



National Park Service
U.S. Department of the Interior
Cape Hatteras National Seashore
Bodie Island District

Oregon Inlet Marina Improvements

Site Plan and Environmental Assessment

March 2021



NPS Photo

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**US Department of the Interior
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Cape Hatteras National Seashore
Oregon Inlet Marina**

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Oregon Inlet Marina (also known as Oregon Inlet Fishing Center) is a commercial charter fishing marina located within Cape Hatteras National Seashore (Seashore), south of Nags Head, North Carolina in the region of barrier islands known as the Outer Banks (Figure 1). As part of the National Park Service (NPS) system, the Seashore has permitted or contracted fishing center and marina operations at Oregon Inlet since 1953 and the marina has been in operation in its current location since December 1956.

Oregon Inlet Marina (marina) is currently operated by Oregon Inlet Fishing Center, LLC (OIFC or lessee) under a 20-year lease with the NPS (2018 – 2038). In general, OIFC provides the following services at the marina: slip rentals for charter fishing boats, headboats and tour boats; booking services for charter fishing and other boats; retail sales; fuel sales; and food & beverage sales. OIFC is also authorized to provide: non-motorized watercraft rentals (such as kayaks and canoes); special events, such as fishing tournaments; and a children's play area. Under the terms of the lease with the NPS, OIFC is responsible for the repair and maintenance of the marina premises during the lease term. Additionally, the lease requires that any alterations to the marina conducted by the lessee (as defined in the lease, including construction, modifications, rehabilitation, reconstruction, and/or restoration of the lease premises) be undertaken at OIFC's expense and approved by the NPS.

The marina premises is +/- 11.3 acres and consists of a retail building, marina basin with 61 wet slips, maintained landscape area (~ 1 acre), storage buildings, an exhibit building, asphalt parking area, fuel station booth, waste water systems, and a fuel system.

In coordination with OIFC, the NPS has prepared this Site Plan and Environmental Assessment (EA) in order to evaluate strategies for the lessee to replace vulnerable structures and to conduct site improvements at the marina. This project is focused on replacing existing buildings, improving safety and pedestrian/vehicle circulation at the site, and conducting additional site improvements to support the replacement buildings and to modernize the marina premises (project area). The project aims to address the following key issues:

- The main marina building was constructed 1963 - 1964 and all of the buildings within the marina are in poor condition and vulnerable to storm surge and sea level rise
- The location of the marine fuel docks causes boat traffic congestion and safety hazards within the marina basin
- The existing improved parking areas are inadequate to meet customer, visitor and employee needs
- Existing pathways and driveways do not support safe and efficient pedestrian and vehicle traffic flows
- The existing viewshed, including the outbuildings and dumpsters on the northwest side of the main marina building, detract from the visitor experience and views in this area of the Seashore

- Some marina slips are too shallow to accommodate charter fishing boats and the marina will require maintenance dredging in the future

This EA evaluates two alternatives: the (A) no-action alternative and (B) the proposed action/preferred alternative. This EA analyzes the potential impacts these alternatives would have on the natural, cultural, historic, and human environment within the project area. In accordance with the terms of the marina lease, and with NPS approval and oversight, the lessee would be responsible for the actions described in this EA under either alternative.

The no-action alternative (Figure 2) would continue current management of the marina, including maintenance of the structures and premises in accordance with the terms of the lease. While the marina is currently operating, the NPS and lessee have determined that, due to its poor condition and vulnerability to sea level rise and storm surge, routine maintenance of the existing main marina building will not be sufficient to enable continued operation of the marina through the term of the current lease (until 2038) or beyond. Therefore, the no-action alternative would involve repairing the main marina building, including raising the retail section to comply with local and Federal Emergency Management Act (FEMA) guidance. This alternative would also include maintenance dredging of the existing marina basin in order to enable continued use of the marina during the term of the lease. This alternative would leave all other site elements as they are today, with only general maintenance of buildings and grounds, performed by the lessee, on an as-needed basis.

The proposed action/preferred alternative (Figure 3) would include demolishing and replacing and elevating all the existing marina buildings within the project area and conducting other site improvements, including: formalizing informal parking areas and adding a driveway for air pump stations; upgrading the fuel system with in-slip fueling, a new transient fuel dock (including associated dredging) and placing the vehicle fuel area in a new location with a new driveway that improves connectivity and flow to the adjacent boat ramp parking area; adding pedestrian paths and boardwalks; maintenance dredging of the existing marina basin; formalizing stormwater management infrastructure to handle runoff from impervious surfaces; and adding a new wastewater pump station and drainfield.

After a careful analysis of the impacts the implementation of the proposed project would have on the project area and after consultation with the appropriate local, state and federal agencies, the EA discloses that the proposed project/preferred alternative would have little to no adverse impact on floodplains, visitor use and experience, marine mammals and sea turtles.

Note to Reviewers and Respondents:

This EA will be on formal public and agency review for 30 days from the release date. If you wish to comment, please provide comments on the park's website at <https://parkplanning.nps.gov/projectHome.cfm?projectId=90742> or by mailing to the name and address below. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

David E. Hallac, Superintendent, National Parks of Eastern North Carolina
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CHAPTER 1: PURPOSE AND NEED FOR ACTION

Introduction

Oregon Inlet Marina (also known as Oregon Inlet Fishing Center) is a commercial charter fishing marina located within Cape Hatteras National Seashore (Seashore), south of Nags Head, North Carolina in the region of barrier islands known as the Outer Banks (Figure 1). As part of the National Park Service (NPS) system, the Seashore has permitted or contracted fishing center and marina operations at Oregon Inlet since 1953 and the marina has been in operation in its current location since December 1956.

Oregon Inlet Marina (marina) currently is operated by Oregon Inlet Fishing Center, LLC (OIFC) under a 20-year lease with the NPS (2018 – 2038). In general, OIFC provides the following services at the marina: slip rentals for charter fishing boats, headboats and tour boats; booking services for charter fishing and other boats; retail sales; fuel sales; and food & beverage sales. OIFC is also authorized to provide: non-motorized watercraft rentals (such as kayaks and canoes); special events, such as fishing tournaments; and a children's play area. Under the terms of the lease with the NPS, OIFC is responsible for the repair and maintenance of the marina premises during the lease term. Additionally, the lease requires that any alterations to the marina conducted by the lessee (as defined in the lease, including construction, modifications, rehabilitation, reconstruction, and/or restoration of the lease premises) be undertaken at OIFC's expense and approved by the NPS. The marina provides premier charter fishing experiences and OIFC estimates more than 600,000 visits to the marina in 2019 based on sales of charter fishing trips and retail sales receipts.

In coordination with the lessee, the NPS is preparing this Site Plan and Environmental Assessment (EA) in order to evaluate strategies for the lessee to replace vulnerable structures and conduct site improvements at the marina. This project is focused on replacing existing buildings, improving safety and pedestrian/vehicle circulation at the site, and conducting additional site improvements to support the replacement buildings and modernize the marina premises (project area). The project aims to address the following key issues:

- The main marina building was constructed 1963 - 1964 and all of the buildings within the marina are in poor condition and vulnerable to storm surge and sea level rise
- The location of the marine fuel docks causes boat traffic congestion and safety hazards within the marina basin
- The existing improved parking areas are inadequate to meet customer, visitor and employee needs
- Existing pathways and driveways do not support safe and efficient pedestrian and vehicle traffic flows
- The existing viewshed, including the outbuildings and dumpsters on the northwest side of the main marina building, detract from the visitor experience and views in this area of the Seashore
- Some marina slips are too shallow to accommodate charter fishing boats and the marina will require maintenance dredging in the future

This EA evaluates two alternatives: the (A) no-action alternative and (B) the proposed action/preferred alternative. In accordance with the terms of the marina lease, and with NPS approval and oversight, the lessee would be responsible for the actions described in this EA under either alternative.

The no-action alternative (Figure 2) would continue current management of the marina, including maintenance of the structures and premises in accordance with the terms of the lease. While the marina is currently operating, the NPS and lessee have determined that, due to its poor condition and vulnerability to sea level rise and storm surge, routine maintenance of the existing main marina building will not be sufficient to enable continued operation of the marina through the term of the current lease (until 2038) or beyond. Therefore, the no-action alternative would involve repairing the main marina building, including raising the retail section to comply with local and FEMA guidance. This alternative would also include maintenance dredging of the existing marina basin in order to enable continued use of the marina during the term of the lease. This alternative would leave all other site elements as they are today, with only general maintenance of buildings and grounds, performed by the lessee, on an as-needed basis.

The proposed action/preferred alternative (Figure 3) would include demolishing and replacing all the existing marina buildings within the project area and conducting other site improvements, including: formalizing informal parking areas and adding a driveway for air pump stations; upgrading the fuel system with in-slip fueling, a new transient fuel dock (including associated dredging) and placing the vehicle fuel area in a new location with a new driveway; adding pedestrian paths and boardwalks; maintenance dredging of the existing marina basin; formalizing stormwater management infrastructure to handle runoff from impervious surfaces; and adding a new wastewater pump station and drainfield.

These alternatives are described in detail in Chapter 2: Alternatives.

This EA analyzes the potential impacts these alternatives would have on the natural, historic, and human environment. This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [USC] 4332[2] [C]); the implementing regulations of the 2020 Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] 1500-1508.9); the Department of the Interior NEPA regulations (43 CFR Part 46); and NPS Director's Order #12: Conservation Planning, Environmental Impact Analysis and Decision-Making (NPS 2011) and the accompanying NEPA Handbook (NPS 2015).

Project Area Location and Description

In 1937, Cape Hatteras became the first national seashore. It was designated to preserve dynamic barrier islands and its unique vegetation, wildlife and coastal processes, and to provide recreation and enjoyment for the public. Stretching over 70 miles from north to south, the Seashore crosses three islands: Bodie, Hatteras, and Ocracoke in the region known as the Outer Banks.

Oregon Inlet Marina is a commercial charter fishing marina located in the Bodie Island District of the Seashore. The marina is located just south of the town of Nags Head, North Carolina, just north of the Marc Basnight Bridge, adjacent to United States Coast Guard Station Oregon Inlet and an NPS public boat ramp, and across NC-12 from the NPS Oregon Inlet Campground (Figure 1).

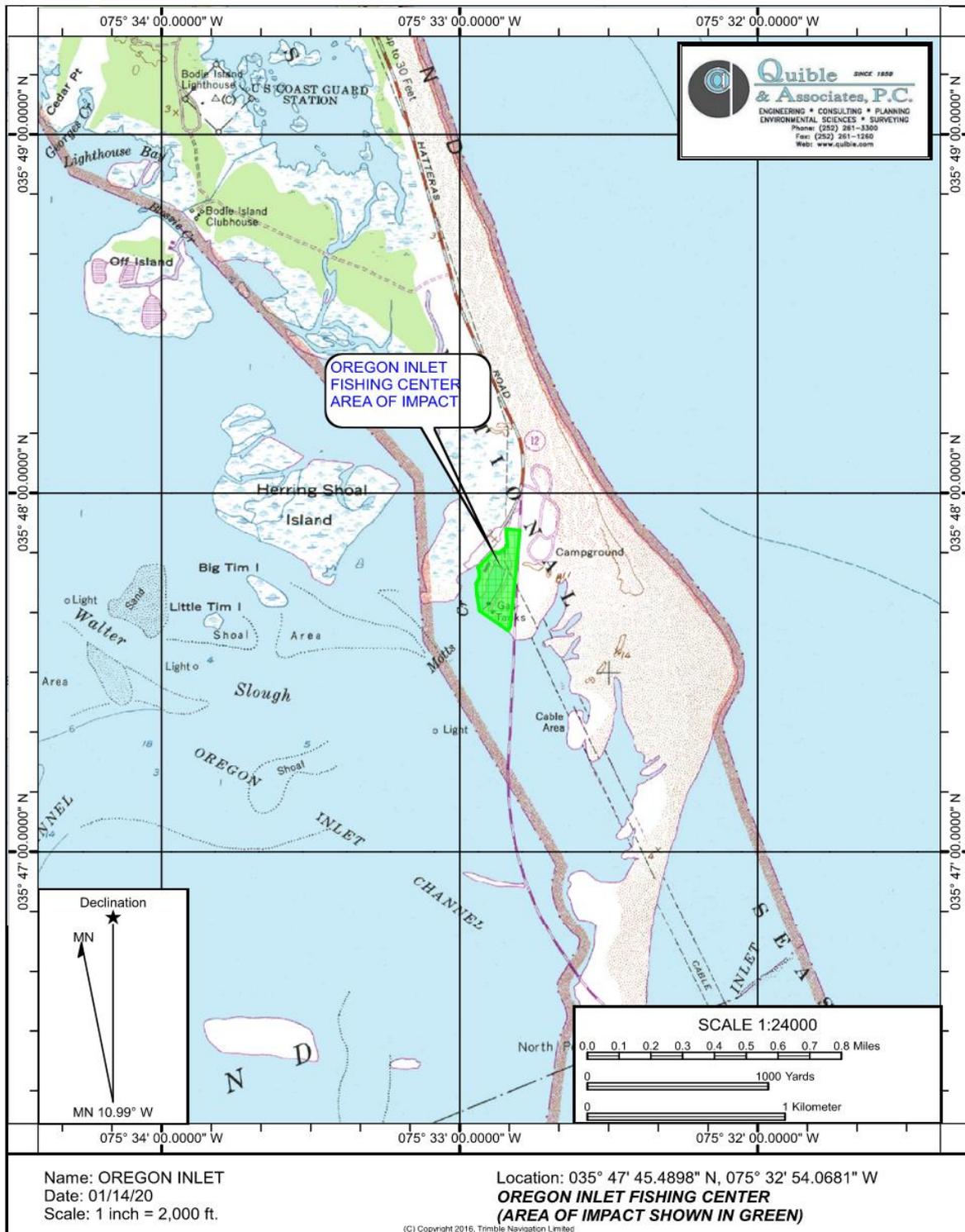
Fishing operations and a marina in some form have been in place at Oregon Inlet for several decades. According to the Seashore's administrative history, a fishing center was in existence at Oregon Inlet prior to government ownership and NPS management of this area where the marina is located. The NPS has permitted or contracted fishing center and marina operations at Oregon Inlet since at least 1953 and

the marina has been in operation in its current location since December 1956. While some of the facilities and operations have changed over the years, the marina operation has continuously provided charter fishing and associated services since the 1950s.

The earliest known building at the Oregon Inlet Marina was a small, single story gable roof structure located on the northeast end of the marina. This is the same general location of the replacement for the main marina building discussed in the preferred alternative/proposed project alternative in this EA. The original marina structure was severely damaged during the Ash Wednesday storm of March 7, 1962. The building was beyond repair and a new, larger structure was built to replace the original building in the same location in 1963. The 1963 facility, also a single-story gable roof structure, included a large retail store and a full-service restaurant. In 1963, the northeast side of the marina also contained fuel docks, fuel storage tanks, a marlin hoist, and several fish racks. In order to allow the marina operator at the time (the concessioner) to offer additional services and remove congestion from the north end of the marina, the 1963 concessions building was relocated to its current position in 1974. That same year, an addition was constructed on the relocated building to accommodate increasing numbers of visitors to the marina. The enlarged concessions building has been in the present location since 1974, but has undergone alterations since that time including replacement of the full-service restaurant with food and beverage provided as convenience items, and the addition of storage sheds on the west (back) side of the building.

Today, the marina premises (also referred to as the “project area”) is +/- 11.3 acres (outlined in red on Figure 2) and consists of a retail building (6,577 sf), marina basin (~ 1,580 linear ft with 61 existing wet slips), maintained landscape area (~ 1 acre), four (4) storage buildings (496 sf), an exhibit building (168 sf), asphalt parking area (~ 197 spaces), automobile fuel station booth (128 sf), waste water systems, and a fuel system consisting of three 10,000 gallon ConVault above ground storage tanks and six dispensers providing marine and vehicle fuel. The project area currently has a total impervious area of approximately 144,484 square feet or 3.32 acres.

Figure 1 - Project Area Vicinity Map



Purpose of and Need for Action

Oregon Inlet Marina (Oregon Inlet Fishing Center) is world-renowned and provides a premier charter fishing experience on the east coast of the United States. However, the marina buildings and many aspects of the lease premises (project area) do not reflect the importance of the marina and cannot support continued marina operations without substantial improvement or replacement.

The existing marina buildings are vulnerable, deteriorating, have significant deferred maintenance, and do not meet elevation standards for the flood zone in which they are located (Firm Zone (AE 5')). In addition to the need for well-functioning, sustainable and resilient buildings, the marina also needs improvements to and replacements of many site elements in order to continue operating for the remainder of the current lease (through 2038) and beyond. A well-functioning fuel system is also critical to supporting charter fishing operations. The marina's fuel tanks are relatively new (2007) and have been well maintained, however, the fuel delivery infrastructure needs to be replaced and relocated in order to support modern marina operations (e.g. in-slip fueling for charter boats renting marina slips). In addition to the need to improve or replace the buildings and some elements of the fuel system, the existing parking, walkways and driveways do not meet demand or support safe and efficient traffic flows on the marina premises.

The purpose of and need for the project is to replace vulnerable, deteriorating structures with sustainable structures adapted to sea level rise and storm surge and to conduct additional site improvements to modernize the marina in order to provide well-functioning, sustainable and resilient infrastructure to support continued marina operations for the remainder of the current lease (through 2038) and beyond.

In summary, the following key issues outline the purpose of and need for action:

- The main marina building was constructed 1963 - 1964 and all of the buildings within the marina are in poor condition and vulnerable to storm surge and sea level rise
- The location of the marine fuel docks causes boat traffic congestion and safety hazards within the marina basin
- The existing improved parking areas are inadequate to meet customer, visitor and employee needs
- Existing pathways and driveways do not support safe and efficient pedestrian and vehicle traffic flows
- The existing viewshed, including the outbuildings and dumpsters on the northwest side of the main marina building, detract from the visitor experience and views in this area of the Seashore
- Some marina slips are too shallow to accommodate charter fishing boats and the marina will require maintenance dredging in the future

Impact Topics

Impact Topics Analyzed in this Environmental Assessment

Impact topics are resources within the project area that could be affected, either beneficially or adversely, by the range of alternatives presented in this EA. Impact topics considered in this document were identified based on the issues raised during scoping, site conditions, federal laws, regulations, Executive Orders, NPS Management Policies 2006, Director's Orders, and staff knowledge of the project

area's resources. During the scoping process, impact topics were either retained for further analysis in this EA or dismissed from further consideration. The following impact topics were retained for analysis in this EA and are discussed in detail in Chapter 3: Affected Environment and Environmental Consequences:

- Floodplains
- Visitor Use and Experience
- Sea Turtles
- Marine Mammals
- Atlantic Sturgeon

Impact Topics Dismissed from Further Analysis

The following impact topics were dismissed for full analysis in this EA, because it was determined that the resource evaluated in the impact topic is not present in the project area, or that there would not be a meaningful effect to the resource, i.e. impacts would be less than minor, typically temporary, and localized. Appendix H provides the rationale for why each of these impact topics were dismissed from further analysis.

- Air Quality
- Federal Species of Special Concern and Their Habitat (Terrestrial)
- Vegetation
- Archeological Resources
- Cultural Landscapes
- Ethnographic Resources
- Historic Structures
- Geologic Processes
- Lightscapes
- Land Use
- Environmental Justice
- Soundscape
- Viewsheds
- Water Quality and Quantity
- Wetlands
- Marine or Estuarine Resources

CHAPTER 2 – ALTERNATIVES

This chapter describes actions that would take place under each alternative for maintaining the marina premises at Oregon Inlet Marina (project area). Council on Environmental Quality (CEQ) regulations for implementation of the NEPA process call for the alternatives considered in a document to include a no-action alternative. The description and evaluation of this alternative provides a baseline to which the action alternatives can be compared. This EA evaluates two alternatives: Alternative A: No-Action and Alternative B: Proposed Action/Preferred Alternative. The elements of these alternatives are described in the following sections. Impacts associated with the alternatives are described in Chapter 3: Affected Environment and Environmental Consequences.

ALTERNATIVE A: No-Action Alternative

The no-action alternative (Figure 2) would continue current management of the marina, including maintenance of the structures and premises in accordance with the terms of the lease. While the marina is currently operating, the NPS and lessee have determined that, due to their poor condition and vulnerability to sea level rise and storm surge, routine maintenance of the existing main marina building will not be sufficient to enable continued operation of the marina through the term of the current lease (until 2038) or beyond. Therefore, the no-action alternative would involve repairing the main marina building, including raising the retail section to comply with local and FEMA guidance. This alternative would also include maintenance dredging of the existing marina basin in order to enable continued use of the marina during the term of the lease. This alternative would leave all other site elements as they are today, with only general maintenance of buildings and grounds, performed by lessee, on an as-needed basis.

Facilities

Under the no-action alternative, the main marina building would be repaired, and the retail section of the main building would be elevated to 11.0 feet to comply with current FEMA and Dare County flood zone elevations (county requirement is 8.0 feet and FEMA requirement of 5.0 feet). However, the fish cleaning portion of the existing structure (north side of the building) would be left at its current elevation. The fish cleaning portion of the building is a concrete slab and block structure that would be very difficult, if not impossible, to elevate this portion of the building without the structure failing.

All structures within the project area require maintenance, which includes, but is not limited to, replacing windows and siding, new roofing, electrical system improvements, and additional updates to bring the buildings up to modern codes and standards. By raising the retail section only, the main marina building would only be partially adapted to sea level rise and storm surge. The fish cleaning portion of the building, along with all of the other buildings on the lease premises (fuel booth, storage buildings and display building) would continue to be vulnerable to flooding, would not meet FEMA and Dare County flood zone elevations, and would continue to contribute to an unattractive viewshed from many locations within the marina area.

Fuel

Routine maintenance of the fuel system and dispensers would be performed under the no-action alternative. The marine fuel dispensers would remain in their current locations on the finger piers at the north wall of the marina and the road-based fuel dispenser would be replaced in its previous location

(before it was removed due to a 2019 traffic accident), which is between the north wall of the marina and the existing fuel booth. Vessels using the marine fuel would continue to face traffic and, potentially, safety hazards navigating through the marina to reach the fuel docks at the north end. Marine fuel would continue to be difficult for transient boats to access due to its location at the end / back of the marina. Additionally, the marine fuel pumps would continue to be vulnerable to flooding in their current location on docks within the marina basin.

Dredging

Under the no-action alternative, as part of routine marina maintenance, the marina basin would be dredged in late 2021 / early 2022 and on an as-needed basis in the future. The majority of the marina basin (shown within the marina premises on Figures 2 and 3) does not require dredging at this time. However, there are currently slips within the marina that have filled in to depths of less than six feet (NAVD 88), which precludes the slips from being used for offshore charter boats, as intended. Figure 3 includes current water depths in the marina basin and illustrates that some slips in the corners of the marina require excavation (dredging). The shallow slips were likely caused by sediment moving into the basin as a result of storm events over time. As far as the NPS and lessee could determine, maintenance dredge of the marina basin has not been performed on any regular basis or cycle, and there is not any documentation or readily available anecdotal information about the last maintenance dredge event.

Maintenance dredge of the existing boat basin under the no-action alternative would generate approximately 5,000 cubic yards of material in a one-time event. Volumes of dredge spoil are based on recent bathymetric surveys taken during the preparation of this EA. Future dredge maintenance events would only be performed when water depths measure -6.0 feet (Mean Lower Low Water (MLLW)).

Dredge activities require some level of permitting through the NC Division of Coastal Management (NC DMF). Through consultation with various resource agencies (NC DMF and NOAA NMFS), DCM establishes dredge moratoriums when the work cannot occur (generally Feb 15 through October 31). Typically, dredge activities are only allowed to occur in the winter months (Nov 1 through Feb 14) or as specified in the permitting process. A Coastal Area Management Act (CAMA) Permit is being sought for the proposed maintenance dredge of the basin.

Sampling of sediment within the basin was performed to determine grain size and whether or not any common contaminants (volatile organic compounds, semi volatile organic compounds, metals, herbicides and pesticides) were present. Based on the laboratory report of analysis (included in Appendix E), there were no concentrations of any compounds analyzed detected at or above the Method Detection Limits as specified in the laboratory analytical report. Grain size analyses indicate that the dredge spoils are predominately fine sands and generally suitable for fill.

Dredge spoils would be deposited in the open grass areas within the lease premises and allowed to dewater. Sandy material would be used on site for general filling purposes of potholes and low areas. If at any point during dredge activities, in 2021/2022 or in the future, the NPS, lessee or any regulatory body with jurisdiction determined that material could not stay on the site for any reason, (either due to grain size, organic nature, or contaminants) dredge spoil material would be disposed of off-site, outside of NPS property, in an approved upland location. The dredge spoil material would not be deposited in wetlands or any other environmentally sensitive habitats.

Parking and Roads

Under the no-action alternative, existing asphalt surfaces would be repaired and resurfaced as part of routine maintenance and as needed. This routine maintenance could include re-orienting some of the angled spaces and restriping the existing parking areas. Overflow parking would continue to occur on unimproved areas within the project area (open grassed areas).

Pedestrian Access

Under the no-action alternative, no improvements or changes would be made to the existing boardwalks and sidewalks other than repairs and maintenance, as needed. No sidewalks or boardwalks would be added to the project area. Pedestrian access would not be improved, and the site would continue to be disjointed from the adjacent NPS public boat ramp.

Wastewater

Under the no-action alternative, wastewater flows generated on the lease premises would not be projected to change. Currently, the marina shares a wastewater pump station and drainfield with the adjacent NPS bathrooms and this would continue in the no-action alternative.

Stormwater

Currently, there are some existing stormwater inlets with direct connections to the marina basin and some stormwater pipes that convey stormwater to the wetlands adjacent to the project area to the northwest. There would be no changes to stormwater management within the project area under the no-action alternative.

ALTERNATIVE B: Replace Buildings and Conduct Site Improvements – Proposed Action/Preferred Alternative

The proposed action/preferred alternative (Figure 3) would include demolishing and replacing all the existing marina buildings within the project area and conducting other site improvements, including: formalizing informal parking areas and adding a driveway for air pump stations; upgrading the fuel system with in-slip fueling, a new transient fuel dock (including associated dredging) and placing the vehicle fuel area in a new location with a new driveway; adding pedestrian paths including a boardwalk near the transient fuel dock; maintenance dredging of the existing marina basin; formalizing stormwater management infrastructure to handle runoff from impervious surfaces; and adding a new wastewater pump station and drainfield.

The proposed action includes the following activities (shown on Figure 3):

- Demolish all buildings currently in the project area (retail building - 6,577 sf., four (4) storage buildings – totaling 496 sf, an exhibit building - 168 sf, and automobile fuel station booth - 128 sf)
- Replace buildings with sustainable and resilient buildings with a first-floor elevation of 11-feet (exceeding Dare County requirements by 3 feet and FEMA requirements by 6 feet) as follows:
 - Main marina building (retail, food & beverage, and marina operations) +/- 6,393 sf first floor footprint
 - Fish cleaning building +/- 1,880 sf
- Increase formal parking infrastructure to accommodate up to 293 automobiles
- Enhance vehicular and pedestrian circulation within the lease premises and between adjacent uses (NPS Boat Ramp and Recreational Vehicle (RV) pump out) by adding secondary vehicular

egress in the vehicle fuel area, constructing pedestrian paths and wooden boardwalks, and adding a driveway for air pump stations

- Replace existing marine fuel docks and aged fuel infrastructure with the following:
 - An ~ 900 sf fuel dock with two (2) fueling stations for transient boats in Motts Creek (outside of marina basin)
 - Seven (7) in-slip fueling stations located throughout the marina
- Replace existing fuel docks with up to six (6) boat slips
- Replace existing vehicle fuel in a new location with a new driveway
- Construct new on-site wastewater treatment and disposal system (+/- 1,600 gpd) to accommodate replacement buildings, including food and beverage services
- Enhance stormwater management by constructing formal Stormwater Control Measures (SCMs)
- Perform maintenance dredging of marina basin and portions of Motts Creek
- Place a removable, open-air events pavilion (+/- 3,400 sf) on the lease premises, which would be the personal property of the lessee (not real property of NPS)

Facilities

The proposed action/preferred alternative includes the demolition or removal of the existing retail and fish cleaning building, and other storage structures and outbuildings located within the lease premises (Figure 2) and replacing these buildings with two new structures – one for retail, food and beverage, and marina operations, and one for fish cleaning operations (Figure 3). Both buildings would be elevated so that the finished floor elevation (FFE) would be at least 11.0 feet (relative to NAVD 88), which is three feet higher than the local (county) first floor requirement of 8.0 feet (NAVD 88) and six feet higher than the FEMA requirement of 5.0 feet (NAVD 88). Currently, the FFE of the retail structure and fish cleaning building (one unit) are at an elevation of 5.95 feet (NAVD 88). The 100-year flood elevation based on the current FEMA Flood Maps and a comparison of site topography is approximately 5.0 feet (NAVD 88). The replacement buildings would not only exceed elevation requirements, but would also incorporate other elements of modern and sustainable design.

The replacement retail building would be a pile-supported structure and have a first-floor footprint of +/- 6,393 sf and a total of +/- 10,166 sf in total conditioned space spread over two floors. In addition to providing space for retail, food & beverage and marina operations, it would also include space for an NPS visitor contact station, meeting rooms and office areas.

The replacement fish cleaning building would be a pile-supported or concrete block foundation structure and have a total footprint (one floor) of +/- 1,880 sf. It would be configured to meet operational needs and include more cooler space than is currently available in the existing fish cleaning building. Because the fish cleaning operation depends on the ability to easily and quickly move large quantities of fish and ice into and out of the building, it would be necessary to elevate the adjacent grades of the site to elevations that would allow for the safe movement of people and vehicles to deliver the fish and ice to a building with an FFE of 11.0 feet. To achieve this, fill from the associated dredge portion of the project would be used to raise the site grade in the location of the proposed fish cleaning building. The proposed dredge fill was analyzed for grain size and chemicals of concern (Toxicity Characteristic Leaching Procedure (TCLP) analyses for volatile organics, semi-volatile organics, metals, pesticides and herbicides were conducted on samples collected from Vibracore borings that were installed in representative locations throughout the proposed area of dredge work) and much of the sediment has been found to be suitable for on-site beneficial reuse in the forms of structural and roadway fill.

The lessee would also install a +/- 3,400 sf removable, open air events pavilion for use during events such as fishing tournaments. The pavilion would be personal property of the lessee and removed at the termination of the lease.

Fuel

The proposed action/preferred alternative would include upgrading the fuel supply lines and electrical wiring, as well as replacing all of the existing marine dispensers and cabinets with new equipment and locating the dispensers around the basin so that boats can be fueled while docked in their designated boat slip (in-slip fueling). In addition, fuel dispensers would be installed on the proposed transient dock along the Motts Creek shoreline so that transient boaters could fuel up without having to enter the basin. Automobile fuel would be replaced in a new location with multiple fueling islands, a canopy and driveway as shown in Figure 3.

The proposed ~ 900-sf transient fuel dock would be typical wood construction with 6-8 feet on center pilings and decking would be constructed of treated lumber (as specified by a structural engineer). The dock would be elevated a minimum of three feet above normal water level (NWL) at an elevation of approximately 3.5 feet (NAVD 88). In order to function as a fuel dock for boats in the water, the dock cannot be elevated above the 100-year or 500-year flood plain.

The fuel system improvements would be designed to meet current flood and safety regulations. The improvements would make the system less vulnerable to flooding, storm surge, and sea level rise than the fuel system currently in place and would also reduce environmental risks.

Dredging

Under the proposed project/preferred alternative, as part of routine marina maintenance, the marina basin would be dredged in late 2021 / early 2022 and on an as-needed basis in the future (as described in the no-action alternative). Under this alternative, a portion of Motts Creek (within the marina premises as shown in Figure 3) would be dredged in to construct and maintain a transient fuel dock in this location. The majority of the marina basin (shown within the marina premises on Figures 2 and 3) does not require dredging at this time. However, there are currently slips within the marina that have filled in to depths of less than six feet (NAVD 88), which precludes the slips from being used for offshore charter boats, as intended. Figure 3 includes current water depths in the marina basin and illustrates that some slips in the corners of the marina require excavation (dredging). The shallow slips were likely caused by sediment moving into the basin as a result of storm events over time. As far as the NPS and lessee could determine, maintenance dredge of the marina basin has not been performed on any regular basis or cycle, and there is not any documentation or readily available anecdotal information about the last maintenance dredge event.

Maintenance dredge of the marina basin and the dredge work within Motts Creek to create the transient fuel dock would generate approximately 9,500 cubic yards of material in a one-time event. Volumes of dredge spoil are based on recent bathymetric surveys. Future maintenance events would only be performed when water depths measure -6.0 feet (Mean Lower Low Water (MLLW)).

Under the proposed project/preferred alternative, dredge spoils would be placed on-site in open grass areas and allowed to dewater prior to being used on site for filling of the access drive, grounds around the proposed fish cleaning building and other redevelopment needs. The material within Motts Creek has been determined to be suitable for use on site for fill under roads and around the fish cleaning building based on the results of sediment sampling and analysis.

Sampling of sediment within the basin and Motts Creek was performed to determine grain size and whether or not any common contaminants (volatile organic compounds, semi volatile organic compounds, metals, herbicides and pesticides) were present. Based on the laboratory report of analysis (included in Appendix E) there were no concentrations of any compound analyzed detected at or above the Method Detection Limits as specified in the laboratory analytical report. Grain size analyses indicate that the dredge spoils are predominately fine sands and suitable for fill.

Any dredge work would require permitting through the NC Division of Coastal Management and moratoriums when the work cannot occur (generally during the summer months) would apply. Typically, dredge activities are only allowed to occur in the winter months (Nov. 1 through Feb. 15). The lessee is currently seeking a CAMA Major Permit for the proposed project/preferred alternative. The CAMA permit would include a maintenance clause that specifies when maintenance dredge work can occur, along with notification requirements prior to performance of any dredge activities.

If at any point during dredge activities, in 2021/2022 or in the future, the NPS, lessee or any regulatory body with jurisdiction determined that material could not stay on the site for any reason, (either due to grain size, organic nature, or contaminants) dredge spoil material would be disposed of off-site, outside of NPS property, in an approved upland location. The dredge spoil material would not be deposited in wetlands or any other environmentally sensitive habitats.

Parking and Roads

The proposed action/preferred alternative would add approximately 96 improved parking spaces (using permeable pavement) and re-orient existing spaces within the project area to bring the total proposed parking spaces up to approximately 293 from the current 197. On busy days, there is often a shortage of formalized parking resulting in visitors and marina customers parking in the unimproved grassy areas. The proposed action/preferred alternative would also add a +/- 4,781 sf permeable pavement loop access drive with up to five new air filling stations capable of handling the demand for air needed for re-inflating automobile tires returning from off-road driving on the nearby Seashore beaches. This service is primarily driven by the off-road vehicle use near the marina (between off-road vehicle ramps 2 and 4 on the beach). The proposed parking improvements are shown on Figure 3.

Pedestrian Access

The proposed action/preferred alternative would enhance pedestrian access throughout the project area and provide pedestrian connections between the marina premises and the adjacent NPS public boat ramp and parking lot. This alternative would include adding boardwalks on the peninsula on the southwest side of the marina (along Motts Creek) and on the south side of the replacement retail building. Additionally, sidewalks would be added to provide connectivity.

Wastewater

The proposed action/preferred alternative would add new wastewater treatment and disposal to support the proposed replacement buildings and increased or new usage (e.g. the existing food and beverage services, which are convenience items, could be replaced with a full-service restaurant). Currently, the main marina building (retail and fish cleaning building) and NPS bathroom all share the same pump station and drain field. The NPS public bathrooms would continue to flow to the existing lift station and continue using the existing drainfield. The replacement marina buildings would use the new wastewater treatment and disposal system. Locations of existing and proposed septic tanks, pumps and

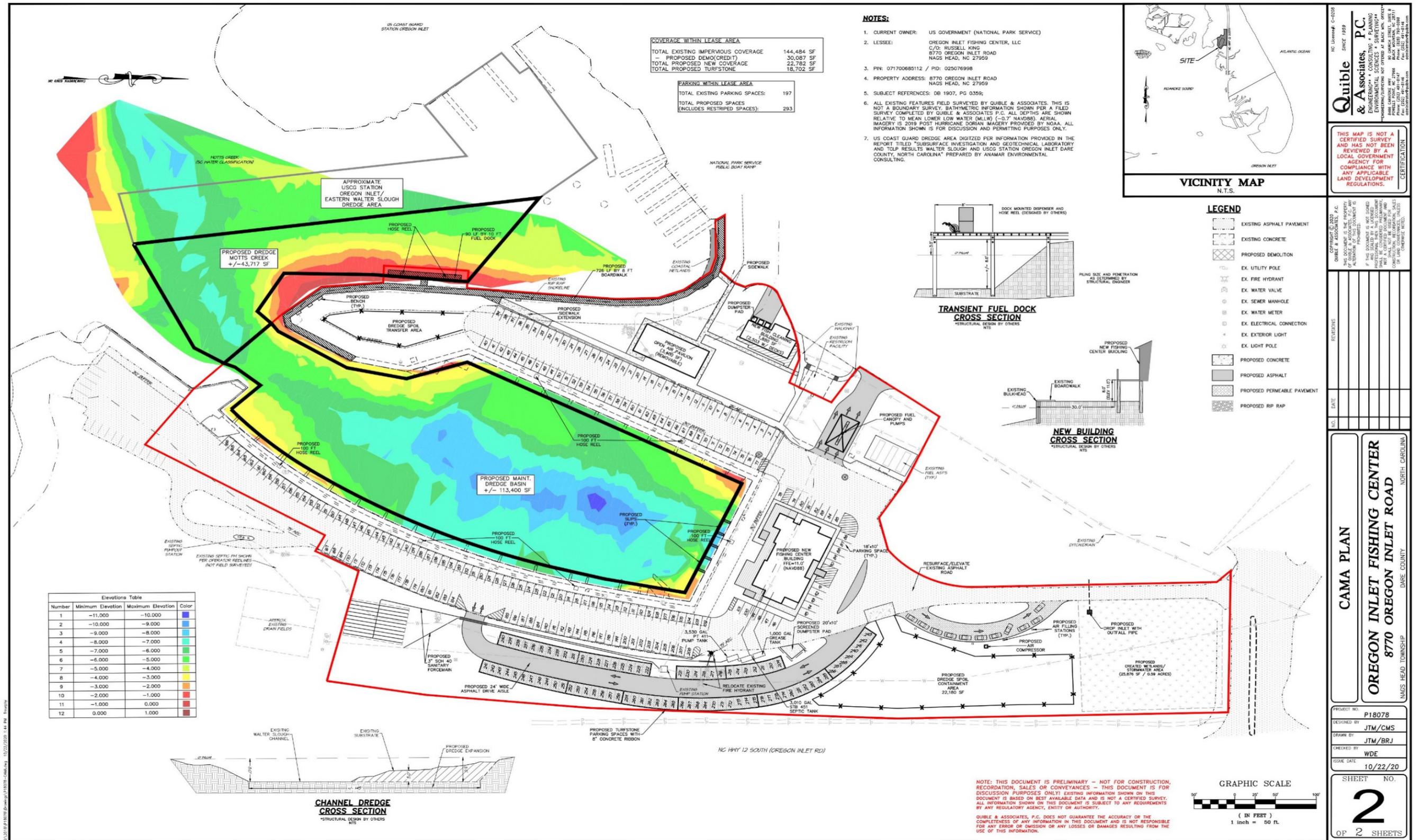
drain fields are shown on Figure 3. All new wastewater facilities would be designed and constructed in accordance with applicable regulations.

Stormwater

The proposed action/preferred alternative would convert a portion of the existing maintained grassed areas (Figure 3) within the project area into a stormwater control measure (SCM). Formalizing the stormwater control within the project area would help with standing water mitigation during rain events and provide improved retention and treatment of stormwater (Figure 3).

The proposed action/preferred alternative would not add impervious surfaces to the project area. Existing impervious surface coverage of 144,484 sf would be decreased by 30,087 sf and the proposed action/preferred alternative would add 18,702 sf of pervious parking and air filling drive access. Stormwater naturally flows toward the entrance (north and west), and the proposed addition of a SCM in the general location as shown on Figure 3 would benefit water quality by providing nutrient uptake and minor flood control during rain events.

Figure 3 - Preferred Alternative/Proposed Project



Mitigation Measures of the Proposed Action/Preferred Alternative

To minimize environmental impacts related to the proposed action/preferred alternative, the NPS and lessee would implement mitigation measures whenever or wherever feasible using best management practices. The following section provides a list of mitigation measures the NPS and lessee would implement under the proposed action/preferred alternative. Additional and/or more specific mitigation measures may be implemented based on NPS and other relevant agency review, approval and permitting of the final design and construction plans. At minimum, the following mitigation measures would be implemented:

- The marina lessee, Oregon Inlet Fishing Center, LLC, would be required to obtain the following state and federal permits to support the proposed action/preferred alternative:
 - North Carolina (NC) Division of Coastal Management (DCM) Coastal Area Management Act (CAMA) Major Permit, which would include review by the United States Army Corps of Engineers (USACE) through the Joint 291 Process
 - NC Department of Environmental Quality (DEQ) Division of Energy Mineral and Land Resources (DEMLR) stormwater permit for new impervious development (redevelopment is exempt),
 - NC DEQ DEMLR Soil Erosion and Sedimentation Control (SESC) Permit (for disturbance greater than one acre)
 - NC DEQ Division of Water Resources 401 Water Quality Permit
- NPS would ensure that the lessee instructs all contractor employees on the sensitivity of the general environment and monitor their activities, as needed, in order to mitigate and minimize potential impacts on natural and cultural resources during construction. Corridors for construction vehicle movement would be established and defined on the ground. Staging of construction equipment would be restricted to the road corridor, parking lots, and other identified previously disturbed areas to avoid impacts to natural and cultural resources.
- All designs and construction plans would be reviewed and approved by NPS prior to construction.
- NPS would ensure that the lessee and its contractor/s clearly state all protection measures in the construction specifications and instruct workers to avoid conducting activities beyond the limits of disturbance.
- NPS would ensure that the lessee and its contractor/s fence all areas in order to keep related disturbances within an NPS-defined and minimal impact area required for construction. Limits of disturbance would be established and fencing, or other appropriate barriers would be installed to prohibit inadvertent impacts to natural and cultural resources.
- NPS would ensure that the lessee and its contractor/s implement standard noise abatement measures during construction. Standard noise abatement measures would include the following elements: a schedule that minimizes impacts on adjacent noise-sensitive uses, the use of the best available noise control techniques wherever feasible, the use of hydraulically or electrically powered impact tools when feasible, and location of temporary noise sources as far from sensitive uses as possible.
- NPS would ensure that the lessee and its contractor/s implement USFWS recommendations (USFWS Correspondence February 20, 2020, attached as Appendix C) including submitting and implementing an approved NC DEQ DEMLR Soil Erosion and Sediment Control plan prior to construction.

- NPS would ensure that the lessee and its contractors minimize soil erosion by limiting the time that soil is left exposed and by applying other erosion control measures, such as erosion matting and silt fencing in construction areas to reduce erosion, surface scouring, and discharge to water bodies.
- NPS would ensure that the lessee and its contractors implement measures to prevent invasive plants from entering construction areas, such as ensuring that construction-related equipment arrives at the site free of mud or seed-bearing materials and certifying that all seeds and straw material are weed-free.
- NPS would ensure that the lessee and its contractors remove invasive plants that may have entered construction areas using approaches prescribed in the NPS Integrated Pest Management Program.
- NPS would ensure that the lessee and its contractors rehabilitate areas that are disturbed, either during construction or areas that were previously disturbed, with NPS-approved vegetation, as per NPS standards.
- NPS would ensure that the lessee and its contractors immediately implement National Historic Preservation Act (NHPA) Section 106 procedures if any unknown significant archeological resources are uncovered during ground-disturbing activities. If previously unknown archeological resources are discovered during construction, all work in the immediate vicinity of the discovery would be halted until the resources are identified and documented and an appropriate mitigation strategy developed, if necessary, in accordance with pertinent laws and regulations, including the stipulations of the 2008 Programmatic Agreement Among the NPS (US Department of the Interior), the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers.
- Facilities would be designed to be flood resilient in terms of materials and design and would be designed to impede flow of floodwaters as little as possible.
- The project would include a pre-construction meeting including the NPS, lessee and its contractor/s, as well as regularly scheduled meetings and site visits during construction, and a final inspection meeting including those parties.
- NPS would ensure that the lessee and its contractor/s plant only native wetland plant species such as, but not limited to, *Juncus* spp., *Spartina* spp., *Typha* spp. within any stormwater retention ponds or constructed wetlands.
- NPS would ensure that the lessee and its contractors comply with the following Endangered Species Act listed species construction conditions as described below:
 - Instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with listed species.
 - Advise construction personnel that there are civil and criminal penalties for harming, harassing, or killing listed species, which are protected under the Endangered Species Act of 1973.
 - Siltation barriers would not be used during construction of the proposed project due to high tidal flows and coarse sediment present within the action area. Any turbidity issues would be localized and dissipate quickly. Therefore, aquatic organisms should not become entangled or entrapped.
 - All vessels associated with the construction project should operate at “no wake/idle” speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels would preferentially follow deep-water routes (e.g., marked channels) whenever possible.

- If a listed species is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions should be implemented to ensure its protection. These precautions would include cessation of operation of any moving equipment closer than 50 feet of a listed species. Operation of any mechanical construction equipment would cease immediately if a listed species is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- Any collision with and/or injury to a listed species would be reported immediately to the National Marine Fisheries Service's Protected Resources Division at 727-824-5312 and to Cape Hatteras National Seashore's stranding hotline at 252-216-6892.

CHAPTER 3 – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the current environmental conditions in and surrounding the project as they relate to each impact topic retained for analysis, as outlined in Chapter 1. These conditions serve as a baseline for understanding the resources that could be impacted by implementing the project. This chapter then analyzes the beneficial and adverse impacts that would result from implementing the alternatives considered in this EA.

Existing Conditions

The marina is operated by OIFC under a 20-year lease with the NPS (2018 – 2038). OIFC provides slip rentals and booking services for charter fishing and tour boats, retail merchandise and fishing tackle sales, retail petroleum sales, fish cleaning and packaging and food & beverage sales. OIFC is also authorized, under the lease to provide non-motorized watercraft rentals (such as kayaks and canoes), host special events, such as fishing tournaments, and provide a children's play area. The lease area is part of a larger area within the Bodie Island District of the Seashore that is used to provide public access to the Atlantic Ocean and Pamlico Sound via the NPS Public boat ramps, and to provide services (sewer pump out, public restrooms and water) to visitors using nearby Seashore areas including Oregon Inlet Campground and off-road vehicle access ramp 4.

Daily operations of the marina (lease area) and immediately adjacent facilities (outside of the lease area) include public use of the fishing center (parking areas and charter boat use), restrooms, NPS boat launch, and kayak launch and parking area. On a typical day, visitors in boats, RVs and automobiles come in and out of the marina and adjacent parking areas, and either stop to use the restroom facilities, purchase supplies or use the facility as the starting point for a planned fishing trip. Activity at the marina, including boat traffic, slip use and activities in the marina buildings, occurs year-round, but is slower in the winter months. All of the infrastructure that supports these activities requires routine maintenance. Routine maintenance includes, but is not limited to, maintaining the fuel tanks and fuel delivery system, buildings, parking areas, landscaping and wastewater system.

Floodplains

Affected Environment

The project area is located within a vast coastal floodplain. Floodplains are not restricted by arbitrary boundaries and the entire floodplain of the sub-watershed of the project area (12- digit Hydraulic Unit Code (HUC) 030102051507 Pamlico Sound-Oregon Inlet), which encompasses nearly 14,963 acres should be considered when evaluating impacts of the project alternatives.

The majority of the project area falls within the 100-year floodplain (Zone AE 5), as categorized by the FEMA Flood Insurance Rate Map (3730072600K) exported on June 27, 2020 (Appendix G). The existing wastewater disposal field is located outside of the 100-year flood plain as shown in Appendix G. The floodplains within the project area have been previously altered by development, both prior to and following acquisition of the land by the NPS. Structures such as the marina buildings and fuel tanks can impede the flow of floodwaters during a flood event and reduce the capacity of the floodplain to convey

water. Most of the project area has relatively flat topography and is stabilized by lawn grasses or coastal scrub vegetation.

Executive Order 11988, "Floodplain Management" and NPS Director's Order #77-2: Floodplain Management require that the NPS protect and preserve natural functions of floodplains and avoid the long- and short-term adverse impacts associated with occupancy and modifications of floodplains. Construction of new facilities qualify as a class I actions as defined by the procedural manual for Director's Order #77-2: Floodplain Management. Class I actions include location or construction of buildings or other man-made features, which by their nature entice individuals to occupy the site, within the 100-year floodplain. A draft Floodplains Statement of Findings has been developed in accordance with Director's Order #77-2 (Appendix G).

Flooding at the project area is generally caused by rain events and storms, such as tropical storms, hurricanes, and nor'easters, which cause water levels of Pamlico Sound to rise and fall dramatically. Flooding occurs occasionally within the overflow parking area when rain events saturate the ground and the water table is high. Flooding associated with these storms may last a few days, with water levels fluctuating with tide and wind direction. Current technology offers plenty of advanced warning of potential flood events associated with major storms (i.e., tropical storms and nor'easters), and both the Seashore and the lessee (OIFC) have developed and implemented plans to minimize risks to human health and safety, as well as potential property damage during storm events. Although the exact track of a storm may be unknown, park managers and the marina lessee are provided with ample time to evacuate the site prior to flooding.

Sea level rise rates locally are approximately 0.14 inches per year, as measured at the Oregon Inlet observation station (NOAA 2019), which is located within the project area (marina) described in this EA. Factoring in sea level rise acceleration documented in coastal North Carolina, the Seashore can expect 1-1.3 feet of rise above the 1992 mean sea level by 2050 (Boon et al. 2018). The impact of sea level rise would be the same under both alternatives; the project area may also be inundated from storm events more frequently, which makes use of the standards and criteria of the National Flood Insurance Program (44 CFR Part 60) particularly relevant.

Past actions that have impacted the floodplain specifically within the project area and adjacent areas of Motts Creek include the various physical improvements (buildings and infrastructure) that have been erected, modified and added within the project area and immediately surrounding lands since the 1940s. The project area has been dredged and filled, and bulkheads, docks and other water-based infrastructure were installed and have been maintained in their current configuration since the 1950s. NPS boat ramps were constructed in the 1970s along with paving of a large parking area within the floodplain immediately adjacent to the project area to the west. Several iterations with varying building locations since the 1950s have been constructed in the project area.

All of the physical land disturbance involved in the construction of buildings and associated infrastructure over the years has generally led to an incremental increase in the total impervious surfaces within the project area and immediately surrounding properties. Construction activities over time have also led to soil compaction and a decrease in the soils ability to absorb runoff. Increases in impervious surfaces, and associated land disturbance, have had two adverse impacts on the floodplain. The first adverse impact is the compaction of soils that results from construction and development. The second adverse impact is the addition of impervious surfaces which reduces areas of infiltration and concentrates runoff. Compaction of soils and addition of impervious areas over time is also exacerbated

by rising groundwater tables, more frequent flooding and more intense rainfall events that are attributed to sea level rise and a current trend of global warming ([Heavy Downpours Increasing | National Climate Assessment \(globalchange.gov\)](#)).

Impacts of the No-Action Alternative

The No-Action Alternative considers lifting the retail portion of the existing marina building above the base flood elevation plus required Dare County freeboard (resulting in an elevation of 8.0' relative to NAVD 88) and leaving the fish cleaning building, freezers and coolers below FEMA base flood elevation and required Dare County freeboard elevation (8.0'). Surveys of the first-floor building elevations indicates that the fish cleaning portion of the building has a first-floor elevation of 5.95' (NAVD 89). Not elevating all structures and mechanical components above the base flood elevation leaves these structures at risk of chronic inundation, which could result in disruption of marina services and significant financial losses.

As sea level rises, buildings and assets that are located below the 100- year floodplain elevation are at risk of more frequent flooding and subsequently, damage. Structures located below the 100-year floodplain elevation may also reduce the ability of the floodplain to absorb and store floodwaters and storm surge. These structures also impede the flow of floodwaters and/or storm surge in the project area during a flood event, which would reduce the capacity of the floodplain to convey water and would be localized to the project area. The impact of the no-action alternative to the floodplain would be minimal due to the large scale of the floodplain (14,963 acres), however, leaving multiple, vulnerable marina structures within the floodplain could result in significant damage to these structures and marina operations.

Impacts of the Action Alternative

Under the proposed action/preferred alternative, existing marina buildings would be demolished, or removed and re-used, in accordance with NPS policy. Replacement structures would be constructed on pilings and raised above the 100-year floodplain along with the removal of roughly 7,996 square feet of the old building footprints bringing about a net decrease in impervious surfaces. These actions would increase the ability of the floodplain to absorb and store floodwaters and/or storm surge. Overall, the proposed project/preferred alternative would decrease the impervious surfaces in the project area by approximately 7,305 square feet or 0.17 acres. By elevating all replacement structures above the based flood elevation with pile supported foundations, the proposed project reduces the square footage of structures within the floodplain and would remove impediments to the flow of floodwaters and/or storm surge during flood events and increase the infiltration capacity of the floodplain.

The improvements considered for the proposed project/preferred alternative are consistent with the current land use in the project area. The protection of people and property is of high priority to the NPS, and measures would be taken to minimize harm to life, property, and natural resources. Flood mitigation would be undertaken by incorporating methods for protecting life and minimizing storm damage through appropriate procedures. Although specific design of the proposed structures and facilities would be determined during a future phase of the project, they would be designed to withstand flood events, while impeding water flow as little as possible. Structures and facilities would be designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR Part 60). Mitigations to minimize storm damage would include using sustainable design principles and using best management practices during and after construction. These mitigation measures would be in accordance with the NPS floodplain guidelines and with Executive Order 11988, "Floodplain Management."

In summary, impacts to the floodplain as a result of the proposed project/preferred alternative are the removal of impervious surfaces and elevation of structures from the floodplain. Decreasing impervious surfaces would result in a benefit to the floodplain by allowing more infiltration, which would decrease water runoff. Replacing the existing structures that are located in the floodplain with structures that are elevated above the minimum building height of 8 feet plus three feet of freeboard (resulting height of 11 feet), would lessen obstructions to floodwaters within the floodway during flood events. Additionally, the replacement structures would be less likely to flood than the current structures making them easier to insure (meeting or exceeding FEMA Flood Insurance standards) and more resilient.

Visitor Use and Experience

Affected Environment

The marina and surrounding NPS facilities offer visitors the opportunity to experience charter fishing and also provide direct access to the waters of the Pamlico Sound and the Atlantic Ocean for recreational fishing and boating. OIFC estimated that it served more than 600,000 customers at the marina in 2019 (based on 2019 sales receipts) with roughly 210,000 of those customers taking a charter fishing trip in one of the 60 vessels in the Oregon Inlet Fishing Fleet. Cape Hatteras National Seashore hosts over two million visitors per year (approximately 2.6 million visitors in 2020, <https://irma.nps.gov/Portal/>) and the majority of these visitors come from the north, passing by and/or visiting the marina and surrounding NPS facilities.

Visitors enter the marina from North Carolina Highway 12 and turn left onto the entrance road to the marina parking areas. Many visitors drive straight into the parking spaces for the main marina building and visit the building to either schedule a charter fishing trip or purchase retail or food and beverage items. Some visitors come to the marina primarily to watch the charter fishing vessels return at the end of the day and view the day's catch. Other visitors use the marina premises to re-inflate tires at the air pumps after a drive on the off-road vehicle routes in the Seashore. Campers from the Oregon Inlet Campground bring their RVs to the campground dump site adjacent to the marina area and must navigate through the marina parking lots to access the RV pump out station located in the southeast corner of the marina area. On the busiest days, the parking lots are full, and visitors must park in an informal overflow parking area along the entrance of OIFC.

Impacts of the No-Action Alternative

Under the no-action alternative, all of the marina services that are currently provided would continue to be provided, but with little opportunity to improve visitor experience. While the marina offers the basic services to the visiting public, some of the marina infrastructure, such as the fuel delivery system, and the buildings do not meet modern standards and have significant deferred maintenance. The main marina building has cramped retail space, no opportunity to provide food and beverage services beyond convenience items (no space for a commercial kitchen or dining area), limited areas for marina operations (areas for charter boat captains to gather and for marina staff to conduct business activities) and the ad-hoc appearance of all the outbuildings that have been added over the years detracts from visitor experience aesthetically. In addition, the fish cleaning operation is not modern and there is limited cooler space. Under the no-action alternative, repairing the main building (including raising the retail portion to flood standards) would not make a measurable difference on visitor use and experience as it would not improve visitor experience of the facility in terms of services and amenities. Because the no-action alternative would not include any changes to the site, such as parking improvements or new

sidewalks, the no-action alternative would also not improve visitor experience of the overall project area. The impact of the no-action alternative is that the lessee would not be able to provide a modern, full-service charter fishing marina experience and visitor use and experience of the marina would not be improved.

Impacts of the Action Alternative

The main attraction and purpose of the marina has been, and continues to be, charter fishing services. All of the services that are offered such as charter fishing opportunities, access to the Pamlico Sound and Atlantic Ocean, retail sale of merchandise and souvenirs, food & beverage, restrooms, fish cleaning and services to the general public like fuel, air stations and supplies have evolved in response to needs of the visitors to the marina and to the Seashore. The NPS and lessee recognize that the marina buildings and the infrastructure that support the marina services are dated and in need of updates, but do currently provide for basic needs of the visitor.

The impact to visitor experience of the proposed project/preferred alternative would be beneficial, because the proposed project/preferred alternative replaces existing structures with new resilient structures designed to better serve the visitor with expanded services and updated modern conveniences. The proposed project/preferred alternative would also increase formal parking spaces, relocate fuel dispensers, add a transient fuel dock outside of the marina basin, add sidewalks and a boardwalk along the waterfront connecting adjacent uses to the project area, and provide a dedicated air station turn out lane, which would reduce vehicular and pedestrian congestion and improve visitor circulation in the project area. Through the above actions, the proposed project/preferred alternative would provide for a safer visitor experience through dedicated walking paths (improving pedestrian circulation) and alleviating traffic congestion in the marina through in-slip fueling and a transient fuel dock outside the marina basin.

Listed Species and Critical Habitat

Section 7 of the Endangered Species Act requires all federal agencies to consult with the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats (16 USC 1531 et seq.). In a letter dated January 29, 2020, USFWS Consultation was initiated. In a letter reply dated February 20, 2020 the USFWS provided a reply stating,

“Based on the information provided and other information available, it appears that the proposed action is not likely to adversely affect any federally-listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at these sites. We believe that the requirements of section 7(a)(2) of the Act have been satisfied for your project. Please remember that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner that was not considered in this review; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

However, the Service is concerned about the potential impacts the proposed action might have on aquatic species. Aquatic resources are highly susceptible to sedimentation. Therefore, we recommend that all practicable measures be taken to avoid adverse impacts to aquatic species,

including implementing directional boring methods and stringent sediment and erosion control measures. An erosion and sedimentation control plan should be submitted to and approved by the North Carolina Division of Land Resources, Land Quality Section prior to construction. Erosion and sedimentation controls should be installed and maintained between the construction site and any nearby down-gradient surface waters. In addition, we recommend maintaining natural, vegetated buffers on all streams and creeks adjacent to the project site.”

An expedited track informal request for Section 7 Consultation was submitted in a letter dated December 2, 2020 (Reference: Oregon Inlet Fishing Center Marina Reconfiguration, SERO-2020-02259, Dare County, North Carolina). In reply on December 3, 2020 NMFS concurred with the NPS that the proposed action was not likely to adversely affect the NMFS ESA-Listed species or designated critical habitat. The USFWS IPaC listed species and the NMFS ESA listed species that occur within the project area and have been retained for analysis in this section. Species include the following:

- Green sea turtle
- Kemp’s ridley sea turtle
- Leatherback sea turtle
- Loggerhead sea turtle
- Hawksbill sea turtle
- West Indian Manatee
- Atlantic sturgeon

Correspondence referenced in this section is included in this EA as Appendix C.

Sea Turtles

Affected Environment

The project area does not appear to provide habitat for any listed sea turtles or other reptiles of special concern. However, sea turtle species are listed as occurring (Table 1) on or near the project area, and may include resources outside of the project area that could potentially be directly or indirectly impacted by activities in the project area.

According to the IPaC (queried on 2/10/2020) website, the following reptiles under the responsibility of the U.S. Fish and Wildlife Service (USFWS) could be found to occur within the project area:

Table 1 - IPaC Resource List Reptiles

Scientific Name	Common Name	Federal Status	Determination of Impacts
American Alligator	<i>Alligator mississippiensis</i>	SAT	No effect
Green Sea Turtle	<i>Chelonia mydas</i>	Threatened	Not likely to adversely effect
Hawksbill Sea Turtle	<i>Eretmochelys imbricata</i>	Endangered	No effect
Kemp’s Ridley Sea Turtle	<i>Lepidochelys kempii</i>	Endangered	Not likely to adversely effect
Leatherback Sea Turtle	<i>Dermochelys coriacea</i>	Endangered	No effect
Loggerhead Sea Turtle	<i>Caretta caretta</i>	Threatened	Not likely to adversely effect

Based on a Submerged Aquatic Vegetation (SAV) survey conducted on April 28, 2020, there are not any SAV resources or habitat that occur within the proposed project area. A copy of the SAV Survey is attached as Appendix F.

Impacts of The No-Action Alternative

Under the no-action alternative, the proposed land-based activities including routine maintenance of the marina premises (including the buildings, grounds and marina basin) and repairing the main marina building (including lifting a portion of the building out of the flood zone) would have no impact on sea turtles. Additionally, the no-action alternative would continue using existing wastewater and stormwater systems and continued proper treatment and disposal of wastewater and stormwater occurs on land and would have no impact on sea turtles.

The no-action alternative would include maintenance dredging of the marina basin to remove accumulated sediments and shoaling that has occurred at the entrance to the basin, along the southeast corner and in the slips of the marina. Maintenance dredge activities funded by the lessee would be required to be permitted through the North Carolina Division of Coastal Management (DCM). The permit process would include consultation with the North Carolina Division of Marine Fisheries (NC DMF), USFWS and NOAA National Marine Fisheries Service (NMFS). Any dredge activity would be subject to a dredge moratorium that typically prohibits dredge work between April and October. Any dredge work under the no-action alternative would be maintenance and occur only within areas that have been previously dredged and to maintain historical access to the existing marina. Based on these permitting requirements and facts, the no-action alternative would not have an adverse impact on any of the listed sea turtles or their habitat.

Impacts of The Proposed Action/ Preferred Alternative

Under the proposed action/preferred alternative, the proposed land-based activities, which include, but are not limited to replacing the marina buildings, increasing formal parking, adding driveways and walkways, creating in-slip (land-based) marine fueling, and constructing new on-site wastewater treatment and disposal, would have no impact on sea turtles.

The proposed project/preferred alternative would include maintenance dredging of the marina basin in water construction and dredge work that would temporarily disturb sediments during piling installation and permanently shade 792 sf of soft subtidal substrate with slotted wooden decking in the location of the proposed transient fuel dock. This activity would temporarily disturb the substrate within Motts Creek and result in deeper water depths (-8 feet MLLW) within the marina and Motts Creek. Please note, the United States Coast Guard (USCG) proposes to perform maintenance dredge for the Walter Slough channel, which serves USCG Station Oregon Inlet and is adjacent to the marina, within the next couple of years. The NPS and marina lessee would seek opportunities for dredge activities in this area, under the proposed project/preferred alternative, and as considered by the USCG to serve Station Oregon Inlet, to occur at the same time to minimize impacts. The proposed project/preferred alternative could temporarily increase turbidity in the water column within the project area and adjacent waters. Increased turbidity could cause sea turtles to alter their normal movements, however, these minor movements would be too small to be meaningfully measured or detected. Sea turtles breathe air and would swim away from turbid waters and would not be adversely affected by temporary increases in suspended sediments (<https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-effect-analysis-turbidity-greater-atlantic-region>).

Marine Mammals

Affected Environment

The Marine Mammal Protection Act (MMPA) of 1972, as amended, offers federal protection to marine mammals within the waters of the US. The MMPA prohibits marine mammal takes and enacts a moratorium on the import, export, and sale of any marine mammal, along with any marine mammal part or product within the US. The Act defines take as the act of hunting, killing, capture, and/or harassment of any marine mammal; or, the attempt at such. The MMPA defines harassment as any act of pursuit, torment or annoyance which has the potential to either: (1) injure a marine mammal in the wild; or (2) disturb a marine mammal by causing disruption of behavioral patterns, which includes, but is not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

In addition to being protected under the MMPA, many whale species are also protected under the Endangered Species Act. The NPS retrieved a list of species present at the project site from the USFWS IPaC webpage. The list allowed the NPS to determine what species may be present and determine effects, if any, of the proposed project actions. There are no listed whale species that are protected under the Endangered Species Act listed in the IPaC or NMFS lists queried as part of this assessment.

According to the IPaC, the following marine mammals under the responsibility of the U.S. Fish and Wildlife Service (USFWS) are potentially affected by activities in this location:

Table 2 - IPaC Resource List Marine Mammals

Scientific Name	Common Name	Federal Status	Determination of Impacts
Trichechus manatus	West Indian Manatee	Threatened	No effect

Manatees feed on algae that may accumulate on marina pilings and concrete walls, similar to those found in the Oregon Inlet Marina. Manatees are infrequent visitors to the Pamlico and Albemarle estuary; however, manatees are spotted in the summer months in low numbers and have been reported during the summer months in and around the marina.

Based on a Submerged Aquatic Vegetation (SAV) survey conducted on April 28, 2020, there are not any SAV resources or habitat that occur within the proposed project area. A copy of the SAV Survey is attached as Appendix F.

Impacts of the No-Action Alternative

Under the no-action alternative, the proposed land-based activities including routine maintenance of the marina premises (including the buildings, grounds and marina basin) and repairing the main marina building (including lifting a portion of the building out of the flood zone) would have no impact on the West Indian Manatee. Additionally, the no-action alternative would continue using existing wastewater and stormwater systems and continued proper treatment and disposal of wastewater and stormwater occurs on land and would have no impact on West Indian Manatees.

The no-action alternative would include routine maintenance dredge of the marina basin and continued operation of the commercial marina and retail store in their current configuration. Any maintenance dredge activities would be required to occur in winter months and outside of any established dredge moratorium as established by USFWS, NOAA NMFS and NC DMF. The no-action alternative would not have an adverse impact on the West Indian Manatee.

Routine maintenance of the fuel system and dispensers is required under the no-action alternative. However, the dispensers would remain on the finger piers at the north wall of the marina and the proposed in-slip fueling for all of the marina would not be undertaken. As the marina is configured now, any vessel that needs fuel must travel through the basin and dock along the north wall to get fuel and then relocate to their designated slip. This creates boat congestion in the marina fairway. The marina has operated under its current configuration for many years, and while the configuration is not optimal in terms of convenience for boaters and charter boat captains that need fuel, there would be no impact to West Indian Manatees.

Under the no-action alternative, dredge of the existing marina basin would be conducted as part of routine maintenance. Dredge operations have the potential to adversely impact marine mammals if conducted in areas of habitat or during times when marine mammals are known to be present. However, dredge work would occur in winter months to avoid any conflicts with marine mammals of concern (West Indian Manatees). In addition, any in water activity would follow the latest guidance on working in waters where West Indian Manatees occur.

The no-action alternative would not incrementally increase areas of dredge activity within Motts Creek and there would not be any new structures added in Motts Creek. Under the no-action alternative dredge of the marina entrance and basin would be performed and the temporary suspension of sediments in the marina basin would occur as a result. However, any dredge work would occur outside of the mandated dredge moratoriums (as determined by NOAA NMFS and NC DMF) and only after securing a permit through the applicable NC DCM CAMA permit process. There would be no meaningful or measurable impacts to the West Indian Manatees or their habitat as a result of the no-action alternative.

Impacts of the Proposed Action/ Preferred Alternative

Under the proposed action/preferred alternative, the proposed land-based activities, which include, but are not limited to replacing the marina buildings, increasing formal parking, adding driveways and walkways, creating in-slip (land-based) marine fueling, and constructing new on-site wastewater treatment and disposal, would have no impact on West Indian Manatees.

The proposed project/preferred alternative would include maintenance dredging of the marina basin in water construction and dredge work that would temporarily disturb sediments during piling installation and permanently shade 792 sf of soft subtidal substrate with slotted wooden decking in the location of the proposed transient fuel dock. This activity would temporarily disturb the substrate within Motts Creek and result in deeper water depths (-8 feet MLLW) within the marina and Motts Creek. Please note, the USCG proposes to perform maintenance dredge for the Walter Slough channel, which serves USCG Station Oregon Inlet and is adjacent to the marina, within the next couple of years. The NPS and marina lessee would seek opportunities for dredge activities in this area, under the proposed project/preferred alternative, and as considered by the USCG to serve Station Oregon Inlet, to occur at the same time to minimize impacts. Because in water work would occur during the marina's offseason and outside established dredging moratoriums as directed by the NOAA NMFS and NC DMF, the proposed action/preferred alternative would have no effect on West Indian Manatees.

Atlantic Sturgeon

In addition to the USFWS listed species, the National Marine Fisheries service lists the Atlantic sturgeon as Endangered with a Distinct Population Segment that is native to rivers and estuaries in the Carolinas including the Roanoke and Tar/Pamlico River systems.

Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) spawn in freshwater, but spend most of their adult life in the marine environment. Spawning adults generally migrate upriver in the spring/early summer (Smith and Clugston, 1997). Spawning is believed to occur in flowing water between the salt front and fall line of large rivers. Post-larval juveniles move downstream into brackish waters and eventually move to estuarine waters where they reside for a period of months or years (Moser and Ross, 1995). Subadult and adult Atlantic sturgeons emigrate from rivers into coastal waters where they may undertake long range migrations. Migratory subadult and adult sturgeon are typically found in (10 to 50 m) nearshore waters with gravel and sand substrates (Collins and Smith, 1997; Stein et al., 2004). Although extensive mixing occurs in coastal waters, Atlantic sturgeons return to their natal river to spawn (ASSRT, 2007). The Carolina Distinct Population Segment (DPS) encompasses Atlantic sturgeons from the Roanoke, Tar/Pamlico, Cape Fear, Waccamaw, Pee Dee, and Santee-Cooper Rivers. In North Carolina, spawning occurs in the Roanoke, Tar-Pamlico, and Cape Fear River systems and possibly in the Neuse River (ASSRT, 2007). Based on incidental capture data from tagging cruises, shallow nearshore ocean waters along the NC coast may represent a winter (January-February) aggregation site for Atlantic sturgeons (Laney et al., 2007). Incidental captures typically occurred over sand substrate in nearshore waters that were less than 59 ft deep.

Based on a Submerged Aquatic Vegetation (SAV) survey conducted on April 28, 2020, there are not any SAV resources or habitat that occur within the proposed project area. A copy of the SAV Survey is attached as Appendix F.

Impacts of The No-Action Alternative

Under the no-action alternative, the proposed land-based activities including routine maintenance of the marina premises (including the buildings, grounds and marina basin) and repairing the main marina building (including lifting a portion of the building out of the flood zone) would have no impact on sea turtles. Additionally, the no-action alternative would continue using existing wastewater and stormwater systems and continued proper treatment and disposal of wastewater and stormwater occurs on land and would have no impact on Atlantic sturgeon.

The no-action alternative would include maintenance dredging of the marina basin to remove accumulated sediments and shoaling that has occurred at the entrance to the basin, along the southeast corner and in the slips of the marina. Maintenance dredge activities funded by the lessee would be required to be permitted through the North Carolina Division of Coastal Management (DCM). The permit process would include consultation with the North Carolina Division of Marine Fisheries (NC DMF), USFWS and NOAA National Marine Fisheries Service (NMFS). Any dredge activity would be subject to a dredge moratorium that typically prohibits dredge work between April and October. Any dredge work under the no-action alternative would be maintenance and occur only within areas that have been previously dredged and to maintain historical access to the existing marina. Based on these permitting requirements and facts, the no-action alternative would not have an adverse impact on Atlantic sturgeon or their habitat.

Impacts of The Proposed Action/ Preferred Alternative

Under the proposed action/preferred alternative, the proposed land-based activities, which include, but are not limited to replacing the marina buildings, increasing formal parking, adding driveways and walkways, creating in-slip (land-based) marine fueling, and constructing new on-site wastewater treatment and disposal, would have no impact on Atlantic sturgeon.

The proposed project/preferred alternative would include maintenance dredging of the marina basin in water construction and dredge work that would temporarily disturb sediments during piling installation and permanently shade 792 sf of soft subtidal substrate with slotted wooden decking in the location of the proposed transient fuel dock. This activity would temporarily disturb the substrate within Motts Creek and result in deeper water depths (-8 feet MLLW) within the marina and Motts Creek. Please note, the USCG proposes to perform maintenance dredge for the Walter Slough channel, which serves USCG Station Oregon Inlet and is adjacent to the marina, within the next couple of years. The NPS and marina lessee would seek opportunities for dredge activities in this area, under the proposed project/preferred alternative, and as considered by the USCG to serve Station Oregon Inlet, to occur at the same time to minimize impacts. Impacts to the water column and substrate would be temporary, therefore, there would be no adverse impact to the Atlantic sturgeon or its habitat.

CHAPTER 4 – CONSULTATION AND COORDINATION

NPS Director's Order #12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* requires NPS to make "diligent" efforts to involve the interested and affected public in the NEPA process. This process helps to achieve the following: determine the important issues and eliminate those that are not; allocate assignments among the interdisciplinary team members and/or other participating agencies; identify related projects and associated documents; identify other permits, surveys, consultations, etc. required by other agencies; and create a schedule that allows adequate time to prepare and distribute the environmental document for public review and comment before a final decision is made. This chapter documents the agencies and Tribes consulted during the NEPA process and summarizes the public review process for this EA.

Tribal Consultation

During the NEPA process, the park contacted the following Tribes for consultation:

- Catawba Indian Nation
- Cherokee Nation
- Eastern Band of Cherokee Indians
- Tuscarora Nation
- United Keetoowah Band of Cherokee Indians in Oklahoma

Agency Consultation

During the NEPA process, the park contacted the following local, state and federal agencies for consultation:

- Dare County Health Department
- National Oceanic and Atmospheric Administration: National Marine Fisheries Service
- North Carolina Department of Environmental Quality: Division of Energy, Mineral and Land Resources; Division of Water Resources; Division of Coastal Management; Division of Marina Fisheries; Division of Waste Management; Department of Natural and Cultural Resources – Natural Heritage Program
- North Carolina State Historic Preservation Office
- North Carolina Wildlife Resources Commission
- US Army Corps of Engineers
- US Fish and Wildlife Service

Public Review

The EA will be on formal public and agency review for 30 days and has been distributed to a variety of interested individuals, agencies, and organizations. It also is available on the internet at <https://parkplanning.nps.gov/caha>, and hard copies are available by request.

FEDERAL AGENCY PERSONNEL CONSULTED				Date(s) of Inquiry/Request	Date(s) of Reply	CAMA Review/Permit Agency (Y,N)
Name	Agency/Affiliation	Position/Title	Office / Region			
Sarah Merrill	National Park Service	Management Analyst	Cape Hatteras National Seashore	N/A	N/A	N
Sabrina Henry	National Park Service	Environmental Protection Specialist	Cape Hatteras National Seashore	N/A	N/A	N
Dave Hallac	National Park Service	Superintendent	Cape Hatteras National Seashore	N/A	N/A	N
Jami Lanier	National Park Service	Cultural Resource Manager / Historian	Cape Hatteras National Seashore	N/A	N/A	N
William Pendleton	National Park Service	Engineer	Cape Hatteras National Seashore	N/A	N/A	N
Mark Ford	National Park Service	Wetlands Ecologist	US Department of the Interior Region 2	N/A	N/A	N
Stephen Lacey	National Park Service	Archaeologist	US Department of the Interior Region 2	N/A	N/A	N
Jami Hammond	National Park Service	Environmental Planning and Compliance	US Department of the Interior Region 2	N/A	N/A	N
Beth Byrd	National Park Service	Section 106 Coordinator	US Department of the Interior Region 2	N/A	N/A	N
Mike Martin	National Park Service	Hydrologist	National Park Service, Natural Resource Stewardship and Science	N/A	N/A	N
Kathy Matthews	US Fish and Wildlife Service	Fish and Wildlife Biologist	Raleigh Ecological Services	1/29/2020	2/20/2020	Y
John Ellis	US Fish and Wildlife Service	Fish and Wildlife Biologist	Raleigh Ecological Services	1/29/2020	2/20/2020	Y
Twyla Cheatwood	NOAA National Marine Fisheries Service	Fishery Biologist	Southeast Region, Habitat Conservation Division	3/24/2020; 7/17/20; 10/21/20	7/17/2020	Y
Dana Bethea	NOAA NMFS Interagency Coop Branch	Endangered Species Biologist	Southeast Region, Protected Resource Division	8/5/2020	8/18/20- 11/16/20	N
Josh Pelletier	US Army Corps of Engineers	Regulatory Specialist	Wilmington District, Wash. Reg. Field Office	3/24/2020		Y
STATE/LOCAL AGENCY PERSONNEL CONSULTED				Date(s) of Inquiry/Request	Date(s) of Reply	CAMA Review/Permit Agency (Y,N); Distribution Date(s)
Name	Agency/Affiliation	Position/Title	Region			
Carl Dunn	NC DEQ DEMLR (Stormwater)	Environmental Engineer	Regional Office	3/24/2020; 07/21/20		Y
Samir Dumpor, PE	NC DEQ DEMLR	Regional Engineering Supervisor	Washington Regional Office	3/24/2020; 07/21/20		Y
Randy Jones	NC DEQ DEMLR (SESC)	PE	Washington Regional Office	3/24/2020; 07/21/20		Y
Maria Dunn	NC Wildlife Resources Commission	Coastal Coordinator	Washington Regional Office	3/24/2020; 07/21/20		N
Anthony Scarbraugh	FORMERLY DEQ DWR 401 Wetlands Unit	Environmental Senior Specialist	Washington Regional Office	3/24/2020; 07/21/20	3/25/2020	Y
Chris Pullinger	DEQ DWR 401 Wetlands Unit	Environmental Senior Specialist	Washington Regional Office	3/24/2020; 07/21/20	3/25/2020	Y
Yvonne Carver/	NC DEQ DCM	Field Representative/	Elizabeth City District	3/24/2020; 07/21/20		Y
Ron Renaldi	NC DEQ	District Manager	Elizabeth City District	3/24/2020; 07/21/20		Y
Gregg Bodnar	DCM	Major Permits Coordinator	Morehead City District	3/24/2020; 07/21/20		Y
James Harrison/	NC Division of Marine Fisheries	Habitat and Enforcement Section	Washington Regional Office	3/24/2020; 07/21/20		N
Anne Deaton	NC Division of Marine Fisheries		Raleigh Central Office	3/24/2020; 07/21/20		N
Ruth Strauss	NC Division of Waste Management	UST Permits and Inspection Branch	Raleigh Central Office	3/24/20; 6/22/2020	6/22/20; 7/16/2020;	N
Renee Gledhill-Earley	NC Department of Natural and Cultural Resources	State Historic Preservation Office	Raleigh	11/15/2019;1/8/2020	12/16/2019;1/31/2020	N
Josh Coltrain	Dare County Health Depart.	Environmental Health Specialist	Dare County	3/24/2020		Y

REFERENCES

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2. Phase I and Phase II Environmental Site Assessments prepared by Quible & Associates, P.C. August 31, 2018 and February 7, 2019; respectively.
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[https://irma.nps.gov/STATS/SSRSReports/Park%20Specific%20Reports/Recreation%20Visitors%20By%20Month%20\(1979%20-%20Last%20Calendar%20Year\)?Park=CAHA](https://irma.nps.gov/STATS/SSRSReports/Park%20Specific%20Reports/Recreation%20Visitors%20By%20Month%20(1979%20-%20Last%20Calendar%20Year)?Park=CAHA).
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8. Data USA. (n.d.). Retrieved January 05, 2021, from <https://datausa.io/>
9. Heavy Downpours Increasing. Globalchange.Gov, National Climate Assessment US Global Change Research Program, nca2014.globalchange.gov/report/our-changing-climate/heavy-downpours-increasing. Accessed 5 Jan. 2021.

LIST OF APPENDICES

Appendix A: Information Planning and Consultation System (IPaC) Resource List

Appendix B: Natural Heritage Program (NHP) Element Occurrence Report

Appendix C: Agency and Tribal Correspondence

Appendix D: USDA NRCS Web Soil Survey

Appendix E: Essential Fish Habitat Assessment October 21, 2020

Appendix F: Submerged Aquatic Vegetation (SAV) Survey April 28, 2020

Appendix G: DRAFT Floodplains Statement of Findings

Appendix H: Impact Topics Dismissed from Further Analysis



As the nation's principal conservation agency, the Department of the Interior has responsibilities for most of our nationally owned public lands and natural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historic places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for American Indian reservation communities and for people who live in island territories under US administration.

NPS/CAHA/March 2021