

Texas Wetland Action Mapping Plan

Executive Summary

October 2025



Tidal wetlands—tidal marsh, brackish marsh, mangroves and tidal flats—are valuable coastal ecosystems in Texas, providing nursery habitat for commercial and recreational fisheries, refuge for endangered species like the whooping crane and critical storm surge and flood protection for coastal communities. However, tidal wetlands in Texas have been disappearing at an accelerating rate due to subsidence, sea level rise, erosion and coastal development. Without coordinated action, wetland loss will only intensify, despite numerous efforts by federal and state agencies, environmental nonprofits, land trusts, landowners and restoration practitioners.

To avoid further tidal wetland loss in Texas, The Nature Conservancy (TNC) and a broad coalition of partners worked together to implement the Texas Wetland Action Mapping (Texas WAM) project. This collaborative, science-based initiative has been underway since 2023 to coordinate statewide action via participatory mapping and priority alignment. Texas WAM aims to catalyze collaboration and funding opportunities for tidal wetland restoration and conservation in consensus-based priority areas. The *Texas Wetland Action Mapping Plan* is the first statewide plan focused on tidal wetland conservation and restoration developed in recent decades.

The Texas WAM working group was established with membership from 34 partner organizations. During a series of regional workshops and targeted planning sessions conducted over two years, the working group developed a shared set of goals and strategies and prioritized locations where working group members and partners could implement action. Action areas were selected using a participatory mapping process and planning tools developed by the Texas WAM project team to help guide wetland restoration and conservation investments across the coast.

Texas WAM Goals and Strategies

The overarching goal of Texas WAM is to reduce and reverse the trend of tidal wetland loss by aligning and accelerating partner-led conservation and restoration efforts. Through a collaborative planning process led by TNC, **six focal strategies for tidal wetland conservation and restoration** were identified:

1 Protecting Wetlands

4 Employing Beneficial Use of Dredged Material

2 Implementing Living Shorelines

5 Protecting Wetland Migration Space

3 Restoring Hydrologic Flow

6 Improving Management of Wetland Migration Space

These six strategies address threats to tidal wetlands and increase wetland resilience to future conditions. Protection efforts like outright acquisition or conservation easements ensure wetlands and their migration space are not lost to development. Living shorelines buffer wetlands from boat wakes and shoreline erosion, while beneficial use of dredged material helps marshes keep pace with relative sea level rise. Improved management of wetland migration space (through landowner outreach and best management practices) ensures that wetlands have strategic space to migrate inland as

sea levels continue to rise. To inform working group discussions and decisions, the Texas WAM project team created opportunity maps that identify where each of the six conservation and restoration strategies could be implemented across the coast (Figure 1A). The maps use the best available spatial data and expert input, while also considering where wetlands are resilient and adjacent to undeveloped migration space.

To complement the opportunity maps, the WAM project team also developed five co-benefit maps, which highlight areas where wetland action could provide additional ecological and social benefits or support enhanced ecosystem services for coastal communities. Identifying locations where there is opportunity for wetland restoration and conservation and potential co-benefits allowed working group members to identify areas where action is likely to have high impact. **The co-benefit maps highlight areas likely to provide benefits related to:**

1 Priority Habitat for Species of Greatest Conservation Need

4 Tidal Wetland Carbon Stocks

2 Flood Mitigation

5 Improved Access to Potential Parks

3 High Social Vulnerability to Hazards

Wetland Action Areas

Texas WAM focused its process on partner-informed mapping and planning. Over twelve regional workshops and additional follow-up meetings, working group members refined goals and strategies, reviewed and provided feedback on opportunity maps and co-benefit maps, and engaged in guided participatory mapping exercises to select action areas that provide multiple co-benefits and the ability to potentially sustain wetlands over time. These action areas were revised iteratively and collaboratively to ensure their even distribution across the Texas coast, inclusion of wetland migration corridors, and feasibility of conservation and restoration actions.

The result of this collaborative approach is a portfolio of 17 action areas that capture about 78% of the mapped opportunities for wetland conservation and restoration across the state (Figure 1B). Although all tidal wetlands in Texas provide benefits to people and nature, the WAM working group selected the 17 action areas as locations along the coast where partners will work together to focus funding and project implementation for the current and future resilience of tidal wetlands. The action areas represent more than 1 million acres prioritized for their co-benefits to people and nature and potential for collaborative conservation and restoration implementation.



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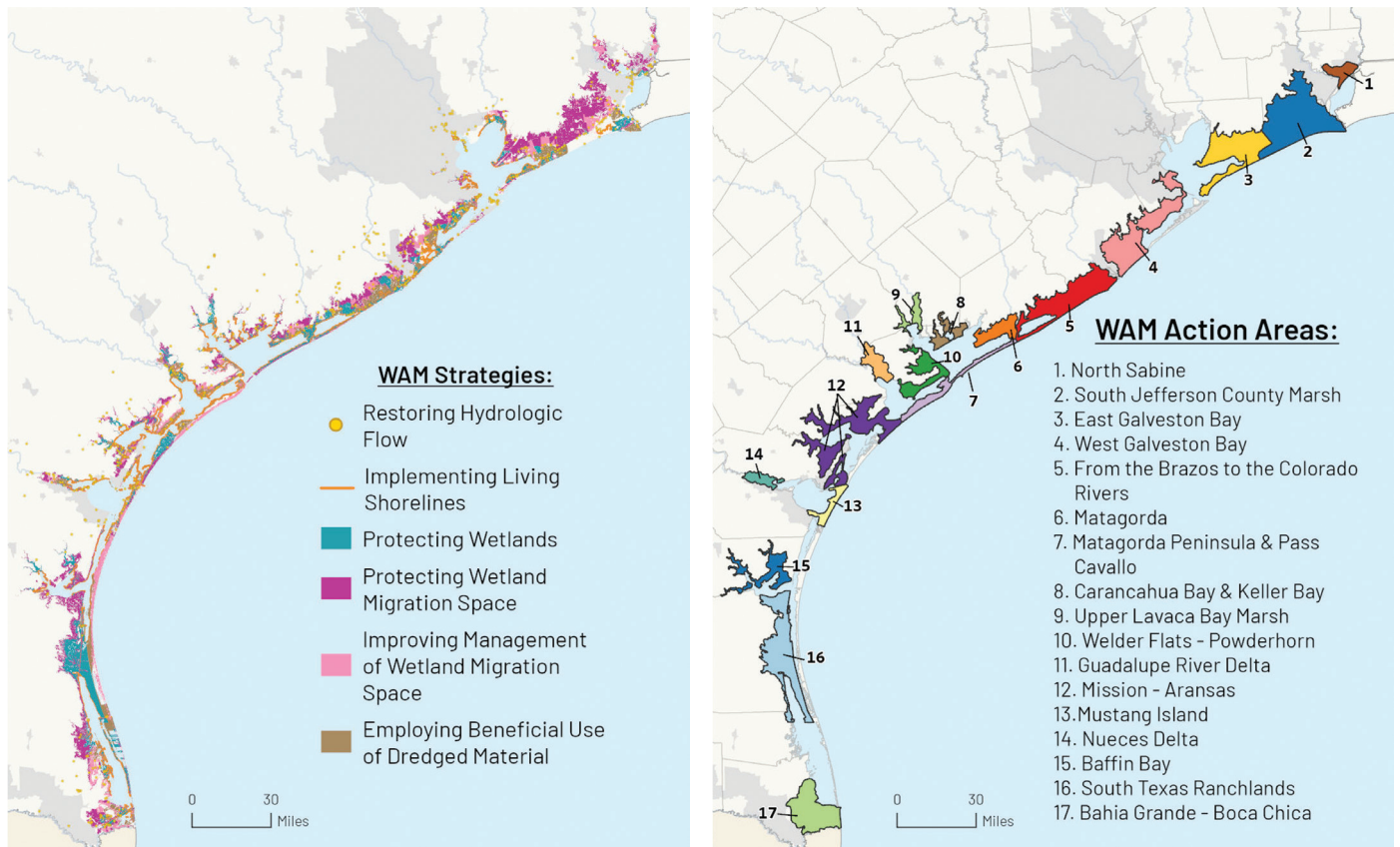


FIGURE 1: Texas WAM A) Identified Opportunities for Conservation and Restoration Strategies and B) Action Areas

Texas WAM Implementation and Next Steps

To continue to engage the Texas WAM working group and key stakeholders, the WAM team has drafted implementation guidance for advancing priority projects and strategies in each action area. Next steps are to:

- Engage co-lead organizations and partners in each action area to support project development and funding;
- Develop a monitoring and evaluation plan for future work phases and potentially for a subset of action areas, and;
- Pursue coordinated funding opportunities across multiple public and private sources to catalyze project implementation

Ongoing coordination and support for the WAM working group organizations and stakeholders across the 17 action areas will be essential to strengthening the resilience of tidal wetlands— for the benefit of both wildlife and the people of Texas.

