

**U.S. Department of the Interior  
National Park Service, Northeast Region**

**FINDING OF NO SIGNIFICANT IMPACT  
BAYSIDE PICNIC AND SOUTH OCEAN BEACH PARKING AREAS  
REMOVAL AND RELOCATION ENVIRONMENTAL ASSESSMENT**

**Assateague Island National Seashore  
(Worcester County, Maryland)**

**INTRODUCTION**

The National Park Service, in cooperation with the Federal Highway Administration (FHWA) Eastern Federal Lands Highway Division, prepared an environmental assessment to evaluate alternatives for relocating two parking areas to more sustainable locations in response to damage from Hurricane Sandy on October 29, 2013. The Bayside Picnic and South Ocean Beach parking areas are located in positions that are vulnerable to future storm events. Action is needed to address the erosion and encroachment of shorelines on the asphalt and boardwalks at both locations, which serve as a source of manmade debris into Chincoteague Bay, the Atlantic Ocean, and along the surrounding shoreline. The proposed action is also needed to reduce the vulnerability of the parking areas to reoccurring storm activity and damage and thereby reduce the burden on park operations resulting from the required clean up and repair. Additionally, prolonged parking area closures that result from recurring storm damage limit the national seashore's ability to provide high quality resource based recreational opportunities to the public. Maintaining the current location of the South Ocean Beach Parking Area is altering the evolution of landforms on the island by affecting the natural inland migration of the adjacent sand dunes.

The environmental assessment evaluated two alternatives: a no-action alternative and one action alternative: Removal and Relocation of Parking Areas, identified as the NPS preferred alternative. The environmental assessment also analyzed the potential impacts these alternatives would have on the natural and human environment. The environmental assessment was prepared in accordance with National Environmental Policy Act; regulations of the Council on Environmental Quality (CEQ) (40 CFR 1500-1508.9); and NPS Director's Order (DO) 12: *Conservation Planning, Environmental Impact Analysis, and Decision-Making* and accompanying DO-12 Handbook.

**SELECTED ALTERNATIVE**

Based on concerns expressed in public comments and the analysis presented in the environmental assessment, the National Park Service has re-examined the alternatives presented in the environmental assessment. After further consideration, the National Park Service has selected alternative B (the preferred alternative) for the South Ocean Beach Parking Area and selected elements of both the no action and alternative B for the Bayside Picnic Parking Area for implementation. The selected alternative for South Ocean Beach was described on pages 27-30 of the environmental assessment. The selected alternative for the South Ocean Beach and Bayside Picnic Parking Areas is described below.

## **SOUTH OCEAN BEACH**

### **Condition, Location, Size, and Building Materials**

The Life of the Dunes Nature Trail Parking Area will be removed and the South Ocean Beach Parking Area will be relocated and reconstructed further inland in its place. The existing asphalt will be disposed of properly offsite. The new parking area will be constructed with a 12 inch clay base surfaced with 2 inches of clam shells. Due to the surfacing material, parking spots will not be delineated with paint, but the new parking area will be designed to accommodate approximately 76 vehicles, including two oversize vehicles and 3 ADA spaces adjacent to the boardwalk (see sheet P02 in appendix E of the draft environmental assessment). Construction of the new parking area will require the use of mechanized equipment and could require the need to import or export fill in order to recontour the new parking area accordingly. Potential sources for fill include the park's existing stock pile of natively sourced fill or locally acquired crushed road base. Any excess of native fill will be transported to the park's stock pile for use in future projects. Staging for removal of the Life of the Dunes Nature Trail Parking Area and construction of the new South Ocean Beach Parking Area will be located in the existing South Ocean Beach Parking Area and/or other nearby parking areas in the national seashore. Maintenance of the aggregate mix will require monthly surface leveling by park staff during the peak season and occasional resurfacing with clam shells. No asphalt will be used at the newly relocated South Ocean Beach Parking Area.

Stormwater management measures at the South Ocean Beach Parking Area will be implemented pending coordination with the Maryland Department of Environment and identification of appropriate measures. Site specific stormwater design features will include an infiltration trench around the perimeter of the parking area as seen on figure 9. The intent of stormwater management will be to restore the natural geomorphology in the area by removing one of the existing corrugated metal culverts (CMP) at the northern end of the existing South Ocean Beach Parking Area (as depicted on sheet M02 in appendix E of the environmental assessment) and allowing natural succession to occur. The National Park Service will use best management practices to address stormwater and water quality. Permitting requirements will be addressed with the State of Maryland as appropriate in advance of any construction activity.

Following construction of the new parking area, the existing South Ocean Beach Parking Area and the stormwater culverts will be removed and restored. Restoration will include filling and recontouring the area to meet existing grade. Pending Maryland Department of the Environment approval, stormwater will be treated by the environmental site design practice of disconnection of non-rooftop runoff for the South Ocean Beach Parking Area. The approximate limit of disturbance for the new South Ocean Beach Parking Area will be approximately 72,550 square feet. The approximate limit of disturbance for the removal of the existing South Ocean Beach Parking Area will be approximately 49,500 square feet.

### **Pedestrian Access and Circulation**

The existing asphalt bike path adjacent to the proposed location for the South Ocean Beach Parking Area will be maintained in its current location. An additional at grade boardwalk path may be constructed off the eastern side of the new parking area, across Bayberry Drive, through the restored area and onto the beach. Any additional paths that led to road crossings will be marked with pedestrian cross walks to ensure public health and safety. A path and concrete pads will also be constructed immediately adjacent to the new parking area for restroom and shower facilities.

As mentioned above, due to the use of an aggregate surfacing material, parking spots would not be delineated with paint and split rail fencing would be used to suggest parking spot locations and traffic circulation within the new South Ocean Beach Parking Area. Signage will be posted to indicate that back-in parking will not be permitted in the new parking area. The perimeter of the new parking area

may be marked with split rail fence, flexible fiberglass posts, or other similar means in order to control traffic and discourage off-road parking.

### **Visitor Amenities**

- The two movable restroom facilities located at the existing South Ocean Beach Parking Area will be relocated to the eastern side of the proposed new parking area location;
- Moveable changing stations may be added to the eastern side of the proposed new parking area location;
- The existing shower / foot wash at the South Ocean Beach Parking Area will be removed and a new facility will be installed nearby the relocated bathrooms on the eastern side of the new South Ocean Beach Parking Area;
- Trash and recycling receptacles will be moved closer to the new parking area;
- The information kiosk at the Life of the Dunes Trailhead will remain in its current condition and a new kiosk could be installed providing additional information to visitors; and
- Bicycle racks will be installed adjacent to the new South Ocean Beach Parking Area.

### **BAYSIDE PICNIC PARKING AREA**

The Bayside Picnic Parking Area will remain in its current location (figure 6 of the environmental assessment), and the asphalt will be removed and replaced with a 12 inch clay base surfaced with 2 inches of clam shells. As conditions change, relocation of the Bayside Picnic Parking Area may be addressed in future planning efforts, with opportunity for future public input.

### **Condition, Location, Size, and Building Materials**

Instead of removing and relocating the Bayside Picnic Parking Area, all of the asphalt will be removed (and disposed of properly offsite) and the parking area will be resurfaced with a 12 inch clay base surfaced with 2 inches of clam shells in its current location (see figure 6 of the environmental assessment). Due to the surfacing material, parking spots will not be delineated with paint, but the parking area will continue to accommodate the same number of vehicles it does currently, approximately 63 vehicles, including 14 oversize vehicles and 3 ADA spaces. The resurfaced parking area will remain in the current footprint. Resurfacing of the parking area will require the use of mechanized equipment. Staging for resurfacing of the parking area will be located in the existing Bayside Picnic Parking Area and/or other nearby parking areas in the national seashore. Maintenance of the aggregate mix will require monthly surface leveling by park staff during the peak season and occasional resurfacing with clam shells. No asphalt will be used at the newly resurfaced Bayside Picnic Parking Area.

Pending Maryland Department of the Environment approval, stormwater will be treated by the environmental site design practice of disconnection of non-rooftop runoff for the Bayside Picnic Parking Area. The approximate limit of disturbance for the Bayside Picnic Parking Area will be approximately 62,350 square feet.

### **Pedestrian Access and Circulation**

The facilities and amenities in the area will continue to be accessible from the parking area. Restrooms and facilities will remain ADA accessible.

Traffic circulation and parking space locations will be suggested by split rail fencing within the centerline of suggested parking spaces. Signage will be posted to indicate that back-in parking will not be permitted in the new parking area. The perimeter of the new parking area may be marked

with split rail fence, flexible fiberglass posts, or other similar means in order to control traffic and discourage off-road parking.

### **Visitor Amenities**

- The 2 permanent restroom facilities will remain in their current location;
- The 10-12 picnic tables will remain in their current locations dispersed along the shoreline adjacent to the bay. Approximately 8-10 additional picnic tables and a picnic pavilion or shade structure could be installed at the Bayside Picnic Parking Area;
- 4-9 additional grills will be dispersed among the picnic tables, for a total of 10-15 grills;
- The following amenities will remain in their current location (depicted on figure 6 in the environmental assessment):
  - Trash and recycling receptacles;
  - The canoe, bike, and kayak rental stand;
  - The bike rack;
  - The 2 drinking water pumps; and
  - The information kiosk.
- A new shower tower / foot wash may be installed, as well as additional moveable rest room facilities and changing stations adjacent to the parking area and within the existing footprint.

### **OTHER ALTERNATIVES CONSIDERED**

One other alternative was fully considered in the environmental assessment, which was Alternative A: No Action / Continue Current Management. Additionally, one additional alternative was also considered for the Bayside Picnic Parking Area, which was Alternative B: Remove and Relocate Parking Areas and Corresponding Visitor Amenities. These alternatives are summarized below.

#### **ALTERNATIVE A: NO ACTION / CONTINUE CURRENT MANAGEMENT**

Under alternative A, the Bayside Picnic, South Ocean Beach, and Life of the Dunes Nature Trail Parking Areas would remain in the developed management zone, as determined by the existing general management plan and current general management planning. These areas would continue to be managed to offer interpretive, educational, and management programs that provide a range of services to visitors. Alternative A represents a continuation of the existing situation.

#### **Condition, Location, Size, and Building Materials**

**Bayside Picnic Parking Area.** The Bayside Picnic Parking Area would remain in its current location. The asphalt would remain in its current condition. Routine maintenance and repairs would continue. Following future storm events, damaged portions of the asphalt parking area would not be replaced and the lot would be expected to shrink in size due to future storm damage. Existing stormwater features would be left in place, cleaned, and repaired only if they became a hazard to public health and safety.

**South Ocean Beach Parking Area.** The South Ocean Beach Parking Area would remain in its current location. Damaged features from Hurricane Sandy would not be replaced and/or repaired. Routine maintenance and repairs would continue. The existing South Ocean Beach Parking Area location is becoming more prone to capturing windblown sand, requiring more frequent removal

operations and maintenance activity. Existing stormwater features would be left in place, cleaned, and repaired only if they became a hazard to public health and safety.

**Life of the Dunes Nature Trail Parking Area.** The Life of the Dunes Nature Trail Parking Area would remain in its current location. Routine maintenance and repairs would continue on the asphalt. In the event of future storm events, the Life of the Dunes Nature Trail Parking Area could serve as an alternative parking area during temporary closures of the South Ocean Beach Parking Area. Existing stormwater features would be left in place, cleaned, and repaired only if they became a hazard to public health and safety.

### **Pedestrian Access and Circulation**

**Bayside Picnic Parking Area.** A concrete walkway currently connects the southeastern corner of the parking area to the restroom facilities. Otherwise, access and circulation around the Bayside Picnic Parking Area is informal and occurs along the sandy shores of Chincoteague Bay.

**South Ocean Beach Parking Area.** A small section of boardwalk serves to bridge a swale along the edge of the asphalt that formed as a result of changes to the surrounding dunes and landforms post-Hurricane Sandy. The new boardwalk connects the parking area to the restroom facilities and continues a short way to South Ocean Beach. All other access and circulation around the South Ocean Beach Parking Area is informal and occurs on the sandy perimeter and in between the dunes on the eastern side of the parking area, and the existing vegetation along the western edge.

**Life of the Dunes Nature Trail Parking Area.** An asphalt bike path runs out of and along the eastern edge of the parking area. The Life of the Dunes Nature Trail head is just off the southeastern edge of the existing parking area. Additionally there are several visible social (unauthorized) trails cutting between vegetation and small interdunal wetlands to the east of the parking area and connecting across Bayberry Drive towards the South Ocean Beach Parking Area.

### **Visitor Amenities**

#### **Bayside Picnic Parking Area**

- 2 permanent restroom facilities, located off of the southwestern corner of the parking area;
- 10 to 12 picnic tables dispersed along the shoreline adjacent to the bay on the western side of the parking area;
- 6 grills dispersed among the picnic tables;
- Trash and recycling receptacles on either end of the west side of the parking area;
- A canoe, bike, and kayak rental stand operated by a concessioner located in the northeast corner of the parking lot;
- A bike rack located in front of the rental stand;
- 2 drinking water pumps; one in front of the restrooms and one in front of the rental stand; and
- An information kiosk along the shoreline to the northwest of the parking area.

#### **South Ocean Beach Parking Area**

- 2 removable restroom facilities located east of the parking area along the boardwalk;
- 1 shower / foot wash station with a bench located just east of the restroom facilities;
- Trash and recycling receptacles located on the eastern edge of the parking area near the boardwalk; and

- An information kiosk was damaged during Hurricane Sandy and subsequently removed. The kiosk would be replaced under alternative A.
- Bike rack

#### **Life of the Dunes Nature Trail Parking Area**

- 1 bicycle rack at the southeastern corner of the parking area; and
- A trail head kiosk located at the trailhead of the Life of the Dunes Trail.

Alternative A was not selected for implementation because it would not provide for use of native materials, provide for continued visitor use and beach and trail access, reduce the future potential for erosion of asphalt into Chincoteague Bay resulting from storm events, or reduce the long-term labor and maintenance costs of maintaining the parking areas.

### **BAYSIDE PICNIC PARKING AREA – ALTERNATIVE B: REMOVE AND RELOCATE THE BAYSIDE PICNIC PARKING AREA AND CORRESPONDING VISITOR AMENITIES**

#### **Condition, Location, Size, and Building Materials**

The Bayside Picnic Parking Area would be removed and relocated further inland to the east of the existing parking area. The new parking area would be constructed with a packed clay layer underlying a crushed clam shell surface.

Following construction of the new parking area, the northwestern portion of the existing parking area and stormwater culverts would be removed and restored. Restoration would include filling and recontouring the area to meet existing grade. Stormwater management measures at the Bayside Picnic Parking Area would be implemented pending coordination with the Maryland Department of Environment and identification of appropriate measures.

#### **Pedestrian Access and Circulation**

A new ADA-accessible boardwalk path would be constructed off the southwestern edge of the new parking area to link the new parking area with a section of existing parking area to be maintained. The path would also connect to the restroom facilities; provide access to the water, and to the relocated concessions rental stand. The southeastern portion of the existing parking area would be retained for use as a turn-around and loading area for boat trailers, commercial vehicles, and visitors.

Traffic circulation and parking space locations would be suggested by split rail fencing within the centerline of suggested parking spaces. Signage would be posted to indicate that back-in parking would not be permitted in the new parking area. The perimeter of the new parking area could be marked with split rail fence or flexible fiberglass posts or other similar means in order to control traffic and discourage off-road parking.

#### **Visitor Amenities**

- The 2 permanent restroom facilities would remain in their current location;
- 10-12 picnic tables would remain in their current locations dispersed along the shoreline adjacent to the bay. 8-10 additional picnic tables and a picnic pavilion or shade structure could be installed in the newly restored portion of the existing Bayside Picnic Parking Area;
- 10-15 grills would be dispersed among the picnic tables;
- Trash and recycling receptacles would be placed adjacent to the restrooms;

- The canoe, bike, and kayak rental stand would be relocated further east and adjacent to the proposed access boardwalk path;
- The bike rack would be relocated in front of the rental stand;
- The 2 drinking water pumps would remain in their current locations;
- The information kiosk would be moved closer to the access path connecting each area; and
- A new shower tower / foot wash may be installed, as well additional moveable rest room facilities and changing stations adjacent to the new access path.

Alternative B for the Bayside Picnic Parking Area does meet the purpose and need of the proposed action because it would remove the existing parking area and relocate it to a less vulnerable location. However, this alternative was not selected for implementation at the Bayside Picnic Parking Area because of the results of analysis presented in the environmental assessment and concern raised during public scoping regarding adverse impacts on natural resources as a result of clearing the proposed relocation area.

### **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

In accordance with the DO-12 Handbook, the National Park Service identifies the environmentally preferable alternative in its National Environmental Policy Act documents for public review and comment [Sect. 4.5 E(9)]. 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 (43 CFR 46.30).

Of the alternatives evaluated in the environmental assessment, the selected alternative (consisting of alternative B for the South Ocean Beach Parking Area and elements of both the no action and alternative B discussed above for the Bayside Picnic Parking Area) best meets the park objectives of protecting and preserving natural resources by providing a larger protective buffer between the parking area and the shoreline at South Ocean Beach and subsequently reducing the risk of future flooding, and maintaining the parking area in its current location at the Bayside Picnic Area thereby avoiding impacts to vegetation and wildlife. Additionally, the relocation of the South Ocean Beach Parking Area will allow the shoreline and dune system to evolve more naturally over time. Human impact on the island would be reduced by the removal of asphalt and the use of natural and native materials (a clay base surfaced with clam shells) for surfacing both the relocated South Ocean Beach Parking Area and the Bayside Picnic Parking Area. Improvements would also be made through the integration of stormwater best management practices at both parking areas.

### **MITIGATION MEASURES**

To minimize environmental impacts related to the action alternative, the National Park Service will implement mitigation measures whenever feasible. Although the exact mitigation measures to be implemented will depend upon the final design and approval of plans by relevant agencies, the following is a list of actions that could take place.

## **WATER RESOURCES (INCLUDING COASTAL PROCESSES, FLOODPLAINS, AND WETLANDS)**

Identify specific provisions in construction contract(s) to prevent storm water pollution during construction activities, in accordance with the National Pollutant Discharge Elimination System permit program of the Clean Water Act and all other federal regulations, and in accordance with the storm water pollution prevention plan to be prepared for this project.

Plan and maintain buffers between areas of soil disturbance and wetlands or waterways.

Use soil erosion best management practices such as sediment traps, erosion check screen filters, and hydro mulch to prevent the entry of sediment into waterways.

Promptly remove and properly dispose of any hazardous waste that is generated in the project area.

Inspect equipment for leaks of oil, fuels, or hydraulic fluids before and during use to prevent soil and water contamination. Require contractors to implement a plan to promptly clean up any leaks or spills from equipment, such as hydraulic fluid, oil, fuel, or antifreeze.

Minimize onsite fueling and maintenance. If these activities cannot be avoided, fuels and other fluids will remain in a restricted/designated area, and fueling and maintenance will be performed in designated areas that are bermed and lined to contain spills. Require provisions for the containment of spills and the removal and safe disposal of contaminated materials, including soil.

Take actions that would minimize effects on site hydrology and fluvial processes, including flow, circulation, water level fluctuations, and sediment transport. Take care to avoid any rutting caused by vehicles or equipment.

Conduct the action to minimize adverse effects on normal movement, migration, reproduction, or health of terrestrial fauna.

Conduct the action to avoid degrading water quality to the maximum extent practicable. Employ measures to prevent or control spills of fuels, lubricants, or other contaminants from entering wetland areas. Ensure the action is consistent with state water quality standards and Clean Water Act Section 401 certification requirements.

Maintain appropriate erosion and siltation controls during construction.

Properly maintain fill material to avoid adverse impacts on aquatic environments or public safety.

## **VISITOR USE AND EXPERIENCE AND RECREATION RESOURCES**

Share information with the public regarding implementation of this project and its effects on access, parking, and circulation through the national seashore. Distribute or post information at entrance stations, on the park's website, at trailheads, at other visitor sites, and through press releases.

Develop and enforce an NPS-approved traffic and pedestrian control plan for use during construction. The plan would minimize disruption to visitors and park operations and ensure safety of the public, park employees, contractors, and residents. Require contractors to coordinate with park staff to minimize disruption of normal park activities. Inform construction workers and supervisors about the special sensitivity of park values, regulations, and appropriate housekeeping measures to be used.

Include specific provisions and implementation measures in the NPS/FHWA contract to prevent storm water pollution during construction activities, in accordance with the Clean Water Act's National Pollutant Discharge Elimination System permit program and all other federal, state, and local regulations. Require the construction contractor to develop and implement a storm water pollution prevention plan and dust control plan prior to construction. The National Park Service would provide contractor(s) with information related to storm water protection and dust control.

## **PUBLIC HEALTH AND SAFETY**

Implement measures to close and/or redirect access and circulation in areas that would be affected by construction to ensure visitor health and safety. Provide information on alternatives that would help visitors achieve their goal while staying away from the work area.

Implement a traffic control plan during construction, as warranted. Include strategies to maintain safe and efficient traffic flow and keep full area closures to a minimum.

Implement measures to reduce adverse effects of construction on visitor health and safety.

## **PARK OPERATIONS**

Coordinate activities of contractors and park staff to minimize disruption of normal park activities. Inform construction workers and supervisors about the special sensitivity of park values, regulations, and appropriate housekeeping measures to be used.

To minimize potential impacts on concessioners and visitors, consider stipulations on construction timing. For example, operate heavy construction equipment in noise-sensitive areas between 7 a.m. and 7 p.m. to minimize noise impacts. Consider timing of construction to occur during non-peak visitation period.

Prior to construction, conduct a meeting with concession operators, project managers, and park staff to provide information on anticipated issues that may occur.

## **GENERAL CONSTRUCTION BEST MANAGEMENT PRACTICES**

Clearly state all protection measures in construction specifications. Construction workers will be provided with educational instruction to avoid impacting wildlife.

Minimize the amount of ground disturbance for activities not directly related to construction, such as staging and stockpiling areas. Restore all staging and stockpiling areas following construction. Limit parking of construction and employee vehicles to designated staging areas or existing roads and parking lots.

Identify and define construction zones with construction tape, temporary fencing, or other material prior to any construction activity. Use the zone to confine activity to the minimum area required for construction. Stipulate that construction activities, including material staging and storage, cannot occur beyond the construction zone fencing.

Comply with federal and state regulations for the storage, handling, and disposal of all hazardous material and waste. If hazardous materials would be used on site, make provisions for storage, containment, and disposal. Provide the contractor with a copy of U.S. Environmental Protection Agency document *EPA 832-F-99-003, Storm Water Management Fact Sheet-Dust Control*. Require the contractor to submit a dust control plan prior to construction.

If recycled concrete or road base is used for backfill, ensure that it is free of waste metal products, debris, toxic material, or other deleterious substances and that it meets gradation and aggregate test requirements.

Backfill excavated areas with appropriate material and contour them so that, after settling, they will blend with the surrounding terrain.

Ensure that construction equipment uses the best available technology for sound dampening muffler and exhaust systems.

To save fuel and reduce noise and emissions, require contractors to develop and implement a plan that prevents excessive idling of all vehicles used in construction.

Require good housekeeping practices such as placing debris in refuse containers daily, emptying containers regularly, and prohibiting the burning or burying of refuse in the park.

## **WHY THE SELECTED 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:

***1) Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS.***

The selected alternative will result in both adverse and beneficial impacts on coastal processes, visitor use and experience and recreation resources, public health and safety, and park operations; and beneficial impacts on floodplains and wetlands. As described in chapter 4 of the environmental assessment, none of these impacts will be significant. On balance, the selected alternative will have a beneficial impact.

***2) The degree to which public health and safety are affected.***

The selected alternative has some risk to public safety during the time that demolition and construction activities are occurring; however, this risk is considered to be low and will be further minimized during construction/demolition by implementing measures such as fencing, signs, and other physical means to exclude visitors from construction areas and equipment.

The relocation of the South Ocean Beach Parking Area will likely increase the number of pedestrians crossing Bayberry Drive. Visitors will be encouraged to use the pedestrian walkways and cross at one of the two marked cross walks. As a result, the selected alternative will likely have some adverse impacts to public health and safety at the South Ocean Beach Parking Area but these would be expected to be minor.

***3) Any unique characteristics of the area (proximity to historic or cultural resources, wild and scenic rivers, ecologically critical areas, wetlands or floodplains, and so forth).***

The entire national seashore is within both the 100- and 500-year floodplain.

The selected alternative will likely have long-term beneficial impacts to wetlands and floodplains because it will enhance wetland and floodplain functions by slowing sheetflow during precipitation events, enhancing the ability of wetlands to absorb these flows by decreasing the inflow rate, increasing the size of the natural buffer area surrounding the relocated South Ocean Beach Parking Area relative to open water, and restoring natural processes to the current South Ocean Beach Parking Area. However, these beneficial impacts will not likely be significant because they will be highly localized and will not likely result in any large-scale changes in wetland or floodplain functions and values.

No cultural resources, wild and scenic rivers, or ecologically critical areas have been identified within the project area.

***4) The degree to which impacts are likely to be highly controversial.***

There is no controversy over the effects of the selected alternative. There was public disagreement over the proposed relocation of the Bayside Picnic Parking Area; however, relocating the Bayside Picnic Parking Area is no longer part of the selected alternative; the Bayside Picnic Parking Area will remain within the existing footprint and location until conditions change or new alternatives are developed. Of the public comments received during scoping and review of the environmental assessment, many people and organizations voiced support for removal and relocation of the South Ocean Beach Parking Area and for retaining the Bayside Picnic Parking Area in its current location.

**5) The degree to which the potential impacts are highly uncertain or involve unique or unknown risks.**

No highly uncertain, unique, or unknown risks were identified for the removal and relocation of the South Ocean Beach Parking Area or resurfacing of the Bayside Picnic Parking Area in its current location with a packed clay layer underlying a crushed clam shell surface during preparation of the environmental assessment or during the public review period.

**6) Whether the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.**

The selected alternative neither establishes precedent for future actions with significant effects nor represents a decision in principle about a future consideration. The materials proposed have previously been used successfully in the area.

**7) Whether the action is related to other actions that may have individual insignificant impacts but cumulatively significant effects. Significance cannot be avoided by terming an action temporary or breaking it down into small component parts.**

As described in chapter 3 of the environmental assessment, cumulative impacts were analyzed by combining the impacts of the selected alternative with the impacts of three other projects that were identified as contributing to cumulative impacts on the resources addressed by the environmental assessment: general management planning for the national seashore, alternative transportation planning within the national seashore, and the resource management plan. The beneficial and adverse impacts of these other past, present, and reasonably foreseeable future actions on resources, in conjunction with the impacts of the selected alternative, will result in both beneficial and adverse cumulative impacts; however, the overall cumulative impacts are not significant.

**8) The degree to which the action may adversely affect historic properties in or eligible for listing in the National Register of Historic Places, or other significant scientific, archeological, or cultural resources.**

There are no significant scientific, archeological, cultural resources, or historic properties in or eligible for listing in the National Register of Historic Places within the project areas.

**9) The degree to which an action may adversely affect an endangered or threatened species or its habitat.**

Based on a review of U.S. Fish and Wildlife Service (USFWS) federally listed species, there are no federally listed species under their jurisdiction that are known or are likely to occur in the study area.

**10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.**

The selected alternative violates no federal, state, or local environmental protection laws.

## **AGENCY AND PUBLIC INVOLVEMENT CONSULTATION**

The planning process for the proposed action was initiated during the internal, agency, and public scoping efforts, which began in the spring of 2013. This process introduced agencies and the public to the purpose and need of the project and potential actions that could be included with the removal and relocation of the South Ocean Beach and Bayside Picnic Parking Areas. An internal scoping meeting was held on June 4, 2013 to begin discussions on impact topics and alternatives.

Initial public scoping for this environmental assessment began with a press release, which was distributed to the local media on July 8, 2013, stating the park's intentions to begin the environmental assessment process. Scoping letters or notices were sent to the approximately 85 people and organizations on the National Park Service's core mailing list. These included local, state, and

federal agencies; organizations, and individuals. The official public scoping period began on July 8, 2013 and concluded August 9, 2013. During this time, public comments were accepted on the NPS Planning, Environment, and Public Comment (PEPC) website (<http://parkplanning.nps.gov/asis>) and by mail. The park received 23 pieces of correspondence from the public. The comments identified concerns regarding the rationale and relocation of the South Ocean Beach Parking Area, maintaining ADA accessibility, and the potential to affect migratory bird habitat.

Agency scoping for this project began in July 2013. Scoping letters were sent out to various agencies requesting feedback on the proposed project and alternatives. A list of agencies and other entities that received scoping notices is provided in the environmental assessment. Copies of these letters and responses from the agencies, if applicable, are included in appendix A of the environmental assessment.

The National Park Service initiated a 30-day public review and comment period for the environmental assessment on August 26, 2013. A public notice of availability and the environmental assessment were posted on the park's PEPC website (<http://parkplanning.nps.gov/asis>). A press release was sent out to the park's mailing list. The environmental assessment was made available to federal, state, and local regulatory agencies; local businesses; and interested individuals for their review. Public comments on the environmental assessment were collected via PEPC, email, and by mail through September 25, 2013.

A total of 267 pieces of correspondence were received during the public review period via email, hardcopy, or the PEPC website. The majority of commenters expressed concern regarding impacts to migratory birds as a result of the actions proposed for relocating the Bayside Picnic Parking Area. Correspondence was also received from a number of individuals and organizations supporting the removal and relocation of the South Ocean Beach Parking Area. Some commenters expressed concern regarding ADA accessibility to South Ocean Beach. A summary of the substantive comments received, along with NPS responses, are included as attachment B of this FONSI. A list of agencies and other entities that received a copy of the environmental assessment is provided in the environmental assessment.

## **COASTAL ZONE MANAGEMENT ACT CONSISTENCY DETERMINATION**

The State of Maryland Critical Area Commission Chesapeake and Atlantic Coastal Bays sent a letter to the Integrated Policy and Review Unit of the Maryland Department of Natural Resources in regards to the proposed project. They stated their requirement to review the proposed action for consistency under the Maryland Coastal Zone Management Act and included a checklist providing submittal details in order to do a thorough review. These details were submitted to the program in conjunction with the environmental assessment. As the selected alternative has been changed from the preferred alternative described in the EA and now contains elements of both the preferred and no-action alternatives, the park consulted with the state in January 2014 and agreed to submit a copy of this finding of no significant impact and an updated Coastal Zone Management Act Consistency Determination reflecting the selected alternative described within this document to the Integrated Policy and Review Unit of the Maryland Department of Natural Resources for their concurrence.

## **SECTION 106 COMPLIANCE**

No archeological resources or historic structures were identified in the project area. In accordance with 36 CFR §800.3(c), the park initiated Section 106 consultation with the Maryland State Historic Preservation Officer during initial public scoping. The Maryland State Historic Preservation Officer replied with concurrence that the proposed action would have no adverse effect on historic properties.

## **SECTION 7 DETERMINATION**

Special status species and/or habitat are not known to occur within the vicinity of the two parking areas. In accordance with Section 7 of the Endangered Species Act of 1973, the park initiated Section 7 consultation with the U.S. Fish and Wildlife Service during initial public scoping. The U.S. Fish and Wildlife Service replied with concurrence that the proposed actions would have no appreciable effect on federally-listed endangered or threatened species, candidate species, or other migratory birds.

**FINDING OF NO SIGNIFICANT IMPACT**

The NPS has selected elements of both the no action alternative and alternative B for implementation as described in this Finding of No Significant Impact. The selected alternative will not have a significant effect on the human environment. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, 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 NPS selected alternative will not violate any federal, state, or local environmental protection law.

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

Recommended: Deborah A. Darden 2/7/2014  
Deborah A Darden, Superintendent Date  
Assateague Island National Seashore

Approved: Michael A. Caldwell 2/19/2014  
for Michael A. Caldwell, Regional Director Date  
Northeast Region, National Park Service

## **ATTACHMENT A: NON-IMPAIRMENT DETERMINATION**

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of Interior and the NPS to manage units “to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations” (16 USC § 1). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that NPS must conduct its actions in a manner that will ensure no “derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress” (16 USC 1a-1).

NPS Management Policies 2006, Section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the Nation Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The NPS has discretion to allow impacts on Park resources and values when necessary and appropriate to fulfill the purposes of a Park (NPS 2006 sec. 1.4.3). However, the National Park Service cannot allow an adverse impact that would constitute impairment of the affected resources and values (NPS 2006 sec 1.4.3). An action constitutes an impairment when its impacts “harm the integrity of Park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values” (NPS 2006 sec 1.4.5). To determine impairment, the National Park Service must evaluate “the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts” (NPS 2006 sec 1.4.5).

This determination on impairment has been prepared for the selected alternative described in this FONSI. An impairment determination is made for all resource impact topics analyzed for the selected alternative. An impairment determination is not made for visitor experience, public health and safety, and park operations because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be 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.

### **COASTAL PROCESSES**

Under the selected alternative, resurfacing the Bayside Picnic Parking Area with a packed clay layer underlying a crushed clam shell surface in its current location has the potential to adversely impact coastal processes because continued efforts to maintain a parking area in a location subjected to natural coastal processes would reduce the area’s ability to maintain natural sediment transport by wind and wave action. The National Park Service will continue to allow natural processes to prevail, and not impede the effects of future storm events. The impacts to coastal processes will likely be minimal because the area of impact would be limited and would not impact a large portion of the sediment transport budget or the coastal processes along the seashore in general.

The removal and relocation of the South Ocean Beach Parking Area will result in beneficial impacts to coastal processes because permanent removal of the nearshore parking area will let coastal

processes return to a more natural state allowing natural sediment transport by wind and wave action.

The selected alternative will not result in impairment of coastal processes because the removal and relocation of the South Ocean Beach Parking Area will result in beneficial impacts to coastal resources. At the Bayside Picnic Parking Area, resurfacing the parking area in its current location has the potential for minimal adverse impacts to coastal processes by reducing the area's ability to maintain natural sediment transport by wind and wave action. These impacts will not result in impairment because the impacts in this localized area would be very small compared to the context of coastal processes along the seashore in general.

## **FLOODPLAINS**

At the Bayside Picnic Parking Area, under the selected alternative, no disturbance to floodplains would occur because the asphalt will be removed and the parking area will be resurfaced with a packed clay layer underlying a crushed clam shell surface in its existing location. Although this surface is not likely permeable, the clam shell surface will increase surface roughness of the parking area. Roughness is an important variable in measuring a surface's ability to convey water across the surface. A smoother surface, such as asphalt will convey water faster than a rough surface. Therefore, the proposed aggregate surface materials will continue to convey sheetflow into surrounding areas during precipitation events, but at a much slower rate than a paved asphalt surface. In addition, reduced sheetflow rates will reduce the risk of sedimentation and erosion. Changes in the quantity and quality of stormwater will not be measurable. These impacts will be adverse but will be negligible.

The relocation of the South Ocean Beach Parking Area to a site further inland will provide additional natural buffer from sheetflow from precipitation events.

The natural features that reduce flooding severity (wetlands and coastal topography) will continue to provide floodplain ecological services. This in turn will maintain the ability of wetlands to support floodplain functions to reduce flood severity, aid in sediment retention, and shoreline stabilization. The impact to floodplains associated with the selected alternative will be long-term and beneficial as a result of removing impermeable surface from floodplains, moving the South Ocean Beach parking area farther inland and increasing the size of its buffer on floodplain areas, and utilizing a surface that will reduce the risk of sedimentation during precipitation events. Although small in areal extent, these impacts are considered moderate because they will likely contribute noticeable benefits to the natural functioning of the floodplains in the vicinity of the existing parking areas.

For these reasons, the selected alternative will not result in impairment..

## **WETLANDS**

At the Bayside Picnic Parking Area, under the selected alternative, no disturbance to wetlands would occur because the asphalt will be removed and the parking area will be resurfaced with packed clay layer underlying a crushed clam shell surface in the parking area's existing location. Wetlands would continue to provide ecological services, such as supporting natural communities and various water quality and hydrological functions (e.g. flood severity reduction, sediment retention, nutrient cycling, and shoreline stabilization), and natural processes would continue to influence or disturb existing wetlands. The proposed new parking area surface will continue to convey sheetflow into surrounding areas during precipitation events, but at a much slower rate compared to a paved asphalt surface.

The removal and relocation of the South Ocean Beach Parking Area will likely have long-term beneficial impacts to wetlands because it will enhance wetland functions by slowing sheetflow during precipitation events, enhance the ability of wetlands to absorb these flows by decreasing the inflow rate, increase the size of the natural buffer area surrounding the new parking area relative to open water, and restore natural processes to the area currently occupied by the existing parking lot.

Wetlands adjacent to both parking facilities will receive sheetflows at lower rates, which will reduce the risk of sedimentation and erosion. This in turn will better maintain wetland functional values.

Implementation of the selected alternative will have negligible adverse impacts because some sediment will likely still be carried into adjacent wetlands; however, the reduced rate of sheetflow will likely result in long-term beneficial impacts to wetlands.

The selected alternative will not result in impairment of wetlands because the use of packed clay layer underlying a crushed clam shell surface at both parking areas will enhance wetland functions by slowing sheetflow during precipitation events and will enhance the ability of adjacent wetlands to absorb these flows by decreasing the inflow rate. Because any adverse impacts to wetlands resulting from sediment transport will be minimal and highly localized, these impacts will not result in impairment.

## ATTACHMENT B: SUBSTANTIVE COMMENTS WITH NPS RESPONSES AND ERRATA

Public comments received on the *Bayside Picnic and South Ocean Beach Parking Areas Removal and Relocation Environmental Assessment* were analyzed by reviewing each piece of correspondence, extracting comments according to the specific issue or concern expressed, grouping similar comments according to the issue or concern expressed and whether the issue was substantive (questioned, with a reasonable basis: the accuracy or adequacy of the environmental assessment; presented reasonable alternatives other than those contained in the environmental assessment; or caused changes or revisions in the proposal, requiring a response) or non-substantive (expressed a view or opinion, not requiring a response). Substantive comments are summarized below with the NPS responses and errata correcting the text of the environmental assessment, as applicable. This Finding of No Significant Impact, including comments received and responses, will be made available on the NPS Planning, Environment, and Public Comment (PEPC) website at <http://parkplanning.nps.gov/asis>.

Substantive comments on this environmental assessment were received on a variety of topics, including concern over handicap access to South Ocean Beach; the delineation of parking spaces; concerns over pedestrian safety when crossing the road at South Ocean Beach; the role of global warming; consideration of a shuttle system; and concern over impacts to migratory birds at the Bayside Picnic Parking Area. These issues are summarized below in concern statements and illustrated by representative comments from the public.

### RESPONSES TO SUBSTANTIVE COMMENTS

#### **Concern Statement: Concern was expressed over handicap access at South Ocean Beach**

**Representative Comment:** We have tried the handicapped access long walkway near the entrance, but it is a very long walk. We hope you will consider the ease of access to the South Beach versus possible storm damage. Could you not build up the dunes again to protect the parking area?

**Response:** The proposed access boardwalk at South Ocean Beach will be approximately 450 feet in length, which is comparable to the length of the walkway at North Ocean Beach. The National Park Service maintains a small artificial dune in the South Ocean Beach area to protect the adjacent parking lot and infrastructure. As the ocean shoreline continues to retreat, this dune system is constantly evolving and moving inland, rendering the current location of the parking area unsustainable.

#### **Concern Statement: Concern was expressed over the fact that individual parking spaces will not be delineated in the new parking areas**

**Representative Comment:** Having a parking lot without any designated spaces will be a free for all. I've worked at the rental stand for 5 years and know that the visitors can barely handle the marked areas. They already park between cars over the double white line. Without some marks they will park all over the place.

**Response:** As mentioned on page 29 of the environmental assessment, split rail fencing will be used to suggest parking spot locations and traffic circulation within the new South Ocean Beach Parking Area. Additionally, signage will be posted to indicate that back-in parking will not be permitted in the new parking area to help maintain the flow of traffic within the parking area. These same provisions will be taken at the resurfaced Bayside Picnic Parking Area. If the lack of designated parking spaces were to become an issue in the future, NPS staff will add additional signage to delineate parking spaces. The parking areas within the Tom's Cove Recreational Beach, farther south and within Chincoteague National Wildlife Refuge, is currently set up similarly and does not appear to be causing concerns.

**Concern Statement: Concern was expressed regarding climate change and the potential for future storms**

**Representative Comment:** Please Do Not Expand the Parking at Bayside Picnic and South Ocean Beach areas. With climate change, the storms will only increase looking forward - parking areas do not help in preserving the park into the future. Habitat restoration efforts could.

**Response:** Relocation of the South Ocean Beach parking area will allow the shoreline and dune system to evolve more naturally over time. The dunes at South Ocean Beach are part of a dynamic habitat. Efforts to maintain the existing South Ocean Beach parking area have impacted the natural evolution of the dune system. Relocation of the South Ocean Beach parking area will enable a portion of this habitat to respond naturally to changing conditions on the island. The Bayside Picnic Parking Area will remain in its current location for the present; as conditions change, relocation may be considered in future planning efforts, with opportunity for future public input.

**Concern Statement: Concern was expressed regarding public safety at South Ocean Beach**

**Representative Comment:** The South Beach Alt B parking proposal puts pedestrians at risk of ORV traffic, having the access path cut right across the road! All of those big trucks crossing by beach-goers would definitely serve up several safety issues! Let the sand wash over and clean it up, Ocean City does that every time a storm comes to the inlet.

**Response:** Public safety is a priority for the National Park Service. As noted on page 76 of the environmental assessment, due to current congestion and high visitation in the South Ocean Beach area, visitors are accustomed to slow traffic speeds and pedestrians crossing the road from the Life of the Dunes Parking Area to South Ocean Beach. As a result, it is not expected that there will be a change to existing conditions from moving the parking area across Bayberry Drive. Traffic speeds in the area are not expected to increase and the removal of the existing South Ocean Beach roundabout turnoff could reduce some driver confusion. Visitors will be encouraged to use the pedestrian walkways and cross at one of the two marked cross walks. Pavement rumble strips may also be added to Bayberry Drive to alert drivers to the new pedestrian crossings. As a result, the selected alternative will likely have some adverse impacts to public health and safety at the South Ocean Beach Parking Area but will not be expected to represent a significant change over current conditions.

**Concern Statement: Concern was expressed regarding the need to consider alternative transportation options within the national seashore**

**Representative Comment:** If the goal is to (1) reduce expenses on repeated (and ultimately futile) infrastructure repairs; (2) maintain or improve visitor experiences; (3) maintain as much vulnerable habitat as possible - the NPS should strongly consider moving to a shuttle system for visitors.

**Response:** The purpose and need for the project is detailed in chapter 1 of the environmental assessment. The potential for a future shuttle system within the park is being considered and evaluated under the current general management planning process. In the meantime, in order to continue to provide public access in the developed zone, parking in the designated two areas will continue until traditional means of access become unsustainable.

**Concern Statement: Concern was expressed regarding the removal of the Life of the Dunes Parking Area**

**Representative Comment:** Particularly distressing is the plan to remove the "Life of the Dunes" nature trail parking lot, with no reference to its replacement or, at the least, a staging area for it from a relocated (west?) South Ocean Beach parking lot.

**Response:** As described in the EA (p. 27), the proposed larger South Ocean Beach Parking Area will be designed to replace both the existing South Ocean Beach and Life of the Dunes Parking Areas. The new South Ocean Beach Parking Area will be constructed in place of the existing Life of the Dunes Parking Area and will contain 76 parking spaces. There will be no changes proposed to the Life of the Dunes Nature Trail as part of the proposed action.

**Concern Statement: Concern was expressed regarding the coastal zone buffer at the South Ocean Beach Parking Area**

**Representative Comment:** As proposed, it also appears that the South Ocean Beach parking area may be located within the 100-foot coastal zone buffer. This also would require buffer mitigation for any disturbance.

**Response:** The National Park Service did include the coastal zone buffer in considering locations, and the proposed location for the new South Ocean Beach Parking Area is well inland from the 100-foot buffer (see figures 2 and 9 in the EA). Therefore, the National Park Service is compliant with requirements and does not anticipate the need for buffer mitigation.

**Concern Statement: Concern was expressed regarding the removal of vegetation and relocation of the Bayside Picnic Parking Area**

The park received over 260 correspondences regarding the Bayside Picnic Parking Area. Of these, approximately 250 correspondences addressed concern over impacts to migratory birds as a result of the construction of the proposed Bayside Picnic Parking Area in the area to which it was to be relocated. The vast majority of these correspondences touched on the following six concerns:

- The environmental assessment did not adequately assess the impact of the Bayside Picnic Parking Area relocation on migratory bird habitat in the new location.
- Extensive avian monitoring has been completed at the Bayside Picnic area that demonstrates the significance of the woodland/shrub-scrub habitat. This information was not considered in the environmental assessment.
- The selected alternative is inconsistent with the fundamental goals of the project that were included in the environmental assessment.
- Removal of a portion of the existing parking lot and restoration of habitat would not replace the value of the habitat lost in building the new parking lot.
- Alternatives that would have lesser impact to migratory bird habitat were not fully considered.
- Additional time and opportunity for public input and comment on the proposed alternatives needs to be provided.

**Representative Comment:** I have conducted research on dung beetles on Assateague Island for the last couple of years. I am convinced that any removal of trees from Assateague would be detrimental to the already fragile ecosystem of the island habitats.

**Representative Comment:** Perhaps the concessions could be moved to another location within the park, thereby alleviated a good portion of the vehicle traffic to this area? In this way, the park could resurface the eastern half of the current parking lot and retain it as public parking, while allowing the western portion of the lot to be returned to a more natural state and provide the increased buffer needed from storm impacts. Another possible scenario would be to keep the concessions activity, but instead of relocating the entire parking lot only remove the western portion, and extend the eastern portion into just a small area of the adjacent shrub-scrub woods.

**Response:** The National Park Service has reevaluated relocating a new parking area at the Bayside Picnic Area, and will maintain this parking area within its existing location. Any future changes and/or

repairs of the existing Bayside Picnic Parking Area will require future compliance with the National Environmental Policy Act. The public would be given the opportunity to provide further input on any future plans for the area. At this time, the National Park Service will proceed under a modified alternative at the Bayside Picnic Area that includes elements from both the no action alternative and alternative B, as discussed within this finding of no significant impact. The Bayside Picnic Parking Area will be closed during the construction timeframe (expected to be approximately 30 days). There will be short-term, minor adverse effects to visitors and wildlife during construction while the asphalt is removed, and the packed clay layer underlying a crushed clam shell surface is installed. Other effects during use of the parking area will be similar to existing conditions. None of these effects will be significant.

Additionally, expansion of the existing parking area was not considered due to concerns regarding compliance with the Maryland Coastal Zone Management Program. Coastal Resources Policy 9 requires that any new development within the Critical Area (in which the Bayside Picnic Parking Area is located) requires "a minimum 100 foot vegetated buffer shall be maintained landward from the mean high water line of tidal waters..." Due to the proximity of the existing Bayside Picnic Parking Area to the high water line of the Chincoteague Bay, any modifications or improvements that would expand the existing footprint would initiate the need to comply with this policy. Due to the proximity of the lot to the water line, compliance with the 100 foot vegetated buffer component of this policy, among others, would not be possible. Therefore, these alternative options were not further considered for the project.

ATTACHMENT C: FLOODPLAIN STATEMENT OF FINDINGS

National Park Service  
U.S. Department of the Interior



Assateague Island National Seashore  
Maryland

STATEMENT OF FINDINGS  
FOR  
EXECUTIVE ORDER 11988 (FLOODPLAIN MANAGEMENT)

Bayside Picnic and South Ocean Beach Parking Areas Removal and Relocation Project  
PMIS #194834 & PMIS #194874; NPS Disaster Number MD2013-1-NPS  
Assateague Island National Seashore

Recommended: *Deborah A. Darden* 1/15/2014

Superintendent, Assateague Island National Seashore

Certification of Technical Adequacy and Servicewide Consistency

Chief, Water Resources Division *F. Elvin Hawley* 1/24/2014

Approved:

*[Signature]*  
Director, Northeast Region *[Signature]* 2/19/14

## INTRODUCTION

Situated in a dynamic coastal environment that includes rising sea levels, Assateague Island National Seashore is planning to remove the existing asphalt at the Bayside Picnic Parking Area and resurface with a packed clay layer underlying a crushed clam shell surface in its current location and to relocate the South Ocean Beach Parking Area. These actions will address damages incurred during Hurricane Sandy in October 2012 and mitigate for long-term environmental effects.

Hurricane Sandy affected 24 states from Florida to New England causing hundreds of millions of dollars of damage to property. Between October 26 and 30, 2012, President Obama issued Major Disaster declarations in the states of New Hampshire, New York, and Connecticut; and Emergency declarations in the states of New Hampshire, Virginia, West Virginia, Delaware, Rhode Island, Pennsylvania, Maryland, Massachusetts, and the District of Columbia. These declarations in the states of New York, New Jersey, and Maryland entitle eligible projects to receive relief through the Emergency Relief for Federally Owned Roads Program which supports the federal response to the disasters and emergencies. Established in 1977, the mission for the Emergency Relief for Federally Owned Roads' Program is to provide funding and engineering services to restore access to public lands.

This statement of findings has been prepared in accordance with Executive Order 11988 (*Floodplain Management*), NPS Director's Order #77-2, and *Floodplain Management and Procedural Manual #77-2*. The statement of findings summarizes the floodplain development associated with actions to resurface and/or relocate the two parking areas within Assateague Island National Seashore. Assateague Island National Seashore and the parking area project locations are shown on figure 1 below. The statement of findings also describes the reasons why encroachment into the floodplain is required to implement the project, the site-specific flood risks involved, and the measures that will be taken to mitigate floodplain impacts.

### Proposed Action

Action is needed to address the erosion and encroachment of shorelines on the asphalt and amenities at both Bayside Picnic Parking Area and South Ocean Beach Parking Area which serve as a source of manmade debris into Chincoteague Bay, the Atlantic Ocean, and along the surrounding shoreline. The proposed action is also needed to reduce the vulnerability of the parking areas to reoccurring storm activity and damage and thereby reduce the burden on park operations resulting from the required clean up and repair. Additionally, prolonged parking area closures that result from reoccurring storm damage limit the national seashore's ability to provide high quality resource based recreational opportunities to the public. A description of the proposed action for each of the parking areas is provided in the paragraphs that follow.

**Bayside Picnic Parking Area (PMIS 194834)** – At the Bayside Picnic Parking Area, all of the asphalt will be removed and the parking area will be resurfaced with a packed clay layer underlying a crushed clam shell surface in its current location (see figure 6 of the environmental assessment). The resurfaced parking area will remain in the current footprint. Due to the surfacing material, parking spots will not be delineated with paint, but the parking area will accommodate approximately the same number of vehicles as it does currently.

Removal of asphalt and resurfacing of the parking area will require the use of mechanized equipment. Potential sources for fill include the park's existing stock piles of natively sourced fill or locally acquired crushed road base. Any excess of native fill would be transported to the park's stock pile for use in future projects. Staging for construction will be located in the existing Bayside Picnic Parking Area and/or other nearby parking areas in the national seashore. Construction will take place during the off season when visitation is comparatively lower. The Bayside Picnic Parking Area will be closed for approximately 30 days during construction.

Existing asphalt will be disposed of properly offsite. Maintenance of the aggregate mix will require monthly grading by park staff during the peak season and occasional resurfacing with clam shells.

**South Ocean Beach Parking Area (PMIS 194874)** – The initial damage survey reports prepared for this project identified replacement in kind, to include removal of sand, repair pavement and curb, replace curb stops, restore parking islands, and replace pavement markings. However, this 66 car parking area continues to be enveloped by sand as the barrier island is influenced by ocean currents. The national seashore, therefore, plans to remove the Life of the Dunes Nature Trail Parking Area and relocate the South Ocean Beach Parking Area. In addition, rather than surface the parking area with asphalt, the national seashore will surface the parking area with a packed clay layer underlying a crushed clam shell surface. Due to the surfacing material, parking spots will not be delineated with paint, but the new parking area will be designed to accommodate approximately 76 vehicles, including two oversized vehicles. The location of the South Ocean Beach Parking Area project is shown on figure 3.

Construction of the new parking area will require the use of mechanized equipment and could require the need to import or export fill in order to recontour the new parking area accordingly. As with the Bayside Picnic Parking Area relocation, potential sources for fill include the park's existing stock pile of natively sourced fill or locally acquired crushed road base. Any excess of native fill will be transported to the park's stock pile for use in future projects. Staging for removal of the Life of the Dunes Nature Trail Parking Area and construction of the new South Ocean Beach Parking Area will be located in the existing South Ocean Beach Parking Area and/or other nearby parking areas in the national seashore. Construction will take place during the off season when visitation is comparatively lower. The new South Ocean Beach Parking Area will be constructed before removal of the existing parking area commenced in order to minimize closure of the area to visitors.

Following construction of the new parking area, the existing South Ocean Beach Parking Area will be removed and restored. Restoration will include filling and recontouring the area to meet existing grade. Any fill not available on site will be imported from the park's existing stock pile of natively sourced fill. Portions of the restored area will then be allowed to naturally revegetate. Existing park staff will monitor and manage for any invasive plant species that may occur in the area.

As mentioned above, maintenance of the aggregate mix will require monthly grading by park staff during the peak season and occasional resurfacing with clam shells. No asphalt will be used at the South Ocean Beach Parking Area.

### **Brief Site Description**

Assateague Island National Seashore encompasses a 37-mile long barrier island, adjacent marsh islands and waters in Maryland and Virginia, and the Barrier Island Visitor Center on the Maryland mainland. On September 21, 1965, Public Law 89-195 established Assateague Island National Seashore as a unit of the National Park System to protect the natural resources and recreational values of Assateague Island and adjacent coastal waters. The authorized boundary includes approximately 48,700 acres of land and water in Maryland and Virginia. Of this, 8,400 acres in Virginia are managed as Chincoteague National Wildlife Refuge, and 600 acres are managed as Assateague State Park in Maryland. The mission of the national seashore is to preserve the unique coastal resources of Assateague Island and the natural ecosystem conditions and processes upon which they depend, while providing high quality resource-based recreational and educational opportunities.

The Bayside Picnic Parking Area is located on Chincoteague Bay, just west of the Bayside Camping Area, and at the terminus of Bayside Drive. Bayside Drive turns west off of Bayberry Drive approximately ¼ mile south of the national seashore entrance station. The parking area provides access to various activities on Chincoteague Bay including boating, shellfishing, sunbathing, and picnicking, to name a few.

The South Ocean Beach Parking Area is located approximately 1 ¼ miles south of the national seashore entrance station to the southeast of the roundabout. The parking area provides access to South Ocean Beach and the paved bike path along Bayberry Drive. The Life of the Dunes Nature Trail Parking Area is located approximately 1 ¼ miles south of the national sea-shore entrance and to the southwest of the roundabout. The parking area provides access to the Life of the Dunes Nature Trail and the bike path. This parking area also serves as overflow for South Ocean Beach during peak visitation.

## **JUSTIFICATION FOR THE USE OF THE FLOODPLAIN**

Removal of asphalt and the resurfacing and/or relocation of the parking areas within the 100-year floodplain is needed for the following reasons:

- The entirety of Assateague Island falls within the 100-year floodplain and therefore any proposed repairs to existing or construction of new parking areas within the national seashore would fall within the floodplain. The proposed locations for the new South Ocean Beach Parking Area, while in the 100-year floodplain, would be less susceptible to the factors listed below.
- The existing parking area locations are vulnerable to reoccurring storm activity and susceptible to damage. Figure 5 shows representative photographs of overwash and storm surge just after Hurricane Sandy in October 2012.
- The necessary clean up and repair to the parking areas required after reoccurring storm events places a burden on park operations.
- Prolonged parking area closures limit the national seashore's ability to provide high quality resource based recreational opportunities to the public.
- The continued erosion and encroachment of asphalt materials at the Bayside Picnic Parking Area serves as a source of manmade debris into Chincoteague Bay, the Atlantic Ocean, and along the surrounding shoreline.
- Maintaining the current location of the South Ocean Beach Parking Area is altering the evolution of landforms on the island by preventing the natural inland migration of the adjacent sand dunes.

## **FLOOD RISK**

Both parking areas are within the mapped 100-year floodplain, as shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) map number 2400830200C. The Federal Emergency Management Agency is currently updating floodplain maps for Worcester County, Maryland and the revised maps are anticipated to be released in the latter half of 2013. The entirety of Assateague Island is within the 100-year floodplain. There are two 100-year floodplain zones within the Assateague Islands National Seashore (see figure 4). The first zone, labeled A-12 on FEMA maps, has a 100-year floodplain at 8.0 feet National Geodetic Vertical Datum of 1929 (NGVD29). This zone constitutes most of the bayside area on the island, and covers the Bayside Picnic Parking Area. The major source of flooding on this side is overwash from Chincoteague Bay. Immediately adjacent to the parking area project, estuarine wetlands, particularly along the northern shoreline of the peninsula provide shoreline stabilization function and reduce flood potential (by allowing for water storage during surges) (see figure 2 below). These wetlands would not be impacted by resurfacing of the Bayside Picnic Parking Area with a packed clay layer underlying a crushed clam shell surface.

The second zone on the FEMA mapping is zone V-7, a zone where floodplain elevation is known to be influenced by wave action. This zone is isolated to the dune and beach area along the ocean side of the island and has a 100-year floodplain at 12.0 feet NGVD29 (FEMA 1992). The South Ocean

Beach Parking Area is within zone V-7. The primary source of flooding at this location is from the ocean, with potential for minor flooding from Chincoteague Bay. The bayside of the South Ocean Beach Parking Area, however, is protected by several hundred feet of forested and scrub-shrub intertidal estuarine wetlands and estuarine emergent marshes (see figure 3). Within the immediate vicinity of the proposed parking relocation, interdunal palustrine wetlands are found which may help ameliorate overwash conditions. These wetlands would not be impacted or disturbed by the proposed removal and relocation proposed action.

Flooding on the 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, particularly along the shoreline. Hurricanes can cause severe flooding, wind damage, and extensive beach erosion. Heavy surf and high tides can breach dunes, and inlets may be cut by flood tides trapped in bay areas. Facilities may be severely damaged or destroyed, roads and bridges washed out, and utilities damaged.

Assateague Island National Seashore supports a number of natural features that reduce flooding severity. For example, estuarine wetlands along the western shoreline of the island provide various functions, such as flood flow storage and sediment retention. Dunes along the seashore impede storm surge, and interdunal wetlands and other depressions also function to store water during overwash or large precipitation events. Beach dunes are typically formed through the trapping of sand by dune vegetation, and in the absence of vegetation, dunes may “migrate,” moving with the prevailing wind direction. Vegetation such as American beachgrass (*Ammophila breviligulata*), adapted to rapid sand accumulation, sandblast, wind and water erosion, wind temperature fluctuations, and saltspray, facilitate dune stabilization along Assateague Island. Stabilized, non-migratory dunes provide flood protection services by preventing blowouts and impeding overwash. Dunes are present near the South Ocean Beach Parking Area and appear to be relatively stable. Dunes are not present near the Bayside Picnic Parking Area.

Dynamic and challenging weather conditions are typical for the national seashore. Storms continuously reshape the landscape. The Atlantic hurricane season begins on June 1 and continues through November 30 each year, and these dates encompass over 97% of tropical activity (NOAA 2013). The peak season runs from August through October, with 78% of the tropical storm days, 87% of the minor hurricane days, and 96% of the major storms. The number of tropical storms (sustained winds between 39 and 73 mph) occurring each season may vary from 4 to 12. At Ocean City, Maryland, just north of the park, tropical storms occur on average every 2.8 years, and direct hurricane hits occur about every 16 years. The longest gap between storms was reported between 1904 and 1916, a period of 11 years (Hurricane City 2013). The average sustained winds from hurricanes are 90 miles per hour (Hurricane City 2013). The hurricane of late August 1933 turned the Assateague peninsula into an island (The Assateague Naturalist 2011). Waves greater than 20 feet high swept over the dunes and into the bays on the west side of Assateague Island. An inlet was forged at Ocean City that remains today. After the March 1962 nor'easter, resort development stopped on Assateague Island, and in 1962, it became a national seashore (NPS 2011). During the 1962 storm, massive waves rushed over the dunes on the island and spilled into Chincoteague Bay (The Assateague Naturalist 2011). The Chincoteague causeway partially blocked the retreat of the flood waters. In 1998, two nor'easters occurred in January and February. During the first storm, the Chincoteague causeway was closed for five hours. During the second storm, Beach Drive, which crosses over the Sheepshead Creek Bridge, was closed due to flooding and the Chincoteague causeway was again closed for several hours (The Assateague Naturalist 2011). In August 1999, Hurricane Dennis sent large surf to Assateague Island. The island was overwashed in some areas, and the overwash sent water into Swan Cove, which had been nearly empty prior to the storm (The Assateague Naturalist 2011). In September 1999, the eye of hurricane Floyd passed over the area and weakened to a tropical storm (Hurricane City 2013). Hurricane Irene caused minor damage in the area of Ocean City in August, 2011. Hurricane Sandy caused flooding and damage (see also Introduction) with a reported storm surge of 4.33 feet in Ocean City (Hurricane City 2013).

## MITIGATION OF RISK TO PEOPLE AND STRUCTURES

The proposed action is within a Class III regulatory floodplain, a designation for High Hazard Areas. Assateague Island National Seashore has a hurricane and flooding plan that would direct emergency actions and evacuations in the event of flooding. At the appropriate times visitors would be removed from the site and the site would be closed until potentially hazardous conditions subsided. Further, structures such as the canoe and kayak rental concession stand located near the Bayside Picnic and Parking Area will be mounted on a towable trailer and moved during storm events. The structures and parking areas are designed using materials that have the least possible impact to natural resources, property, and human life.

The new South Ocean Beach Parking Area location will be located further inland and, therefore, will be less subject to inundation and storm surge effects. For instance, the new location of the South Ocean Beach Parking Area is behind a system of stabilized dunes, where the current location is between these dunes and the foredunes of the primary beach area. Therefore, hazard to life and property from flooding will be reduced.

The impacts to the natural resources and functions of the floodplain will be enhanced by the resurfacing and/or removal and relocation of the parking areas. The floodplain will be enhanced by removing asphalt and relocating the South Ocean Beach Parking Area further inland. The location of the new South Ocean Beach Parking Area is less subject to natural dynamic coastal processes such as sand migration, sea level rise, shoreline erosion, and over wash because it is further inland. The Bayside Picnic and South Ocean Beach Parking Areas will both be located in previously developed areas. As stated previously, neither project would remove wetlands delineated in May 2013 (see Appendix D: Wetlands Statement of Findings in the environmental assessment).

## SUMMARY

The National Park Service finds that the parking area resurfacing and/or relocations at Assateague Islands National Seashore are essential for public use and safety, despite the fact that the parking areas will be located in flood-prone areas. The National Park Service also finds that in reconstructing the facilities, there are no practicable alternatives for locating the parking areas outside of the floodplain since the entire Assateague Island is within the 100-year floodplain. However, a number of mitigation measures will serve to reduce short-term and long-term impacts of the construction and operation of the parking areas on floodplain resources and functions. These measures include site specific storm water management planning and best management practices, spill prevention and response planning, and avoidance of wetlands during construction. This project is consistent with the policies and procedures of NPS Director's Order #77-2 (Floodplain Management) and Executive Order 11988.

## REFERENCES

Assateague Naturalist, The

- 2011 The Great Hurricane of 1933, the Ash Wednesday Storm of 1962, the 1998 Nor'easters, and Hurricane Dennis (1999). Available on the Internet at <<http://www.assateague.com/>>.

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Hurricane City

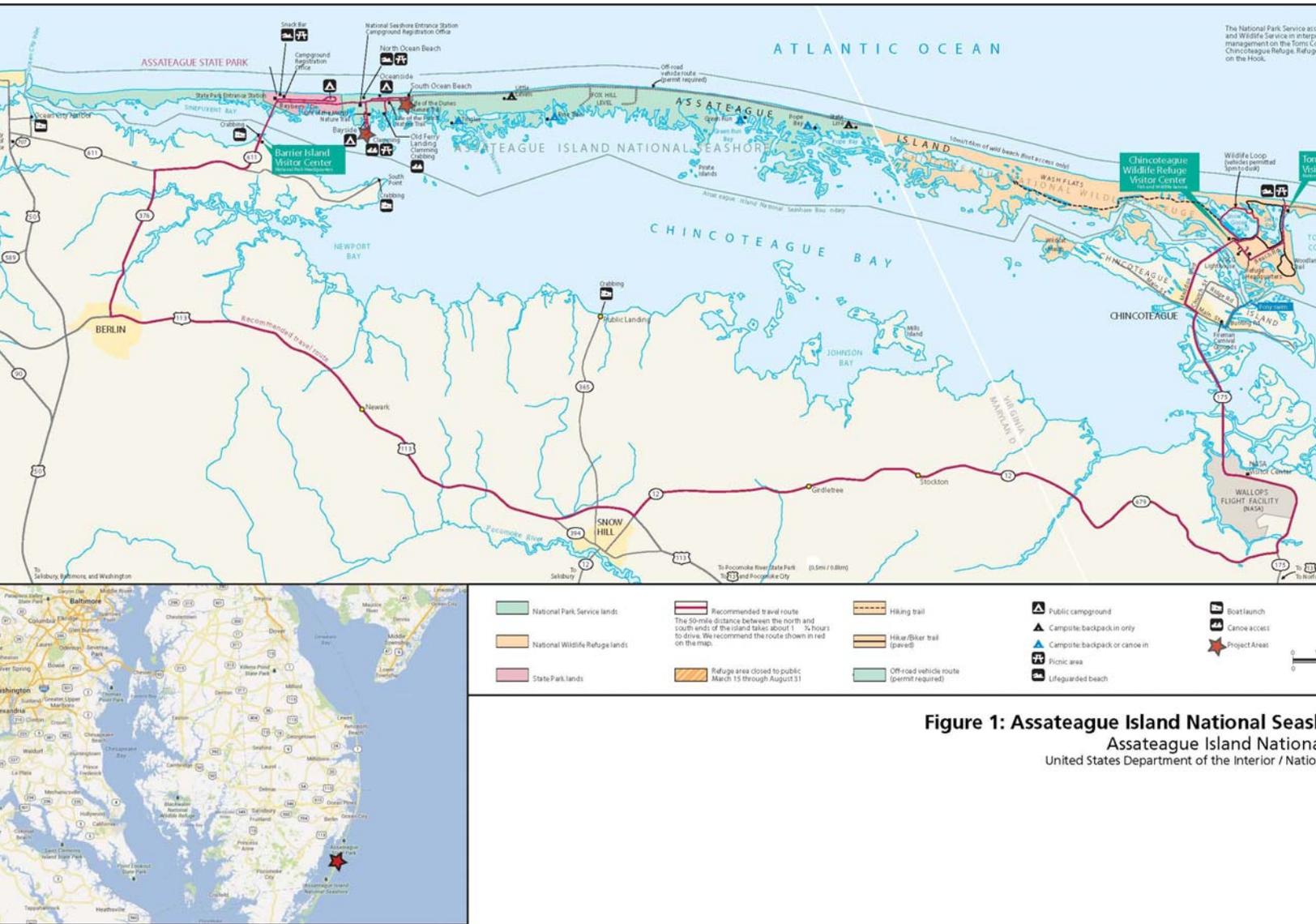
- 2013 Ocean City (including Assateague Island), Maryland's history with tropical storm systems. Available at: <http://www.hurricanecity.com/city/oceancity.htm>.

National Oceanic and Atmospheric Administration, Atlantic Oceanographic and Meteorological Laboratory (NOAA)

- 2013 Hurricane Research Division, Frequently Asked Questions. Available on the Internet at <<http://www.aoml.noaa.gov/hrd/tcfaq/G1.html>. July 16>.

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- 2011 Assateague Island National Seashore, Natural Resource Condition Assessment. Maryland, Virginia. Natural Resource Report NPS/ASIS/NRR—2011/405.



**Figure 1: Assateague Island National Seashore**  
 Assateague Island National Seashore  
 United States Department of the Interior / National Park Service

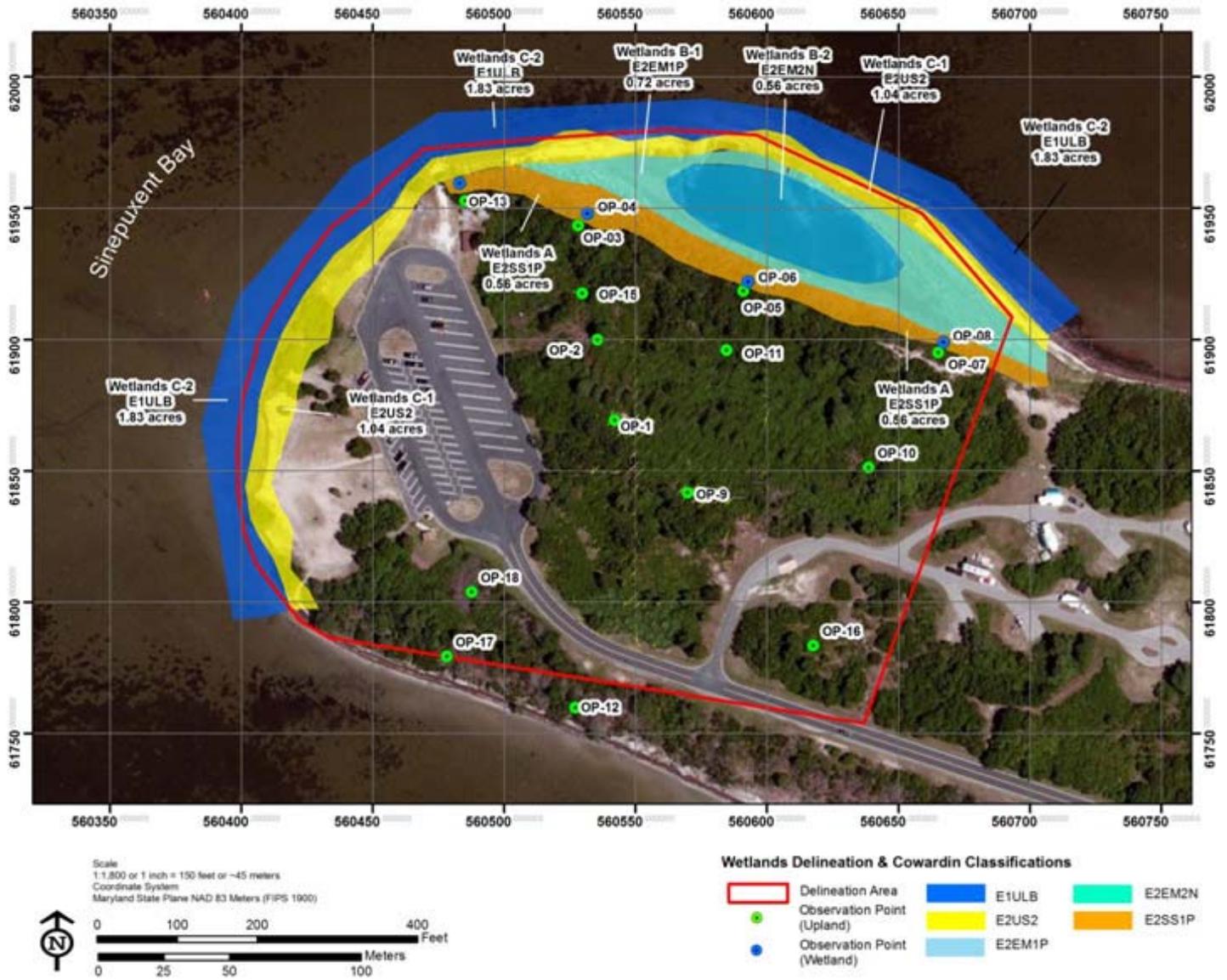
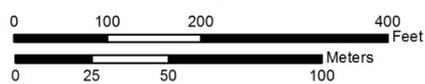


Figure 2: Bayside Picnic Parking Area



Scale  
 1" = 150 feet or ~45 meters  
 Coordinate System  
 Maryland State Plane NAD 83 Meters (FIPS 1900)



**Proposed Parking Area**

- Proposed silt fence installation
- Proposed parking area footprint

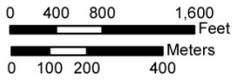
**Wetlands Delineation & Cowardin Classifications**

- Delineation Area
- Observation Point (Upland)
- Observation Point (Wetland)
- PEM1J
- PSS3/4E
- E2SS1P

**Figure 3: South Ocean Beach Parking Area and Relocation Area**



Scale  
 1:16,000 or 1 inch = 1,330 feet or ~405 meters  
 Coordinate System  
 Maryland State Plane NAD 83 Meters (FIPS 1900)



**Proposed Parking Area**

 Proposed parking area footprint

**100-Year Floodzone**

-  Zone A-12: 100-year floodplain at 8 feet NGVD29
-  Zone V-7: 100-year floodplain at 12 feet NGVD29

**Figure 4: South Ocean Beach Parking Area**



**Figure 5: Representative Photographs of Overwash and Storm Surge Effects  
After Hurricane Sandy**

(Left Panel: Existing Bayside Picnic Parking Area inundated with water shortly after Hurricane Sandy. Right Panel:  
The existing South Ocean Beach Parking Area completely covered with sand.)