United States Department of the Interior

NATIONAL PARK SERVICE

Padre Island National Seashore
P.O. Box 181300
20301 Park Road 22
Corpus Christi, Texas 78418

IN REPLY REFER TO:
L7617

January 19, 2012

Dear Interested Party:

Public Comment Sought on Reclamation of Wind-tidal Flats in the Area of Yarborough Pass and the Back Island Road.

Padre Island National Seashore (National Seashore) is proposing to reclaim areas within the park's wind-tidal flats damaged by off road vehicles. The reclamation project would restore the surface hydrology of the tidal flats as well as help to restore the natural viewshed of the area. Reclamation of the wind-tidal flats would offer an opportunity to monitor the effects of the recovery efforts on this unique ecosystem. The experimental component of the reclamation would add to the knowledge base for future reclamation projects both in and out of the National Seashore.

A fundamental policy of the National Park Service is to preserve park resources to the extent that the resources will be left unimpaired for future generations. Tire tracks left behind by vehicles alter the physical, biological, and aesthetic components of these valuable wetlands, and may take years to decades to recover naturally.

The deep ruts and ridges of the tracks interrupt the natural surface hydrology of the wind-tidal flat. This primary wetland area is characterized by long dry periods of exposure until inundation by lagoon waters driven by strong northerly winds. Flooding of the area is relatively brief, with water loss due to either a shift in wind direction or evaporation. Alterations of the topography result in changes to depth and duration of flooding. Wind-tidal flats are a very limited and specialized environment existing within a few centimeters of sea level, leaving them vulnerable to potential loss as a result of climate change or sea level change. Obstruction of surface hydrology and loss of healthy algal mats could prevent the natural migration of the tidal flats as the island's geology morphs.

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Wind-tidal flats serve as an important winter and migration foraging habitat for shorebirds, including the federally threatened Piping plover. Habitat protection and restoration is of great importance to the National Seashore, as Padre Island has been designated a *Globally Important Bird Area* by the American Bird Conservancy and a *Site of International Importance* by the Western Hemisphere Shorebird Reserve Network. Wind-tidal flats such as those at Yarborough Pass and along the Back Island Road are able to support large blue-green algal mats, creating an ideal environment for a thriving benthic community. Shorebirds feed on the polychaetes, crustaceans, and insect larvae that would not be available if not for the presence of the algal mats. Alterations to the hydrology threaten the viability of the algal mats, as the algae require a degree of light attenuation lost in deeper waters. Reclamation of this unique wetland would improve habitat for other highly imperiled species such as the red knot.

While the physical and biological components are most important to the reclamation of the wind-tidal flats, the National Seashore believes it has a responsibility to make every effort to maintain a natural viewshed as a benefit to visitor appreciation. The extensive tire tracks throughout the flats negatively impact the viewshed of the back island areas at the west end of Yarbrough Pass and along the Back Island Road, which are the only back island areas accessible by vehicle for park visitors.

While off-road vehicles have intruded and left their marks on wind-tidal flats throughout the Coastal Bend, no effective and reliable restoration methods are currently known. Wetland remediation by oil and gas companies performed at the National Seashore in the past have had varying degrees of success with regard to buried pipelines and tire track restoration. Reclamation of the park's tidal flats would provide the opportunity for research and long-term monitoring for the determination of more successful methods for future wetlands habitat restorative efforts.

An Environmental Assessment will be prepared in compliance with the National Environmental Policy Act (NEPA) to provide the decision-making framework that (1) analyzes reasonable alternatives to meet project objectives, and (2) evaluates issues and impacts to park resources and values.

The Seashore proposes to analyze the following alternatives:

Alternative 1 (No Action): The condition of the tidal flats would remain impaired until geologic and biologic processes create a more natural environment.

Alternative 2: This alternative would involve research and collaboration to design several methods for the leveling and reclamation of tidal flat conditions. Methods would include use of manual labor crews to avoid additional impacts from heavy equipment and may include fluffing and raking of sediment, soil compaction, and placing algal mat plugs in the reclaimed areas as well as fertilization or adjustment of sediment pH to encourage re-establishment of the algal mat. Large portions of the disturbance within the Seashore would be reclaimed over the next two

years and delineated by reclamation method, then monitored for multiple years to determine which methods produce the greatest surface hydrology continuity and fastest algal mat recovery rates. This information will then be available for designing successful tidal flat reclamation projects in the future.

Alternative 3: This alternative would involve using a tractor with a backhoe such as a Case 580M (7 ton) or similar equipment to fill and or grade the area of the tracks. This method has typically been used in the past by oil and gas companies and has had limited success in preserving or reestablishing algal mats. All disturbances would be reclaimed with the same method.

Alternative 4: This alternative would use one or more light (one and a half to three ton) track hoes such as the Kubota U series or similar equipment. While in the tidal flats, protective mats would be used to disperse equipment weight and would minimize impacts from the tracks on the tidal flats and algal mats. All in filling and leveling of tracks would be done with the hoe bucket. All disturbances would be reclaimed with the same method.

The National Park Service encourages public participation throughout the NEPA process during which the public has two opportunities to formally comment on the project; once during initial project scoping and again following release of the Environmental Assessment. We are currently in the scoping phase of this project, and invite you to submit your written comments online at the NPS Planning, Environment, and Public Comment website at http://parkplanning.nps.gov/.

If you are not able to submit comments electronically through this website, then you may also submit written comments to me at the address on the letterhead. Please provide all comments by February 24, 2012. These comments will be considered during preparation of the Environmental Assessment. We look forward to hearing from you!

If you have any questions, or require additional information, please contact Mr. James Lindsay at (361) 949-8173 ext. 223, or email James_Lindsay@nps.gov.

Sincerely,

Joe Escoto
Superintendent

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