

**National Park Service
US Department of the Interior**



Cape Hatteras National Seashore

**Finding of No Significant Impact
Construct Multi-use Pathway in Hatteras Island District**

April 2023

Recommended:

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Superintendent
National Parks of Eastern North Carolina

Date

Approved:

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Date

INTRODUCTION

The National Park Service (NPS) prepared an environmental assessment (EA) to evaluate the impacts to construct a new multiple use (otherwise known as multi-use) pathway along Lighthouse Road, in the Hatteras Island District in Cape Hatteras National Seashore (the seashore). The purpose of this project includes the following: (1) develop a multi-use pathway solution approved in the park's 1984 General Management Plan that enhances today's park visitor experience and safety while protecting natural and cultural resources, (2) provide visitors with a resilient, safe, and accessible route based on the American Association of State Highway and Transportation Officials (ASSHTO) guidelines to many of the seashores' key visitor use areas in the Cape Hatteras Lighthouse District of Hatteras Island, (3) provide a connection into the seashore from paved pathways originating in the village of Buxton and (4) accommodate different types of uses including biking and reduce maintenance by using a sustainable design.

The EA and this finding of no significant impact (FONSI) have been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended [42 United States Code (USC) 4321 et seq] and the 2022 Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) implementing regulations [40 Code of Federal Regulations (CFR) 1500-1508]; the Department of the Interior NEPA regulations (43 CFR Part 46); and NPS Director's Order (DO) 12: *Conservation Planning, Environmental Impact Analysis and Decision-making* (DO-12) and its accompanying NPS NEPA Handbook. The statements and conclusion reached in this FONSI are based on the documentation and analysis provided in the EA and associated decision file. To the extent necessary, relevant sections of the EA are incorporated by reference below. As required by NPS *Management Policies 2006*, a finding of non-impairment is included as Appendix A.

NPS SELECTED ALTERNATIVE

In February 2023, the NPS released the *Construct Multi-use Pathway in Hatteras Island District Environmental Assessment* (EA) for public review. The EA evaluated alternatives to constructing a multi-use pathway from North Carolina Highway 12 to Cape Hatteras Lighthouse. The EA described two alternatives: a no-action alternative and one action alternative. The EA then analyzed the potential impacts these alternatives will have on the seashore's natural and cultural resources as well as the human environment.

Selected Alternative Description

The alternative selected by the NPS for implementation is Alternative B: Construct a multi-use pathway (Proposed Action/NPS Preferred) described on pages 12-18 and shown on Figure 5 of the EA. The following summarizes the NPS selected alternative; see the EA for full details.

Under the selected alternative, the NPS will construct a 1.6 mile long, 10-12-foot-wide paved multi-use pathway in two Segments as shown in Figure 6 on page 16 in the EA. The project will include wayfinding signage, benches, bollards, and the reconfiguration of the seashore entrance including intersection improvements and connections to local sidewalks. The pathway will be constructed of a paved surface either concrete or asphalt. A typical trail design can be seen in Figure 2 on page 13 of the EA.

Segment I. Approximately 1.4 miles (7,333 linear feet) of an approximately a 10-foot-wide pathway will be constructed to the Cape Hatteras Lighthouse. The multi-use pathway will begin on the west side of Lighthouse Road at the intersection of NC Highway 12. A trailhead plaza will be constructed at the beginning of the pathway with wayfinding signage, including safety information, and benches, see Figure 3 in the EA.

The pathway will continue southward along the west side of Lighthouse Road until it crosses the roadway approximately 3,700 feet south of NC Highway 12. This crossing location was identified because it provides over 500 feet of visibility to motorists approaching in each direction. The speed limit along this stretch of Lighthouse Road may be reduced to 25 mph and speed tables, along with flashing signal beacons, may be added to further increase drivers' awareness of the crossing.

An interpretive plaza will be constructed, with trailhead signs, bike racks, pedestrian seating, and a picnic pavilion at the corner of the intersection of the pathway and the Old Lighthouse Beach parking areas, see Figure 4 in the EA. This interpretive plaza will provide one of the first and most accessible areas for the park to highlight the active recreation and its history at the seashore. A comfort station with bathroom facilities and plumbed for water for drinking fountains and/or spraying off sand, will be constructed within the interpretive plaza to accommodate visitors who are using the pathway and the two beach access areas. The septic field and septic system sized for the comfort station use will be constructed within an upland area adjacent to the interpretive plaza.

From the interpretive plaza, the pathway will cross the road and continue along the Lighthouse move path towards the Lighthouse and the Visitor Center. Branching off the pathway, an exhibit detailing the logistics and engineering accomplishment of moving the lighthouse 2,900 feet will be presented at an interpretive location. The pathway will be constructed within the move path and enter the woods around the septic field, outside of the developed area, and continue along the existing sidewalk south of the Lighthouse parking lot. Where the pathway exits the woods adjacent to the parking lot sidewalk, an additional interpretive exhibit will be constructed, detailing the lighthouse move within the move path viewshed. The pathway will be constructed parallel to the existing sidewalk and separated with bollards and rope, a standard delineation around seashore parking areas. A pedestrian connection from the pathway to the sidewalk will be provided that allows pedestrians to access the Visitor Center, Lighthouse, Keepers Quarters and Museum.

A cul-de-sac will be constructed at the end of Segment I south of the Keepers of the Light Amphitheater that is sized to allow bicyclists to turn around safely without conflicting with the pedestrians exiting the pathway.

The width of the pathway throughout Segment I will vary from 10 to 12 feet, reducing to 10 feet to minimize impacts to the adjacent wetlands. The American Association of State Highway and Transportation Officials (AASHTO) provides guidelines for two-directional shared use paths for both bicycles and pedestrians and state they should be a minimum of 10 feet. The width of the pathway from the interpretive plaza to the end of Segment I at Lighthouse parking lot will be 12 feet to accommodate more users along this stretch of the pathway. A standard width of a 5-foot landscape buffer strip will be maintained between the edge of the paved roadway and the pathway in all locations as recommended by AASHTO.

Segment II. Segment II of the pathway will be about 0.2 miles long (992 linear feet) and begins at the Old Lighthouse Parking area. After the interpretive plaza, the pathway will continue along the western side of the parking lot adjacent to the parking lot and pond. The alignment will follow the existing paved access drive east of the pond and through an existing clearing in the brush. An exhibit detailing sea level rise and natural coastal processes as the reasoning for moving the Lighthouse and Keepers Quarters will be located at the former Keepers Quarters site.

From the pond, the pathway will continue northward along the water bodies to keep the alignment as far away from the coastline as possible. Segment II will end at the former US Navy/Coast Guard area where a trailhead with signage, benches, and bike racks will be provided. This area is currently used as a parking lot that is accessed from Old Lighthouse Road. Throughout Segment II the pathway will be 10 feet wide.

Drainage culverts cross under Lighthouse Road approximately 400 feet south of the seashore entrance. Additional culverts are also present parallel to both sides of the road approximately 30 feet from the edge of pavement. Project actions will require minor repairs to three culverts within the project area; one culvert will require the installation of a headwall, one culvert to nowhere will be removed and one metal culvert will need to be repaired where corrosion has created sinkholes.

No equestrian use will be allowed on the paved multi-use path, but equestrian use could continue on the opposite side of the road on the wide grassy shoulder. Some electric assisted modes of transportation may be permitted along the pathways, such as motorized wheelchairs. Traditional and electric bicycles (known as e-bikes), will be allowed on the pathway. NPS regulations defines an electric bicycle as a two to three wheeled cycle with an electric motor of not more than 750-watts and fully operable pedals that meets the requirements of one of three defined classes. The three known classes of electric bikes are presented in Table 2 on page 15 in the EA. Bicycles with electric motors of more than 750 watts (1 hp) of power, do not meet the definition of an electric bicycle and therefore will be managed as motor vehicles under 36 CFR 4.10, i.e., motor vehicles are allowed on park roads and on routes and areas designated for off-road motor vehicle use in special regulations.

NPS BICYCLE RULE CONSIDERATIONS

The EA was prepared to meet the requirements of 36 CFR § 4.30 (the Bicycle Rule) and evaluated the effects of bicycle use in the park and on the specific pathway. The selected alternative complies with the Bicycle Rule, which contains regulations that manage bicycle use within national park system units. The EA evaluated the suitability of existing pathway surfaces and soil conditions for accommodating bicycle use, including any maintenance, minor rehabilitation, or armoring that will be necessary to upgrade the pathway to sustainable condition. Lifecycle maintenance costs, safety considerations, strategies to prevent or minimize user conflict, and methods to protect natural and cultural resources and mitigate impacts were also analyzed and presented in the EA. In Chapter 3: *Affected Environment and Environmental Consequences*, the NPS describes the impacts to cultural landscapes, vegetation, wetlands and water resources, and visitor use and experience associated with the selected alternative allowing for bicycle use.

The selected alternative will allow bicycle and electric bicycle use on the multi-use pathway. No additional roads or trails in the park will be designated for bicycle use under this selected alternative and this alternative does not include other modifications to any existing park trails or pathways. The multi-use pathway will be considered a new trail under the Bicycle Rule. Where the multi-use pathway crosses or intersects other park pathways closed to bicycle use, signage will clearly indicate allowed uses and restrictions at those intersections. The Superintendent has determined that construction of the multi-use pathway is consistent with the Bicycle Rule and will have important benefits for recreation and visitor experience, and localized, minor, adverse impacts on natural resources in the park.

The EA incorporates a sustainable trail design for the multi-use pathway under the selected alternative. The design incorporates shallower grades and wider turns to support user safety, reduce water pooling and erosion, and reduce the overall maintenance costs associated with more complex features such as rails and retaining walls. Soil conditions of the project area are well-suited to pathway development due to the fill material brought in for the construction of the existing Lighthouse Road.

A lifecycle cost estimate by pathway segment and type for the selected alternative was developed and includes general annual maintenance costs and planning level cost estimates presented in Table 3 on page 18 of the EA. The cost estimate included assumptions to account for uncertainties

at this stage in the planning process, including a 50% contingency cost. Funding for construction of the proposed multi-use pathway segment included in the selected alternative will be provided by Federal Lands Transportation Program funding, the seashore project funds and Outer Banks Forever donations. Funding for maintenance of the pathway will be the responsibility of the NPS.

RATIONALE FOR DECISION

The NPS selected Alternative B: Construct a Multi-use Pathway for implementation because it will allow the seashore to meet its obligation identified in its 1984 General Management Plan and will greatly improve the quality of the experience for visitors travelling along Lighthouse Road by constructing a safe, resilient, and accessible off-road pathway for pedestrians and bicyclists. Visitation to the seashore has increased annually each year. The seashore hosted 3,206,056 visits in 2021, which was more than 20% higher than 2020 and over 35% higher than the ten-year visitation average (2011-2020). Lighthouse Road is one of the busiest roads within the seashore because the most iconic lighthouse in the United States is located along this road as well as the surf fishing mecca, Cape Point. Traffic counts demonstrate that more than 81,000 park visitors travel down Lighthouse Road to access popular beach access ramps annually over the last 10 years. Providing for visitor safety is especially important at the seashore due to the proximity to the village of Buxton, increased visitation, and various access points along Lighthouse Road to key destinations which has created a very busy road to both vehicle and pedestrian traffic. In addition, the selected alternative will allow for the first time, a pathway within the seashore where bicycles will be allowed to travel off designated roads.

The seashore designed this pathway to minimize impacts to natural resources by keeping the pathway along the road shoulder or along parking areas and previously disturbed areas as much as possible and to implement project design criteria and best management practices, found in Appendix C of this FONSI, to reduce adverse impacts to cultural landscapes, vegetation and wetland and water resources.

RESOURCE PROTECTION MEASURES

To avoid, minimize, and mitigate impacts related to the selected alternative, the seashore will commit to the measures presented in the EA in Chapter 2 and listed in Appendix C in the FONSI during the planning and implementation of the construction of the multi-use pathway. Appendix C details project design criteria (PDC) and best management practices (BMPs) incorporated into the selected alternative to minimize potential adverse impacts from construction and implementation of the project. The bulk of the PDC and BMPs provided are considered common practices for pathway construction projects to prevent or decrease potential resource impacts. They are highly effective methods that can be planned and adapted to site conditions as needed. The potential effects of implementing the selected alternative (presented in chapter 3 in the EA) are disclosed under the assumption that these PDC and BMPs are applied.

Subject to the final design and approval of plans by relevant agencies, mitigation measures will include, but will not be limited to, the items listed in Appendix C

OTHER ALTERNATIVES CONSIDERED

In addition to the NPS selected alternative described above, the EA also analyzed a no-action alternative (page 12 of the EA).

FINDING OF NO SIGNIFICANT IMPACT

As described in chapter 3 of the EA, the NPS selected alternative will result in impacts on park resources, including impacts to cultural landscape, vegetation, wetlands and water resources and visitor use and experience. No significant impacts were identified that require analysis in an environmental impact statement. The anticipated impacts to the affected resources are summarized below. See pages 24-45 of the EA for complete discussions of the impacts on these resource topics.

Cultural Landscape. Under the selected alternative, the construction of a new multi-use pathway and signage will occur within the move corridor of the Cape Hatteras Lighthouse and will result in noticeable changes to the landscape both beneficial and adverse. The move corridor has strong integrity of association with the 1999 relocation and represents a possible new period of significance for the Cape Hatteras Light Station Complex. The Cultural Landscape Report identifies that the old site could be marked in a way that could be viewed from the new site but also states the open view through the move corridor towards the old site will be protected. Beneficial impacts will result from providing interpretive messaging on the move corridor and will enhance the story of why and how the move corridor was created and why its preserved. The construction of a new pathway will have long-term direct adverse impacts to the view of the move corridor. Visually from the lighthouse one will see this new pathway but on the ground this very low to ground path and signs will not detract nor change the openness of the corridor which is a non-contributing but compatible feature to the Lighthouse move.

Vegetation. Under the selected alternative, project activities will have a moderate degree of permanent adverse impacts from the removal of vegetation within the project area. Approximately 5.6 acres of ground disturbance will occur and approximately 1.84 acres of vegetation will be removed for the development of the multi-use pathway and in some locations, a wider area for trailhead areas and for visitor safety. Pedestrians and bicyclists will shift their impact from the grassy shoulder to the new paved path, instead of creating and maintaining social trails. Mowing operations will be reduced on one side of the road and in areas where the additional facilities will be constructed. The total acreage accounts for the width of the pathways and the necessary horizontal clearance of vegetation thinning and trimming needed to construct and maintain the pathway. Most vegetation impacts will occur within the upland scrub forest habitat during the construction of the pathway when specific trees, shrubs and grasses are removed to clear the site for construction activities. Healthy live trees, particularly *Quercus virginiana* (live oak), and other larger shrubs such as *Morella cerifera* (wax myrtle), *Juniperus virginiana* (eastern red cedar), will be preserved whenever possible and fencing placed around them to further protect them and their root zones. However, but both live and dead trees may be removed during construction for the footprint of the pathway, required slopes and temporary work zones. Wetland vegetation impacts are described in the *Wetland and Water Resources* environmental consequences section beginning on page 41 in the EA.

The construction of a new interpretive plaza with comfort station and septic field will require the removal of low growing woody shrubs like wax myrtle and juniper and grasses within 0.34 acres of a previously disturbed area adjacent to two roads. This area had been previously cleared and used as a temporary visitor center during construction activities for the relocation of the lighthouse. Although the majority of this area has been continually mowed, some junipers, wax myrtle, yaupon holly shrubs and herbaceous grasses have grown up and will need to be cleared.

Hazard tree removal (e.g., dead or dying trees that have fallen across the pathway) will occur during future maintenance of the pathway to provide a safe, obstacle free pathway for human use after the pathway has been constructed. Branches extending over the pathway corridor will be pruned no higher than 10 feet above the pathway surface and maintained through the life of the

pathway. Frequent pruning of trees creates opportunities for pathogens or insects to enter through the wound and allows them to bypass a tree's defense layers and could adversely affect a tree's vitality for the remainder of the tree's life. Selective pruning of trees will be done with appropriate tools and during appropriate times of year for the tree's species.

The impact to vegetation is expected to be localized to the pathway construction corridor and pathway clearance corridor and will only constitute a relatively small number of trees compared to the number of trees within and adjacent to the project area. When the acres of impact of the selected alternative are compared to the total acreage of that vegetation type in the park, there is a 0.01% impact to park vegetation from the selected alternative. Additionally, a small section of asphalt adjacent to the Buxton Beach access parking area will be removed and restored as a vegetative surface to help offset previous effects of new facilities.

Construction activities that disturb vegetation could lead to increasing populations of nonnative invasive plants by removing established native plants that compete with noxious weeds, exposing mineral soil as a substrate for weed germination and dispersing existing or new weed seeds or plants carried by construction equipment and pathway users. To prevent the spread of invasive and nonnative vegetation, the seashore will manage weed infestations in accordance with the park's invasive vegetation management by spraying with approved herbicide and other mitigation measures discussed in chapter 2. An additional 1.11 acres of invasive plant species, phragmites, will be treated via chemical treatments and burning to help offset wetland vegetation impact from the selected alternative and is further described below and in the Wetlands Statement of Findings appended to this FONSI. Under the selected alternative, project activities would have a moderate degree of permanent adverse impacts from the removal of vegetation within the project area. Impacts would be approximately 1.84 acres of vegetation, which is only a 0.01% of the seashore's total vegetative areas. Additionally, restoration efforts would be implemented upon the completion of the pathway, and associated facilities, to help stabilize disturbed areas and to reestablish native plant species within the project area.

Visitor Use and Experience. Under the selected alternative, impacts to visitor use and experience will result in both beneficial and adverse impacts. Approximately 1.6 miles of a multi-use pathway will be added which will be the seashore's first multi-use pathway and therefore providing a new visitor use opportunity to access key destinations in a safe informative way. Creating a separated pathway along the road, allows pedestrians and bicyclists to safely travel along a busy section of Lighthouse Road and reduces conflicts with motorized vehicles also traveling along the road.

The selected alternative makes a notable change to a user type that is allowed on certain trails or pathways. Namely, bicyclists will gain access to the first pathway within the seashore. The direct beneficial impact to bicyclists using traditional bicycles or electric bicycles will be quite substantial as this is a popular activity, and the addition of an off-road pathway will be welcome. The direct effect of the changes in allowed use type under the selected alternative will be beneficial, as it will benefit many more users than it will adversely affect by creating a safe, resilient, informative trail.

Visitor wayfinding and circulation will be greatly improved under the selected alternative. Consistent standard amenities, including signage at trailheads and primary trail access points, will help ensure that visitors have a better sense of how the pathway is laid out and can better prepare for their activity. These amenities will provide an inviting gateway into the park from the village of Buxton, ensuring that visitors are aware they are entering a national park unit, have appropriate expectations about their upcoming experience, and are aware of any pertinent rules and regulations. The secondary access point near the Buxton Beach access area will also help ensure that the pathway system is better connected with other areas of Buxton and will help facilitate

access from this community, possibly even reduces the need for visitors to drive to a trailhead to gain access to the park.

The use of ABA standards to improve the accessibility of the pathway and the installations of interpretive messaging will benefit visitors of differing abilities and thereby improving the overall quality of their experience within the project area. The availability of the pathway to e-bikes will make the selected alternative more accessible to older adults and others with mobility challenges who may not access the park using a traditional bicycle or on foot.

Under the selected alternative, visitors will be able to tangibly experience the powerful story of the Cape Hatteras Lighthouse move by exploring a section of the move path and better understand this important part of the lighthouse's history. The pathway will connect visitors to the original site of the Lighthouse, a very central part of the move story that is currently challenging to visit due to a lack of pathway connectivity.

The multi-use pathway could lead to more visitor conflicts between pedestrians and traditional bikes, between pedestrians and e-bikes, and between traditional bikes and e-bikes. However, the wide nature of the pathway (between 10 and 12 feet), will likely provide enough space between users to avoid excessive conflicts. If conflicts occur, several management strategies could be implemented to reduce conflicts and improve the quality of visitors' experience.

Most of the adverse impacts will be temporary because of the construction of the pathway which may add visual and noise disturbances and cause one lane closures lasting for only a short time (i.e., hours or days) and only affect a small minority of visitors, within a small geographic portion of the park. These impacts will generally be outweighed by the direct long-term (i.e., 10-20 years or more) beneficial effect of having a multi-use pathway in the seashore.

Wetland and Water Resources. The selected alternative will have direct, long-term (years), adverse impacts to 0.286 acres of the fringe edge of palustrine wetlands and a Wetland Statement of Findings was prepared and is attached to this FONSI in Appendix D for regional approval. These impacts include both temporary impacts (0.118 acres) from construction limits of disturbance and permanent impacts from fill (0.168 acres) to create a 2-foot buffer with 3:1 slope on one side of the pathway along Lighthouse Road. Construction of the new 1.6-mile-long multi-use pathway and trailhead and plaza facilities will primarily occur on well-drained soils or modified soils within developed areas. This alternative was designed to minimize impacts to wetlands as best as possible.

Project design criteria (PDC) and best management practices (BMPs) will be implemented before and during pathway construction to reduce the adverse impacts of impacting wetlands, including using silt fencing, use of wooden construction pallets, sediment bags for any dewatering needs, salvaged topsoil, and native vegetation, in all restoration efforts, phragmites treatments, and monitoring the success of restoration efforts. PDC and BMPs are listed in Appendix C in the FONSI.

Overall functions of the wetlands are not likely to be noticeably altered because of the generally small area of fill and vegetation and ground disturbance in relation to the total acres of wetlands present in the project area; approximately 7.03 acres of wetlands within the project area, accounting for 96% of total wetlands, will remain undisturbed. Remaining adjacent wetlands will continue to filter and convey precipitation and provide an important wetland habitat for vegetation and wildlife.

To compensate for a no net loss of wetlands, a total of 1.11 acres of wetlands (4:1) will be treated to eradicate exotic phragmites within adjacent wetlands. It is anticipated that natural and beneficial wetland values of the modified wetlands will continue in the long-term.

PUBLIC AND AGENCY INVOLVEMENT

The seashore initiated public scoping with the release of a press release and notice of public scoping period on May 24, 2022. The seashore presented the preliminary alternatives through one in-person public scoping meeting on June 2, 2022. The EA was provided for formal public and agency review for 30 days February 27 through March 28, 2023. The majority of comments were in favor of the project, and no comments were substantive to warrant substantial modification or additional environmental analysis. However, the NPS has elected to respond to comments that reasonably questioned the project or were a frequent comment in Appendix B, Response to Public Comments.

As required by Section 106 of the NHPA, the NPS considered impacts on historic properties and Section 106 consultation process was conducted separately from but concurrently to the NEPA process. The NPS concluded that the undertaking will result in *no adverse effect* on historic properties. In a letter dated February 27, 2023, the North Carolina State Historic Preservation Officer concurred with this finding. NPS has initiated consultation with tribal partners for the project, and these tribal partners include the Absentee Shawnee tribe, the Catawba Indian Nation, the Eastern Shawnee tribe, the Shawnee tribe, and the United Keetoowah Band of Cherokee Indians. NPS provided notification of the project to these tribes through correspondence dated May 20, 2022, and received only a response from the Catawba Indian Nation responded in a letter dated July 7, 2022 to be notified if Native American artifacts and/or human remains area located during the ground disturbance phase of the project.

As required by Section 7 of the Endangered Species Act, the NPS considered impacts on federally listed species. Based on a review of the project area and the federally listed species known to occur in the vicinity of the project area, NPS staff determined that project activities will have no effect on threatened or endangered species. There are no critical habitats for threatened and endangered species within the vicinity of the project area. Therefore, no formal consultation with the US Fish and Wildlife Service is required under Section 7 of the Endangered Species Act.

As required by the Coastal Zone Management Act and the North Carolina Coastal Area Management Act, the NPS completed a Federal Consistency Determination to assess the project's consistency with these acts. The seashore consulted with the North Carolina Division of Coastal Management through this process. In an email dated March 27, 2023, the North Carolina Division of Coastal Management concurred with the NPS finding that the selected alternative is fully in conformity and consistent to the maximum extent practicable with the standards and management objectives and enforceable policies of Subchapters 7H and 7M of Chapter 7 in Title 15A of the North Carolina Administrative Code. A copy of the Federal Consistency Determination is available in Appendix B of the EA.

CONCLUSION

The NPS selected alternative does not constitute an action meeting the criteria that normally requires preparation of an environmental impact statement and as noted above, impacts resulting from implementing the action will not have a significant effect on the human environment. Based on the foregoing, it has been determined that an environmental impact statement is not required for this project and thus will not be prepared.

Documents appended to this FONSI include:

Appendix A: Non-Impairment Determination

Appendix B: Response to Substantive Public Comments

Appendix C: Project Design Criteria (PDC) and Best Management Practices (BMPs)

Appendix D: Wetland Statement of Findings

APPENDIX A:

NON-IMPAIRMENT DETERMINATION

By enacting the National Park Service (NPS) Organic Act of 1916 (Organic Act), Congress directed the US Department of Interior and the National Park Service to manage units “to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations” (54 USC 100101). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that the National Park Service must conduct its actions in a manner that will ensure no “derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress” (54 USC 100101).

Z

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

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

The *Construct a Multi-use Pathway in Hatteras Island District Environmental Assessment* (EA) analyzes impacts to the following resources: cultural landscape, vegetation, visitor use and experience and wetlands and water resources. NPS *Guidance for Non-Impairment Determinations and the NPS NEPA Process* states that:

The impairment determination does not include discussion of impacts to visitor experience, socioeconomics, public health and safety, environmental justice, land use, park operations, etc., as those do not constitute impacts to park resources and values subject to the non-impairment standard.

As a result, for purposes of this document, impairment findings are required for the resources of cultural landscapes, vegetation and wetlands and water resources.

IMPAIRMENT DETERMINATION FOR THE SELECTED ALTERNATIVE

The National Park Service has determined that constructing a 1.6-mile-long multiple use (otherwise known as multi-use) pathway will not result in the impairment of park resources and values. This determination on impairment has been prepared for the selected alternative described on pages 12-18 of the EA and in this Finding of No Significant Impact. An impairment determination is made for the following resource impact topics: cultural landscapes, vegetation, and wetlands and water resources. These resources are considered fundamental to the multi-use pathway in Cape Hatteras National Seashore (the seashore).

Cultural Landscape

As described in the EA, the selected alternative will result in noticeable changes to the cultural landscape both beneficial and adverse. The concrete or asphalt pathway and pull-off areas with interpretive panels will create an intrusion on the relatively open grassy landscape of the move corridor, that was created with the 1999 move of the Cape Hatteras Light Station. The move corridor outside of the National Historic Landmark boundary is considered a 'noncontributing-but compatible' resource and views from the lighthouse are also listed as 'noncontributing-but compatible' in the updated Cultural Landscape Inventory for the Cape Hatteras Light Station. The construction of a new pathway will have long-term direct adverse impacts to the view of the move corridor. Visually from the lighthouse one will see this new pathway but on the ground this very low to ground path and signs will not detract nor change the openness of the corridor. Beneficial impacts will result from providing interpretive messaging on the move corridor and will enhance the story of why and how the move corridor was created and why its preserved. Interpreting the move and old lighthouse site was an action the NPS agreed to in the Memorandum of Agreement with the State Historic Preservation Office and Advisory Council on Historic Preservation with the development of the 1990 Cape Hatteras Lighthouse Protection Plan EA/FONSI. Although there will be noticeable changes to the cultural landscape, the visibility of the new pathway will not detract nor change the openness of the corridor and the added interpretation will enhance the site overall. Therefore, implementing the selected alternative will not result in impairment to cultural landscapes.

Vegetation

As described in the EA, the selected alternative will have permanent adverse impacts from the removal of vegetation within the project area. Approximately 1.84 acres of vegetation will be impacted, which is only a 0.01% portion of the seashore's total vegetative areas. Pedestrians and bicyclists will shift their impact from the vegetative shoulders to the new paved path which could absorb this visitor impact and reduce social trailing. Upland areas will have vegetation such as trees and shrubs removed for and around the pathway and associated facilities. Areas for the new septic drainfield for the comfort station will be cleared and maintained to ensure vegetation will not encroach into the drainlines. Best management practices to reduce and protect vegetation directly will be performed prior to and during construction activities. Routine maintenance to keep vegetation cut back from new facilities will occur on an annual basis or after storm events. Additionally, restoration efforts will be incorporated upon the completion of the pathway and associated facilities to help stabilize disturbed areas and to reestablish native plant species within the project area. Because only 0.01% of the seashore's vegetation would be permanently removed, native plant species will be reestablished, and social trail impacts will be reduced, implementing the selected alternative will not result in the impairment to vegetation.

Wetland and Water Resources

As described in the EA, the selected alternative, will have direct, long-term (years), adverse impacts on the fringe edge of palustrine wetlands from fill within the project area; however, the permanent loss of wetlands will be approximately 0.168 acres, which is only 2.0% of the 7.03- acre project site. Wetlands within and adjacent to the project area have been modified and are connected to a series of culverts which help control flooding from adjacent developed areas after rain events. The design of the selected alternative will allow natural surface water flows to sheet over the pathway and the vegetative buffers will slow runoff into the adjacent wetlands. It is anticipated that natural and beneficial wetland values of the modified wetlands will continue to function in the long-term by continuing to filter and convey precipitation and provide an important wetland habitat for

vegetation and wildlife. Indirect impacts from maintenance of the pathway from mowing or pavement repair will likely be limited and not expected to affect or influence the wetland system. Best management practices to reduce and protect wetland and water resources will be performed prior to and during construction activities. To compensate for a no net loss of wetlands, a total of 1.11 acres of wetlands (4:1) will be treated to eradicate exotic phragmites within adjacent wetlands. Because only the fringe edge of modified wetlands will be permanently filled, and wetland functions and systems would persist, implementing the selected alternative will not result in the impairment of wetlands.

SUMMARY

The National Park Service has determined that the implementation of the NPS selected alternative will not constitute an impairment of the resources or values of the seashore. As described above, implementing the selected alternative is not anticipated to impair resources or values that are essential to the purposes identified in the establishing legislation of the park, key to the natural or cultural integrity of the park, or identified as significant in the park's relevant planning documents. This conclusion is based on consideration of the park's purpose and significance, a thorough analysis of the environmental impacts described in the EA, the comments provided by the public and others, and the professional judgment of the decision-maker guided by the direction of the *NPS Management Policies 2006*.

APPENDIX B:

PUBLIC COMMENT SUMMARY

The *Construct Multi-use Pathway in Hatteras Island District Environmental Assessment* (the EA) was released for public review on February 27, 2023, and was available via the park's Planning, Environment, and Public Comment (PEPC) website (<https://parkplanning.nps.gov/caha>) and hard copies were available upon request. An open public comment period was held from February 27 through March 28, 2023.

According to NPS policy, substantive comments are those that 1) question the accuracy of the information in the EA, 2) question the adequacy of the environmental analysis, 3) present reasonable alternatives that were not presented in the EA, or 4) cause changes or revisions in the proposal. During the comment period, 30 pieces of correspondence were received from the general public via PEPC. The majority of comments expressed support of the project, and no comments were substantive to warrant changes to the environmental assessment.

ALTERNATIVES: PROPOSED ACTION

Concern Statement: Commenters advocate for an alternative which does not require any removal of natural resources nor additional facilities which would impact the natural environment or require maintenance.

NPS Response: The seashore presented a no action alternative in the EA on page 12 and analyzed this alternative in the affected environment sections on pages 24 through 45 under several impact topics. The no action alternative describes current management where no pathway would be constructed, and visitors would be expected to travel on the grassy shoulder or on the road itself and will not have a safe, accessible multi-use path to access key destination areas along Lighthouse Road. The public has frequently expressed an opinion about the need for a safe pathway along Lighthouse Road and did so again during public scoping and the review of the EA for this project. The seashore designed this pathway to minimize impacts to natural resources by keeping the pathway along the road shoulder or along parking areas and previously disturbed areas as much as possible and to implement project design criteria and best management practices, found in Appendix C of this FONSI, to reduce adverse impacts to park resources. As part of the federal requirements to allow bicycle use on trails or paths, the NPS must provide a summary of cost estimates for the construction and maintenance of the new pathway. This cost table is presented in Table 3 page 18 in the EA.

APPENDIX C:
PROJECT DESIGN CRITERIA AND BEST MANAGEMENT PRACTICES (BMP)

General (applies to all segments of the project)

- The pathway shall be designed and constructed using natural topography to create grade reversals or rolling dips to provide adequate drainage.
- All equipment and vehicle washing operations will be performed off-site.
- Erosion control structures (silt fencing, coir logs, etc.) must be maintained throughout project activities and removed upon project completion when appropriate.
- All utilities (power, fiber, water, sewer, etc.) will be properly marked prior to construction activities by local utility companies. If any utility shutdowns are expected, due to project activities, then notification to park management and district staff is required.
- Parking of personal vehicles will be within designated areas only.
- The project shall include a pre-construction meeting and a final inspection meeting, in addition to regularly scheduled project meetings and site visits.
- To minimize the amount of ground disturbance, staging and stockpiling areas shall be in previously disturbed sites, away from visitor use areas to the greatest extent possible.
- A public information program to warn of temporary closures, delays, and road hazards during construction shall be implemented. This program will help convey appropriate messages to the public and aid in mitigating potential impacts on visitors' expectations and experiences.
- A project schedule will be provided to the public as soon as it is known.
- To the extent practical, work shall be scheduled to avoid construction activity and construction related delays during peak visitation times. No holiday or nighttime work shall be allowed. Weekend work (Friday through Sunday) shall not be allowed unless authorized in writing by the park's Superintendent.
- No amplified artificial music (stereos, smartphones, etc.) will be allowed while conducting construction activities within visitor use areas such as the Cape Hatteras Lighthouse.
- To reduce noise and pollution emissions, construction equipment will not idle any longer than is necessary for safety and/or mechanical reasons.

Pre-Construction

- Army Corps Engineers may issue 404/401 permit for project actions. NPS to submit a pre-construction notification to USACE district engineer prior to commencing for use of the Nationwide 14.
- NPS to identify wetland compensatory projects for wetland restoration efforts to comply with DO-77: Wetland Protection. NPS to pay for wetland mitigation credits for impacts to jurisdictional wetlands as requirement of 404 permit.

- NPS is required to seek a Sediment Control Erosion Permit, a Construction Stormwater Permit and a Post-Construction Stormwater Permit from the North Carolina Division of Erosion, Mineral and Lands Resources.
- The park's Public Affairs Team shall be notified at least two weeks in advance of scheduled work and/or when start date has been established by contract, so that a news release may be prepared and sent to the public.
- Contractor to verify groundwater conditions and evaluate dewatering requirements prior to construction.
- Survey points and monuments (water, boundary) shall be surveyed prior to the start of construction to verify their accuracy and to ensure the monuments are protected from damage during construction activities.
- The project administrator shall inspect all off-road equipment prior to entering NPS lands to ensure that they are free of soil, seeds, vegetative matter, or other debris that could contain or hold noxious weed seeds. "Off-road equipment" includes all construction machinery, except for trucks, service vehicles, water trucks, pickup trucks, cars, and similar vehicles.
- Measures must be employed to prevent or control spills of fuels, lubricants, or other contaminants from entering the waterway or wetland.
- Clearing limits and wetland limits shall be adequately buffered and marked in the design and marked with silt fencing within the project area.
- Prior to commencement of any earthwork, project area must be flagged/staked or fenced to ensure that machine-operated activity is focused within the limits of disturbance.
- Tree Preservation Plan should be developed and should identify "Leave/Save trees" along pathway design. Critical Root Zone, (1 foot radius protect for every 1" dbh) of marked trees must be fenced for protection and avoided. Trees adjacent to the pathway design, should have a no cut zone (6'-10' of a mature (24" dbh) identified, if possible. Cutting within this radius can destabilize the tree and cause the tree to become a hazard after the pathway has been constructed. If root zones surfaces will be impacted by project activities, mats or fill must be placed on top of root zones to reduce compaction impacts, and hand excavation must occur.
- NPS will only carry out tree/limb removal outside of avian nesting season (April 1 through August 31).

During Construction

- Project areas will be re-surveyed by NPS resource staff to ensure any undocumented threatened, endangered, proposed, or candidate species or nesting species or milkweed plants are noted and avoided within the project area prior to or during project implementation.
- If undocumented historic or archeologic resources are located during ground-disturbing activities or planning activities associated with approved construction activities, all construction in the immediate vicinity shall cease and properties shall be treated as specified in 36 CFR Part 800, Protection of Historic Properties. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) will be followed.

- Stumps in the pathway tread and pathway clearance corridor shall be ground down or cut as low as possible to the ground to avoid safety hazards.
- All construction activities shall be confined to daylight hours, excluding emergencies.
- Construction materials staging areas will be restricted to previously disturbed sites in upland areas.
- Equipment must be free of any fluid leaks (fuel, oil, hydraulic fluid, etc.) upon arrival to the work site and will be inspected at the beginning of each shift for leaks. Leaking equipment will be removed off site for necessary repairs before the commencement of work.
- Runoff from stockpiled material must be controlled with silt fencing, filter cloth, coir wattles or other appropriate means to prevent reentry into waterways or wetlands.
- Sediment filter bags must be used for dewatering operations. Unfiltered discharge must not flow directly into wetlands.
- Wooden construction pallets are required to protect wetlands from vehicle impacts.
- Contractor must be required to maintain silt fence lines once they have been installed and/or repaired.
- Construction activities will be halted while the ground is saturated following large rain events to avoid damage to soils and vegetation.
- Care must be taken to avoid any rutting caused by vehicles or equipment during construction activities.
- Heavy equipment use in wetlands must be avoided if possible. Heavy equipment used in wetlands must be placed on mats, or other measures must be taken to minimize soil and plant root disturbance and to preserve preconstruction elevations.
- All hazardous waste materials such as oil filters, petroleum products, and equipment maintenance fluids will be stored in structurally sound and sealed containers in the hazardous materials storage area and segregated from the other non-waste materials. Additionally, all hazardous materials will be disposed of in accordance with federal, tribal, and state regulations.
- Any waste generated will be properly disposed of in a contract provided trash bin located in approved site and hauled off promptly at project completion.
- Construction equipment and maintenance materials will be stored at approved staging areas.
- All major equipment and vehicle fueling, and maintenance will be performed offsite or on non-pervious surfaces such as concrete or asphalt or deploy a spill containment pad. Absorbent, spill cleanup materials and spill kits will be located at the staging area. All equipment receiving maintenance and vehicles and equipment parked overnight will have drip pans placed beneath them.
- No work will occur outside of the limits of disturbance without NPS approval.

Post Construction

- Ground surface treatment will include grading to natural contours, topsoil and topsoil mantle replacement, seeding, and planting. Pathway edges will be promptly revegetated with NPS approved seed mixes upon completion of pathway construction. All mulch used in re-vegetation efforts shall be certified to be free of weed species. This work will occur as soon after the completion of construction as possible. Soil and fill material must be weed-free and from a source approved by the National Park Service.
- Remove all flagging and fencing and soil erosion structures (after vegetation established).
- All staging and stockpiling areas shall be returned to pre-construction conditions following construction.
- All pathway segments shall have appropriate signage to prevent user conflicts. A sign plan shall be reviewed and approved prior to installation of signage.
- Some of the slash generated from tree-removal operations may be mulched, and the mulch applied to the surface of disturbed areas for both temporary and permanent stabilization. Invasive vegetation shall not be mulched and spread when it is in seed.
- Downed woody debris resulting from construction activities should not be left in place in a pile due to concerns about fuel loading and potential for wildfire impacts. Woody debris should be cut up and scattered or mulched and applied on site.
- Annual pathway maintenance shall include monitoring and maintenance of drainage features, as necessary. Monitoring of these features shall also occur during construction to ensure that impacts are minimized, and drainage management is implemented.
- Pathway shall have appropriate signage to inform users of permitted activities and reduce user conflicts.
- Monitor and treat invasive and exotic plant species. Herbicides must be approved through the Pesticide Use Proposal System (PUPS). Application of herbicides shall be by licensed applicators and certificates must be issued to the park IPM coordinator. At completion of annual work, a pesticide use log must be submitted to the park and entered into PUPS prior to next year's herbicide treatments.
- Restoration of wetland mitigation areas will be carried out biannually with alternating herbicide and prescribed fire treatments as is practicable.
- Annual summaries of restoration treatment efforts, lessons learned and plans for the subsequent year will be prepared near the end of the calendar year to document restoration success and inform adaptive management decision making.

APPENDIX D:
WETLAND STATEMENT OF FINDINGS