Wind-Tidal Flat Restoration Pilot, Phase 2

RESTORE Council Proposal Document

General Information

Title:
Wind-Tidal Flat Restoration Pilot, Phase 2

Project Abstract:
This project builds upon the $321K FPL3b funded Wind-Tidal Flat Restoration Pilot project. The sponsor is the U.S. Department of the Interior/ National Park Service. That project and the 2026 FPL proposal both support the primary RESTORE Comprehensive Plan goal to restore and conserve habitat in coastal Texas, including Padre Island National Seashore. This project will characterize broad scale distribution and conditions of wind tidal flat habitats at Padre Island National Seashore and conduct on-the-ground restoration targeting areas with vehicle track damages from previous exploration activities. A cost-benefit analysis will be conducted to estimate costs of using the selected restoration approach over a large scale. The wind-tidal flat areas at Padre Island National Seashore are significant in that they protect portions of the largest freshwater wetland in Texas, conserve protected species, and provide wintering habitat for millions of migratory birds. However, impacts from previous activities have impaired these important habitats. This project aims to refine and expand upon FPL3b accomplishments by 1) at the broad scale, using drones with advanced multispectral imaging technology to improve the accuracy of wind-tidal flat mapping; and 2) at the local scale, conducting on-the-ground restoration using “best practices” from FPL 3b. A document of lessons-learned will be created to share with resource managers across the Gulf of America and to inform future management decisions regarding conservation and restoration of wind-tidal flat habitats. Project duration is three years.

FPL Category: Cat1: Planning/ Cat1: Implementation

Activity Type: Project

Program: N/A

Co-sponsoring Agency(ies): N/A

Is this a construction project?:
Yes

RESTORE Act Priority Criteria:
(I) Projects that are projected to make the greatest contribution to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region, without regard to geographic location within the Gulf Coast region.

Priority Criteria Justification:
This project will result in the characterization and restoration of coastal resources and habitats

with the goal of achieving pre-disturbance levels. Techniques developed as part of this project will be used by state and federal land management agencies to provide accurate cost estimates for tidal flat restoration and reduced uncertainty about restoration success. The pilot project will occur within Padre Island National Seashore.

This project will lead to permanent results, including critical maps regarding distribution, condition, and damage to extensive wind tidal flat habitat, and improved resilience by selecting a 5-acre area of wind tidal flats and target areas for restoration of vehicle track damages. Restored natural processes will sustain habitats and enhance the overall health, availability, and diversity of natural resources that include migratory and protected species. The restoration of important wind-tidal flats will create habitat that supports 22 species of shorebirds and wading birds. This habitat creation will enhance bird populations that contribute to restored areas being designated as Globally Important Bird Areas by the American Bird Conservancy and Sites of International Importance by the Western Hemisphere Shorebird Reserve Network.

Project Duration (in years): 3

Goals

Primary Comprehensive Plan Goal:
Restore and Conserve Habitat

Primary Comprehensive Plan Objective:
Improve Science-Based Decision Making Processes

Secondary Comprehensive Plan Objectives:
N/A

Secondary Comprehensive Plan Goals:
N/A

PF Restoration Technique(s):
Improve science-based decision-making processes: Develop tools for planning and evaluation
Protect and conserve coastal, estuarine, and riparian habitats: Habitat management and stewardship

Location

Location:
This project would occur in Texas at Padre Island National Seashore.

HUC8 Watershed(s):
Texas-Gulf Region(Nueces-Southwestern Texas Coastal) - Southwestern Texas Coastal(North Laguna Madre)
Texas-Gulf Region(Nueces-Southwestern Texas Coastal) - Southwestern Texas Coastal(Central Laguna Madre)

State(s):
Texas

County/Parish(es):
TX - Kenedy
TX - Kleberg
TX - Willacy

Congressional District(s):
TX - 34

Narrative

Introduction and Overview:
Public lands managed by the National Park Service (NPS) have impaired coastal habitat with impacts from previous exploration activities. Seismic surveys conducted along the western shoreline at Padre Island resulted in compacted vehicle tracks that altered wind-driven inundation by Laguna Madre waters--thus affecting algal growth and degrading foraging habitat for migratory birds.

Wind-tidal flats are low, relatively flat areas inundated when high water conditions are created by northerly winds and left uncovered when low-water conditions are created by southerly winds (hence the term "wind-tidal flats"). The Laguna Madre is the largest hypersaline system in the world. These mats account for approximately 42% of the lagoon's area. These mudflats form an almost continuous band along the Laguna Madre side of Padre Island National Seashore (PAIS). Tidal flat elevation changes range from sea level to 0.8 feet and change on the order of only 0.2 feet per mile (Watson 1979). In the southern areas of the park, wind-tidal flats may extend to high wind-tide levels. They are generally covered with a blue-green algal mat that ranges between a thin layer up to 0.4 inches (2 cm) thick. Forty-five (45) cyanobacterial taxa have been identified in Laguna Madre tidal flats using morphological analysis. These taxa are distributed in zones with large filamentous forms on the surface and smaller, motile filamentous and coccoid forms in subsurface mat layers. These mats of algae are quite distinct from the harmful algal blooms that have been increasing in frequency and extent in recent years in the Gulf of America.

The Laguna Madre is located along the Texas Gulf Coast on the Central Flyway for migratory birds and is a significant feeding area during the winter and migration seasons for many endangered avian species. Wind-tidal flats in the Laguna Madre support extensive mats of blue-green algae, and include essential habitat for the piping plover, offer significant feeding areas for aquatic bird life, and play a crucial role in the life history of some of Texas' most important commercial fish and shellfish industries (Withers 1993). They provide abundant amounts of blue-green microalgae, which contribute to the primary productivity of estuarine systems. Their productivity is comparable to seagrass beds and to approximately 20-40 percent of a typical marsh-hay cordgrass (Spartina patens) marsh. These mats form the critical base of the food chain supporting the ecology and economy of the Gulf.

Macrobenthic invertebrates inhabit the wind-tidal flats in the Laguna Madre and create an abundant and diverse benthic community that exists throughout most of the year (Withers 1994). Detritus from other estuarine habitats such as seagrass beds is deposited in large quantities on the flats, and combined with the large algal biomass, contribute to the high productivity found in this area. As a result of the high productivity, the wind-tidal flats are inhabited by a diverse set of benthic invertebrates, which are then preyed upon by demersal fish

and crabs.

Anthropogenic disturbances such as tracks left behind from seismic exploration, addition of fill materials, and soil compaction adversely affect blue-green algal mat production. Approximately 3,038 acres of these flats have been damaged by past seismic surveys that have altered surface hydrology and resulted in the loss of algal mats. Extensive blue-green algal mat production is dependent on flats that are alternately emergent and submerged in regular cycles. Vehicle tracks create depressions and channelization that disrupt the natural hydrology of the wind-blown tides. The use of fill in the wind-tidal flat areas not only converts the flats to an elevated landform, but also disrupts the hydrological cycle. Both the tracks and the filled areas could act as a barrier to inundation or allow water to be retained behind. Irregular inundation and excessive water retention both adversely affect blue-green algal mat production. Soil compaction by vehicular traffic in wind-tidal flats disturbs the hydrological regime by allowing compacted areas to remain submerged. Wind-tidal flats that are submerged too frequently do not have extensive algal mats (Weise and White 1980).

Proposed Methods:
The project at Padre Island National Seashore will refine and expand upon FLP3b project accomplishments by: (1) at the broad scale, using drones with advanced multispectral imaging technology to improve accurate wind tidal flat restoration mapping; and (2) at the local scale, conducting on-the-ground restoration using “best practices” from FLP3b. Over 3,000 total acres of wind tidal flats habitat is available. First, small uncrewed aircraft systems (UAS or drones) will be used to employ a multispectral sensor to produce detail-rich mapping of the land cover, including cyanobacterial mats distribution, within exposed wind tidal flats. These maps will estimate the percent ground cover and productivity of cyanobacteria mats based on repeat multispectral surveys. These results will be compared to larger geographic extents using newly available high resolution multispectral satellite data. This approach has the potential to extend the mapping of damaged and undamaged areas of the wind tidal flats to regional scales (e.g., the entire breadth of exposed wind tidal flat habitat within PAIS).

On the ground, restoration areas will be selected to target areas with vehicle track damages from previous activities. Restoration will occur using an adaptive management approach, with a cost-benefit analysis conducted to estimate the costs of using the selected approach over a large scale. A document of lessons-learned will be created to guide future management decisions regarding conservation and restoration of wind tidal flat habitat.

The project proponents acknowledge, however, that restoration of wind-tidal flats has not previously been attempted within Padre Island National Seashore, and restoration of wind-tidal flats in the surrounding area has never been attempted. A literature search revealed that very few restoration projects of wind-tidal flats have been conducted in the United States, Canada, and Japan. Those projects that were undertaken focused on man-made habitats, rather than natural habitats. Though there are no established or standard methods to restore this type of wetland, National Park Service (NPS) has considerable knowledge and tools that have been used for similar restoration. The NPS has substantial experience in beach restoration, including but not limited to: 1) Cape Hatteras National Seashore where 2.6 million cubic yards of beach quality sand was placed along approximately 2.2 miles of shoreline (USACE & DOI 2015), 2) Cape Lookout National Seashore where 3,850 linear feet of beach was restored (Schupp 2017), 3) several projects at Gulf Islands National Seashore where approximately 4.9 miles of shoreline was restored along the eastern end of Perdido Key (Gibson and Looney 1994), and 4) a beach nourishment project where approximately 500,000 cubic yards of beach quality sand

was placed along 10,000 feet of the northern shoreline of West Ship Island, within the Mississippi District of Gulf Islands National Seashore (USACE & DOI 2016). Though tidal mudflat restoration is somewhat different, the basic principles are the same: establish a proper slope in the tidal range, restore with similar grain sized sediments, and plant with appropriate flora. The NPS also has considerable experience restoring tracks from seismic exploration at Big Cypress National Preserve in Florida, where 111 miles of exploration trails have been re-graded by hand to the natural contours.

Suzuki (2004) and Lee and Lee (2000) show that newly groomed sediments can be a successful platform for tidal flat restoration. In general, restoration will involve grooming of the tracks with the use of hand tools and ambient soils to prevent further impacts, removing fill, establishing the proper slope within the tidal range, and inoculating the soils with a mixture of the 12 dominant algal species-all of which can easily be grown in controlled conditions in roughly 30 days (Zimba, pers. comm. 6/3/2020). Only 0.2 grams of algal material has been shown to reestablish one square meter (1m2) of tidal flat. Salinity concentrations will be monitored using salinity recorders at low, medium and highest elevations. Up to 41-1.0 cm cores will be obtained monthly to determine the developing algal community structure. This information will help to determine how best to approach large-scaled restoration efforts.

Because of the experimental nature of this wind-tidal flat restoration pilot, our plan is to initiate an experimental design and test phase undertaken via a Cooperative Ecosystems Studies Unit (CESU) agreement with Texas A&M University-Corpus Christi, which has experience studying and researching wind-tidal flats. Because the only known restoration work of wind-tidal flats in the park or surrounding area was done as part of the FPL3b project, we have no successful large-scale restoration project to base an assured method to restore the wind-tidal flats. We plan to leverage the existing expert team including National Park Service staff from the park, region, and Washington offices, US Fish and Wildlife Service experts, and wetland scientists with local expertise. Experts include Dr. Kim Withers from Texas A&M Corpus Christi (TAMUCC) as well as wetlands restoration technical specialists from private industry and nongovernmental organizations. The team will use the information learned from FPL3b and develop and test restoration methods on small plots. Upon completing the experimental phase, the team will recommend how to proceed with restoration on the remaining area.

Environmental Benefits:
These wind-tidal flat areas are significant in that they protect portions of the largest freshwater wetland in Texas, conserve protected species, and provide wintering habitat for millions of migratory birds. This program ultimately provides for public safety and restores important habitat on public lands along coastal Texas, while building upon investments made in FPL1.

Specific benefits to state resources and values include:

- Protection and restoration of water resources, water quality and hydrology restoring surface and subsurface habitats and ecological functions.
- Restoration and improvements of wildlife habitat, ecological health, and primary productivity in priority Texas landscapes where significant investment has been made. Increased public recreation at Padre Island National Seashore through restoration and transformation of native coastal habitat that support species of interest to visitors such as migratory and coastal birds.
- Wind-tidal flat habitat is a very limited and specialized environment. Wind-tidal flats are low, flat areas inundated when high water conditions are created by northerly winds and

left uncovered when low-water conditions are created by southerly winds. Tidal flat elevation ranges from sea level to 0.8 feet and change on the order of 0.2 feet per mile (Watson 1979).

- Wind-tidal flats provide winter and migration foraging habitats for 22 species of shorebirds and waterbirds, including the federally threatened piping plover and red knot (Withers 1994) and when flooded, are used by State-listed threatened reddish egrets (Koczur et al. 2018). Padre Island National Seashore is designated a Globally Important Bird Area by the American Bird Conservancy and a Site of International Importance by the Western Hemisphere Shorebird Reserve Network. Forty-five (45) species of algae have been identified in Laguna Madre tidal flats, with cyanobacteria representing the dominant taxa (Fisk 1959, Sorenson and Conover 1962, Zimba et al. 2017, Shalygin et al. 2019).

Metrics:

Metric Title: PRM010 : Research - # studies used to inform mgmt.
Target: 1
Narrative: A technical report will be published for the Wind-Tidal Flat Restoration Pilot which will be used to evaluate the efficacy of alternative restoration practices and guide recommendations on future restoration method applications.

Metric Title: HR013 : Wetland restoration - Acres restored
Target: 5
Narrative: An objective of this project is to restore tidal flats as part of a pilot project. The natural resources restored and protected by this project include 5 acres of tidal flats.

Risk and Uncertainties:
The major component of this program that presents risk is the project to reclaim vehicle tracks in wind-tidal flats caused by past seismic surveys. The project will mitigate these risks by only implementing a small trial to assess restoration techniques. If that trial proved successful, the project proponent could later seek funding for the extensive tidal flat restoration that is needed. Although there are no established or standard methods to restore wind-tidal flats, the National Park Service (NPS) will test potential techniques on a relatively small portion of Padre Island National Seashore, based upon its experience in Big Cypress National Preserve reclaiming and restoring vehicle tracks in sensitive habitats. To reduce uncertainty, the NPS will assemble an expert team including National Park Service staff from the park, region, and Washington offices, US Fish and Wildlife Service experts, and wetland scientists with local expertise.

A hurricane or other large storm could jeopardize revegetation success, particularly for projects along shorelines; however, risk could be avoided or minimized by scheduling reclamation outside of hurricane season or by applying mitigation techniques to reduce damage by wave action. Additionally, timing restrictions will be defined to avoid impacting wildlife use of the flats and to maximize restoration success.

Monitoring and Adaptive Management:
The initial phases for reclamation of wind-tidal flats at Padre Island National Seashore will likely be conducted via an existing CESU agreement with Texas A&M University-Corpus Christi. Cooperative Agreements provide one method for tracking project status and budget.

Monitoring of the experimental design for reclaiming the vehicle tracks and/or removing the fill in wind-tidal flats at Padre Island National Seashore will be conducted by graduate and possibly undergraduate students with guidance of a university professor under a scope of work developed by National Park Service and the professor. This project will be administered and managed by the National Park Service.

Data Management:
Data on the locations treated and monitoring results will be collected and maintained by NPS or its partners. Progress and accomplishment reports will include site data and will be shared with the RESTORE Council staff and Steering committee.

Collaboration:
Collaboration will occur among the various members of the study pilot team, and results will be shared with other land managers including the Texas Parks & Wildlife Department, Texas General Land Office, the US Fish and Wildlife Service, and others (e.g., National Audubon Society, Coastal Bend Bays & Estuaries Program, American Bird Conservancy, and The Nature Conservancy). Except the Principal Investigators and any contractors, most team members will be contributing their time as in-kind contributions.

Public Engagement, Outreach, and Education:
In addition to public engagement through the NEPA process, where necessary, public outreach will also be achieved by National Park Service posting updates on the agencies' public websites, in visitor centers and in entrance stations where projects will be implemented. During project implementation, particularly near park or refuge visitor use areas, interpretive information such as brochures, exhibits, social media postings, websites, interpretive programs, a banner or large sign, or similar items will be posted notifying visitors that the project is restoring the Gulf Coast. The initial phase of the project to restore wind-tidal flats at Padre Island National Seashore will be undertaken with local experts at Texas A&M University-Corpus Christi. The initial phase will enable students to participate in the development of experimental reclamation method(s) and conduct the test phase and monitoring on a small plot. The students could earn credit while learning how to design wetland restoration methods. Monitoring the restoration of tidal flats will likely involve students who will conduct field assessments, gather scientific information, implement actions to modify restoration efforts if needed, and report and publish findings. There will be opportunities for students to learn about habitat restoration and work on revegetation projects.

Leveraging:

Funds: $321,000.00
Type: Leveraging
Status: Committed
Source Type: Other Federal
Description: This project is a continuation of the FPL3b project "The Wind-Tidal Flat Restoration Pilot" and addresses additional sites on the Seashore. This project also complements other FPL1-funded projects including the "Bahia Grande Coastal Corridor" and "Plug Abandoned Oil and Gas Wells on Padre Island National Seashore"

Environmental Compliance:
The planning component of this project is covered by the Council's National Environmental Policy Act (NEPA) Categorical Exclusion (CE) for planning and related activities. DOI has

advised the Council that the implementation component of this project is covered by a National Park Service CE. The Council is using this CE and the associated environmental compliance documentation to support the funding approval of this project, consistent with Section 4(d)(4) of the Council's NEPA Procedures, which enables the Council to use member CEs, where appropriate. In making this decision, the Council considered potential extraordinary circumstances, including potential negative effects to threatened and endangered species, essential fish habitat, tribal interests, and historic properties, where applicable.

Bibliography (All references listed below that were published prior to 2025 may reference the Gulf of Mexico. This nomenclature has been retained to maintain the integrity of the referenced material. The Council recognizes the name change Gulf of America):

Fisk, H.N. 1959. Padre Island and the Laguna Madre flats, coastal South Texas. Louisiana State University, 2nd Coastal Geography Conference 6-9:103-151.

Gibson, D. J. and P. B. Looney. 1994. Vegetation colonization of dredge spoil on Perdido Key, Florida. Journal of Coastal Research 10(1):133-143.

Koczur, L.M., G.M. Kent, B.M. Ballard, K.D. Meyer, and M.C. Green. 2018. Space use and movements of adult Reddish Egrets (Egretta rufescens) during winter. Waterbirds 41:1-15.

Lee, J. and N. Lee. 2000. An experimental study on the restoration creation of tidal flats. Journal of the Korea Organic Resources Recycling Association 8(1):77-82.

Schupp, C. 2017. Cape Lookout National Seashore: Geologic resources inventory report. Natural Resource Report NPS/NRSS/GRD/NRR—2017/1491. National Park Service, Fort Collins, Colorado.

Shalygin S., K.J. Kavulic, N. Pietrasiak, M. Bohunická, M.A. Vaccarino, N.M. Chesarino, and J.R. Johansen. 2019. Neotypification of Pleurocapsa fuliginosa and epitypification of P. minor (Pleurocapsales): resolving a polyphyletic cyanobacterial genus. Phytotaxa 392:245–263.

Sorensen, L.O. and J.T. Conover. 1962. Algal mat communities of Lyngbya confervoides (C.Agardh) Gomont. Publications of the Institute of Marine Science, University of Texas 8:237-249.

Suzuki, T. 2004. Large-scale restoration of tidal flats and shallows to suppress the development of oxygen deficient water masses in Mikawa Bay, Japan. Bulletin of Fisheries Research Agency. Supplement 1:111-121.

US Army Corps of Engineers and US Department of Interior, National Park Service. 2015. Beach Restoration to Protect NC Highway 12: Clean Water Act 404 and NPS Special Use Permits, at Buxton, Dare County, North Carolina. Environmental Assessment, NPS 603/129663. 61 pages.

US Army Corps of Engineers, Mobile District. 2016. Mississippi Coastal Improvements Program (MsCIP): Comprehensive Barrier Island Restoration, Hancock, Harrison, and Jackson Counties, Mississippi. Final Supplemental Environmental Impact Statement. 400 pages.

Watson, R.L. 1979. Geological history of South Padre Island wind-tidal flats. Unpublished paper, Port Aransas, Texas.

Weise, B.R. and W.A. White. 1980. Padre Island National Seashore: A Guide to the Geology, Natural Environments, and History of a Texas Barrier Island. Bureau of Economic Geology. Reprinted 1981.

Withers, K. 1993. Study to determine the abundance and distribution of benthic invertebrates and shorebirds on a North Padre Island blue-green algal flat. Unpublished paper, National Park Service, Corpus Christi, Texas.

Withers, K. 1994. The Relationship of Macrobenthic Prey Availability to Shorebird Use of Blue-Green Algal Flats in the Upper Laguna Madre. Published Ph.D. Thesis. Texas A&M University, College Station, Texas.

Zimba P.V., I.S. Huang, J.E. Fole, and E.W. Linton. 2017. Identification of a new-to-science cyanobacterium, Toxifilum mysidocida gen. nov. & sp. nov. (Cyanobacteria, Cyanophyceae). Journal of Phycology 53:188–197.

Zimba P.V. 6/3/2020. Texas A&M University, College Station, Texas. Personal communication with author(s).

Budget

Project Budget Narrative:
The overall budget for this project is $1,200,000. Approximately $25,000 will be used for planning. The bulk of the funds ($1,200,000) requested will be used for implementation of the tidal flat restoration project, including project management, monitoring and adaptive management (MAM).

DOI anticipates a Cooperative Agreement with a university will be the primary method of obligation, although we might use an existing Cooperative Agreement with the Railroad Commission of Texas, another small contract, or hire temporary staff.

Total FPL Project/Program Budget Request:
$ 1,200,000.00

Estimated Percent Monitoring and Adaptive Management: 4 %
Estimated Percent Planning: 7 %
Estimated Percent Implementation: 86 %
Estimated Percent Project Management: 3 %
Estimated Percent Data Management: N/A
Estimated Percent Contingency: 0 %

Is the Project Scalable?:
Yes

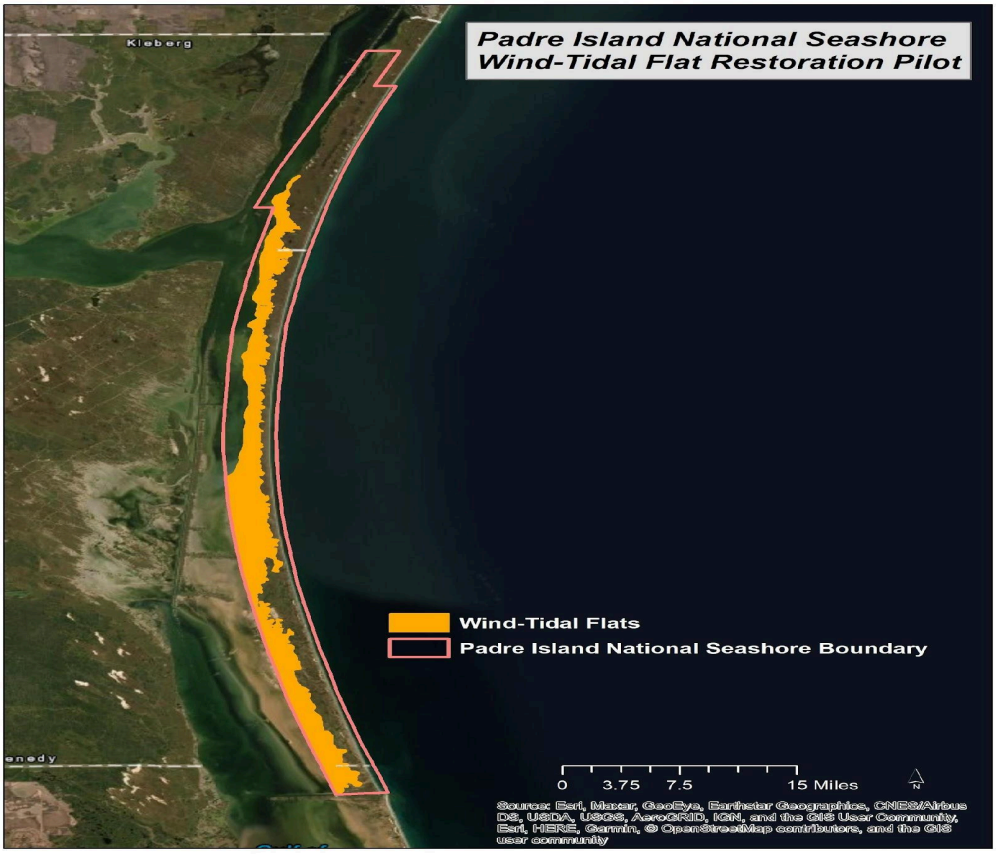
If yes, provide a short description regarding scalability.:
The extent of area treated by each individual method and the number of methods tested could

be increased to cover a larger number of sites, tested techniques, or replication of trial areas.

Environmental

Environmental Requirement	Has the Requirement Been Addressed?	Compliance Notes (e.g., title and date of document, permit number, weblink etc.)
National Environmental Policy Act	Yes	Council's Planning CE; NPS CE for implementation component (9/22/20).
Endangered Species Act	Yes	USFWS letter (9/23/20).
National Historic Preservation Act	Yes	THPO letter (9/15/20); THC email (#202016495).
Magnuson-Stevens Act	Yes	NOAA email (9/16/20).
Fish and Wildlife Conservation Act	N/A	Note not provided.
Coastal Zone Management Act	Yes	TGLO letter (8/17/20).
Coastal Barrier Resources Act	N/A	Note not provided.
Farmland Protection Policy Act	N/A	Note not provided.
Clean Water Act (Section 404)	Yes	Covered by NWP 27 (2/25/2022 letter).
River and Harbors Act (Section 10)	N/A	Note not provided.
Marine Protection, Research and Sanctuaries Act	N/A	Note not provided.
Marine Mammal Protection Act	N/A	Note not provided.
National Marine Sanctuaries Act	N/A	Note not provided.
Migratory Bird Treaty Act	N/A	Note not provided.
Bald and Golden Eagle Protection Act	N/A	Note not provided.
Clean Air Act	N/A	Note not provided.
Other Applicable Environmental Compliance Laws or Regulations	N/A	Note not provided.

Maps, Charts, Figures



Caption : Wind-Tidal Flat Restoration Pilot, Phase 2

Other Uploads

GIS Data_1:
PAIS_RESTORE_GIS_Template.gdb.zip
Caption : N/A

Council Staff Review:
Wind-Tidal Flat Restoration Pilot, Phase 2

Note: All comments indicated below were addressed in the proposal provided above.

FPL Internal Staff Review

Project/Program	Wind-Tidal Flat Restoration Pilot, Phase 2		
Primary Reviewer	Amy Newbold	Sponsor	DOI
EC Reviewer	John Ettinger	Co-Sponsor	NA
1. Is/Are the selected Priority Criteria supported by information in the proposal?			Yes
Notes	This is a continuation of an existing FPL funded project.		
2. Does the proposal meet the RESTORE Act geographic eligibility requirement?			Yes
Notes			
3. Are the Comprehensive Plan primary goal and primary objective supported by information in the proposal?			Yes
Notes			
4. Planning Framework: If the proposal is designed to align with the Planning Framework, does the proposal support the selected priority approaches, priority techniques, and/or geographic area?			Yes
Notes			
5. Does the proposal align with the applicable RESTORE Council definition of project or program?			Yes
Notes			

6. Does the budget narrative adequately describe the costs associated with the proposed activity?	Yes
Notes	

7. Have three external BAS reviews been completed and has the proposal sponsor provided their response?	Yes
Notes	DOI applied BAS reviews that were completed upon the original proposal in previous FPL. This is justified due to the methods remaining largely the same and the scientific integrity of the program potentially increasing.

8. Have appropriate metrics been proposed to support all primary and secondary goals?	Yes
Notes	

9. Environmental compliance: If FPL Category 1 has been selected for the implementation component of the project or program, does the proposal include environmental compliance documentation that fully supports the selection of Category 1?	More information needed
Notes	DOI is proposing that Council adopt the EC documentation used for the first phase in FPL 3b. It is appropriate and efficient to use FPL 3 environmental compliance documentation for 2026 FPL activities provided that the existing documentation either: (1) Fully covers the potential effects of the 2026 FPL activity and requires no updates, or (2) Fully covers the potential effects of the 2026 FPL activity including any needed updates to address changes in environmental conditions or the expected effects of the 2026 FPL activity. Staff requests that sponsors seeking to continue use of FPL 3 environmental compliance documentation for a 2026 FPL activity provide, in writing, a statement and any additional documentation or analysis that might be needed to address changes in environmental conditions or the expected effects of the 2026 FPL activity Note: Restore Council staff worked with the state to resolve these comments.

Best Available Science Review:

Wind-Tidal Flat Restoration Pilot, Phase 2

This project was reviewed for BAS under FPL 3b. Under 2026 FPL, the DOI is proposing a continuation, Phase 2 of the project.

The original BAS review as well as the DOI's response to the BAS comments can be found on the Council's 2026 FPL webpage.