

Laguna Madre Conservation Area Executive Summary

The Laguna Madre region is a vast landscape of estuaries, beaches, shallow bays, salt marshes, grasslands, thornscrub forests, oak mottes, and native palm groves. Together these systems form one of the most biologically diverse and visually stunning of America's natural treasures. This is a special place, a region with a huge variety of natural resources, some abundant, others rare and fragile. The Nature Conservancy of Texas has long recognized the ecological, esthetic, recreational, and economic value of the Laguna Madre. We are excited to embark on a path of community-based conservation that will protect the biological richness here.

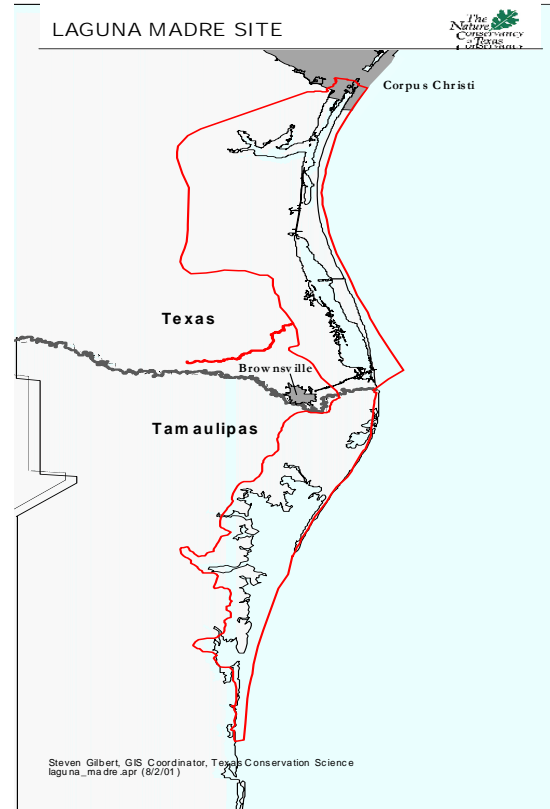
Biology of the Laguna Madre

The Laguna Madre of Texas and Tamaulipas, Mexico, is the only coastal hypersaline ecosystem on the North American continent and one of only seven worldwide. The laguna itself is only eight kilometers (five miles) across at its widest point, with an average depth just under one meter (three feet). Under the hot southern sun, the shallow laguna evaporates rapidly. The resulting hypersaline conditions create a premier nursery area for finfish, shrimp and shellfish. Underwater meadows of seagrass teem with young aquatic life, a rich cafeteria for larger fish, wading birds and waterfowl. The laguna's waters are also home to speckled sea trout, red drum, black drum and flounder – prized by sport fisherman worldwide.

Other species within the Laguna Madre include colonial waterbirds: twenty-three species of herons, egrets, ibises, pelicans, terns, gulls and skimmers. The largest concentration of reddish egrets in the world can be found in the Laguna Madre. Shorebirds such as Wilson's plovers and snowy plovers nest here, or scurry after small prey in the tidal flats surrounding the laguna. A large percentage of the population of federally threatened piping plovers winters in the Laguna Madre. The region's grasslands and barrier islands are also some of the world's most important fall and spring stopover areas

for the peregrine falcons. Barrier island beaches provide nesting habitat for the federally protected Kemp's ridley, Atlantic hawksbill, loggerhead, and green sea turtles. Island dunes are instrumental in protecting the

Figure 1. Laguna Madre Conservation Area



mainland from storms and hurricanes. Barrier islands like Padre Island are also popular recreation spots, where generations of families have obtained their introduction to the Laguna Madre region.

In addition to its special aquatic areas, the Laguna Madre region includes parts of the Rio Grande, Arroyo Colorado, Coastal Sandplain and Tamaulipan Thornscrub. These inland systems support a huge diversity of plant and animal species, some not even yet catalogued. The Coastal Sandplain is the birthplace of Texas ranching and the location of the famous King and Kenedy ranches. South of the Sandplain's savannas and woodlands, the densely vegetated Tamaulipan Thornscrub

stretches well into Mexico. Thornscrub communities include dense riparian forests, mesquite brushlands and tropical palm groves. Where the Thornscrub and laguna meet, lomas (low ridges within wind-tidal flats) support stands of yucca, acacia, brasil, lotebush and the delicate lila de los llanos. Both the Sandplain and Thornscrub are home to federally endangered ocelots and jaguarundis, and bobcats, armadillos, olive sparrows, green jays, and long-billed thrashers. Each year, countless neotropical songbirds migrate through, wintering here or in Latin America.

The Challenge

Despite heavy development pressure along parts of the coast, much of this region remains untouched. The Laguna Madre's relatively pristine conditions make it one of the most

Community-based Conservation

Working with local residents to protect our natural heritage, while taking into account the values and economic needs of people.

A cooperative, science-based approach that demonstrates the value of conservation and builds consensus for it in the community

important coastal conservation areas in the world. Here, we can preserve and enhance intact ecosystems rather than attempting to restore degraded habitats. To retain the biological diversity of the Laguna Madre, we must find ways to foster ecologically compatible residential and commercial development along the coast and inland. We must also grapple with the negative impacts of exotic plants and animals, and encourage sustainable land management in rural areas. Successful conservation here must be community-based, taking into account both biological and human needs within the Laguna Madre.

The Solution

The Conservancy's bi-national efforts have already protected thousands of acres of ecologically valuable land in Texas and Mexico. The Conservancy's most recent

success was the acquisition of about 24,500 acres on South Padre Island, near Harlingen, Texas. The Conservancy has joined with Pronatura Noreste, a Mexican conservation organization, to promote effective natural resource conservation across the border. Presently, The Nature Conservancy and Pronatura Noreste have begun conservation planning for the portions of the Laguna Madre within each of their country's borders. Long-term objectives include designing bi-national conservation strategies with Pronatura Noreste and other partners. The Conservancy has identified seven conservation priorities in Texas. These priority conservation elements are rare or endemic species, ecological communities, or representatives thereof (e.g., ocelots, waterbirds, shorebirds). While The Nature Conservancy will work to protect all native habitats and species within the Laguna Madre, we will emphasize conservation of the seven following elements and any species or habitats they support.

- **Tamaulipan Thornscrub System**
- **Coastal Sandplain System**
- **Ocelot**
- **Barrier Islands**
- **Hypersaline Laguna and Seagrasses**
- **Colonial Waterbird Guild**
- **Shorebird Guild**

In the near future, The Nature Conservancy of Texas will focus on preserving habitat for **ocelots** and other species of the **Tamaulipan Thornscrub** and **Coastal Sandplain** and on fostering ecologically compatible recreation and development around **barrier islands** and other areas that are important for **waterbirds**, **shorebirds** and associated native and migratory species. Conservation here will take the coordinated efforts of all those who love the Laguna Madre. The Nature Conservancy, along with its many public and private partners, is committed to doing its part to preserve this unique and valuable landscape.

