

Blue Carbon and Mangrove Conservation: A NATURAL CLIMATE SOLUTION

WILDCOAST
COSTASALVAJE



Photo by Benito Sanchez Rojo

Avoiding deforestation and degradation of mangroves in Mexico can prevent the emission of at least 70.8 million MgCO₂ and reduce 12% of CO₂ emissions caused by land use changes by 2030.

WILDCOAST is undertaking an innovative project with the Mexican government to conserve Northwest Mexico's vast mangrove forests. New research shows that **Blue Carbon** ecosystems like mangroves are among the most efficient carbon sequestering ecosystems known today. Unfortunately they are among the fastest disappearing ecosystems on the planet.

Mangroves offer a vast array of high-impact ecosystem services such as buffering coastal communities from powerful storms and sea level rise, providing critical habitat for keystone species, filtering pollutants, and absorbing atmospheric carbon. In fact, due to the ability of their complex root systems to store carbon deep underground, scientists have discovered that mangroves, and particularly desert mangroves like those in Northwest Mexico, can sequester more carbon per unit area than almost any other plant species on the planet.

Thanks to recent breakthroughs in the sphere of nature-based emissions reductions, proper protection and management of these ecosystems has become a cornerstone of Mexico's pledge in the Paris Agreement to combat climate change. WILDCOAST, through the Blue Carbon Initiative, is helping Mexico solidify itself as a global leader in achieving **natural climate solutions** like mangrove forest protection.



Photo by Benito Sanchez Rojo

In the last 40 years, Mexico has lost 9% of its mangrove forest cover due to deforestation from unsustainable coastal development, pollution, sedimentation and run-off.

WILDCOAST is an international team that conserves coastal and marine ecosystems and wildlife. We establish and manage protected areas, advance strong conservation policies, and work with communities to preserve healthy thriving oceans and wild coastlines.

Blue Carbon has emerged as a source of great optimism in the fight towards decreasing levels of atmospheric CO₂. Rather than relying solely on traditional ecosystems like rainforests to pull carbon out of the atmosphere, we can also focus on coastal and marine ecosystems such as mangrove forests, seagrass beds, coral reefs, kelp forests and salt marshes with the potential to offer abundant ecosystem services, including the high-volume uptake of carbon.



Photo by Octavio Aburto

Mexico is home to the 4th highest density of mangrove ecosystems in the world, after Indonesia, Australia and Brazil.

WILDCOAST, in partnership with Mexico's National Commission for Protected Natural Areas (CONANP) and Secretariat of the Environmental and Natural Resources (SEMARNAT), is undertaking a comprehensive project to conserve mangroves. Between now and 2030, the conservation of mangrove forests within the project area will prevent emissions equivalent to half of Baja California Sur's carbon dioxide emissions from industrial and transportation activities in the same period.

Since 2008, in partnership with the Mexican government and local communities, WILDCOAST has protected key mangrove forest in Bahia Magdalena and the Gulf of California through federal zone conservation concessions. However, even protected mangroves lack the integrated management necessary to guarantee conservation success.

To begin the voluntary carbon market process, WILDCOAST and partners must quantify the carbon stock of protected mangroves and mangroves pending protection. WILDCOAST and researchers from Griffith University in Australia have collected 444 core samples from 22 distinct sites along the Gulf of California and the Pacific Coast of the Baja California Peninsula. These samples are currently being processed.

WILDCOAST's Blue Carbon Initiative will help expand mangrove protected areas in Northwest Mexico and enhance their ongoing management. The initiative will provide a sustainable and long-term financing mechanism, through the sale of carbon credits, to set-aside and manage additional forests for conservation.

To learn more: visit www.wildcoast.org or contact Eduardo Najera-Hillman at eduardo@wildcoast.org

Steps to the Blue Carbon Initiative:

1. Set aside mangrove forest area as protected through conservation concession or other mechanism
2. Quantify carbon sequestered and stored in protected mangrove area
3. Obtain voluntary carbon market accreditation
4. Sell carbon offsets in the voluntary market
5. Reinvest funds into mangrove area management and expansion