the freshly bagged oyster shells were tied tightly, they were staged along the shoreline where the piles combined to over 1,000 bags.

From there, the process shifted into a steady flow of bags as volunteers stepped into position and began passing the weight of the project hand to hand. With each pass, the growing reef took shape. At the end of the line, staff and trained volunteers worked deliberately to place the bags along the designated footprint, build both height and stability. In just a few short hours, the once open stretch of water began to transform, each placed bag contributing to a living barrier designed to absorb wave energy and shield the shoreline behind it.



By the end of the morning, what started as a stockpile of cured shell had become a functional, nature-based solution built by the community it serves. This project represents more than shoreline protection, reflects a shared investment in preserving access, habitat, and the character of the Texas coast. With time, the bags will break down, the reef will continue to grow, and oyster larvae will begin to establish a thriving structure beneath the surface. Efforts like this at Kate's Hole highlight the power of partnerships and hands-on conservation, ensuring that this historic and heavily used area remains resilient for years to come.



View the full photo album here: [CBBEP - Kate's Hole Oyster Restoration](#)

The Coastal Bend Bays & Estuaries Program is a non-profit organization dedicated to protecting and restoring bays and estuaries in the 12-county region of Texas Coastal Bend. For more information about the Coastal Bend Bays & Estuaries Program, contact Quinn Hendrick, 361-336-0305 or qhendrick@cbbep.org. www.cbbep.org - www.facebook.com/CBBEP