## National Park Service U.S. Department of the Interior

## Padre Island National Seashore Texas



## REPLACEMENT OF LAW ENFORCEMENT DIVISION HEADQUARTERS FINDING OF NO SIGNIFICANT IMPACT

Padre Island National Seashore (National Seashore or Park) proposes to construct a new law enforcement and emergency services headquarters. The existing law enforcement and emergency services facility does not have the capacity to adequately accommodate law enforcement staff, equipment, and vehicles and was not designed to meet the specialized needs for law enforcement operations. Because of these deficiencies, the National Park Service (NPS) is seeking to construct a new facility to better meet law enforcement and other emergency service needs for protecting visitors, staff, and Park resources. This finding of no significant impact (FONSI) and the environmental assessment (EA) constitute the record of the environmental impact analysis and decision-making process for the law enforcement division headquarters. The NPS will implement the preferred alternative to construct a new law enforcement headquarters. A new larger law enforcement headquarters will allow the Park to provide the necessary space for meeting Park law enforcement and emergency operation requirements. Incorporated into the project design are measures for protection of Park natural and cultural resources and improvements in the efficiency of Park operations. The preferred alternative was selected after careful review of resource and visitor impacts and public comment.

This document records (1) a FONSI as required by the National Environmental Policy Act of 1969 (NEPA) and (2) a determination of no impairment as required by the NPS Organic Act of 1916 (see Appendix).

#### **SELECTION OF THE PREFERRED ALTERNATIVE**

Two alternatives were evaluated in the EA including a no action alternative and one action alternative to construct a new law enforcement division headquarters. Under the no action alternative, a new law enforcement headquarters would not be constructed. The selected alternative preferred by the NPS is construction of the new law enforcement headquarters because it best meets the purpose and need for the project, as well as the project objectives to: 1) improve the efficiency of Park law enforcement and other emergency service operations, 2) protect human health and safety, and 3) protect park resources.

The preferred alternative consists of constructing a new two-story 6,600-square-foot law enforcement building, a fenced enclosure for vehicles, and landscape improvements. The new facility will be built at the same location as the existing modular structure currently being used for law enforcement operations in the parking lot adjacent to the Malaquite Visitor Center. The facility will consolidate law enforcement staff, law enforcement and other emergency services equipment, and vehicles in one location to improve operational efficiency. The upper level of the new building will contain a large conference room, ranger offices, evidence processing and storage, an armory, a permitting/clerk office, a remittance office, and other storage and workspace. The lower level will include a prisoner holding cell, sally port, tactical training room (which also will serve as a storm shelter), and secure/enclosed vehicle storage bays for a fire truck and emergency patrol vehicles. The law enforcement headquarters will be designed with many sustainable elements. The exterior site plan includes a fenced area on the east and south sides of the building for secured storage of ranger vehicles, visitor parking on the north side of the building, and

removal of parking lot asphalt to create vegetated islands for improved aesthetics and stormwater retention.

#### **MITIGATION MEASURES**

To prevent and minimize potential adverse impacts associated with the preferred alternative, best management practices (BMPs) and resource protection measures will be implemented during the construction and post-construction phases of the project (Table 1).

TABLE 1. RESOURCE PROTECTION MEASURES

Resource Area	Mitigation	
General Considerations	Construction zones will be identified with construction fence, silt fence, or some similar material prior to any construction activity. The fencing will define the construction zone and confine activity to the minimum area required for construction. All protection measures will be clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond the construction zone. Disturbances will be limited to areas inside the designated construction limits. No machinery, equipment, or disturbance activities will be allowed in natural dunes or sensitive resource areas outside the construction limits. In addition, the Park Service will ensure that all contractors and subcontractors are informed that damage to resources outside the scope of work is subject to prosecution, fine, restitution costs, and other penalties.	
	Construction equipment staging will occur in the existing parking lot, other areas of proposed disturbance, and areas of existing disturbance. Off-site equipment and vehicle parking will be limited to designated staging areas.	
	Contractors will be required to properly maintain construction equipment (i.e., mufflers and brakes) to minimize noise. Construction vehicle engines will not be allowed to idle for extended periods.	
	Construction workers and supervisors will be informed about the special sensitivity of the Park's values, regulations, and appropriate housekeeping.	
	Material and equipment hauling will comply with all legal load restrictions.	
	All tools, equipment, barricades, signs, surplus materials, and rubbish will be removed from the project work limits upon project completion.	
Park Operations	The law enforcement headquarters will achieve a "silver" level certification under Leadership in Energy and Environmental Design (LEED)-NC, Version 2009 to reduce electricity consumption and promote sustainable design features.	
Human Health and Safety	The construction area for the law enforcement facility will be cordoned off to protect visitors from construction equipment and activities.	
	In the event of a large storm or hurricane that could flood the proposed law enforcement headquarters, all Park staff and visitors will be evacuated.	
Visitor Use and Experience	Construction activities will be scheduled to minimize construction-related impacts on visitors. The visitor center will remain accessible throughout construction.	
	Visitors will be informed in advance of construction activities via a number of outlets including the Park website, newspaper, and visitor center. The Park public information officer will coordinate with the contractor on the construction schedule, and update visitors and information sources periodically on construction work to inform visitors of the project status.	
Visual Resources	The law enforcement headquarters will be designed to blend with the existing surroundings, visitor center, and landscape using a compatible building design similar to the visitor center and adding vegetated areas to the landscape bordering the new facility.	

D. Gisting at Line and Line an		
Mitigation  Erosion-control BMPs for drainage and sediment control, as identified and used by the Park Service, will be implemented to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas. These practices may include, but are not limited to, silt fencing, filter fabric, coir logs, temporary sediment ponds, sandbags, and/or other material to minimize sedimentation as a result of construction activities.		
Soil cast aside during construction will also be susceptible to some erosion, although such erosion will be minimized by placing silt fencing around the excavated soil. Silt fencing fabric will be inspected weekly or after every major storm. Accumulated sediments will be removed when the fabric is estimated to be approximately 75 percent full. Excavated soil may be used in the construction project; excess soil will be stored in approved areas.  All soils borrowed will be sterile, as well as certified archeologically sterile and weed free. Any excess material generated from construction activities will be stockpiled in Park storage areas for future use in approved projects or disposed of at approved sites outside the Park.		
Regular site inspections will be conducted to ensure that erosion-control measures are properly installed and functioning effectively.		
A stormwater pollution prevention plan (SWPPP) will be developed and approved by the Park Service, and submitted to the Texas Commission on Environmental Quality prior to commencing construction.		
All equipment will be maintained in a clean and well-functioning state to avoid or minimize contamination from fluids and fuels. Prior to starting work each day, all machinery will be inspected for leaks (e.g., fuel, oil, and hydraulic fluid) and all necessary repairs will be made before commencing work.		
A hazardous spill plan will be required from the contractor prior to the start of construction stating what actions will be taken in the case of a spill and preventive measures to be implemented. Hazardous spill clean-up materials will be on-site at all times. This measure is designed to avoid/minimize the introduction of chemical contaminants associated with machinery (e.g., fuel, oil, and hydraulic fluid) used in project implementation.		
Fueling of all construction equipment will be conducted only in equipment staging areas. During equipment operation, some petrochemicals could seep into the soil. To minimize this possibility, equipment will be checked frequently to identify and repair any leaks.		
A stormwater retention basin will be constructed to capture sediment and improve the quality of stormwater discharges from the law enforcement parking lot.		
The Park will continue to prohibit driving, fires, camping, and other disturbances in the dunes and fore dunes to protect native vegetation communities and maintain these natural barriers to ensure the protection of existing and proposed facilities from washover and rapid recovery of these areas after storm events.		
Temporary barriers will be used to protect existing plants and root zones adjacent to the construction site as needed.		
<ul> <li>To prevent the introduction of, and minimize the spread of, nonnative vegetation and noxious weeds, the following measures will be implemented during construction: <ul> <li>Disturbance will be confined within the existing asphalt parking area and other previously disturbed areas;</li> <li>All equipment will be inspected by resource staff before entering the Park;</li> <li>All construction equipment will be pressure washed and/or steam cleaned before entering the Park to ensure that all equipment, machinery, rocks, gravel, and other materials are clean and weed free;</li> <li>All haul trucks bringing fill materials from outside the Park will be covered to prevent seed transport;</li> <li>Vehicle and equipment parking will be limited to within construction limits or approved staging areas;</li> <li>All fill, rock, and topsoil obtained from sources outside the Park will be taken from weed—free sources; and</li> <li>Monitoring and follow-up treatment of exotic vegetation will occur after project activities are completed.</li> </ul> </li></ul>		

Resource Area	Mitigation
Vegetation / Wetlands (cont'd)	To avoid introduction of exotic plant species, no hay bales will be used to control soil erosion. Hay often contains seeds of undesirable or harmful alien plant species. Therefore, on a case-by-case basis, the following materials may be used for any erosion-control dams that may be necessary: rice straw, straws determined by the Park Service to be weed-free (e.g., appropriate straw material), cereal grain straw that has been fumigated to kill weed seed, and wood excelsior bales. Standard erosion-control measures such as silt fences and/or sand bags will also be used to minimize potential soil erosion.
	Native plant species will be used for landscaped areas and the stormwater retention basin.
Floodplains	The project design will minimize potential risk to lives and property. The law enforcement headquarters will not be built in a 100-year coastal flood area or 100-year floodplain, and will not affect nearby 100-year coastal flood or floodplain areas.
	Structures and facilities will be designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR 60). Design of the building will be based on ASCE Flood Resistant Design and Construction (ASCE-24-05) requirements to provide protection from flooding.
	Natural drainage and natural contours will be preserved to the extent practicable.
	Removal of 1.76 acres of asphalt and replacement with vegetation and a stormwater pond will reduce runoff, increase infiltration, and collect stormwater.
	Preventive measures will be implemented to reduce coastal erosion, retreat, and subsidence in the Park.
	Mitigation for very large storm events that could flood the proposed law enforcement headquarters will be evacuation of the Park, including all staff and visitors to the law enforcement headquarters.
Air / Noise	Dust control, such as spraying water on the construction site, will occur as needed on active work areas where dirt or fine particles are exposed.
	Construction equipment/vehicles will not be allowed to idle longer than 15 minutes when not in use.
Cultural Resources	A NPS-approved archeologist will be on-site during all ground disturbing activities to advise or take appropriate actions should any archeological resources be uncovered during construction.
	If previously unknown archeological resources are discovered during construction, all work in the immediate vicinity of the discovery will be halted until the resources can be identified and documented and, if the resources cannot be preserved in situ, an appropriate mitigation strategy will be developed in consultation with the state historic preservation office and, as necessary, American Indian tribes.
	In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 will be followed. If non-Indian human remains are discovered, standard reporting procedures to the proper authorities will be followed, as will all applicable federal, state, and local laws.
	The Park Service will ensure that all contractors and subcontractors are informed of the penalties for illegally collecting artifacts or intentionally damaging archeological sites or historic properties. Contractors and subcontractors also will be instructed on procedures to follow if previously unknown archeological resources are uncovered during construction.

#### **ALTERNATIVES CONSIDERED**

A no action alternative also was evaluated in the EA. Under the no action alternative, a new law enforcement headquarters would not be constructed. The Park would continue to use the modular structure in the Malaquite Visitor Center parking lot for law enforcement operations. The existing 1,920-square-foot building does not have the capacity to adequately accommodate law enforcement staff, equipment, and vehicles, and was not designed to meet the specialized needs for law enforcement

operations. Thus, portions of law enforcement operations would continue to be housed at Park headquarters about 2 miles north of the existing law enforcement structure. Components of law enforcement operations that would remain at Park headquarters include the armory, secured storage, evidence room, tactical training, fire truck storage, and equipment storage. Current issues associated with the dispersed location of vehicles and equipment, secured storage for vehicles, maintaining building security, processing detainees, employee and visitor safety, coordinating with other law enforcement agencies, and protecting staff and equipment from extreme weather conditions would not be addressed.

The NPS also considered, but rejected from additional analysis in the EA, several alternative locations for a new law enforcement headquarters. None of the identified alternative sites provided advantages over the preferred alternative location. In addition, the NPS evaluated three alternative building design concepts. All of the alternative design concepts were for the same location, but included variations in building size, floor plan, and design. The Park determined that the building design and site layout of the preferred alternative had the best overall combination of features and, thus, it was included for detailed evaluation in the EA.

#### **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

According to the Council on Environmental Quality regulations implementing NEPA (43 CFR 46.30), the environmentally preferable alternative is the alternative "that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative."

The preferred alternative is the environmentally preferable alternative for several reasons: 1) the new facility will be constructed entirely within a previously disturbed existing parking lot and will not directly impact the biological and physical environment or known cultural resources; 2) the design of the new building and site plan includes removal of asphalt with landscaping and vegetation to better blend into the surrounding environment; 3) the site plan includes a water retention pond for treatment of stormwater runoff from the parking lot, which will improve the quality of water discharged from the site; and 4) the new law enforcement headquarters will be energy efficient (sustainable) in the long term. The design includes measures to reduce and conserve energy and eliminate waste by using energy-efficient and cost-effective technology. The use of renewable energy sources also is a component of the new facility. For these reasons, the preferred alternative causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources, thereby making it the environmentally preferable alternative.

By contrast, the no action alternative is not the environmentally preferable alternative because, although there will be no construction or ground disturbing activities that will damage previously undisturbed elements of the biological and physical environment: 1) the existing law enforcement building is not energy efficient (sustainable) in the long term; 2) the existing building does not blend into the surrounding environment; and 3) this alternative does provide for reducing impervious surface and treatment of stormwater runoff.

## WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR § 1508.27, significance is determined by examining the following criteria:

## Impacts that may be both beneficial and adverse: A significant effect may exist even if the agency believes that on balance the effect will be beneficial

The preferred alternative will result in both beneficial and adverse impacts. A short-term minor adverse impact to Park operations and the visitor experience will occur during construction of the law enforcement headquarters in the visitor center parking lot. The new facility will have a parkwide longterm beneficial effect on Park operations from the improvements in the work environment of law enforcement staff and the improved operational efficiency of having law enforcement operations at a consolidated location. Human health and safety effects will be parkwide, long-term, and beneficial from improvements to law enforcement and emergency service response to incidents and the addition of a new storm shelter for protection of Park staff and visitors during severe weather. The new law enforcement headquarters will have a parkwide long-term beneficial effect on visitor use and experience from improved visitor access to Park rangers and a new facility that improves the efficiency of law enforcement rangers to maintain a quality visitor experience. Replacement of 1.2 acres of asphalt with vegetated islands and a water retention pond will have a local long-term beneficial effect on water quality by reducing impervious area, improving infiltration of runoff, and capturing sediment and other contaminants from parking lot runoff. Floodplain impacts will be avoided by locating the law enforcement headquarters outside of the 100-year coastal flood areas or 100-year floodplain. The NPS reviewed the flood hazards for the preferred alternative and prepared a Floodplain Statement of Finding (SOF), which is found as an attachment to this document. Resource protection measures, as listed in Table 1, will minimize adverse effects. A summary of resource effects is found in Table 5 of the EA.

#### Degree of effect on public health or safety

A new law enforcement structure that consolidates operations at a single location and provides more space for housing vital components for law enforcement operations will improve the ability of law enforcement rangers to provide for human health and safety. The new facility will allow law enforcement rangers to improve response to search and rescue operations, wildfires, hazardous material discharges, accidents, and other incidents. Coordinating law enforcement operations with Padre Island Homeland Security Task Force agencies will be improved and will allow the Park to better address drug smuggling and illegal immigrant traffic. Visitor safety and satisfaction are expected to increase as illegal activities are reduced, particularly in the more remote sections of the island to the south. Dedicated space in the new building for interviewing and detaining prisoners will reduce the potential for contact with Park staff and visitors. The storm shelter in the new building will substantially improve the safety of visitors and Park staff in the building during storm events and will reduce overcrowding in other shelters during emergency weather conditions.

## Degree to which effects on the quality of the human environment are likely to be highly controversial

The National Seashore began public scoping with a notice released on January 7, 2011 describing the preferred alternative and soliciting comments or concerns with the proposal to construct a new law enforcement headquarters. The Park received three scoping comments from the public and one from Nueces County supporting the project. The Federal Emergency Management Agency recommended constructing the facility outside of a floodplain. The public also was given an opportunity to comment on the completed EA. At the conclusion of the 30-day public review and comment period, which ended on September 17, 2011, the Park had received five comments. None of the comments raised substantive issues about implementation of the proposed action. Given the limited and positive response for construction of the law enforcement headquarters, there is no evidence that the effect to the quality of the human environment will be highly controversial.

## Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks

Constructing a new law enforcement headquarters meets project objectives by improving the efficiency of Park law enforcement and emergency service operations, which will serve to protect human health, safety, and park resources. Sufficient information is available for adequately evaluating effects to the human environment from construction of the new headquarters. The anticipated effects on the human environment, as analyzed in the EA, are not highly uncertain or unique, nor were any unknown risks identified.

## Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

Construction of the law enforcement headquarters will not result in significant adverse effects to the natural environment, cultural resources, or visitor experience, and will not set a precedent for future actions that could have significant effects.

## Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

The EA concluded that past, present, and future activities, when coupled with the law enforcement headquarters, will have parkwide long-term beneficial cumulative impacts to park operations, human health and safety, visitor use and experience, and water resources. No significant adverse cumulative effects were identified.

# Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources

After applying Advisory Council on Historic Preservation criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), the NPS concludes that implementation of the preferred alternative will have no adverse effect on historic structures, archeological sites, cultural landscapes, ethnographic resources, or museum collections. On August 31, 2011, the Texas Historical Commission indicated they have no concerns with the project at this time.

## Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

The U.S. Fish and Wildlife Service concurred with the determination of no effect on threatened or endangered species in their letter dated August 30, 2011. On September 8, 2011, by electronic transmission, the Texas Parks and Wildlife Department concurred that significant adverse impacts to rare, threatened or endangered species or other fish and wildlife resources are not anticipated.

# Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

As described in the EA, no adverse effects to cultural resources were identified for the preferred alternative. No prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas will be affected.

## Whether the action threatens a violation of federal, state, or local environmental protection law

The preferred alternative does not violate any federal, state, or local environmental protection laws.

#### PUBLIC INVOLVEMENT AND AGENCY CONSULTATION

The EA was made available for public review and comment during a 30-day period ending September 17, 2011. To notify the public of this review period, a letter was mailed to stakeholders, interested parties, and newspapers. Copies of the document were sent to several federal, state, and local agencies, and the Tonkawa Indian Tribe. The Park received five comments during the public review period of the EA. Three comments received from the public supported the proposed project and indicated the value of the new law enforcement headquarters in protecting park fragile natural resources, preserving the quiet scenery, and fulfilling law enforcement objectives.

The Tonkawa Indian Tribe was contacted on January 7, 2011 to determine if any ethnographic resources were in the project area and if the tribe wanted to be involved in the environmental compliance process. The Park has not received any written comments from the Tonkawa Tribe as of the date of this FONSI.

The FONSI will be available on the NPS Planning, Environment and Public Comment (PEPC) website at http://parkplanning.nps.gov.

#### CONCLUSION

As described above, the preferred alternative does not constitute an action meeting the criteria that normally requires preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from localized to widespread, short- to long-term, and negligible to moderate. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection laws.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:

Superintendent

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Approved:

Director, Intermountain Region

Date

### Appendix - Impairment

The NPS Management Policies 2006 require analysis of potential effects to determine whether actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts to park resources and values.

However, the laws do give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS the management discretion to allow certain impacts within the Park, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of these resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment, but an impact would be more likely to constitute an impairment when there is a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated.

The park resources and values that are subject to the no-impairment standard include:

- the park's scenery, natural and historic objects, and wildlife, and the processes and
  conditions that sustain them, including, to the extent present in the park: the ecological,
  biological, and physical processes that created the park and continue to act upon it; scenic
  features; natural visibility, both in daytime and at night; natural landscapes; natural
  soundscapes and smells; water and air resources; soils; geological resources; paleontological
  resources; archeological resources; cultural landscapes; ethnographic resources; historic and
  prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the Park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the Park. The NPS's threshold for considering whether there could be an impairment is based on whether an action would have major (or significant) effects.

Impairment findings are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations because impairment findings relate back to park resources and values, and these impact areas are not generally considered park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. After dismissing the above topics, the topics remaining to be evaluated for impairment include water resources and floodplains.

#### **Water Resources**

Three types of water resources are found in the Park: marine waters, fresh or brackish surface waters, and groundwater. Padre Island's groundwater system is locally isolated and is not connected to the mainland aquifer. Shallow groundwater is lost to evaporation, transpiration (i.e., plant use), and from seepage into the Gulf of Mexico and Laguna Madre. Freshwater recharge comes solely from precipitation on the island. No streams or water bodies are in the immediate vicinity of the Malaquite Visitor Center parking lot. Runoff from the parking lot travels as sheet flow to the west side of the parking lot where it disperses into vegetated areas.

The proposed law enforcement facility will be constructed in the existing asphalt parking lot and will have no direct effect on existing surface water resources. Minor surface grading will be conducted to ensure positive drainage away from the new building. The construction of 1.2 acres of vegetated landscape islands and a water retention basin within the 3.25-acre project area will provide a 37% reduction in the existing amount of impervious surface within the project footprint. Surface runoff also will be reduced by routing drainage water to a 4,200-cubic-foot retention pond that will slowly infiltrate water into the ground water and evaporate from the pond. The pond will serve to capture sediment, oil, grease, and chemicals from the parking lot, which will improve discharge water quality. Construction of vegetated landscape islands in the parking lot with a water retention basin will have local long-term beneficial effects to water resources by improving water quality, reducing impervious surface, and controlling the rate of discharge from precipitation events. The preferred alternative will not result in an impairment of water resources because any construction-related adverse effects will be short-term, minor, and mitigated with BMPs and the stormwater collection and retention system will improve water quality by providing long-term treatment of surface discharges from the site.

#### **Floodplains**

The law enforcement facility will be located in an area of minimal flooding outside of the 100-year floodplain and coastal flood area (as designated by FEMA). Thus, the preferred alternative will not result in an impairment of nearby coastal flood areas or floodplains. As noted in Table 1, several mitigation measures will be implemented to minimize potential risk to lives and property. The NPS reviewed the flood hazards for the preferred alternative and prepared a Floodplain SOF, which is found as an attachment to this document.

## STATEMENT OF FINDINGS FOR EXECUTIVE ORDER 11988 FLOODPLAIN MANAGEMENT

## PADRE ISLAND NATIONAL SEASHORE LAW ENFORCEMENT DIVISION HEADQUARTERS

Recommended: Ze Est	10/25/11
Superintendent, Padre Island National Seashore	Date
Concurred: Hung W Joseph	10/31/11
Chef, Water Resources Division	Date (
Approved:	11 0 0 11
Director, Intermountain Region	Date

## Construction of New Law Enforcement Division Headquarters Padre Island National Seashore

### Statement of Findings for Floodplains

#### INTRODUCTION

In accordance with Executive Order (EO) 11988, "Floodplain Management" and National Park Service (NPS) guidelines for implementing the order, the Park Service has reviewed the flood hazards in Padre Island National Seashore (Park) and has prepared this statement of findings (SOF). This SOF focuses on evaluating the flood hazards for the proposed new law enforcement headquarters near the Malaquite Visitor Center. This SOF describes the proposed action, flood hazard, and mitigation measures for the use of this area. Additional detail regarding the proposed law enforcement headquarters and environmental impacts may be found in the Padre Island National Seashore Environmental Assessment for the Law Enforcement Headquarters.

#### **BACKGROUND**

The Park is comprised of 130,434 acres of coastal prairie habitat along the southern coast of Texas approximately 8 miles south of Corpus Christi, and is bordered by the Laguna Madre and the

Padre Island National Seashore

National Park Service
U.S. Department of the Interior

Vicinity Map

Aransa
Pass
Corpus Christi

Ringsville

Raymendville

Legend
City
Park Boundary

Recurrent Management

Conducted by Division of Science and Recurrent Management

September 2004

Gulf of Mexico. The Park occupies the central 66 miles of the approximately 113-mile-long Padre Island (Figure 1). The Park was established by Congress on September 28, 1962 "to save and preserve, for the purposes of public recreation, benefit, and inspiration, a portion of the diminishing seashore of the United States that remains undeveloped" (Public Law 87-712).

#### PROPOSED ACTION

The Park proposes to construct a new law enforcement headquarters. The facility would be built at the same location as the existing modular structure currently being used as the law

enforcement headquarters in the parking lot adjacent to the Malaquite Visitor Center (Figure 2). The new facility would improve the efficiency of law enforcement operations, while protecting Park scenic, natural, and cultural resources.

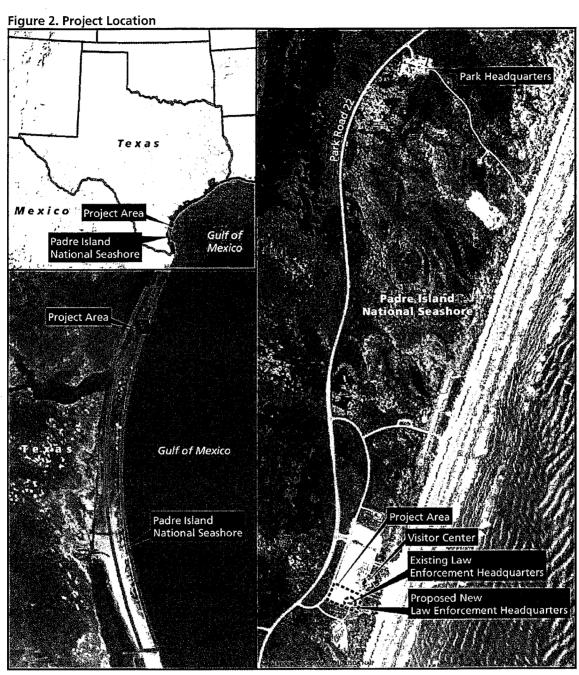
#### Access

All access for construction activities and staffing at the new law enforcement headquarters would be from Park Road 22 through the existing visitor center and law enforcement headquarters parking area.

#### Facility

The new law enforcement facility would be in the same location as the existing law enforcement headquarters and would be built in a zone designated by the Federal Emergency Management Agency (FEMA) as Zone "C" (Figure 3). Zone C is defined as an area of minimal flooding. However, the proposed law enforcement headquarters would be located a few hundred feet behind the fore dunes on the beach to the east. The fore dunes are the beginning of FEMA Zone V, an area of 100-year coastal floods, with velocity (wave action) and a designated base flood elevation of 9 feet. Because the proposed headquarters would be located close to this high-risk flood and wave action area, it would not be safe to remain at the headquarters during direct hurricane landings. The new facility would not comply with Zone V requirements; however, the building would be designed based on ASCE Flood Resistant Design and Construction (ASCE-24-05) requirements. The facility design would help protect the headquarters building from flood damage.

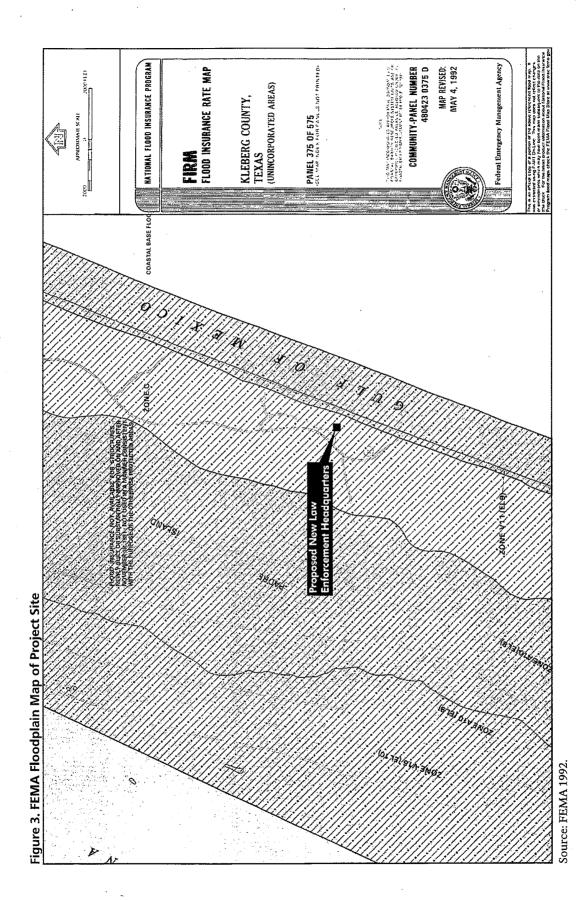
The possibility of severe or significant storm events has been taken into consideration during the planning of this project. The new law enforcement headquarters would be a two-story building with 3,300 square feet on each level. The lower level would be constructed as a slab-on-grade with reinforced concrete and masonry walls supporting the second floor. The lower level would be used for parking vehicles, prisoner management area, storage, and a tactical training area that also would serve as a storm shelter/community safe room. The safe room would be designed in accordance with FEMA 361 to withstand high winds. The second floor would be about 12 feet above grade and would have an 8-inch concrete slab floor for building stability and to provide a safe cover for the storm shelter/community safe room. The second floor would be constructed using a conventional wood frame. All Park personnel and visitors would be evacuated prior to a hurricane landing; the existing evacuation program (NPS 2011) is described in the "Mitigation" section of this SOF.



**Project Area** 

Environmental Assessment Proposed Law Enforcement Center

Padre Island National Seashore United States Department of the Interior/National Park Service



#### Site Description

The proposed new law enforcement facility would be constructed where the existing law enforcement headquarters is currently located in the parking lot adjacent to the Malaquite Visitor Center. The project includes removal of 1.76 acres of existing asphalt and removal of the existing law enforcement headquarters (modular building) following construction of the new building. The former asphalt area would be replaced by about 1.2 acres of landscaped areas planted with native vegetation. A stormwater retention pond would be located in one of the landscaped areas. The remaining 0.56 acre would be covered by the new law enforcement headquarters and enclosed parking. The construction area contains no significant topographic, geologic, or soil features. The proposed construction would require excavation of the asphalt and underlying soils for construction of the building foundation. Topographic changes and site disturbance would be minimal. The proposed location is at a relatively high elevation in the Park, which would provide some protection from storm surges. Natural drainage and natural contours would be preserved to the extent practicable. The new law enforcement facility would not be built in a 100-year coastal flood area or 100-year floodplain, and would not affect nearby 100-year coastal flood or floodplain areas.

#### JUSTIFICATION FOR USE OF THE FLOODPLAIN

The proposed law enforcement headquarters would be located in an area of minimal flooding. The site is ideal because it would be in the same location as the existing law enforcement headquarters and would have no impact to the nearby 100-year coastal flood area or the 100-year floodplain to the west.

#### NATURE OF FLOODING IN THE AREA

Flooding on Padre Island National Seashore can range from minor flooding with inundation of the fore dunes and minor erosion to major flooding from hurricanes. Major storms can drive storm surges across the island, removing large sections of the dune line and completely changing the landscape. Fresh water wetlands may hold salty water from hurricane storm surges for months after an event.

#### Site-Specific Flood Risk

The Atlantic Hurricane Season begins on June 1 and continues through November 30. The greatest percentage of hurricanes affecting the Gulf Coast occurs in August, September, and October. The number of tropical storms occurring each season may vary from 4 to 12. The Gulf of Mexico averages 10 storms annually based on the number of storms that have occurred over the past 40 years. In 1967, Hurricane Beulah caused wind and water damage to the new Park. In 1970, Hurricane Celia hit land north of Padre Island. In 1980, Hurricane Allen, one of the strongest hurricanes in recorded history, landed at the south end of the Park and did extensive damage to the island. The protective fore dunes were reduced to small hills of sand and were scattered as much as 150 feet inland. There were many washovers and large alluvial fans spread across the grasslands away from shore. However, the fore dunes reduced the strength of the wind and inland flow of water.

According to the 1992 FEMA map (FEMA 1992), the base flood elevation in the coastal flood area near the proposed law enforcement headquarters is 9 feet, and the base flood elevation in the floodplain about 2,500 feet to the west is 8 feet. The proposed construction site is landward of the fore dunes in an area of minimal flooding. Based on FEMA's zone designation explanations, the proposed law enforcement headquarters could be subject to a greater than 500-year flood.

#### Mitigation

Mitigation measures to reduce the effects of severe storm events to the proposed law enforcement headquarters include the following:

- 1. Design of the building based on ASCE Flood Resistant Design and Construction (ASCE-24-05) requirements to provide protection from flooding.
- 2. Removal of 1.76 acres of asphalt and replacement with vegetation and a stormwater pond, which would reduce runoff, increase infiltration, and collect stormwater.
- 3. The Park would continue to prohibit driving, fires, camping, and other disturbances in the dunes and fore dunes to protect native vegetation communities and maintain these natural barriers to ensure the protection of existing and proposed facilities from washover; and rapid recovery of these areas after storm events.

The mitigation for very large storm events that could flood the proposed law enforcement headquarters is evacuation of the Park, including all staff and visitors to the law enforcement headquarters. The Park's evacuation plan (NPS 2011) is updated annually and uses a three-stage alert system when a tropical storm enters or originates in the Gulf of Mexico:

- Green Alert—will be established when the National Weather Service identifies a weather system as a Tropical Storm with winds above 39 miles per hour, within 72 hours or 700 miles of the Park, and appears to be heading for the coastal bend area. Park staff advise visitors entering or currently recreating in the Park that a storm is in the Gulf of Mexico.
- Yellow Alert—will be established when a tropical storm system is within 60 hours or 500 miles of the Park, appears to be heading for the northwestern Gulf coastline, and a Hurricane Watch is issued for the coastal bend. Park staff evacuate visitors.
- Red Alert—will be established when a tropical storm is expected to reach hurricane force and is within 48 hours or 300 miles of the Park, the storm track and speed indicate it will strike the coastal bend area within 24 hours somewhere between 25 and 30 degrees N latitude, and a Hurricane Warning is issued for the coastal bend with an expected landfall between 150 miles south of Corpus Christi and 100 miles north of Corpus Christi. The Park is closed, gates locked, and employees and visitors are evacuated.

Should a storm suddenly develop in the western Gulf of Mexico or if an approaching storm suddenly increases its forward speed, any or all of the alerts may be bypassed and the Park would immediately come under red alert.

#### **Project Contingencies**

Design and construction of the new law enforcement headquarters includes contingencies for severe storms that may result in flooding and wind damage to the new headquarters. These

contingencies include constructing the lower level as a slab-on-grade with reinforced concrete and masonry walls supporting the second floor. The safe room on the lower level would be designed to withstand high winds. The second floor would be about 12 feet above grade and would have an 8-inch concrete slab floor for building stability and to provide a safe cover for the storm shelter/community safe room.

#### **SUMMARY**

The Park Service concludes that there is no better alternative for placement of the new law enforcement headquarters. The proposed action would result in no adverse impacts on coastal flood areas or floodplains. The Park Service, therefore, finds that this project is in compliance with EO 11988, "Floodplain Management."

#### REFERENCES

FEMA (Federal Emergency Management Agency). 1992. Current FEMA Issued Flood Maps for Kleberg County, Texas – MSC Digital Post Office. Flood Insurance Rate Map (FIRM). Kleberg County Texas, Panel 375 of 575. May 4. Available at: http://map1.msc.fema.gov/idms/IntraView.cgi?ROT=0&O\_X=5285&O\_Y=5211&O\_ZM=0. 076751&O\_SX=645&O\_SY=396&O\_DPI=400&O\_TH=59420588&O\_EN=59434960&O\_P G=1&O\_MP=1&CT=0&DI=0&WD=10392&HT=10219&JX=783&JY=456&MPT=0&MPS=0&ACT=0&KEY=59419565&ITEM=1&ZX1=147&ZY1=45&ZX2=484&ZY2=30. Last accessed: May 10, 2011.

National Park Service (NPS). 2011. Hurricane Plan. Padre Island National Seashore.