April 15, 2014

Dear Protected Resources Division:

We are requesting concurrence from the Protected Resources Division, NOAA Fisheries Service, Southeast Regional Office, that the proposed *Florida Wakulla County Mashes Sands Park Improvements* (Mashes Sands Park) project is *not likely to adversely affect* listed species managed by the National Oceanic and Atmospheric Administration (NOAA) in the project area (see project description and list below). The Department of the Interior (DOI), acting through the U.S. Fish and Wildlife Service (the Service) and other Bureaus, and the Department of Commerce, acting through the National Oceanic and Atmospheric Administration (NOAA) are designated natural resource trustee agencies authorized by the Oil Pollution Act of 1990 (OPA) and other applicable federal laws to assess and assert a natural resource damages claim for this Oil Spill.

Project Description

The proposed Wakulla County Mashes Sands Park Improvements project would improve recreation areas at the Wakulla County Mashes Sands Park. The proposed improvements include constructing observation platforms, boardwalks, and walking paths; improving the boat ramp area and adjacent dock and picnic areas; renovating the parking area and the restroom facility; and constructing a canoe/kayak launch site. Figure 1 defines the project area for this work. The in-water aspect of this project would be limited to the work associated with the any renovation of the existing boat ramp and associated dock. This activity would take place in the southern half of the project area in Figure 1. This activity is located at approximately Latitude 29.97251 N and Longitude 84.34569 W in Figure 1 along the end of the canal in the figure.

Detailed construction methods and plans for the entire have not yet been fully developed and would be subject to the final design and contractor approach. Proposed construction includes upland observation platforms, boardwalks, and walking paths. Additional components include boat ramp area improvements such as picnic areas, renovations to parking and the restroom facility, and development of a canoe/kayak launch site. A range of hand tools and heavy construction equipment would be used to complete this project. Activities include grading, digging holes to place pilings or foundations for new structures, and removing old or damaged material from existing structures.

In upland areas without any connection to the water, pilings would need to be placed for the upland observation platforms and boardwalks and, depending on the nature of repairs required to picnic areas, pilings may be needed in those areas as well. Pilings would most likely be placed by mechanically auguring holes to place pre-formed pilings or to place forms that would be filled with pumped concrete to produce new pilings. The size and depth of the pilings would be approximately 1 to 2 feet in diameter, but the final size would depend on the engineering design requirements.

Construction materials would need to be staged in the project area; this would likely be accomplished in existing disturbed areas (e.g., parking lot areas). Construction Best Management Practices (BMPs) are as follows:

- All construction would be performed in accordance with all local, state, and federal requirements and all requirements of permits obtained so as to protect the surrounding vegetation and natural condition.
- The contractor would submit plan for control of surface water runoff in accordance with all local, state, and federal requirements and all requirements of permits obtained so as to protect the surrounding vegetation and natural condition (discussed in greater detail below).
- All construction adjacent to open water would be separated and confined by appropriate siltation screens and turbidity barriers so as to protect the quality of such open water.
- Upon completion of construction, the site would be cleared of all construction materials and restored to its natural state as shown on the drawings.
- The contractor would be responsible for assuring compliance with all permit requirements.

Based on a site visit conducted on January 10, 2014 with staff from NOAA, DOI and Florida DEP, it appears that the canoe/kayak launch area could be developed with no required in-water work. This is based on the fact that vehicles already have access to the location and there is a gently sloping access to the waterway that would be suitable for canoe/kayak launching. Based on the site visit, the main improvement needed at this area would be the placement of some sort of barrier that would prevent a truck with a trailer from backing to the water's edge to facilitate launching. This could be achieve with the placement of a large rock or rocks or possibly sinking spaced posts at the end of the road. Because the area can be prone to flooding from tides/storms and the width of the waterway at the road's end the construction of significant launching infrastructure is not necessary or desirable.

Renovation of the boat ramp, if undertaken, would involve excavating and replacing the existing ramp surface. In general, the construction of a boat ramp can be summarized in terms of executing a number of specific tasks and subtasks including:

Task 1. Site Preparation

a. Prior to beginning any waterward work at the boat ramp site the project area needs to be surveyed and marked. Turbidity curtains are then installed to encapsulate the work area and other erosion control methods are put in place on the landward side of the project (e.g., placement of hay bales) to prevent erosion into the water from equipment movement and any work being performed on the upland areas.

Task 2. Ramp Construction

a. The area for the ramp is surveyed in and marked by stake or pole (typically small diameter 2" or less PVC).

b. A coffer or bladder dam is installed and the water within the dam, between the waterward extent of the ramp and the land, is pumped out to upland storage ponds or run through a filter system to remove any sediment in the water before returning it to the receiving waterbody. The work area is kept dry by use of dewater pumps (ground water to be pumped is first sampled and tested for water quality) and disposed of in the same manner as the pumped surface water. This dewatering operation is run continuously throughout the construction of the ramps. Once the ramps are completed the dewatering pumps are shut down and the dams are removed.
c. Construction of the ramps begins once the area is sufficiently dry to remove unsuitable soils, if necessary, and replaced with suitable soil. This soil is then compacted to specification. Then the base material for the ramp is placed, usually a rock material. After placement and compaction of the base the ramp is formed, reinforcing steel placed and then the concrete poured and finished. Once curing of the concrete is complete the forms are removed and the coffer or bladder dams are removed.

Task 3. Monitoring

a. Every day, before the start of construction activities, the turbidity screen is checked and repaired if necessary.
b. The foreman or other designated individual checks the area inside the screen and the screen itself to see if any protected species (manatees, dolphins, small tooth sawfish etc) have gotten trapped within the work area or in the screen. If so then appropriate (FWC) personnel are notified to request removal. No work is begun until the animal, fish or bird is removed.
c. During the work day the work area and area adjacent to the work are is monitored to make sure protected species have not ventured into the area. If so then work is stopped until the animal moves out of the area.
d. At the end of the day the area is checked for debris, sediment and possible spillage and these are properly removed and disposed of before shutting down the site.
e. If a storm is anticipated that might damage the turbidity screen it is removed and stored until the storm event has passed and seas have resided.

When work being constructed in water requires it to be performed in a dry environment a cofferdam or bladder dam is installed. These devices are often employed when building boat ramps where the forming, pouring, finishing and curing of the concrete ramps is required to be constructed in a dry area. More often than not, along the coastal areas where tides and wave action occurs, a cofferdam is utilized. A coffer dam is most often constructed of welded steel sheet piles, whales and cross bracing. The sheet piles are usually jetted in to a set depth and then driven in the last 3-5 feet to provide a secure fitting. The sheet piling will usually encompass the entire work area being installed in a "U" shape with the ends of the system connected into the uplands. The cofferdam then provides a barrier to keep out water during the work of placing the ramp. Once the sheet piles are in place the surface water is pumped out to either upland constructed holding

ponds or more often through a filtration system in order to remove any sediment which may be disturbed during the pumping operation.

To keep the work area dry throughout construction of the ramp a dewatering system will also be installed by the contractor to lower and keep water levels below any depth from which soils or sediment may need to be removed in order to provide a firm foundation for the ramp. Prior to starting the dewatering system, water quality tests will be performed to insure the suitability of discharging groundwater back into the receiving water body. If the groundwater is found to not meet water quality criteria for the receiving water body then further treatment may be required before it is released. If the ground water meets water quality standards then it will be filtered through the same system as the surface water. The dewatering system will be run 24 hours a day continously throughout the construction period required to install the water ward facilities, i.e. ramp. Once all work is completed the dewatering system is shut down and removed and then the sheet piles are removed as well. All coffer dam installation and removal is to be only performed by a qualified contractor thoroughly experienced in this type of work.

Use of a bladder dam follows a similar approach but is less intensive where the bottom is anchored in the sediment and then the dam creating the watertight barrier is created by inflating a durable bladder wall vs installing sheet piles. The less invasive nature of the bladder dam makes it more appealing for use in situations, like the Mashes Sands boat ramp where there is a limited amount of in-water work for a limited duration of time.

Installing a bladder dam consists of the following steps:

1) ***Laying out the bladder dam in the general area for installation.***
The bladder dam is constructed of two general pieces 1) an outer durable, abrasion and puncture resistant shell and 2) the buoyant inflatable bladder. Because the outer shell contains a weighted bottom section it can be laid out prior to inflation.

2) Preliminary securing of the bladder dam.
The bladder dam is secured to the bottom of the in-water work area using spikes/ties that are driven into the sediment to secure the weighted bottom of the dam to the sediment. These spikes are driven using hand tools (e.g., sledge hammer, hand-held post driver) using designated eyelets/rings in the outer shell.

3) Inflation of the bladder
Once initially secured the dam can be inflated to more firmly establish the seal with the bottom. Once the seal is established final adjustments can be made in terms of securing the bladder dam and then any residual flow into the work area is addressed with pumping.

4) Removal of the bladder dam
Once the project work requiring a dry area is complete the dam is removed by 1) deflating the bladder, 2) removing the securing stakes, and 3) physically removing the device from the work area.

The decision to use either a coffer dam or bladder dam will be made as part of the final construction plan following an inspection and evaluation of the conditions in the area of the canal around the boat ramp.

Work on the dock associated with the boat ramp would focus on incorporating changes to make the structure compliant with existing access guidelines (e.g., for the Americans with Disabilities Act). As part of this work it is possible that up to 20 pilings could need to be removed and replaced. If required, piling removal would be undertaken with shore based heavy equipment. Subsequent replacement pilings would be made of wood, be up to 8" in diameter and would be placed using a combination of water jetting, pushing, and mechanical auguring. While any dock renovations should be constructed within the existing footprint, as part of final design effort, a survey of submerged aquatic vegetation (SAV) in the area would be completed. Should the site assessment for the project identify SAV in the proposed project area, the conditions in the *Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat* (U.S. Army Corps of Engineers/National Marine Fisheries Service, 2001) would be implemented. Among other elements that would result should these guidelines need to be implemented, there would requirements that pilings be placed a minimum of 10 feet apart and there would be requirements for the height of the dock and spacing of decking materials.

During all in-water construction activity the conditions and guidelines of the *Sea Turtle and Smalltooth Sawfish Construction Conditions* (NOAA, 2006) and the *Standard Manatee Conditions for In-Water Work* (USFWS, 2011) would be implemented and adhered to.

One of the critical elements of the effort to limit impacts associated with the project development, particularly with any parking lot improvements, will be the consideration of, review for, and ultimate implementation of stormwater management controls for the project. Although each project site will pose its own issues when developing the stormwater and sediment control plans for pre, during, and completion of construction plans there is a standard approach to preparing these designs characterized by the following steps, which are distinguished by their relationship to construction, that will be followed for this project:

1. <u>Development of Pre-construction or existing conditions plans w/erosion and sediment control</u> <u>(E&SC)</u> <u>features.</u> These pre-construction plans will illustrate what sediment control measures will be initially installed and their location in order to minimize impacts to receiving waterways when upland land disturbance activities begin. These plans will be based upon an existing site survey delineating the project boundaries, site topography, topographic features (vegetation, soil types, impervious and pervious areas, water bodies (streams and ponds), wetlands, drainage channels, existing structures, drainage basins, flow patterns and major points where stormwater enters and exits the site. The survey should extend to at least 50 feet beyond the project site and contours should depict intervals of 0.5 to 2.0 feet. The pre-construction plans should also identify phases of construction and areas that will be disturbed along with the overall limits of

construction or disturbance. Sensitive areas (e.g., locations of sensitive/protected flora and fauna, wetlands, excessive slopes and unsuitable soils) should also be identified. Taking all the above information from the survey into consideration the designer will designate the locations and describe the structural controls to be installed in order to minimize erosion and control sediment from reaching adjacent receiving waters and wetlands. The most important aspect of the pre-construction drawings is to identify where water flows through the project site and where critical discharge points are located. The nature and location of best management practices (BMP's) that will then be emplaced and incorporated prior to construction are determined from these drawings. BMP's commonly identified/used include: placing combinations of silt screens, hay bales, fiber logs, and temporary vegetation down gradient of areas to be disturbed. Other sediment and stormwater control options include installing sediment ponds or traps or diversion berms and conveyance channels to redirect runoff and sediment from receiving waters.

2. Development of During Construction grading plans. These plans may be incorporated with the pre-development plans when feasible for a simple site but otherwise will be developed for depicting E&SC measures to be employed during grading operations. As the project progresses through its various phases of construction it may be necessary to adjust the location of structural E&SC measures or to include additional ones. These plans will show areas for stockpiling top soils and other materials and how they are to be contained (silt fencing, berms etc.), equipment storage areas and refueling areas (if allowed) with protective measures to be employed such as containment berms or absorbent material for possible spills. These plans may also include final stormwater control structures such as retention/detention ponds. These plans will also include requirements for inspection and maintenance of the BMP's such as inspections and repair/replacement, if necessary, after every storm event. These plans will point out to the contractor critical containment contours to ensure that optimal treatment of runoff from the disturbed areas is realized and minimal impact occurs to receiving waters.

3. Final Grading or Construction Plans. These plans will show how the site is to look upon completion of construction, final grades, stormwater controls and final stabilization of disturbed lands. These plans will include final landscaping (sod, mulching, plants (native trees and shrubs), ditch or swale lining utilizing sod mats, ditch breaks etc., and slope stabilization. Final grades on all impervious areas such as parking, entry and exit drives will designed so as to reduce runoff velocity and direct runoff into drainage conveyance systems and finally into treatment ponds dry or wet type depending on groundwater depths where the majority of runoff is treated before being released into the receiving waters. The design capacity of the treatment ponds will be based upon SCS curves for the required design storm event. Release of stormwater from the sites will be at pre-construction rates. Outlet controls BMP's may include rip rap installation where necessary to control erosion at exit points. Most boat ramp installations will also

include the installation of trench drains at the top the ramps to capture runoff from the drive areas and divert it to treatment areas or pass it through a filter "sock". Projects that have sufficient budgets and suitable site conditions may also consider the placement of pervious concrete in lieu of asphalt or concrete driving surfaces. The final grading plans will describe when and where removal of BMP construction sediment control structures (silt fencing, diversion berms etc.) is to be done i.e. establishment of 70% of permanent vegetation. The final part of the stormwater management system is the development of the monitoring or maintenance plan which will describe the frequency of inspection (after every major storm, x's per year etc.) and maintenance (removing sediment from ponds and swales, cleaning or replacing sand filter beds, replacing sediment "sock" in trench drain) and what actions to take when the system has been reduced in efficiency or has failed.

The total in-water period of work with this project could be up to six months depending on the sequencing of work. The Florida Fish and Wildlife Commission (FWC) and Department of Environmental Protection (DEP) recognize that conducting the in-water construction elements of this project from May to September could reduce risk of adverse impacts to Gulf sturgeon as they are generally in freshwater riverine habitats during this period. However, the FWC and DEP currently face considerable uncertainty regarding project implementation timing as a result of multiple sequential factors including: the need to finalize the draft ERP/PEIS, reach agreements on project stipulations with BP, receive initial funding from BP, develop bid and procurement documents and select contractors. As a result of these and other factors, such as the additional cost that would be associated with shutting down projects and timing issues with other species, FWC and DEP are unable to commit to conducting in-water activities during the period from May to September. In order to mitigate any increased risk arising from conducting in-water work outside of the May to September period, FWC and DEP will ensure the conditions included in NOAA's *Sea Turtle and Smalltooth Sawfish Construction Conditions* (NOAA, 2006) are implemented and adhered to during periods of in-water project-related activity.

Basis for Conclusion of "Not Likely to Adversely Affect"

As part of the project review process, we carefully reviewed and completed an initial National Marine Fisheries Service Endangered Species Checklist for this project on July 30, 2013. As part of this effort, we reviewed a list of species and their critical habitat that "may be present" within the project area. The 7 species from this list that may be present in the proposed project area, and their status, include:

- Smalltooth Sawfish, *Pristis pectinata*, Endangered
- Gulf Sturgeon, *Acipenser oxyrinchus desotoi*, Threatened
- Green Sea Turtle, *Chelonia mydas*, Endangered
- Loggerhead Sea Turtle, *Caretta caretta*, Threatened
- Hawksbill Sea Turtle, *Eretmochelys imbricate*, Endangered
- Leatherback Sea Turtle, *Dermochelys coriacea*, Endangered
- Kemp's Ridley Sea Turtle, *Lepidochelys kempii*, Endangered

Smalltooth Sawfish

Encounter data indicate a resident population of Smalltooth sawfish exists only in southwest Florida (Simpfendorfer and Wiley, 2005). Only scattered individual encounters of species have occurred in areas north of Charlotte Harbor (Norton et al. 2012). In addition, most of the encounters reported from the Panhandle between 2001 and 2006 were associated with sandy beaches or in deeper water (NMFS 2009). Due to the lack of suitable habitat and extremely rare occurrence of Smalltooth sawfish in the part of the project area where there is potential for in-water work, exposure of Smalltooth sawfish to the proposed project is extremely unlikely. In addition, adverse effects due to the proposed project are not likely to be detectable or measurable due to the proposed implementation of the *Sea Turtle and Smalltooth Sawfish Construction Conditions* (NOAA, 2006) for any in-water work. Therefore, effects to Smalltooth sawfish due to the proposed project would be insignificant.

Gulf Sturgeon

The proposed project does not intersect identified Gulf sturgeon critical habitat areas. As a result of the specific project location for the potential in water work, a tidal waterway connecting parts of Apalachee Bay, we conclude Gulf sturgeon are extremely unlikely to be in the project area. However, implementation of the *Sea Turtle and Smalltooth Sawfish Construction Conditions* (NOAA, 2006) for any in-water work would likely eliminate any remaining risks should in-water work be necessary for the canoe/kayak launch improvements. As a result, adverse effects to Gulf sturgeon due to the proposed project are not likely to be detectable or measurable and, as a result, effects Gulf sturgeon would be insignificant.

Sea Turtles

The proposed project action area identified in Figure 1 does not intersect with identified critical habitat areas for any species of sea turtle. However, the range of sea turtles suggests they could occur in the project area.

Florida conducts sea turtle nesting monitoring which provides some indication of sea turtle activity levels in the area. The project area was not directly surveyed, but data exists for Bald Point State Park, which is approximately 2 miles away. Figure 2, developed using the state's sea turtle nesting and occurrence reporting system (FWC, 2013), shows the portion of the surveyed beach nearest to the project location. The nesting data from Bald Point are summarized in Table 1 to provide some proxy of potential sea turtle presence in the project area.

Table 1. Summary of Sea Turtle Nesting and Occurrence Data from the nearest surveyed beaches to the project area (Bald Point State Park ~2 miles away. See Figure 2 for orientation relative to project site)

Sea turtle	***Nesting density rank***[a]

Green sea turtles	Low
Loggerhead sea turtles	Low-medium
Leatherback sea turtles	Not Present
Sea turtle	***Nesting occurrence data[b]***
Hawksbill sea turtles	Absent
Kemp's ridley sea turtles	Present

[a] Nesting habitat for these species is ranked based on quartiles of observed density in the state along surveyed reaches of beach based on data from 2008-2012. Low values were in the lower quartile, high values in the highest quartile and the Medium value reflects an observation from the middle two quartiles. Not present indicates no observed nesting from 2008-2012.

[b] The available data from 2008-2012 for these species is summarized only in terms of whether the species nested (i.e., present) or not (i.e., absent) during the period in the surveyed area.

Source. FWC, 2013

Generally, the data in Table 1 indicate a low expected presence for Loggerhead and Green sea turtles in the nearest surveyed area. However, because of the specific project location and the low probability of in-water work we believe exposure to sea turtles during project activities is extremely unlikely. Remaining risks would then be addressed with the implementation of the *Sea Turtle and Smalltooth Sawfish Construction Conditions* (NOAA, 2006) for any in-water work. As a result, we conclude that adverse effects due to the proposed project are not likely to be detectable or measurable. Therefore, effects to sea turtles due to the proposed project would be insignificant.

Determination of Effect

Based upon this review, we conclude the proposed action "may affect, but is not likely to adversely affect" the following protected species in the project area (no identified critical habitats intersect the project action area):

- Smalltooth Sawfish – The proposed project may affect, but is not likely to adversely affect and will not jeopardize the continued existence of the species.
- Gulf Sturgeon - The proposed project may affect, but is not likely to adversely affect and will not jeopardize the continued existence of the species.
- Green Sea Turtle - The proposed project may affect, but is not likely to adversely affect and will not jeopardize the continued existence of the species.
- Loggerhead Sea Turtle - The proposed project may affect, but is not likely to adversely affect and will not jeopardize the continued existence of the species.

- Hawksbill Sea Turtle - The proposed project may affect, but is not likely to adversely affect and will not jeopardize the continued existence of the species.
- Leatherback Sea Turtle - The proposed project may affect, but is not likely to adversely affect and will not jeopardize the continued existence of the species.
- Kemp's Ridley Sea Turtle - The proposed project may affect, but is not likely to adversely affect and will not jeopardize the continued existence of the species.

References

Florida Fish and Wildlife Conservation Commission (FWC). 2013. Statewide Atlas of Sea Turtle Nesting Occurrence and Density. http://www.myfwc.com/research/wildlife/sea-turtles/nesting/nesting-atlas/ Accessed November 4, 2013.

NOAA. 2006. Sea Turtle and Smalltooth Sawfish Construction Conditions. http://sero.nmfs.noaa.gov/pr/endangered%20species/Sea%20Turtle%20and%20Smalltooth%20Sawfish%20Construction%20Conditions%203-23-06.pdf Accessed July 16, 2013.

Norton, Shelley L., Tonya R. Wiley , John K. Carlson , Amanda L. Frick , Gregg R. Poulakis & Colin A. Simpfendorfer. 2012. Designating Critical Habitat for Juvenile Endangered Smalltooth Sawfish in the United States, Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science, 4:1, 473-480, DOI: 10.1080/19425120.2012.676606.

Simpfendorfer, C.A. and T.R. Wiley. 2005. Determination of the distribution of Florida's remnant sawfish population and identification of areas critical to their conservation. Final Report. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida.

U.S. Army Corps of Engineers/National Marine Fisheries Service. 2001. *Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat.* August

U.S. Fish and Wildlife Service (FWS). 2011. Standard Manatee Conditions for In-Water Work. http://www.fws.gov/northflorida/Manatee/Manate_Key_Programmatic/20130425_gd_Appendix%20B_2011_Standard%20Manatee%20Construction%20Conditions.pdf

Figures

Figure 1. Detail of the project action area for the Mashes Sands Park project.

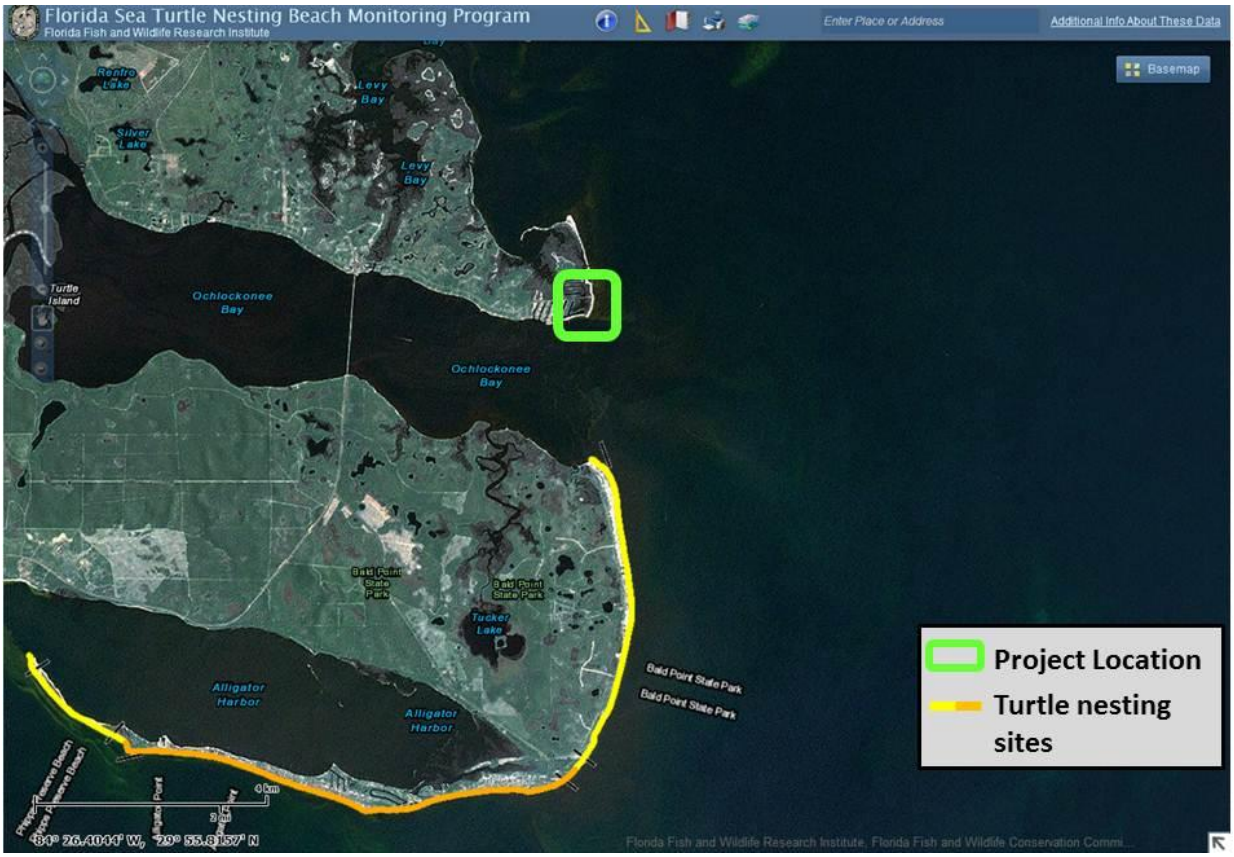

Figure 2. Image showing potential nesting locations for sea turtles relative to the general project location.