
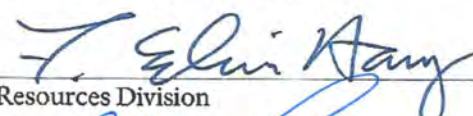


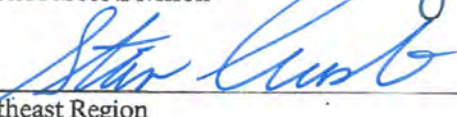
STATEMENT OF FINDINGS  
FOR  
EXECUTIVE ORDER 11988 FLOODPLAIN MANAGEMENT

---

EXISTING AND PROPOSED SITE DEVELOPMENT  
EVERGLADES NATIONAL PARK  
FLORIDA

Recommended:  4/24/15  
Superintendent, Everglades National Park Date

Concurred:  4/28/15  
Chief, Water Resources Division Date

Approved:  5/18/15  
Director, Southeast Region Date

The above signatures certify that this document is technically adequate and consistent with NPS policy.

## INTRODUCTION

Executive Order 11988, "Floodplain Management" requires the National Park Service (NPS) and other federal agencies to evaluate the likely impacts of actions in floodplains. The objectives of the executive order is to avoid to the extent possible the long-term and short-term adverse impacts associated with occupancy, modification, or destruction of floodplains and to avoid indirect support of development and new construction in such areas wherever there is a practicable alternative.

The NPS guidelines for compliance with Executive Order 11988 allow construction within a 100-year floodplain for recreational facilities such as parking and trails. The guidelines also state that in coastal areas structures can only be placed in the coastal high hazard area when the structures or facilities are for management and legislated use of the affected area. The guidelines go on to state that "their placement and construction shall be at locations least likely to be affected by the actions of coastal storms and flooding." The purpose of this Statement of Findings is to present the rationale for the location of a proposed action (building a new visitor center at the NPS Gulf Coast administrative site) in the floodplain, the continued use of existing park infrastructure and development within the floodplain, and to document the anticipated effects on floodplain values.

### PROPOSED ACTION

The National Park Service would propose to implement the NPS preferred alternative of the *Final General Management Plan / East Everglades Wilderness Study / Environmental Impact Statement*. The most significant action in the preferred alternative with respect to new development is the construction of the Marjory Stoneman Douglas Visitor Center and related improvements at the Gulf Coast

administrative site. Construction of the visitor center was included in park legislation.

The proposed action would be to replace the existing 45-year-old wood-frame visitor center. The new building would incorporate innovative design to achieve net zero energy use. It would be a concrete modular design prefabricated at a facility 131 miles from the park and transported to the site. Earlier environmental analysis documented that there are no wetlands in the Gulf Coast site (NPS 1990). Because no wetlands would be impacted by this project, this Statement of Findings is for floodplains only.

The proposed action has been designed to meet the needs of the increasing numbers of visitors to the Gulf Coast area of the park, to enhance the quality of their experiences there, and to ensure safety and improved efficiency of management and operations. Previously, the National Park Service prepared and made available for public review the *Gulf Coast Development Concept Plan and Environmental Assessment* (DCP) that documented the alternatives considered for development at the Gulf Coast administrative site of Everglades National Park (NPS 1990). The *Gulf Coast Development Concept Plan and Environmental Assessment* assessed alternative planning strategies and potential environmental impacts of implementation. The current project proposal is slightly different from that described in the 1990 *Gulf Coast Development Concept Plan and Environmental Assessment*, so this Statement of Findings supersedes the 1990 version.

No alternatives have been carried forward other than construction. Moving administrative functions off-site was considered and rejected because it would not be as cost-effective or efficient operationally as the proposed project. The existing facilities were constructed on the same site in Everglades City where President Truman dedicated the park in 1947. In 1989, Congress

called for construction of the Marjory Stoneman Douglas Visitor Center at this site (see appendix A), and Ms. Douglas attended the dedication there. This establishes extraordinary context to interpret and educate visitors, as well as implementing the will of Congress.

## **FLOODPLAINS WITHIN THE EVERGLADES GULF COAST PROJECT AREA**

The Everglades Gulf Coast administrative site is a 20-acre site within Everglades City and outside Everglades National Park boundary proper. The site was purchased by the National Park Service in 1959 for the development of park administrative and visitor use facilities. The administrative site is composed primarily of filled land built up in the past 30 years by dredging sand into a swampy area previously used as a city dump.

The floodplains of Everglades City in Collier County, Florida, were mapped in 1986 by the Federal Emergency Management Agency. About 25% of Everglades City is within the “coastal flood with velocity hazard (wave action)” zone (coastal high hazard area); the rest of the city is within the base elevation for 100-year flooding.

The Gulf Coast site is in an area that has been filled to approximately 5 feet above mean sea level and is completely within the coastal high hazard area zone VE, with a base flood elevation of 13 feet. The coastal high hazard area is an area where high winds, high waves, and tidal flooding can be expected. At the Gulf Coast site, the combined storm surge and wave elevation is 13 feet above mean sea level. In recent years several storms (hurricanes or tropical depressions) have required personnel and equipment evacuation and closure of the facilities. These storms, coupled with high tides and westerly winds, have caused minor flooding at the Gulf Coast site. Most of the damage to the facilities at Gulf Coast has been wind induced.

## **The Proposal in Relation to Floodplains**

The major Gulf Coast development actions called for in the GMP preferred alternative are constructing a new visitor center and concession facility, improving the parking area, and building a new canoe/kayak ramp and launch. Approximately 8 acres of land would be used for the total site development and planted with turf grass as exists at the current site.

The planned structures and facilities are limited to those necessary to meet the minimum needs for visitor use projected for the next several years to provide a quality visitor experience while minimizing impacts on the park’s resources and site management. The planned construction actions would occur in areas of the site already impacted with development, therefore not introducing significant new impacts on floodplain values.

The site, being totally within the coastal high hazard area, could potentially have floodwater elevations as deep as 13 feet. The design of new structures would incorporate methods for minimizing storm damage as contained in the National Flood Insurance Program’s Floodplain Management Criteria for Flood-Prone Areas (44 CFR section 60.3) and in accordance with local, county, or state requirements for flood-prone areas.

The proposed replacement of the existing visitor center at a new site within the coastal high hazard area would have floor elevations above the combined storm surge and wave height calculated for the site. The space below the lowest floor would be free of obstructions to minimize impact on the structure by abnormally high tides and wind-driven water (storm surges).

Interpretation and natural resources management would emphasize perpetuation of floodplain and wetland values. The park staff would actively assist private landowners and federal, state, and local regulatory agencies in protecting wetlands that are

outside the park boundary, but whose use may affect park resources. Moreover, wetlands and floodplains would be used for their educational, recreational, and scientific qualities through expanded interpretive programs and possibly research emphasis.

## JUSTIFICATION FOR CONTINUED USE OF THE FLOODPLAIN

Most of Everglades National Park is in 100-year or 500-year floodplains. Park development and public use at the main developed areas including Headquarters/Pine Island, Shark Valley, Key Largo, Chekika, the Tamiami Trail Ranger Station, Flamingo, Gulf Coast, and along the main park road have been in place for many years.

Actions proposed in the NPS preferred alternative include the retention or replacement of existing visitor services and park operation facilities within floodplains, as well as restoration of previously impacted areas within floodplains as is the case in the East Everglades Addition and at the Tamiami Trail Ranger Station. The preferred alternative does not propose any new development outside of previously developed areas in the floodplain. The justification for retaining these structures in the 100-year floodplain is as follows:

- The Gulf Coast site is the only land-based access to the park on the west coast of Florida, providing access for the public and park staff to Ten Thousand Islands, Wilderness Waterway, Gulf of Mexico, and Florida Bay. The facilities are historically and functionally dependent on their locations. Moving the entire administrative and visitor services site out of the floodplains would be cost-prohibitive and may not meet the will of Congress.
- Relocating existing facilities, infrastructure, and services at the main

developed areas in the park may be infeasible and very costly, both financially and from a level and quality of service perspective.

- All existing infrastructure and development within the park is on disturbed ground. Moving and attempting to relocate existing visitor services and park operations facilities within or outside the park would likely result in adverse impacts and the loss of other natural resource values in the area.

## SPECIFIC FLOOD RISKS

In recent years, several severe storms (hurricanes or tropical depressions) have required the evacuation of personnel and equipment and facility closures. These storms, coupled with high tides and westerly winds, have caused minor flooding at the Gulf Coast site and other developed areas in the park. As noted above, the Gulf Coast site has the potential for floodwater elevations as deep as 13 feet. Most of the damage to the facilities within the park has been wind induced. Ample notice of severe weather is provided by the National Weather Service and other agencies, making warning and evacuation a practical option for protection of human life.

There would be no additional storage facilities for fuels or toxic materials or museum collections in a floodplain proposed by the NPS preferred alternative.

## MITIGATION

The situations that lead to storm-caused high water events, and the scope and duration of these events, are known by park staff, making warning and evacuation a practical option for protection of human life. Everglades National Park will continue to maintain an active hurricane evacuation plan. The plan details responsibilities of individual park employees for advanced preparedness measures at the

onset of the hurricane season (June through October). These include removing or securing park property, records and utility systems during a hurricane warning; monitoring communications during a hurricane; and conducting rescue and salvage operations following a hurricane. The hurricane plan has proven effective in maintaining safety and reducing property damage during storms, and it will be annually reviewed and updated.

The design of new structures throughout the park would incorporate methods for minimizing storm damage as contained in the National Flood Insurance Program's Floodplain Management Criteria for Flood-Prone Areas (44 CFR section 60.3) and in accordance with local, county or state requirements for flood-prone areas.

The proposed replacement of the existing Gulf Coast visitor center would have floor elevations above the combined storm surge and wave height calculated for the site. The space below the lowest floor would be free of obstructions to minimize impact on the structure by abnormally high tides and wind-driven water (storm surges). By elevating the structure in this way, natural floodplain functions and vales would be preserved and adverse impacts would be minimized.

The new facility would be a concrete modular design entirely prefabricated at a facility 131 miles from the park. This process achieves a level of construction efficiency that is impossible using conventional methods. Advantages include a shorter construction period, superior quality control, reduced labor and transportation costs, and reduced construction site pollution and solid waste disposal.

As previously identified in the *Flamingo Commercial Services Plan Findings of No Significant Impact and Statement of Findings (2008)*, the overall development footprint of the Flamingo area would be considerably reduced from existing levels with the elevation of structures comprising most of the facilities to be rebuilt. Up to an additional 50 acres of

floodplain (the former B and C campground loops and a majority of the former lodge and cottage site) would be restored.

To avoid potential pollution of bay waters by stormwater runoff contaminated by oil and other petroleum products, the developed area (especially the parking lot) would use techniques such as backsloping to allow percolation and filtration of runoff through the soils.

The environmental analysis contained in the *Final General Management Plan / East Everglades Wilderness Study / Environmental Impact Statement* and this Statement of Findings constitute the environmental compliance necessary to implement the Gulf Coast development should the NPS preferred alternative be selected.

## SUMMARY

The National Park Service has determined that implementing the NPS preferred alternative would not result in any additional disruption of floodplains. Risk to life from storms and high water can be mitigated. The National Park Service would allow the existing visitor center to be replaced, the parking area improved, and a new canoe/kayak ramp and launch in the current Gulf Coast administrative site because there are no reasonable alternative sites. Construction of the visitor center would replace an existing facility with a sustainable structure that meets National Flood Insurance Program standards. Visitors would be informed of changes caused by storm events through regular interpretation and local media.

The replacement, restoration, or development facilities and infrastructure within the park would not expand beyond currently disturbed areas. The design of new structures throughout the park would incorporate methods for minimizing storm damage as contained in the National Flood Insurance Program's Floodplain Management Criteria for Flood-Prone Areas (44 CFR section 60.3)

and in accordance with local, county, or state requirements for flood-prone areas.

Therefore, the National Park Service finds that the proposed action would not have any additional adverse impacts on floodplains and their associated values.

***Statement of Findings References:***

Executive Order 11988, “Floodplain Management” (May 28, 1980). Executive Order of the President of the United States.

National Park Service, 2006. *Management Policies 2006*. National Park Service, Washington, D.C.

National Park Service, 2003. Director’s Order 77-2: *Floodplain Management*. Washington Office, Washington, D.C.

National Park Service, 1990. *Gulf Coast Everglades National Park Development Concept Plan / Environmental Assessment*. Everglades National Park, Homestead, Florida.