APPENDIX A

Pertinent Correspondence

ENVIRONMENTAL ASSESSMENT
ADDITIONAL OFFSHORE BORROW AREAS –
ST. JOHNS COUNTY, FLORIDA SHORE PROTECTION PROJECT AND
ST. JOHNS COUNTY, FLORIDA COASTAL STORM RISK
MANAGEMENT PROJECT
(SOUTH PONTE VEDRA BEACH AND VILANO BEACH REACHES)

U.S. Army Corps of Engineers
JACKSONVILLE DISTRICT

This page intentionally left blank.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

20 Jan 2022

Planning and Policy Division
Environmental Branch

To Whom It May Concern:

Pursuant to the National Environmental Policy Act, this letter constitutes the Notice of Availability of the proposed Finding of No Significant Impact (FONSI) and draft Environmental Assessment (EA) that evaluates environmental effects from dredging the proposed additional Offshore Borrow Areas for the St. Johns County, Florida Shore Protection Project (SJC SPP) (St. Augustine Beach) and St. Johns County, Florida Coastal Storm Risk Management (SJC CSRM) Project (South Ponte Vedra and Vilano Beach).

The SJC SPP and SJC CSRM projects are located along the shoreline of St. Johns County (SJC), Florida, specifically South Ponte Vedra, Vilano, and St. Augustine Beach areas. The Preferred Alternative includes dredging borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) from the Outer Continental Shelf (OCS) to obtain beach compatible fill material for the continued renourishment of the St. Augustine Beach and Vilano authorized projects shorelines, respectively. The authorized projects will incorporate the use of these alternate sand sources, as needed, to supplement the use of the St. Augustine Inlet Complex sand borrow source sites.

The purpose of the SJC SPP and SJC CSRM projects are to reduce the risk of potential damages from waves, erosion, and storm surge caused by coastal storms to structures and infrastructure along the SJC shoreline. The purpose of the Preferred Alternative is to obtain beach compatible fill material from borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) for the continued renourishment of the St. Augustine Beach and South Ponte Vedra and Vilano Beach authorized projects shorelines, respectively. The continued use of the St. Augustine Inlet as the primary/only sand source in SJC for the SJC SPP and SJC CSRM projects is unsustainable. Therefore, the new borrow sources S-1 and N-3 are needed to support future nourishment, potential emergency projects, and conceivable future authorized projects in SJC, specifically SJC CSRM and SPP. The proposed action does not change the location or frequency of sand placement described in the authorized SJC CSRM and SPP projects.

Details on the Preferred Alternative can be found in the project's draft EA, which is available for your review on the Jacksonville District's Environmental planning website, under St. Johns County:

http://www.saj.usace.army.mil/About/Divisions-Offices/Planning/Environmental-Branch/Environmental-Documents/ (On that page, click on the "+" next to "St. Johns". Scroll down to the project name.)

Questions or comments should be submitted to the Environmental Branch, Coastal Section at the letterhead address or via email to Darren.J.Pecora@usace.army.mil within 30 days from the date of this Notice of Availability.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

20 Jan 2022

Planning and Policy Division
Environmental Branch

Mr. Pace Wilbur
Acting Assistant Regional Administrator
Habitat Conservation Division
National Marine Fisheries Service
263 13th Ave South
St. Petersburg, FL 33701

Dear Mr. Wilbur:

Pursuant to the National Environmental Policy Act, this letter constitutes the Notice of Availability of the proposed Finding of No Significant Impact (FONSI) and draft Environmental Assessment (EA) that evaluates environmental effects from dredging the proposed additional Offshore Borrow Areas for the St. Johns County, Florida Shore Protection Project (SPP) and St. Johns County, Florida Coastal Storm Risk Management (CSRM) Project (South Ponte Vedra and Vilano Beach). This letter also serves to convey the Essential Fish Habitat (EFH) Assessment incorporated in the project's draft EA.

The U.S. Army Corps of Engineers, Jacksonville (Corps) is initiating coordination with NMFS under the EFH provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). Per the October 2, 2019 EFH Finding between NMFS' Southeast Regional Office and The U.S. Army Corps of Engineers, the EFH Assessment for the project is integrated within the draft EA. Per the 2019 Finding, the February 2004 "Preparing Essential Fish Habitat Assessments: A Guide for Federal Action Agencies" document, and 50 CFR 600.920(e)(3), an EFH Assessment must include specific items. Each item will be addressed in the table below with a reference to where the information is located in the draft EA.

EFH Required Item	Draft EA Location(s)
Description of the Proposed Action	What is the action? - *Section 2.1.2 Alternative 2: New Borrow Areas S-1 and N-3 (Preferred Alternative)* What is the purpose of the action? - *Section 1.1 Project Description* - *Section 1.2 Project Need or Opportunity* - *Section 1.3 Project Authority* How, when and where will it be undertaken? - *Section 2.1.2 Alternative 2: New Borrow Areas S-1 and N-3 (Preferred Alternative)* What will be the result of the action? - *Section 4 Environmental Effects*
Analysis of the potential adverse effects (individual and cumulative) of the action on EFH and the management species	What EFH will be affected by the action? - *Section 3.5 Essential Fish Habitat* What are the adverse effects to EFH that could occur as a result of this action? / How would they impact managed species? / What would be the magnitude of effects? / What would the duration be? - *Section 4.4.2 Environmental Effects*
Proposed Compensatory Mitigation	- *None required*
Avoidance and Minimization	- *Section 6 Environmental Compliance*

Additionally, the guidance states that for projects that may have substantial impacts on EFH, additional information may be necessary. The following additional items are considered and addressed throughout the draft EA:

EFH Additional Information Item	Draft EA Location(s)
Results of on-site studies to evaluate the habitat and/or site-specific effects of the project	- *Section 1.4 Related Documents*
Review of pertinent literature and related information	- *Literature cited throughout draft EA*

The Corps has determined that the potential effects of the Preferred Alternative would have minimal adverse effects on EFH and no adverse effects on federally managed fish species. The magnitude of the potential impacts are minor and insignificant. Details on the Preferred Alternative are contained in the EA, which is available for your review on the Jacksonville District's Environmental planning website, under St. Johns County:

https://www.saj.usace.army.mil/About/DivisionsOffices/Planning/Environmental-Branch/Environmental-Documents/. (On that page, click on the "+" next to "St. Johns County". Scroll down to the project name.)

The Corps respectfully requests all comments under NEPA and the MSFCMA for the draft EA within 30 days of the receipt of this letter. Questions, requests for additional information, or comments should be submitted to the Corps' Environmental Branch, Coastal Section at the letterhead address or via email to Darren.J.Pecora@usace.army.mil. Thank you for your assistance.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

From: Pace Wilber - NOAA Federal
To: Bucatari, Jennifer
Cc: jocelyn.karazsia@noaa.gov; Piatkowski, Douglas N; Pecora, Darren J CIV USARMY CESAJ (USA)
Subject: [URL Verdict: Neutral][Non-DoD Source] Re: Offshore Borrow Area EA - St. Johns County, Florida
Date: Monday, January 31, 2022 9:17:47 PM

Thanks Jen. We are not planning to review the EA. Pace

On Mon, Jan 31, 2022 at 5:12 PM Bucatari, Jennifer <Jennifer.Bucatari@boem.gov> wrote:

> Dear Pace and Jocelyn,
>
> On January 21, 2022, the US Army Corps of Engineers (USACE) issued a Public Notice for the publication of a draft Environmental Assessment (EA) for "Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project and St. Johns County, Florida Coastal Storm Risk Management Project (South Ponte Vedra Beach and Vilano Beach Reaches". The EA evaluates the proposed dredging of new borrow areas S-1 and N-3 for two federally authorized projects. Our understanding is that along with this publication, USACE also submitted a letter to your office to initiate consultation under the Magnuson-Stevens Fishery and Conservation Management Act (MSA) for Essential Fish Habitat (EFH) (Section 305). The Bureau of Ocean Energy Management (BOEM) is a Cooperating Agency on this project and has worked jointly with USACE on the draft EA. Since both of these offshore borrow are under the sole jurisdiction of the BOEM, we wanted to alert you to the our involvement and that the proposed action falls under our purview. BOEM will consider your response to the consultation request in our ongoing review of the project. Please let us know if you need any additional information or have any questions.
>
> Thanks,
>
> Jen
>
> --
>
> Jennifer Bucatari
>
> Oceanographer
>
> Marine Minerals Division
>
> Office of Strategic Resources
>
> Bureau of Ocean Energy Management
>
> Office 703-787-1742
>
> Cell 703-300-7848
>
> www.boem.gov

--
Pace Wilber, Ph.D.
Acting Assistant Regional Administrator
Habitat Conservation Division
NOAA Fisheries Service
331 Ft Johnson Road
Charleston, SC 29412

843-460-9926 (O)
843-568-4184 (NOAA Cell)
Pace.Wilber@noaa.gov

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

CESAJ-PD-E

MEMORANDUM FOR THE RECORD

SUBJECT: Compliance with the Fish and Wildlife Coordination Act (FWCA) for the proposed Finding of No Significant Impact (FONSI) and draft Environmental Assessment (EA) that evaluates environmental effects from dredging the proposed additional Offshore Borrow Areas for the St. Johns County, Florida Shore Protection Project (SPP) (St. Augustine Beach) and St. Johns County, Florida Coastal Storm Risk Management (CSRM) Project (South Ponte Vedra and Vilano Beach).

The purpose of the St. Johns County, Florida Shore Protection Project (SJC SPP) and St. Johns County, Florida Coastal Storm Risk Management (SJC CSRM) projects are to reduce the risk of potential damages from waves, erosion, and storm surge caused by coastal storms to structures and infrastructure along the SJC shoreline. The purpose of the Preferred Alternative is to obtain beach compatible fill material from borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) for the continued renourishment of the St. Augustine Beach and South Ponte Vedra and Vilano Beach authorized projects shorelines, respectively. The continued use of the St. Augustine Inlet as the primary/only sand source in SJC for the SJC SPP and SJC CSRM projects is unsustainable. Therefore, the new borrow sources S-1 and N-3 are needed to support future nourishment, potential emergency projects, and conceivable future authorized projects in SJC, specifically SJC CSRM and SPP.

The Preferred Alternative and study area are located along the shoreline and offshore waters of St. Johns County (SJC), Florida, specifically South Ponte Vedra, Vilano, and St. Augustine Beach areas as well as in Federal waters (>3 nautical miles offshore) on the Outer Continental Shelf (OCS) 6-8 miles offshore in the S-1 and N-3 sand borrow areas. The Preferred Alternative includes dredging borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) to obtain beach compatible fill material for the continued renourishment of the St. Augustine Beach and Vilano authorized projects shorelines, respectively. The authorized projects will incorporate the use of these alternate sources, as needed, to supplement the use of the St. Augustine Inlet Complex sand borrow source sites.

ESA Section 7 consultation was completed for the existing beach nourishment projects (SJC SPP and CSRM) through the 1998 GRR and 2017 EA. The projects were determined to be eligible for coverage by the 2015 USFWS Statewide Programmatic Biological Opinion, as amended (SPBO), 2013 Programmatic Piping Plover Biological Opinion (P3BO), and the 2017 EA's individual consultations with USFWS for Anastasia Island beach mouse and rufa red knot (letter dated December 22, 2016). Beach nourishment activities will be conducted in compliance with the applicable minimization measures, Reasonable and Prudent Measures (RPMs), Terms and Conditions (T&Cs) of those consultations. The Preferred Alternative includes dredging the borrow areas S-1 and N-3, which have not been previously consulted on. The proposed action does not change the location or frequency of sand placement described in the authorized SJC CSRM and SPP projects.

The U.S. Army Corps of Engineers Jacksonville (Corps) has determined that the Preferred Alternative may affect, but is not likely to adversely affect, (MANLAA) Florida manatees (*Trichechus manatus latirostris*).

Details on the final recommendation are contained in the EA, which is available for your review on the Jacksonville District's Environmental planning website, under St. Johns County: http://www.saj.usace.army.mil/About/Divisions-Offices/Planning/Environmental-Branch/Environmental-Documents/ (On that page, click on the "+" next to "St. Johns". Scroll down to the project name.)

The Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq., March 10, 1934, as amended 1946, 1958, 1978, and 1995) (FWCA) requires Federal agencies to consult with USFWS regarding the impacts to fish and wildlife resources and the proposed measures to mitigate these impacts. Additional coordination authorities exist through the review process of the National Environmental Policy Act (NEPA; 42 U.S.C. 4321-4347, January 1, 1970, as amended 1975 and 1982) and the Endangered Species Act of 1973 (ESA; 7 U.S.C. 136, 16 U.S.C. 1531 et seq. December 28, 1973). USFWS continues to coordinate and consult with the Corps through NEPA and the ESA in which impacts to fish and wildlife resources are adequately addressed via these two authorities. USFWS will include comments relevant to FWCA in the USFWS review and response to this project's draft EA.

The undersigned, the Corps and USFWS, agree to utilize the project's NEPA review process to complete coordination responsibilities under the FWCA. This agreement will avoid duplicate analysis and documentation as authorized under 40 CFR section 1500.4 (k), 1502.25, 1506.4, and is consistent with Presidential Executive Order for Improving Regulation and Regulatory Review, released January 18, 2011.

ROBERT CAREY Digitally signed by ROBERT CAREY
Date: 2022.04.28 07:41:35 -04'00'

Robert L. Carey
Division Manager, Environmental Review
Florida Ecological Services Field Office

Angela E. Dunn
Chief, Environmental Branch

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

20 Jan 2022

Planning and Policy Division
Environmental Branch

Robert L. Carey
Division Manager, Environmental Review
Florida Ecological Services Field Office
U.S. Fish and Wildlife Service
Gainesville, Florida

Dear Mr. Carey:

Pursuant to the National Environmental Policy Act of 1969, as amended, (NEPA), this letter constitutes the U.S. Army Corps of Engineers, Jacksonville District (Corps) Notice of Availability of the proposed Finding of No Significant Impact (FONSI) and draft Environmental Assessment (EA) that evaluates environmental effects from dredging the proposed additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project (SJC SPP) (St. Augustine Beach) and St. Johns County, Florida Coastal Storm Risk Management (SJC CSRM) Project (South Ponte Vedra and Vilano Beach). In order to comply with Section 7 of the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the Corps respectfully requests concurrence from the U.S. Fish and Wildlife Service (USFWS) on the Corps' effect determinations for the project.

The SJC SPP and SJC CSRM projects are located along the shoreline in northeast Florida, specifically South Ponte Vedra, Vilano, and St. Augustine Beach reaches. The Preferred Alternative would use the S-1 and N-3 sand borrow areas that are located in Federal waters (>3 nautical miles offshore) on the Outer Continental Shelf (OCS), approximately 6-8 miles offshore. The Preferred Alternative would dredge these borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) to obtain beach compatible fill material for the continued renourishment of the St. Augustine, South Ponte Vedra, and Vilano beach authorized projects shorelines, respectively. The authorized projects will incorporate the use of these alternate sources, as needed, to supplement the use of the St. Augustine Inlet Complex sand borrow source sites. The continued use of the St. Augustine Inlet as the primary/only sand source in SJC for the SJC SPP and SJC CSRM projects is unsustainable. Therefore, the new borrow sources S-1 and N-3 are needed to support future nourishment, potential emergency projects, and conceivable future authorized projects in SJC, specifically SJC CSRM and SPP.

ESA Section 7 consultation was previously completed for the existing beach nourishment projects (SJC SPP and CSRM). The projects were determined to be eligible for coverage by the 2015 Statewide Programmatic Biological Opinion, as amended (SPBO), 2013 Programmatic Piping Plover Biological Opinion (P3BO), and the 2017 EA's individual consultations with USFWS for Anastasia Island beach mouse and rufa red knot (letter dated December 22, 2016). Beach nourishment activities will be conducted in compliance with the applicable minimization measures,

Reasonable and Prudent Measures (RPMs), and Terms and Conditions (T&Cs) of those consultations. The Preferred Alternative includes dredging the borrow areas S-1 and N-3, which have not been previously consulted on. The proposed action does not alter sand placement location and frequency, as described in the prior project consultations.

The Corps is respectfully submitting this request for the dredging of the new borrow areas and potential effects to the Florida manatee (*Trichechus manatus latirostris*). The Corps has determined that the Preferred Alternative may affect, but is not likely to adversely affect, (MANLAA) Florida manatees. The Corps requests concurrence from the USFWS on the Corps' MANLAA determination for the Florida manatee. Included with this letter is additional information describing the project background, project location and Preferred Alternative, potential effects to Florida manatees, as well as efforts to eliminate/avoid effects to listed species. Additional details on the Preferred Alternative can be found in the draft EA, which is available for your review on the Jacksonville District's Environmental planning website, under St. Johns County:

http://www.saj.usace.army.mil/About/Divisions-Offices/Planning/Environmental-Branch/Environmental-Documents/ (On that page, click on the "+" next to "St. Johns". Scroll down to the project name.)

In addition to notifying USFWS of the draft documents and requesting concurrence with the effect determinations, the Corps respectfully submits the enclosed memorandum for the record (MFR) for USFWS consideration and signature. The MFR documents an informal understanding between the two agencies to utilize the project's ESA and NEPA review process to complete coordination responsibilities under the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq., March 10, 1934, as amended 1946, 1958, 1978, and 1995). This agreement will avoid duplicate analysis and documentation as authorized under 40 CFR section 1500.4 (k), 1502.25, 1506.4.

The Corps respectfully requests that USFWS provide concurrence to the Corps' effect determinations and sign the enclosed MFR within 30 days of the receipt of this letter. Questions or comments on the project's proposed FONSI, draft EA, and associated appendices may be submitted to the Environmental Branch, Coastal Section at the letterhead address or via email to Darren.J.Pecora@usace.army.mil within 30 days from the date of this Notice of Availability. Thank you for your assistance.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

Enclosure

Request for Concurrence under Section 7 of the Endangered Species Act Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project (SPP) and St. Johns County, Florida Coastal Storm Risk Management (CSRM) Project (South Ponte Vedra and Vilano Beach)

January 2022

In order to comply with Section 7 of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the U.S. Army Corps of Engineers, Jacksonville District (Corps), respectfully requests a letter of concurrence within 30 days of the date of this letter from the U.S. Fish and Wildlife Service (USFWS) for the Additional Offshore Borrow Areas use for the St. Johns County, Florida Shore Protection Project (SJC SPP) and St. Johns County, Florida Coastal Storm Risk Management (SJC CSRM) Project (South Ponte Vedra and Vilano Beach), Environmental Assessment (EA).

ESA Section 7 consultation was completed for the existing beach nourishment projects (SJC SPP and CSRM) through the 1998 General Reevaluation Report (GRR) with Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), St. Johns County, Florida, Shore Protection Project (Corps 1998) and 2017 St. Johns County Coastal Storm Risk Management Project, Final Integrated Feasibility Study and EA. South Ponte Vedra Beach, Vilano Beach, and Summer Haven Reaches St. Johns County, Florida (Corps 2017). The projects were determined to be eligible for coverage by the 2015 USFWS Statewide Programmatic Biological Opinion, as amended (SPBO), 2013 Programmatic Piping Plover Biological Opinion (P3BO), and the 2017 EA's individual consultations with USFWS for Anastasia Island beach mouse and rufa red knot (letter dated December 22, 2016). Beach nourishment activities will continue to be conducted in compliance with the applicable minimization measures, Reasonable and Prudent Measures (RPMs), Terms and Conditions (T&Cs) of those consultations. The Preferred Alternative includes dredging the borrow areas S-1 and N-3, which are have not been previously consulted on. The proposed action does not alter sand placement location and frequency, as described in the prior project consultations. The Corps is respectfully submitting this request for the dredging of the new borrow areas. The Corps determined that the Preferred Alternative may affect, but is not likely to adversely affect, (MANLAA) Florida manatees (*Trichechus manatus latirostris*).

Pursuant to the request, the Corps is providing the following information:

- Description of the Project Background;
- Description of the Project Location and Proposed Action;
- Listed Species Under USFWS Jurisdiction;
- Potential Effects to Listed Species and Efforts to Eliminate/Avoid Impacts; and
- Corps' Effect Determination.

Description of the Project Background

The purpose of the SJC SPP and CSRM projects are to reduce the risk of potential damages from waves, erosion, and storm surge caused by coastal storms to structures

and infrastructure along the St. Johns County shoreline. The purpose of the Preferred Alternative is to obtain beach compatible fill material from borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) for the continued renourishment of the St. Augustine Beach and South Ponte Vedra and Vilano Beach authorized projects shorelines, respectively. The continued use of the St. Augustine Inlet as the primary/only sand source in SJC for the SJC SPP and SJC CSRM projects is unsustainable. Therefore, the new borrow sources S-1 and N-3 are needed to support future nourishment, potential emergency projects, and conceivable future authorized projects in SJC, specifically SJC CSRM and SPP. The authorized SJC SPP calls for the periodic placement of of approximately 1,625,000 million cubic yards (mcy) of beach compatible fill every 5 years from the St. Augustine Inlet. The SJC CSRM authorized project calls for the placement of periodic nourishment of approximately 866,000 cubic yards (cy) of beach compatible fill every 12 years from the St. Augustine Inlet Complex.

The currently authorized projects would incorporate the use of these alternate sources, as needed, to supplement the use of the St. Augustine Inlet Complex sand borrow source sites. Details on the previously authorized projects, including project descriptions, prior consultations, and effects analysis of the projects, can be found in the following documents:

- SJC CSRM: St. Johns County Coastal Storm Risk Management Project, Final Integrated Feasibility Study and Environmental Assessment (EA) and Findings of No Significant Impact (FONSI). South Ponte Vedra Beach, Vilano Beach, and Summer Haven Reaches St. Johns County, Florida (Corps 2017).
- SJC SPP: General Reevaluation Report (GRR) with Final EA and FONSI, St. Johns County, Florida, Shore Protection Project (Corps 1998).

Additional details on the Preferred Alternative are contained in this document and the draft 2022 EA, which is available for review on the Jacksonville District's Environmental planning website, under St. Johns County:

https://www.saj.usace.army.mil/About/DivisionsOffices/Planning/Environmental-Branch/Environmental-Documents/

(On that page, click on the "+" next to "St. Johns". Scroll down to the project name.)

Description of the Project Location and Preferred Alternative

St. Johns County (SJC) is located along the northeast coast of Florida between Duval County (north) and Flagler County (south). The SJC Atlantic Ocean shoreline extends approximately 40 miles. The SJC SPP and SJC CSRM projects are located along the shoreline in northeast Florida, specifically South Ponte Vedra, Vilano, and St. Augustine Beach areas. The Preferred Alternative would utilize the S-1 and N-3 sand borrow areas located approximately 6-8 miles offshore in Federal waters (>3 nautical miles offshore) on the Outer Continental Shelf (OCS) , (see **Figure 1**). SJC CSRM is approximately 2.6 miles long (Florida Department of Environmental Protection (FDEP) R-monument R-103.5 – R-116.5). SJC SPP is approximately 2.5 miles long (FDEP R-monument R-137 – R-150).

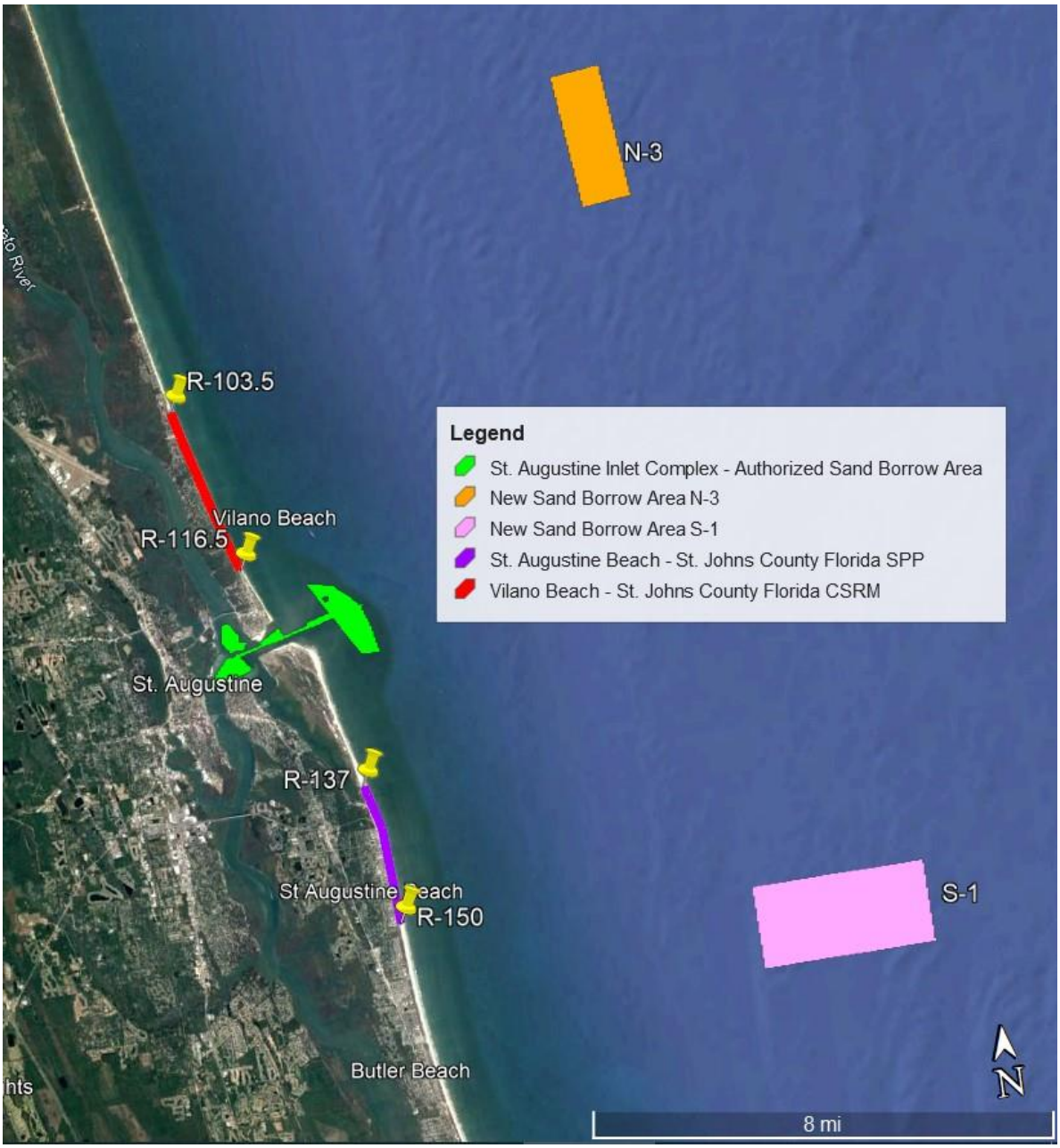


Figure 1. Study area and Preferred Alternative location.

The authorized projects would incorporate the use of these alternate sources, as needed, to supplement the use of the St. Augustine Inlet Complex sand borrow source sites. SJC CSRM is expected to use N-3 for up to two scheduled renourishments during its remaining authorized project lifecycle, through 2070; the SJC SPP is expected to use S-1 for up to three scheduled renourishments during its remaining authorized project lifecycle, through 2051. The proposed offshore borrow areas N-3 and S-1 may be utilized as early as summer/fall 2022. The anticipated dredging interval infrequent and is approximately every 5-15 years, however dredging may occur sporadically for emergency use. Hopper

dredging, transport, and placement is expected to occur for approximately 60-120 days to obtain the necessary volumes.

Efficient dredging practice involves excavating sand in a succession of long, parallel, and relatively straight cuts of 2-5-foot thickness. The dredged sand will travel through the dragheads into the dredge's open hopper and most of the turbid seawater effluent will drain out the overflow structures in the hopper. The vessel will transport the dredged material 6-8 miles from the borrow site to offloading pump-outs positioned within approximately ½ mile offshore where the material will be pumped from the hopper via pipeline to the beach. Multiple pump-outs and pipeline landings will be positioned alongshore to allow for efficient pumping of sand. Pipeline will be rafted, floated into place, and flooded and submerged to the sea floor. The placement and relocation of the nearshore mooring buoys may involve the use of tender tugboats and a barged pipeline hauler or crane. Pump-out buoys may be anchored using multi-ton point anchors and/or clump weights. Support vessels and tugs may support the hopper dredge in other activities, such as crew rotations and pump-out connection. Pipelines will use existing corridors, and new corridors may be established. Any new pipeline corridors will avoid areas of hardbottom. There may be potential need for relocation trawling to remove ESA listed sea turtles from N-3 and S-1 immediately prior to daily dredge operations. If trawling is utilized, it would be coordinated through the South Atlantic Regional Biological Opinion for Dredging and Material Placement Activities in the Southeast United States (SARBO), as amended, process with U.S. Army Corps of Engineers South Atlantic Division (SAD) and National Marine Fisheries Service (NMFS).

Listed Species under USFWS Jurisdiction

Listed species which may occur in the vicinity of the Preferred Alternative and are under the jurisdiction of the USFWS include the following:

Common Name	Scientific Name	Listing Status	Corps' Effect Determination
Florida manatee	*Trichechus manatus latirostris*	Threatened	MANLAA

MANLAA = May affect, not likely to adversely affect

The Corps' Analysis and Effect Determinations on Listed Species under USFWS Jurisdiction:

West Indian (Florida) Manatee

The Florida manatee is a subspecies of the West Indian manatee (*Trichechus manatus*) and can be found throughout the southeastern United States. The manatee is a large, plant-eating aquatic mammal that move between freshwater and saltwater environments. They can be found in shallow coastal waters, rivers, and springs. Adult manatees are approximately 10 feet long, weighing between 800 – 1200 pounds, and consume approximately 4-9% of their body weight each day. Although manatees feed underwater, they frequently rest just below the water surface with only the snout above water. Manatees were listed as endangered throughout its range for both the Florida and Antillean subspecies (*Trichechus manatus latirostris* and *Trichechus manatus manatus*)

in 1967 (32 FR 4001). In May 2017, the USFWS reclassified the manatee from endangered to threatened.

Federal law, specifically the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973 protects manatees. Critical habitat is defined under the Endangered Species Act as specific areas within and/or outside a geographical area that are occupied by a species at the time of listing, that contain physical or biological features essential to the conservation of the species and therefore require special management considerations or protection for the benefit of the species. Critical habitat for the Florida manatee was described in 1976 in 50 CFR 17.95 for Florida. The project is not located within USFWS Designated Critical Habitat (DCH) (*see* **Figure 2**) or Florida Fish and Wildlife Conservation Commission Manatee Protection Zones (*see* **Figure 3**).

Figure 2. USFWS Florida manatee DCH.

(Source: https://www.fws.gov/northflorida/manatee/2009_CH_Petition/20100112_frn_Federal%20Register_manatee_12-mo_325.pdf)

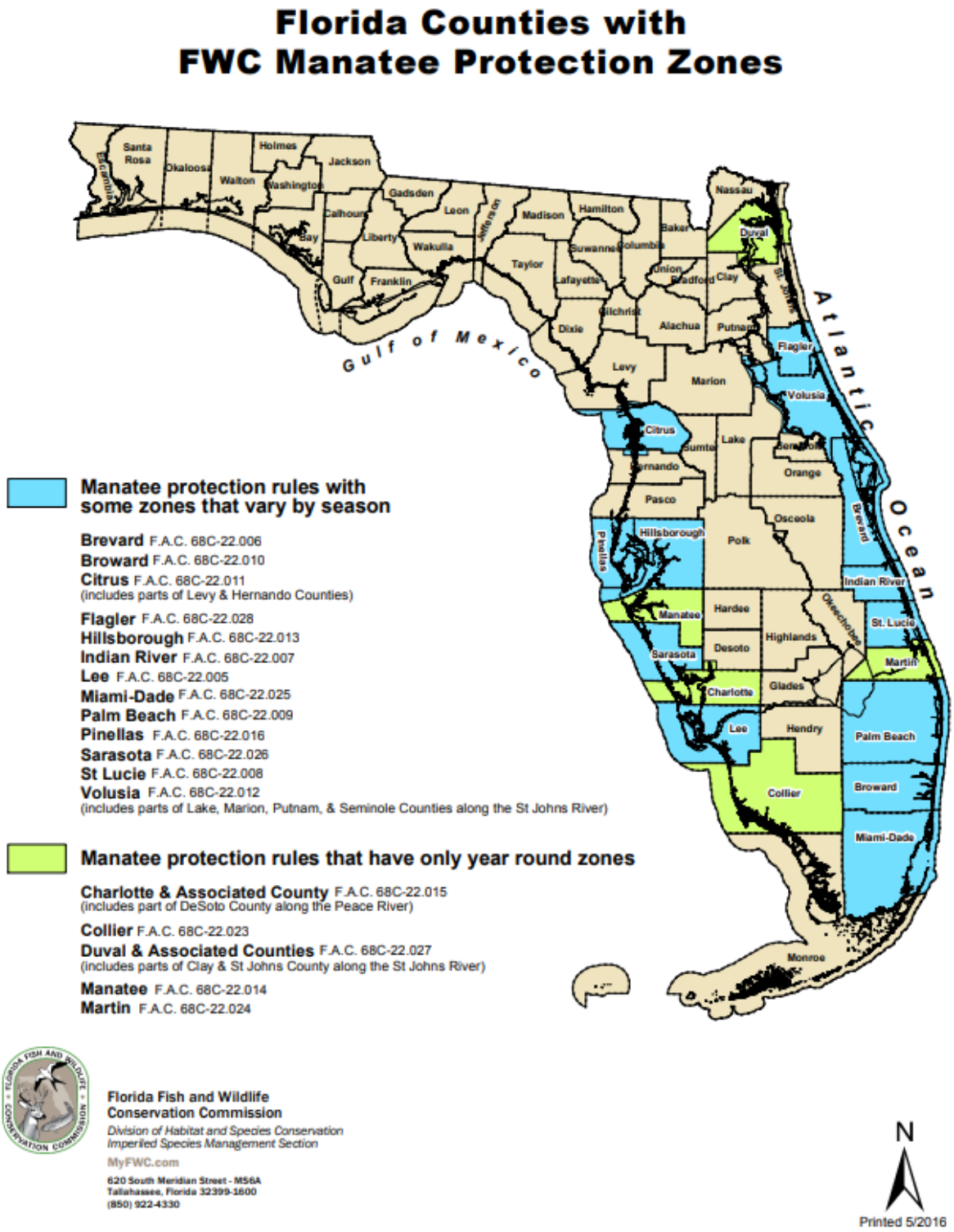


Figure 3. Florida Fish and Wildlife Conservation Commission (FWC) manatee protection zones.

(Source: http://myfwc.com/media/2944209/MPZStatewideMap.pdf)

Corps' Effect Determination: MANLAA.
The Corps determined that the proposed project may affect, but is not likely to adversely affect, Florida manatees. Direct, physical injury effects to this species are not anticipated from construction operations, machinery, or materials as the species are highly mobile and able to easily avoid the area; however, the Corps will include the 2011 USFWS' Standard Manatee Conditions for In-Water Work (see Attachment 1) in the project plans and specifications to ensure protection of the species.

References:

USFWS. 2019a. West Indian Manatee (*Trichechus manatus*). Retrieved from https://www.fws.gov/southeast/wildlife/mammal/manatee/. Website accessed July 15, 2019.

USFWS. 2015. Shore Protection Activities along the Coast of Florida. Statewide Programmatic Biological Opinion (Revised). Service Log Number: 41910-2011-F-0170. March 13, 2015.

USFWS. 2011. Standard manatee conditions for in-water work. Retrieved from https://www.fws.gov/northflorida/manatee/Manate_Key_Programmatic/20130425_gd_Appendix%20B_2011_Standard%20Manatee%20Construction%20Conditions.pdf. Website accessed 15 July 2019.

U.S. Army Corps of Engineers (Corps). 2017. St. Johns County Coastal Storm Risk Management Project, Final Integrated Feasibility Study and Environmental Assessment. South Ponte Vedra Beach, Vilano Beach, and Summer Haven Reaches St. Johns County, Florida. (St. Johns County, Florida South Ponte Vedra, Vilano Beach and Summer Haven Reaches Coastal Storm Risk Management Project Final Integrated Feasibility Study and Environmental Assessment dated March 2017 and approved by the Chief of Engineers on August 8, 2017).

U.S. Army Corps of Engineers (Corps). 1998. General Reevaluation Report (GRR) with Final Environmental Assessment (EA) and Findings of No Significant Impact (FONSI), St. Johns County, Florida, Shore Protection Project.

Attachment 1

USFWS 2011 Standard Manatee Conditions for In-Water Work

2286/Pecora/CESAJ-PD-EC
Donofrio/CESAJ-PD-EC
LoSchiavo/CESAJ-PD-EC
Dunn/CESAJ-PD-E

U.S. FISH & WILDLIFE SERVICE
CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE
JANUARY 2012

TECHNICAL ASSISTANCE TO EVALUATE EFFECTS ON ANTILLEAN MANATEES

The Service considers shallow coastal areas, bays, estuaries, river mouths and mangrove lagoon ecosystems as important for the conservation of the Antillean manatee because these areas contain all the natural elements preferred by manatees: abundant sea grass relatively calm waters, sheltered spots, and freshwater sources, as well as a relatively low number of boats within the bay. Actions proposed for these areas should be carefully examined, to ensure that elements required by this species are not compromised.

To evaluate the potential effect of proposed action on manatees, we need the applicants to address the following issues:

1. Type and amount of watercraft associated to the project
2. Amount of boat facilities (e.g. ramps, piers, dry-stacks, buoys, among others)
3. Amount of habitat to be affected (e.g. acres of sea grasses and/or mangroves)
4. Provisions / restrictions to be taken to prevent collisions with manatees (e.g. delineation of an entrance channel, marking buoys, navigation aids, among others).
5. Outreach efforts to be implemented concerning boat operation. One of the main components of a successful operation of facilities that implement mechanisms to safeguard threatened and endangered species is a comprehensive outreach program that clearly indicates to the public 1) the actions that the facility is undertaking to protect such species (including assurances on the implementation of protection measures), and 2) the activities that the public should take to minimize or prevent impacts to sensitive species and their habitats. Guidelines for safe operation of watercrafts should be included as part of the outreach/education component of the proposed project (example attached below).
6. Any other site-specific conservation measure applicable for the project.

EXAMPLE OF CONSERVATION MEASURES FOR IN-WATER PROJECTS (INCLUDING DREDGING ACTIVITIES)

The following manatee conservation measures are recommended:

1. The contractor instructs all personnel associated with construction of the facility of the presence of manatees and the need to avoid collisions with manatees.
2. All construction personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972. The permit holder and/or contractor will be held responsible for any manatee harmed, harassed, or killed as a result of construction of the project.

3. The project work area shall be surveyed for the presence of manatees at least one hour before any dredging starts and prior to the installation of the silt fence. If manatees are found before any in-water project activity starts, the contractor shall wait for the manatee to leave the area by itself and be at least 100 feet from the project in-water area. Manatees must not be herded or harassed into leaving the area.

4. Siltation barriers will be made of material in which manatee cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exit from essential habitat.

5. All vessels associated with the project construction will operate at “no-wake/idle” speed at all times while in water within manatee areas and vessels will follow routes of deep water whenever possible.

6. If manatees are seen within 100 yards (300 feet) of the in-water work area, all appropriate precautions shall be implemented to ensure protection of the manatees. These precautions shall include operating all equipment in such a manner that moving equipment does not come any closer than 50 to 100 feet of any manatee. If a manatee is within 50 feet of in-water work, all in-water activities must shut down, until manatee moves on its own at least 100 feet away from the in-water work area. Manatees must not be herded or harassed into leaving the area.

7. Any collision with and/or injury to a manatee shall be reported immediately to the Department of Natural and Environmental Resources Law Enforcement (787-724-5700) and the USFWS Caribbean Ecological Services Field Office (787-851-7297).

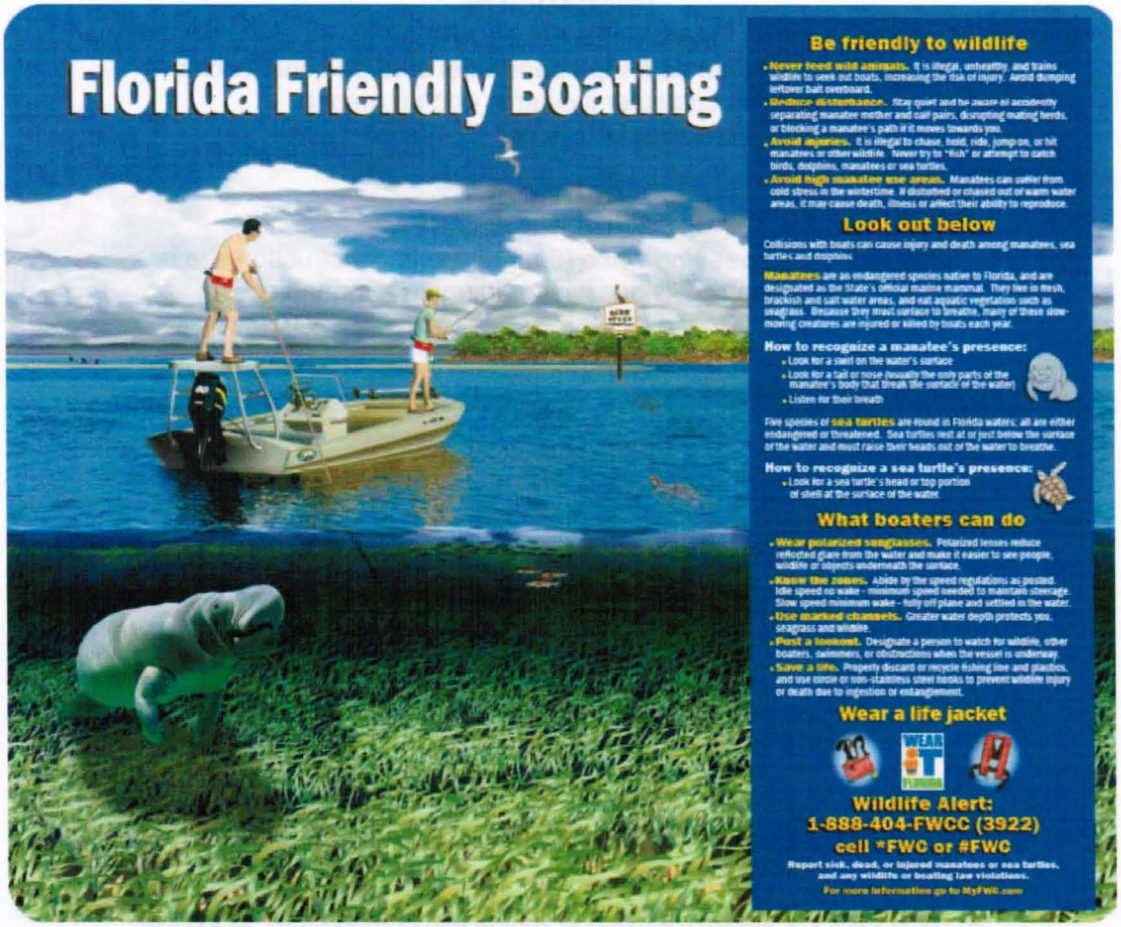
8. The contractor shall keep a log detailing sightings, collisions, or injury to manatees, which have occurred during the contract period. Following project completion, a report summarizing the above incidents and sightings will be submitted to the U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office, P.O. Box 491, Boquerón, Puerto Rico 00622.

9. The permit holder and/or contractor shall install and maintain temporary and permanent manatee signs as recommended by the following guidelines:

    a. Signs must be placed in a prominent location for maximum visibility. Areas that are recommended include: dock walkways, dock master offices, near restrooms or other high patron foot traffic areas.
    b. Signs must be replaced when faded, damaged or outdated.
    c. If the facility is large or has multiple docks with separate walkways that are a considerable distance apart, multiple signs should be installed.
    d. These signs must not face the water, must never be attached to pilings or navigational markers in the water. Some exceptions to signs facing the water exist for temporary signs during in-water work.
    e. For durability, all signs should be fiberglass, PVC or metal with rounded corners (hand-sanded to remove all sharp edges and burrs), constructed of 0.08 Gauge 5052-H38 Aluminum with an Alodine 1200 conversion coating and Engineer Grade Type I reflective sheeting. Signs constructed to other specifications may not provide durability acceptable to the consumer.
    f. Signs other than depicted may be considered, but should be approved by USFWS.

10. A permanent bilingual manatee educational sign should be installed and maintained prior to mooring occupancy at a prominent location to increase the awareness of boaters using the facility of boats to these animals. The numbers of educational signs that may be installed will depend on the docking facility design. One manatee educational sign is recommended at each boat ramp or travel lift (if applicable). Manatee educational signs remain the responsibility of the owner(s) and the Service recommends the signs be maintained for the life of the docking facility in a manner acceptable to the Corps of Engineers.

EXAMPLE MANATEE EDUCATIONAL SIGN



This **permanent** educational sign should have a minimum size of at least 30" inches tall by 36" inches wide with rounded corners.

PRECAUCIÓN: HÁBITAT DE MANATÍ
CAUTION: MANATEE HABITAT

Toda embarcación

VELOCIDAD MÁXIMA 5MPH

All project vessels **IDLE SPEED/NO WAKE**

Si observa un manatí a 50 pies o menos del área de trabajo, toda actividad en el agua debe

DETENERSE

When a manatee is within 50 feet of work all in-water activities must **SHUT DOWN**

Informe cualquier accidente con un manatí.

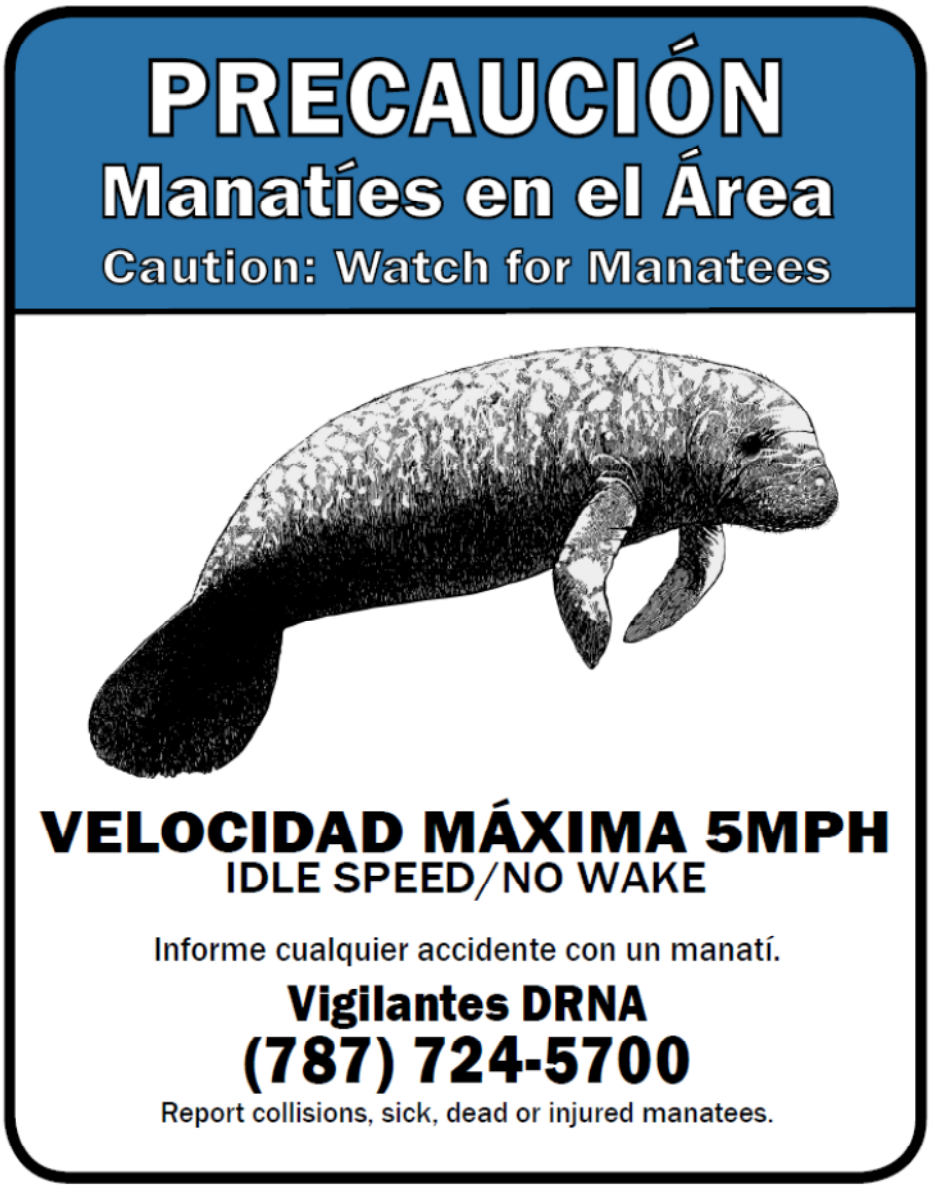
Report any collision with or injury to a manatee.

Vigilantes DRNA

(787)724-5700

This **temporary** bilingual sign is required as part of the standard manatee construction conditions and is intended to be placed near dredge, tugboat and work boat operators. Minimum size should be at least 8½" inches tall by 11" inches wide, and besides the above recommendation, the sign may be in laminated paper. This sign shall be installed or distributed prior to the initiation of construction. Temporary signs will be removed by the permit holder upon completion of construction.

To obtain a ready to print copy of this sign, please contact the USFWS Caribbean Ecological Services Field Office at 787-851-7297 ext. 220 or by email at jan_zegarra@fws.gov



This **permanent** bilingual sign is required as part of the standard manatee construction conditions and is intended to be placed within docking and launching facilities. Minimum size should be at least 30” inches tall by 24” inches wide with rounded corners. This sign shall be installed prior, during or after project construction. This permanent sign may not be required for coastal projects that **do not** have docking and/or launching facilities.

To obtain a ready to print copy of this sign, please contact the USFWS Caribbean Ecological Services Field Office at 787-851-7297 ext. 220 or by email at jan_zegarra@fws.gov

11. A notarized verification letter stating that permanent signs have been installed at designated locations shall be forwarded to the Corps of Engineers, Antilles Regulatory Section, as soon as they are installed. Signs and pilings remain the responsibility of the owner(s) and are to be maintained for the life of the docking and launching facility in a manner acceptable to the Corps of Engineers.

12. Signs other than depicted above may be considered, but should be approved by USFWS. Signs shall have at least the following minimal recommend information:

    a. Temporary bilingual signs:

PRECAUCIÓN
MANATÍES EN EL ÁREA
Mantenga velocidad de 5 mph dentro del área de construcción
Informe cualquier incidente con un manatí
Vigilantes DRNA 787-724-5700

CAUTION
MANATEES IN THE AREA
Maintain idle speed/no wake (5 mph) within construction site
Report any collisions with or injury to a manatee

    b. Permanent bilingual signs:

PRECAUCIÓN
MANATÍES EN EL ÁREA
Velocidad máxima 5 mph
Informe cualquier incidente con un manatí
Vigilantes DRNA 787-724-5700

CAUTION
MANATEES IN THE AREA
Idle speed/No wake (5 mph) zone
Report collisions, sick, dead or injured manatees

    c. Permanent bilingual educational sign and some of the of the recommended information it should include:

GUÍA PARA LA PROTECCIÓN Y CONSERVACIÓN DEL MANATÍ
(*MANATEE PROTECTION AND CONSERVATION GUIDELINES*)

1. Utilice gafas polarizadas mientras navega. Éstas ayudan a detectar mejor al manatí, las áreas llanas y cualquier obstáculo en el mar. (*Use polarized sunglasses while navigating. These help to detect any manatee, shallow waters and any other obstacle in the wáter.*)

2. Si usted ve un manatí en la trayectoria de su embarcación, reduzca la velocidad a 5 mph y conduzca la embarcación fuera del paso del manatí o espere a que el manatí salga del área poniendo su embarcación en neutro. (*If you see a manatee within the*

path of your vessel, reduce the velocity to 5 mph and turn your vessel away from the manatee's path or wait until the manatee has moved from the area by putting your vessel in neutral.)

3. Luego de asegurarse de que el manatí esté fuera de la trayectoria de su embarcación, continúe navegando despacio (no más de 5 mph) hasta que su embarcación se encuentre a no menos de 50 pies (15 metros) del manatí. (*After you are certain that the manatee is well outside of the path of your vessel, resume navigation slowly (not more than 5 mph) until your vessel is not less than 50 feet (15 meters) away from the manatee.*)

4. Obedezca las zonas con límites de velocidad y reduzca la velocidad en aguas llanas menores a 10 pies de profundidad en particular cerca de la costa, en las desembocaduras de ríos, en praderas de hierbas marinas y manglares. (*Obey regulatory speed zones and reduce velocity in shallow waters less than 10 feet, particularly close to the coast, in river mouths, in sea grass beds and mangroves.*)

5. Si observa un manatí mientras usted está en el agua, obsérvelo pasivamente, no lo persiga, acose o lo toque. (*If you observe a manatee while in the water, passively observe it, do not follow it, nor harass or touch.*)

6. No tire basura al agua. El manatí puede ingerirla o enredarse en ella, lo cual podría causarle heridas o la muerte. (*Do not throw trash in the water. Manatees may ingest or entangle on trash, which may injure or kill it.*)

7. Nunca alimente o le ofrezca agua a un manatí. Es ilegal y los malacostumbra a acercarse a lugares donde pueden ser lastimados. (*Never feed or give water to a manatee. It is illegal and will wrongly habituate them to approach areas where they can be injured.*)

Informe accidentes con un manatí inmediatamente. Si encuentra un bebé manatí solo, en peligro, herido o muerto, llame al Cuerpo de Vigilantes del Departamento de Recursos Naturales y Ambientales al 787-724-5700 o al Programa de Rescate de Mamíferos Marinos al 787-833-2025, 787-538-4684 ó 787-645-5593. (*Inform any accident with a manatee immediately. If you find a baby manatee alone, in danger, injured or dead, call the Department of Natural and Environmental Resources Law Enforcement of at 787-724-5700 or the Marine Mammal Rescue Program at 787-833-2025, 787-538-4684 or 787-645-5593.*)

Herir o matar un manatí puede conllevar multas de más de $50,000 y/o no menos de dos años de cárcel. ¡EVÍTESE ESE RIESGO!
(*Harming or killing a manatee could carry fines of more than $50,000 and/or not less than two years in prison. AVOID THIS RISK!*)

GRACIAS POR AYUDAR A SALVAR LOS MANATÍES
THANKS FOR HELPING SAVE THE MANATEES

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Florida Ecological Services Field Office

1601 Balboa Avenue
Panama City, FL 32405-3721

Tel: (850) -769-0552
Fax: (850-763-2177

April 21, 2022

Ms. Angela E. Dunn, Chief
Environmental Branch
Planning and Policy Division
U.S. Army Corps of Engineers, Jacksonville District
701 San Marco Boulevard
Jacksonville, FL 32207-8175

Attn: Mr. Darren Pecora
Mr. Andrew Loschiavo

Re: FWS Ecosphere No: 2022-00014002- Formal
Date Consultation initiated January 21, 2022
Project Title: FL Shoreline Protection Project-
Dredge and Sand Placement.
Location: St. Augustine Beach, South Ponte Vedra,
And Vilano Beach.
County: St. Johns County, Florida.

Dear Ms. Dunn:

The Fish and Wildlife Service (Service) received a request for consultation via electronic mail dated January 20, 2021, from Darren Pecora of your staff. The U.S. Army Corps of Engineers (Corps) proposes use of two offshore sand borrow areas that are located in federal waters (>3 nautical miles offshore) for federally authorized sand nourishment projects referred to as Florida Shore Protection Project, St. Augustine Beach (SJC SPP) and Florida Coastal Storm Risk Management Project, South Ponte Vedra and Vilano Beach (SJC CSRM), in Johns County, Florida (Figure 1). Historically, sand removal occurred within the St. Augustine inlet. The inlet currently provides an insufficient sand source. The proposed new borrow sources (S-1 and N-3) will support future nourishment, potential emergency projects, and conceivable future authorized projects in St. Johns County.

The Corps has previously completed consultation with Service for the existing beach nourishment projects (SJC SPP and CSRM) as referenced in their January 20, 2022 letter to the Service (Corps, 2022). This consultation request focuses strictly on use of the newly proposed sand borrow areas (S-1 and N-3).

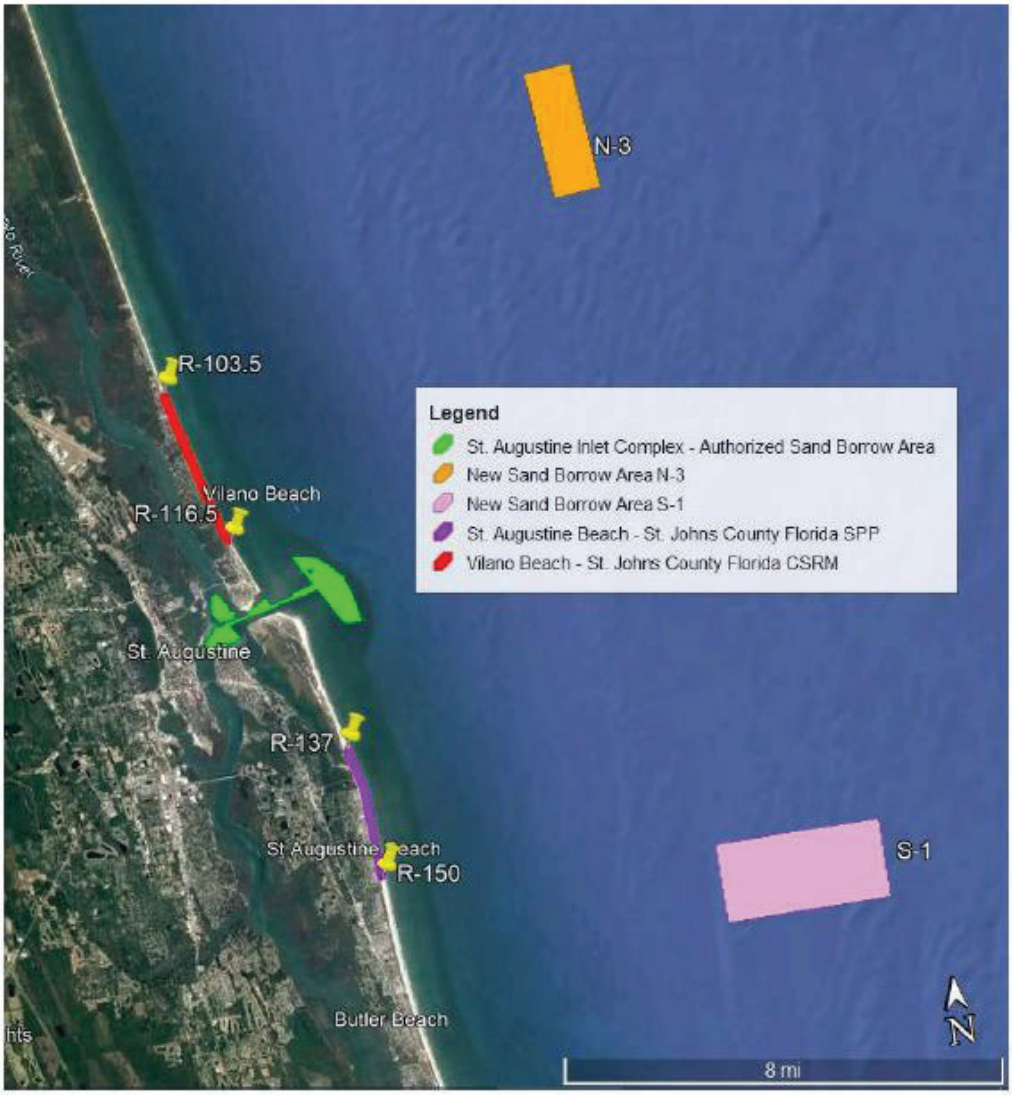


Figure 1. Sand nourishment projects referred to as Florida Shore Protection Project, St. Augustine Beach (SJC SPP) and Florida Coastal Storm Risk Management Project, South Ponte Vedra and Vilano Beach (SJC CSRM), in Johns County, Florida, St. Johns County, Florida.

The Corps determined the project may affect, but is not likely to adversely affect the West Indian manatee (*Trichechus manatus latirostris*). The Corps, via their January 20, 2022 letter, commits to following the requirements within the Florida Statewide Programmatic Biological Opinion (SPBO) signed in 2015 that included the Standard Manatee Construction Conditions for In-Water Work . We provide comments in accordance with the Endangered Species Act (Act) of 1973, as amended (16

U.S.C. 1351 *et seq*). The Service concurs with the determination of not likely to adversely affect the West Indian manatee if the 2011 Standard Manatee In-water Construction Conditions are made a condition of the Corps project plan and implemented. The project area is not within designated critical habitat. These findings fulfil section 7 requirements of the Act in regard to manatees. In addition, because no incidental take of manatees is anticipated, no such authorization under the Marine Mammal Protection Act (MMPA) is needed. The web link to these conditions: https://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/Manatee/2011_StandardConditionsForIn-waterWork.pdf

In coordination with the Corps, the Service updated the SPBO in 2015. Per their January 20, 2022 letter, the Corps has agreed to project requirements with regard to the West Indian manatee as authorized under **FWS Log No. Programmatic Statewide BO (SPBO) 41910-2011-F-0170, Revised March 13, 2015.** We have assigned the Service log number **2022-00014002- Formal** to this specific consultation.

The Corps concurrently submitted an enclosed memorandum for the record (MFR) for Service consideration and signature. The MFR documents an informal understanding between the Corps and the Service to use the project's ESA (7 U.S.C. 136, 16 U.S.C. 1531 et seq. December 28, 1973) and National Environmental Protection Agency (NEPA; 42 U.S.C. 4321-4347, January 1, 1970, as amended 1975 and 1982) review process to complete coordination responsibilities under the Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661 et seq., March 10, 1934, as amended 1946, 1958, 1978, and 1995). This agreement will avoid duplicate analysis and documentation as authorized under 40 CFR section 1500.4(k), 1502.25, and 1506.4 and is consistent with Presidential Executive Order for Improving Regulation and Regulatory Review, released January 18, 2011. The Service coordinated with the Corps through NEPA and the ESA in which impacts to fish and wildlife resources are adequately addressed via these two authorities. The Service included the following recommendations relevant to FWCA in the Service's review and response to this project's draft EA.

The Service has minimal knowledge of impacts to offshore sand borrow sites but we make the following recommendations per FWCA in attempts to reduce the frequency of sand placement projects along coastal shorelines, largely intended for structural protections.

RECOMMENDATIONS

1) Construct the berm or dune features in a non-linear pattern to emulate natural beach-dune systems. Gaps and open areas behind the "dunes" provide protected habitat for nesting shorebirds and beach mice.
2) In coordination with the Service or Fish and Wildlife Conservation Commission, incorporate areas with natural shell materials to encourage the use of pockets amongst dunes for nesting shore- and water- birds.
3) 500-1000 foot wide shoreline segments/zones where no sand deposition is allowed within the intertidal zone will be established every mile for survival and recovery of invertebrate food resources in identified areas with highest concentrations of shorebirds OR at a regular interval along the beach per the restoration protocol.
4) Any sand placement dunes, berms, or dunets, will be tapered 75 to 150 feet from inlet and outfall areas.

5) The Service discourages the use of sand fencing, but if deemed necessary, project must follow Service-provided best management practices, including the use of bio-degradable materials that does not require removal.
6) Plant dune features in sparse density (less than 50%), but high plant species variety.

7) Protect permanent and ephemeral pools, lagoons and sand spits during project construction as these provide optimal foraging and roosting areas year around for shorebirds. These areas are ideal when located near inlets and adjacent conservation lands.
8) Create a permanent pool feature between the Project area, protect it from disturbance. Around the created pool, spread out shell-mash for nesting shorebirds in sections at least 20 feet by 10 feet in size. Have the local sponsor commit to posting and roping around the newly created feature to reduce disturbance for roosting and nesting water- and shore-birds year around. Educational signs should be placed around the feature to explain the importance of these areas for birds.
9) Monitoring is the responsibility of the applicant and protocols for listed species and habitat features such as vegetative survival, expansion, and dune growth will be detailed in the restoration protocol. Per the adaptive management protocol, if certain restoration features are not successful, modifications within the intent and scope of the original action will be made (i.e., a replanting or re-stabilization of a vegetative island) on the next sand placement event.
10) Grant access for Service and other federally or state personnel to conduct monitoring of the project site as requested.
11) US Geological Survey (USGS) recently published "Impacts of sediment removal from and placement in coastal barrier island systems" (Miselis et al. 2021). This publication identifies several knowledge gaps and recommendations necessary to inform future sand placement events. We recommend the Corps work with USGS and set up appropriate studies concerning the effects of sediment placement on short- and long- term time scales as summarized in sections 3.3.3 (p. 23), 4.4 (p. 30), 6.3.2 (p. 45), and 7.4 (p. 51).
12) Compliance and enforcement will be the responsibility of the local sponsor for the following rules within the habitat restoration project area:

    a. Post and rope (and signage if needed for compliance) will be installed >25 feet seaward of the starter dune to prevent human disturbance. For large projects this may not be attainable so focus will be on documented high disturbance areas or within lands under public ownership. Untrampled beach areas maintain and establish vegetation, traps sand, and therefore new starter dunes are more likely to accumulate.
    b. The local sponsor is to protect the "wrack line" (organic debris that washes up with the tide) within the Project Area, post-construction and between sand placement events. Beach cleaning could increase erosion. Suggesting alternatives methods of beach cleaning may reduce frequency of sand placement events. At the minimum, beach cleaning is to occur dune-side of the wrack line, leaving the primary wrack line protected.
    c. Wildlife friendly lighting (The Dark Skies Initiative) will be used where lighting is needed and existing ordinances will be enforced. Lighting considerations will be incorporated throughout the entire affected coastal dune habitat to encompass all nocturnal coastal wildlife.

d. Nighttime activities, other than walking, will not be permitted on the beach in the project footprint (for example, fires, driving, pets on beach).

e. Pets will not be permitted on the beach in the project footprint (depending on the scope of the project, some limited areas can be used by pets if already authorized).

f. Deter beach driving. If necessary, create driving corridors for vendors, and emergency personal that routinely travel the beaches.

g. Predators will be deterred through installation of predator-proof trash receptacles at select roadside access points. Trash along the shoreline can be manually picked up as needed. Receptacles for fishing lines will be placed at access areas.

h. An educational kiosk or signage will be placed at the project site providing information about coastal species and the benefit of habitat restoration.

REINITIATION NOTICE

As provided in 50 CFR §402.16, reinitiation of formal consultation for any species reflected in this document is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take i.e. the shoreline amount described herein is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take shall cease pending reinitiation

The Service appreciates the cooperation of the Corps personnel during this consultation. If you have any questions about this opinion, please contact Patty Kelly of this office at 850-532-5401.

Sincerely,

Catrina Martin Digitally signed by Catrina Martin Date: 2022.04.28 07:04:38 -05'00'

Catrina Martin
Environmental Review Supervisor
Panama City Field Office Station Lead

Cc: (all electronic)
FWC, fwcconservationplanningservices@myfwc.com

Citations:

Miselis, J.L., Flocks, J.G., Zeigler, S., Passeri, D., Smith, D.R., Bourque, J., Sherwood, C.R., Smith, C.G., Ciarletta, D.J., Smith, K., Hart, K., Kazyak, D., Berlin, A., Prohaska, B., Calleson, T., and Yanchis, K., 2021, Impacts of sediment removal from and placement in coastal barrier island systems. Coastal and Marine Hazards, and Resources Program and Ecosystems Mission

Area. U.S. Geological Survey Open File Report 2021-1062, 94 p., https://doi.org/10.3133/ofr20211062.

U.S. Fish and Wildlife Service (Service). 2015. Shore Protection Activities along the Coast of Florida. Statewide Programmatic Biological Opinion (revised). February 27. 242 ppl

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

20 Jan 2022

Planning and Policy Division
Environmental Branch

Robert L. Carey
Division Manager, Environmental Review
Florida Ecological Services Field Office
U.S. Fish and Wildlife Service
Gainesville, Florida

Dear Mr. Carey:

The U.S. Army Corps of Engineers (Corps) requests coordination with the U.S. Fish and Wildlife Service (USFWS) under the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 *etc, eq.)* for the proposed Finding of No Significant Impact (FONSI) and draft Environmental Assessment (EA) that evaluates environmental effects from dredging the proposed additional Offshore Borrow Areas for the St. Johns County, Florida (SJC) Shore Protection Project (SPP) and SJC, Florida Coastal Storm Risk Management (CSRM) Project (South Ponte Vedra and Vilano Beach). The Corps respectfully requests concurrence from the USFWS that the consultations for the previously authorized projects are still valid given recent reversals and interpretations of the CRBA (letter dated October 25, 2016).

The SJC SPP and SJC CSRM projects are located along the shoreline in northeast Florida, specifically South Ponte Vedra, Vilano, and St. Augustine Beach reaches. The Preferred Alternative would use the S-1 and N-3 sand borrow areas that are located in Federal waters (>3 nautical miles offshore) on the Outer Continental Shelf (OCS), approximately 6-8 miles offshore. The Preferred Alternative would dredge these borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) to obtain beach compatible fill material for the continued renourishment of the St. Augustine, South Ponte Vedra, and Vilano beach authorized projects shorelines, respectively. The authorized projects will incorporate the use of these alternate sources, as needed, to supplement the use of the St. Augustine Inlet Complex sand borrow source sites. The continued use of the St. Augustine Inlet as the primary/only sand source in SJC for the SJC SPP and SJC CSRM projects is unsustainable. Therefore, the new borrow sources S-1 and N-3 are needed to support future nourishment, potential emergency projects, and conceivable future authorized projects in SJC, specifically SJC CSRM and SPP.

The borrow areas are located offshore in water depths greater than the 30-foot contour and are not within CBRS units. Dredging of N-3 and S-1 sand borrow sites would not occur in designated CBRS units; however, placement will continue to restore and stabilize the beaches in the designated CBRS units (CBRS Units OPA-Guana River Unit FL-03P, Usina Beach Unit P04A, Conch Island Unit P05, and OPA Conch Island Unit P05P) maintaining the habitat in these areas. The Preferred Alternative does not include the construction of structures that would require Federal flood insurance; therefore, Federal expenditures for the proposed project are not restricted.

The Corps respectfully requests that USFWS provide concurrence with the Corps' determination within 30-days from the date of this letter that the consultations for the previously authorized projects remain valid. Questions or comments on the project may be submitted to Darren Pecora via email at Darren.J.Pecora@usace.army.mil or via telephone 904-232-2286. Thank you for your assistance.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

Enclosure

Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project (SPP) and St. Johns County, Florida Coastal Storm Risk Management (CSRM) Project (South Ponte Vedra and Vilano Beach)

January 2022

The U.S. Army Corps of Engineers (Corps) requests coordination with the U.S. Fish and Wildlife Service (USFWS) under the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 *et,eq.)* for the proposed Finding of No Significant Impact (FONSI) and draft Environmental Assessment (EA) that evaluates environmental effects from dredging the proposed additional Offshore Borrow Areas for the St. Johns County, Florida (SJC) Shore Protection Project (SPP) (St. Augustine Beach) and SJC, Florida Coastal Storm Risk Management (CSRM) Project (South Ponte Vedra and Vilano Beach). The Corps respectfully requests concurrence from the USFWS that the Corps' consultation for the previously authorized projects are still valid given recent reversals and interpretations of the CRBA.

The Corps is providing additional information on the project background, Preferred Alternative, location of system units, previous CBRA consultation, and current effect determinations below.

<u>Project Background and Preferred Alternative.</u>
The SJC SPP and SJC CSRM projects are located along the SJC shoreline in northeast Florida, specifically South Ponte Vedra, Vilano, and St. Augustine Beach areas (see **Figure 1**). The purpose of the SJC SPP and CSRM projects are to reduce the risk of potential damages from waves, erosion, and storm surge caused by coastal storms to structures and infrastructure along the St. Johns County shoreline. Renourishment projects at SJC SPP have been constructed in 2005 (0.8 mcy), 2008 (2.8 mcy), 2012 (2.1 mcy), and 2018 (0.9 mcy). Initial construction beach fill operations for SJC CSRM were completed on January 6, 2021. Approximately 1.3 million cubic yards (cy) of sand coming from the St. Augustine Inlet flood shoal were placed between R102.5 and R117.5.

The Preferred Alternative is in Federal waters (>3 nautical miles offshore) on the Outer Continental Shelf (OCS), approximately 6-8 miles offshore, in the S-1 and N-3 sand borrow areas (see **Figure 1**). The Preferred Alternative includes dredging borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) to obtain beach compatible fill material for the continued renourishment of the St. Augustine Beach and Vilano authorized projects shorelines, respectively. These are the closest proven sand sources near SJC CSRM and SJC SPP. Beach compatible fill would be dredged from the ocean bottom from S-1 and N-3 and placed along the SJC SPP and SJC CSRM shoreline, respectively. The proposed offshore borrow areas N-3 and S-1 may be utilized as early as 2022. The anticipated dredging interval infrequent and is approximately every 5-15 years, however dredging may occur sporadically for emergency use. Hopper dredging, transport, and placement is expected to occur for approximately 60-120 days to obtain the necessary volumes.

The purpose of the Preferred Alternative is to obtain beach compatible fill material from borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) for the continued renourishment of the St. Augustine Beach and South Ponte Vedra and Vilano Beach authorized projects shorelines, respectively. The continued use of the St. Augustine Inlet as the primary/only sand source in SJC for the SJC SPP and SJC CSRM projects is unsustainable. Therefore, the new borrow sources S-1 and N-3 are needed to support future nourishment, potential emergency projects, and conceivable future authorized projects in SJC, specifically SJC CSRM and SPP. The proposed action does not alter sand placement location and frequency, as described in the prior project consultations

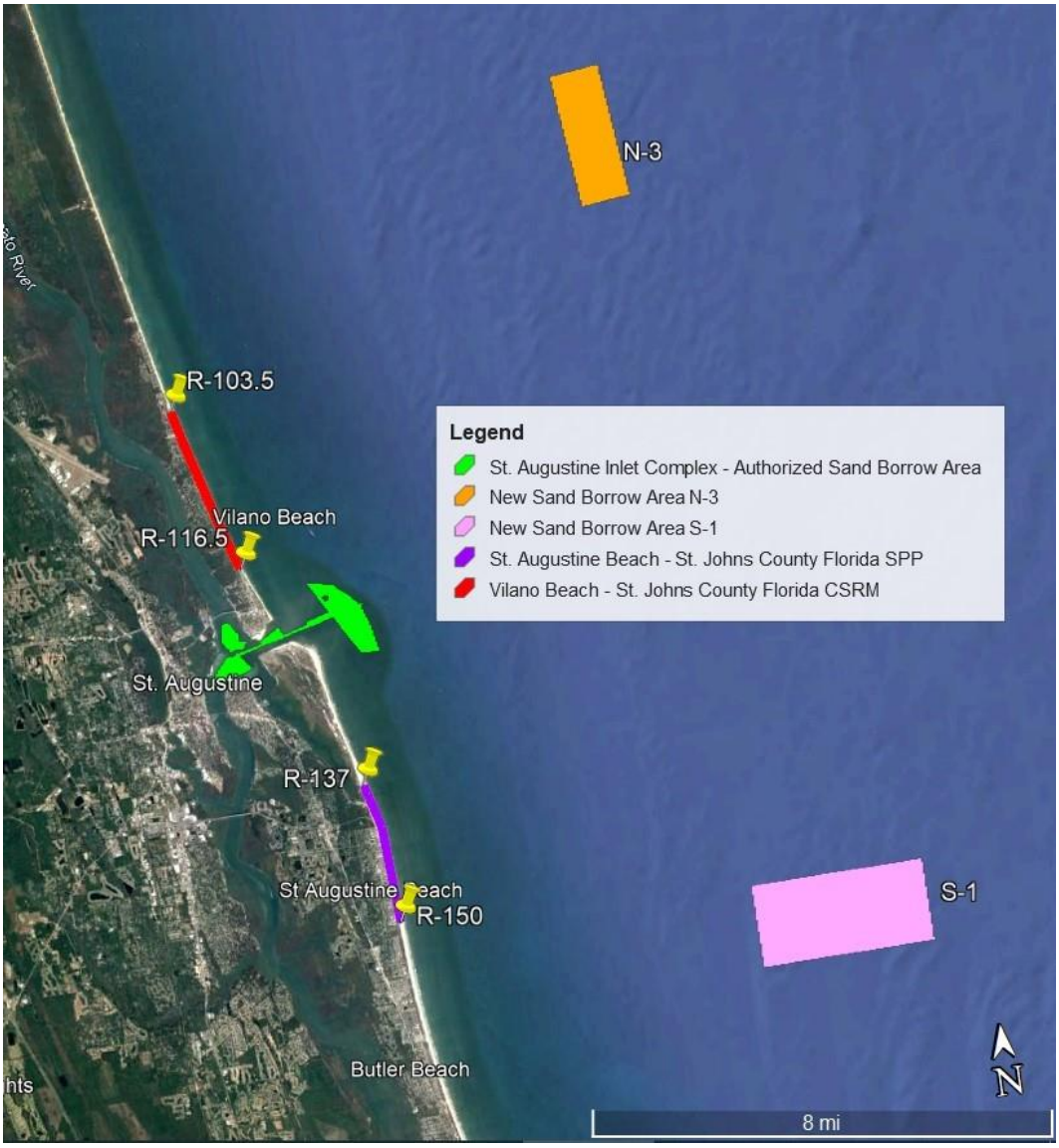


Figure 1. Study area and Preferred Alternative location.

Location of Coastal Barrier Resource System (CBRS) Units in Project Vicinity.

The Corps reviewed the official USFWS CBRS maps. Four CBRS Units, classified as Otherwise Protected Areas (OPAs), are located adjacent to the project area (see **Figure 2**):

- FL-03P (Guana River) is located immediately north of Vilano Beach (SJC CSRM).
- P-04A (Usina Beach) is intersecting the southern portion of SJC CSRM.
- P-05 (Conch Island) is located at the area around St. Augustine Inlet, including Porpoise Point on the north side and the northern portion of Anastasia State Park.
- P-05P (Conch Island) is the remaining portion of Anastasia State Park.

Figure 2. Location of CBRS Units OPA-Guana River Unit FL-03P, Usina Beach Unit P04A, Conch Island Unit P05, and OPA Conch Island Unit P05P in the vicinity of SJC CSRM (Vilano Beach) and SJC SPP (St. Augustine Beach). (Source: (https://www.fws.gov/CBRA/Maps/Mapper.html)

Prior CBRA Consultation.

The most recent determination was made in the 2019 consultation for the SJC CSRM project (FWS Log No 2020-CPA-0001). USFWS concurred that the project met the specific exemption 16 U.S.C. 3505(a)(6)(G) “Nonstructural projects for shoreline stabilization that are designed to mimic, enhance, or restore a natural stabilization system”. The justification for this exemption cites the consultation from October 25, 2016 (FWS Log No. 04EF1000-2016-CPA-0042). The 2016 letter for the SJC CRSM (South Ponte Vedra and Vilano Beach reaches) describes benefits to protected species at Anastasia State Park and St. Augustine Beach (SJC SPP). (The prior consultation letters are included in Attachment A.)

CBRA Effect Determination for 2022 EA.

The Preferred Alternative will maintain the benefits of the SJC SPP and CSRM projects as well as dune and nesting habitat for protected species.

The Corps recently prepared a draft EA for the inclusion of borrow sites S-1 and N-3 as alternate sand sources for the SJC SPP and CSRM projects. The Corps will be bringing in beach quality sand from new borrow areas, which are located approximately 6-8 miles offshore at the Outer Continental Shelf (OCS). The addition of this sand into the nearshore system will potentially reduce erosion in the CBRS Units.

The borrow areas are located offshore in water depths greater than the 30-foot contour and are not within CBRS units. Dredging of N-3 and S-1 sand borrow sites would not occur in designated CBRA units; however, placement will continue to restore and stabilize the beaches in the designated CBRS units maintaining the habitat in these areas. The Preferred Alternative does not include the construction of structures that would require Federal flood insurance; therefore, Federal expenditures for the proposed project are not restricted.

Attachment 1

Prior CBRA Consultations

TEMPLATE FOR INTERAGENCY CBRA CONSULTATIONS

The Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 *et seq.*) encourages the conservation of hurricane prone and biologically rich coastal barriers. No new expenditures or financial assistance may be made available under authority of any Federal law for any purpose within the System Units of the John H. Chafee Coastal Barrier Resources System (CBRS) including: construction or purchase of roads, structures, facilities, or related infrastructure, and most projects to prevent the erosion of or otherwise stabilize any inlet, shoreline, or inshore area. However, the appropriate Federal officer, after consultation with the U.S. Fish and Wildlife Service (Service), may make Federal expenditures and financial assistance available within System Units for activities that meet one of the CBRA's exceptions (16 U.S.C. 3505). The CBRA imposes no restrictions on actions and projects within the CBRS that are carried out with State, local, or private funding. Any response from the Service to a CBRA consultation request is in the form of an opinion only. The Service has not been granted veto power. **The responsibility for complying with the CBRA and the final decision regarding the expenditure of funds for a particular action or project rests with the Federal funding agency.**

There are two types of units within the CBRS, System Units and Otherwise Protected Areas (OPAs). OPAs are denoted with a "P" at the end of the unit number (e.g., "FL-64P"). Most new Federal expenditures and financial assistance, including Federal flood insurance, are prohibited within System Units. The only Federal spending prohibition within OPAs is on Federal flood insurance; other Federal expenditures are permitted. **Consultation with the Service is not needed if the proposed action or project is located within an OPA.** However, agencies providing disaster assistance that is contingent upon a requirement to purchase flood insurance after the fact are advised to disclose the OPA designation and information on the restrictions on Federal flood insurance to the recipient prior to the commitments of funds.

The Service has developed the attached template to help facilitate the CBRA consultation process. This form, and any additional documentation, may be submitted to the appropriate Ecological Services Field Office to fulfill the CBRA's consultation requirement.

Additional Resources:

CBRS Mapper: *https://www.fws.gov/cbra/maps/mapper.html*

CBRS shapefile and Web Map Service: *https://www.fws.gov/cbra/maps/Boundaries.html*

CBRA consultations: *https://www.fws.gov/cbra* under "Project Consultations"

CBRS in/out property determinations: *https://www.fws.gov/cbra/Determinations.html*

Ecological Services Field Office contact information: *https://www.fws.gov/offices*

September 23, 2019

Mr. Jay Herrington
Field Supervisor
U.S. Fish and Wildlife Service
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517

The U.S. Army Corps of Engineers (Corps) requests a consultation with the U.S. Fish and Wildlife Service (Service) under the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 *et seq.*) for the proposed St. Johns County Coastal Storm Risk Management –Vilano Beach Segment project.

Project Location

The project is located in St. Johns County, Florida, partially within Unit P04A, Usinas Beach, of the Coastal Barrier Resources System (CBRS).

Description of the Proposed Action or Project

The Recommended Plan includes the construction of a 60-foot berm along 2.6 miles of beach from R-103.5 to R-116.5 (Figure 1). The project template will include a dune feature that reflects the average 2015 dune position. One thousand foot tapers will extend from the northern and southern ends of the berm extension, connecting the extension to the existing shoreline. The addition of tapers results in sand placement from R102.5 to R117.5 along three miles of shoreline. The initial construction would require approximately 1.3 million cubic yards (mcy) of sand, which would be obtained from the St. Augustine Inlet system, including the ebb, flood, and Vilano Point shoals, the Federal navigation channel, and any associated shoals. The anticipated duration of the initial construction would be approximately 3.3 months. Future nourishments would require approximately 866,000 cubic yards of material, and the nourishment interval for this project is approximately 12 years.

Applicable Exception(s) under 16 U.S.C. 3505(a)

General Exceptions

☐ 16 U.S.C. 3505(a)(1): Any use or facility necessary for the **exploration, extraction, or transportation of energy resources** which can be carried out only on, in, or adjacent to a coastal water area because the use or facility requires access to the coastal water body.

☐ 16 U.S.C. 3505(a)(2): The **maintenance or construction of improvements of existing Federal navigation channels** (including the Intracoastal Waterway) and related structures (such as jetties), including the disposal of dredge materials related to such maintenance or construction. A Federal navigation channel or a related structure is an existing channel or structure, respectively, if it was authorized before the date on which the relevant System unit or portion of the System Unit was included within the CBRS.

☐ 16 U.S.C. 3505(a)(3): The maintenance, replacement, reconstruction, or repair, but not the expansion, of **publicly owned or publicly operated roads, structures, or facilities that are essential links** in a larger network or system.

☐ 16 U.S.C. 3505(a)(4): **Military activities** essential to national security.

☐ 16 U.S.C. 3505(a)(5): The construction, operation, maintenance, and rehabilitation of **Coast Guard facilities** and access thereto.

Specific Exceptions
These exceptions must also be consistent with all three purposes of the CBRA (see "Justification" section below).

☐ 16 U.S.C. 3505(a)(6)(A): **Projects for the study, management, protection, and enhancement of fish and wildlife resources and habitats**, including acquisition of fish and wildlife habitats, and related lands, stabilization projects for fish and wildlife habitats, and recreational projects.

☐ 16 U.S.C. 3505(a)(6)(B): Establishment, operation, and maintenance of **air and water navigation aids** and devices, and for access thereto.

☐ 16 U.S.C. 3505(a)(6)(C): Projects under the **Land and Water Conservation Fund Act** of 1965 (16 U.S.C. 4601-4 through 11) and the **Coastal Zone Management Act** of 1972 (16 U.S.C. 1451 et seq.).

☐ 16 U.S.C. 3505(a)(6)(D): **Scientific research**, including aeronautical, atmospheric, space, geologic, marine, fish and wildlife, and other research, development, and applications.

☐ 16 U.S.C. 3505(a)(6)(E): Assistance for **emergency actions essential to the saving of lives and the protection of property and the public health and safety**, if such actions are performed pursuant to sections 5170a, 5170b, and 5192 of title 42 **and are limited to actions that are necessary to alleviate the emergency.**

☐ 16 U.S.C. 3505(a)(6)(F): Maintenance, replacement, reconstruction, or repair, but not the expansion (except with respect to United States route 1 in the Florida Keys), of **publicly owned or publicly operated roads, structures, and facilities.**

☒ 16 U.S.C. 3505(a)(6)(G): **Nonstructural projects for shoreline stabilization** that are designed to mimic, enhance, or restore a natural stabilization system.

Justification for Exception
The U.S. Fish and Wildlife Service (USFWS) determined as a result of previous consultations on this project that the Recommended Plan was consistent with CBRA. As stated in your letter dated October 25, 2016, this determination was made following careful review of the June 12, 1995 letter from the Department of the Interior to the Corps regarding CBRA and a beach renourishment project at Folly Beach, SC; section 6 of the CBRA which allows nonstructural

projects for shoreline stabilization that are designed to mimic, enhance, or restore a natural stabilization system; and the best available scientific information regarding the history of sand management, renourishment, and its effects on trust resources.

At the time of the previous consultation, there was insufficient parking and public beach access in the vicinity of the Usinas Beach system unit (CBRS Unit P04A); therefore, the Federal government was not authorized to share in the cost of sand placement in this area per Corps policy. As a result, Corps stated in our May 25, 2016 letter that no Federal funds would be expended in the CBRS unit, and USFWS' October 25, 2016 letter reflected this expectation.

Since 2016, the local sponsor has approved the construction of a parking lot and beach access point on parcels owned by St. Johns County within CBRS unit P04A at the future Mussallem Park site. Construction of the parking lot with 20 parking spaces is anticipated to begin in November 2019. The initial construction of the beach nourishment project is scheduled to be awarded in January 2020, and to be completed by December 2020. The addition of this parking and the beach access point will allow the local sponsor to receive Federal funding for the sand placement in this area based on Corps policy. Figure 1 shows the extent of the CBRS unit where appropriate access and parking will be available. Figure 2 shows the specific parcels currently in county or state ownership where cost sharing will occur. If parcels currently in private ownership become encumbered by easements to prevent development, or if they are acquired by Federal, state, or local governments, they will also be eligible for Federal expenditures in the future.

Contact Information
Angela E. Dunn
Chief, Environmental Branch

U.S. Fish and Wildlife Service Response
Below is the Service's response to the Corps' request for a consultation under the CBRA for the St. Johns County CSRM – Vilano Beach segment project. This response represents the Service's opinion. **The final decision regarding the expenditure of funds for this action or project rests with the Federal funding agency.** The Corps has fulfilled its obligation to consult with the Service under the CBRA for this particular action or project within the CBRS. Please note that any new commitment of Federal funds associated with this action or project, or change in the project design and/or scope, is subject to the CBRA's consultation requirement.

The Service has reviewed the information provided by the Corps, and believes the referenced action/project is:

☐ Not located within a System Unit of the CBRS and the CBRA does not apply (except with respect to the restrictions on Federal flood insurance)

☒ Located within a System Unit of the CBRS and meets the exception(s) to the CBRA selected above

☐ Located within a System Unit of the CBRS and meets different exception(s) than the one(s) selected above (see additional information/comments below)

☐ Located within a System Unit of the CBRS and does not meet an exception to the CBRA (see additional information/comments below)

☐ Due to many competing priorities, the Service is unable to provide an opinion on the applicability of the CBRA's exceptions to this action/project at this time. The Corps may elect to proceed with the action/project if it has determined that the action/project is allowable under the CBRA. Please note that any new commitment of Federal funds associated with this action/project or a related future project is subject to the CBRA's consultation requirement.

Additional Information/Comments

This response does not constitute consultation for any project pursuant to section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) or comments afforded by the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 *et seq.*); nor does it preclude comment on any forthcoming environmental documents pursuant to the National Environmental Policy Act (83 Stat. 852; 42 U.S.C. 4321 *et seq.*).

U.S. FISH & WILDLIFE SERVICE

FWS Log No. 2020-CPA-0001

The Service concurs with your effect determination(s) for resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). This finding fulfills the requirements of the Act.

for Annie Borgnski 10-8-19

Jay B. Herrington **Date**

Field Supervisor

DATE

Figure 1. Project area showing the location of sand placement from just north of R-104 to R - 117, the location of the new public parking and access at Mussallem Park, and the location of CBRS unit P04A (Usinas Beach). Federal funds are proposed to be expended for the publicly-owned parcels within the CBRS unit shaded yellow.

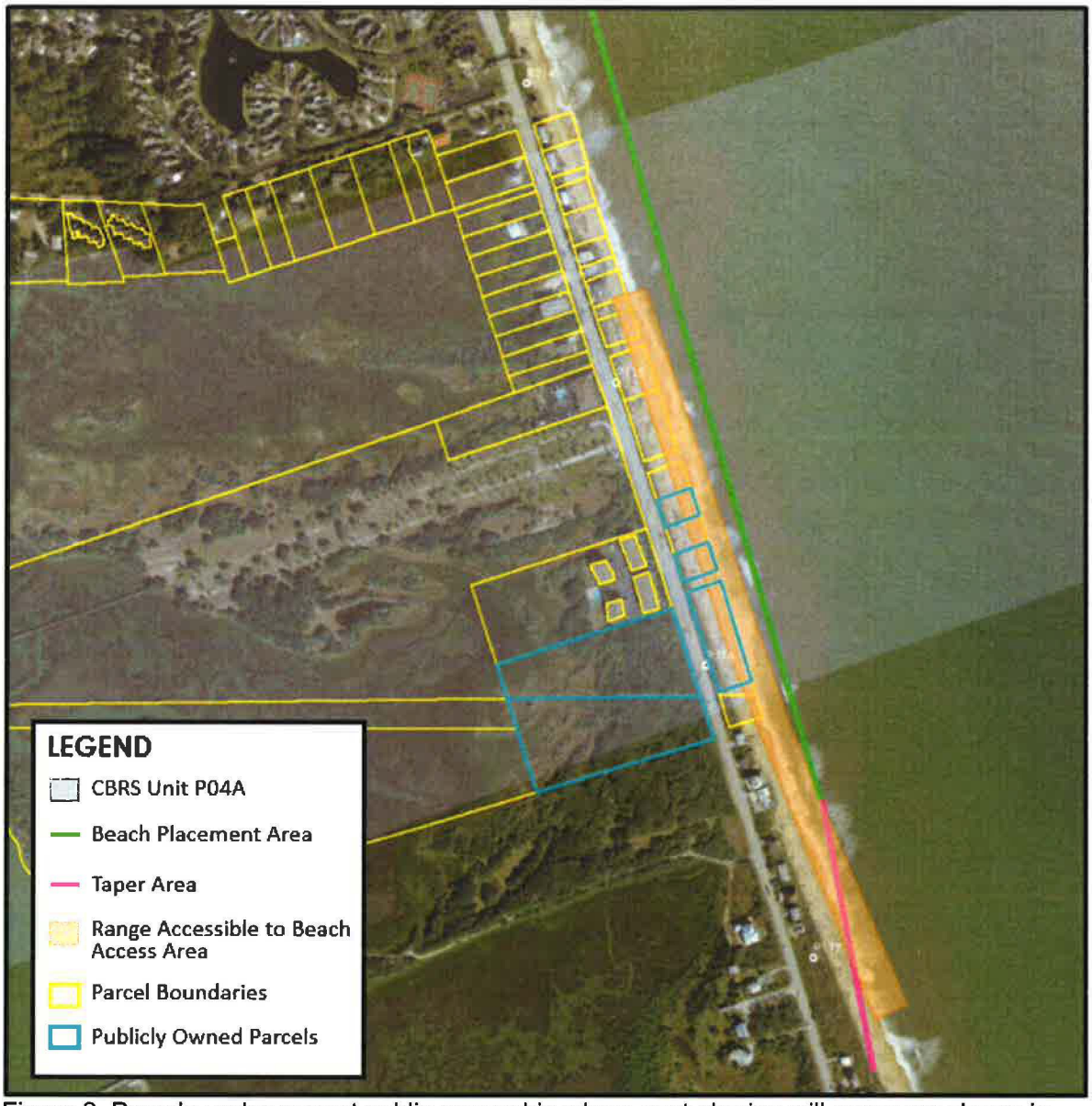


Figure 2. Parcels under current public ownership where cost-sharing will occur are shown in blue. If other parcels are acquired by county, state, or Federal entities in the future, they would also be eligible for Federal funding.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

OCT 1 2 2016

Mr. Jay Herrington
U.S. Fish and Wildlife Service
North Florida Ecological Services Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517

Dear Mr. Herrington:

This letter is in regards to the U.S. Army Corps of Engineers, Jacksonville District's (USACE) ongoing feasibility study to provide coastal storm risk management to the shores of St. Johns County, Florida. We initially consulted with your office on May 25, 2016, and consultation under the Endangered Species Act is ongoing. The U.S. Fish and Wildlife Service's (USFWS) initial response to our consultation on the Coastal Barrier Resources Act (CBRA) was that the project was consistent with the goals of the Act as long as federal funds were not used for the portion of the project in a Coastal Barrier Resources System (CBRS) unit. The purpose of this letter is to provide additional information with respect to the CBRS units in the study area, and to obtain clarification on the applicability of CBRA to this project.

The Recommended Plan includes the construction of a 60-foot berm along 2.6 miles of beach from R-103.5 to R-116.5 (Figure 1). The project template will include a dune feature that reflects the average 2015 dune position. One thousand foot tapers will extend from the northern and southern ends of the berm extension, connecting the extension to the existing shoreline. The addition of tapers results in sand placement from R102.5 to R117.5 along three miles of shoreline. The initial construction would require approximately 1.3 million cubic yards (mcy) of sand, which would be obtained from the St. Augustine Inlet system, including the ebb, flood, and Vilano Point shoals, the Federal navigation channel, and any associated shoals. The anticipated duration of the initial construction would be approximately 3.3 months. Future nourishments would require approximately 866,000 cubic yards of material, and the nourishment interval for this project is approximately 12 years.

We provided the following information in our May 25, 2016, consultation letter for this study:

> "The placement site is located adjacent to and within two designated units of the John H. Chafee Coastal Barrier Resources System (CBRS), including Usinas Beach (Unit P04A) and Conch Island (Unit P05; see enclosed map of the CBRS units). The Coastal Barrier Resources Act (CBRA) of 1982 and the Coastal Barrier Resources Improvement Act (CBRIA) of 1990 limit federally subsidized development in CBRS Units to limit the loss of human life by discouraging development in high risk areas, to reduce wasteful expenditures of Federal resources, and to protect the natural resources associated with coastal barriers."

USACE included a map of the CBRS unit boundaries with the consultation letter using the boundaries found on the USFWS website. However, we noted that the GIS layers do not extend to the -30 foot contour, which is the actual extent of the CBRS unit. We have revised the map to show the full extent of the CBRS unit boundary and the inclusion of the inlet system sand source in CBRS unit P05 (see attached figure and official CBRS unit map).

The south lobe of the ebb shoal and the inlet complex shown on the revised map have been used for the Federal St. Augustine Beach project since its authorization in 1998. Prior to construction, the majority of the St. Augustine Beach shoreline was stabilized with riprap and other hard structures. Since the initial nourishment, St. Augustine Beach has stabilized and the seawall has been almost constantly buried by sand, ensuring the beach is resilient to storm events. Sea turtle nesting habitat at St. Augustine Beach has also improved as a result of beach nourishment there. Similarly, material placed at Anastasia Island State Park has helped the formation of a robust dune habitat through direct placement (during initial project construction) and through Aeolian transport of beach sand.

Following the removal of sediment from the ebb shoal in the early 2000s, Florida Department of Environmental Protection (FDEP) and USACE conducted significant modeling of the inlet system to identify its sediment transport mechanisms. The use of sediment from the inlet complex for both St. Johns County projects (the current feasibility study for the beaches to the north of the inlet, and the existing project to the south of the inlet) will be consistent with the 2014 St. Augustine Inlet Management Plan (attached). This document includes the results of the modeling efforts and outlines the volume of sediment that should be bypassed from the inlet to the downdrift and updrift beaches based on the volume being trapped by the inlet. USACE is actively working with the local property owners, FDEP and the USFWS to ensure that each project removes sediment from the inlet complex in a way that improves habitat for protected species, while mitigating for the change to sediment transport caused by the creation of the inlet in the early 1940s.

Please review the revised map and provide your determination that the use of sediment from CBRS unit P05 for placement on the beaches north of the man-made St. Augustine Inlet, including on CBRS units P04, is consistent with the purposes of the Act. If you have any questions, please contact me at (904) 232-2336 or the technical point of contact. The technical point of contact for this action is Aubree Hershorin, who can be reached at (904) 232-2136.

Sincerely,

Gina Paduano Ralph, Ph.D.
Chief, Environmental Branch

Enclosures

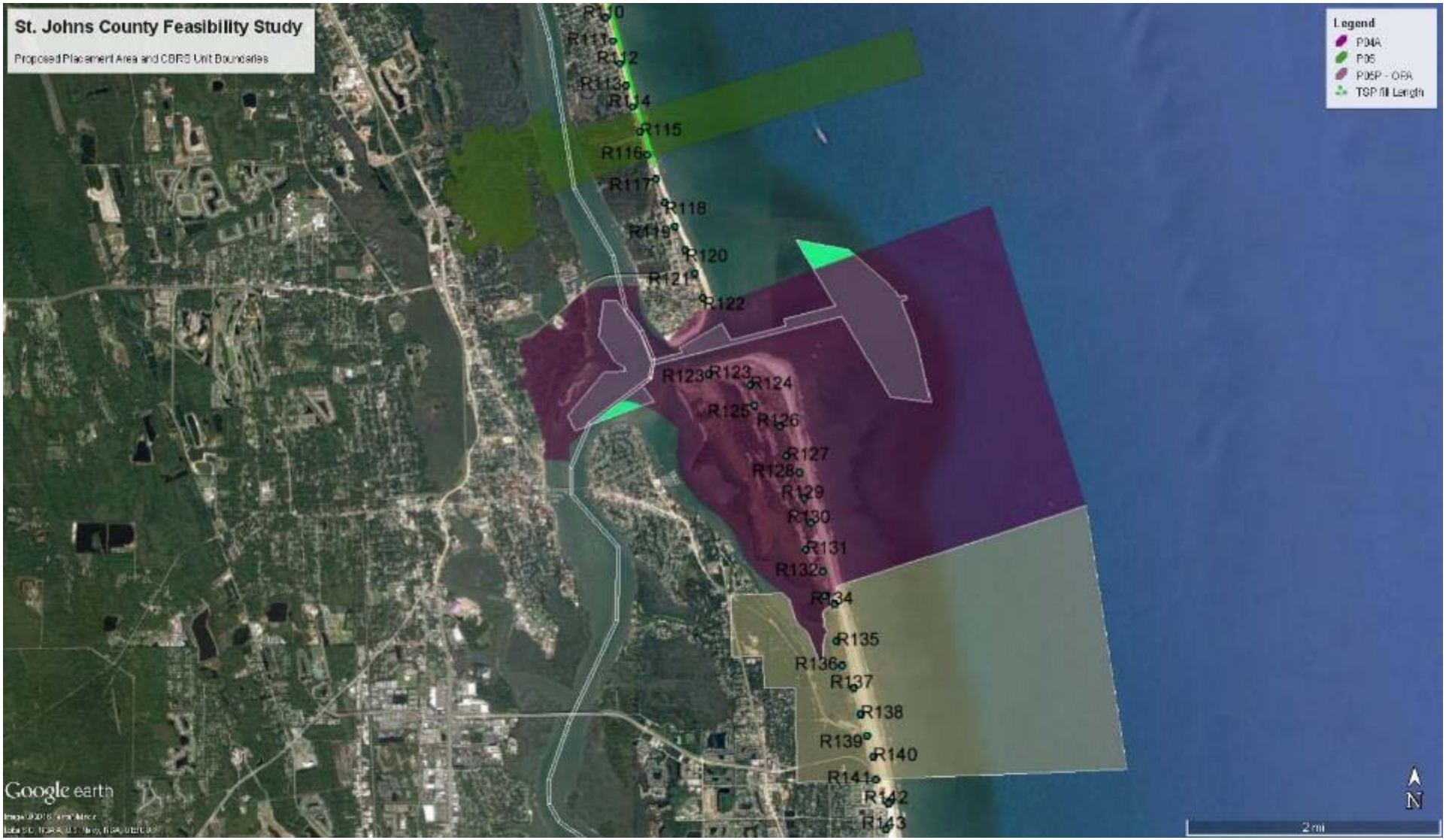


Figure 1. Note that the seaward boundaries of the CBRS units are the -30 ft. bathymetric contour or the extent of the sand sharing system. The extents shown are an approximation.

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

This map has been produced by the U.S. Fish and Wildlife Service as authorized by Section 4(c) of the Coastal Barrier Resources Act (CBRA) of 1982 (Pub. L. 97-348), as amended by the Coastal Barrier Improvement Act of 1990 (Pub. L. 101-591). The CBRA requires the Secretary of the Interior to review the maps of the Coastal Barrier Resources System (CBRS) at least once every 5 years and make any minor and technical modifications to the boundaries of the CBRS units as are necessary solely to reflect changes that have occurred in the size or location of any CBRS unit as a result of natural forces.

The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of coastal barriers is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the CBRA or CBRS, please visit www.fws.gov/cbra.

Usina Beach Unit P04A
Conch Island Unit P05/P05P

N

1:24,000

0 0.25 0.5 1 1.5 2 Miles

0 1,000 2,000 4,000 6,000 8,000 Feet

0 0.25 0.5 1 1.5 2 Kilometers

System Unit Boundary

Otherwise Protected Area (OPA) Boundary; OPAs are identified on the map by the letter "P" following the unit number

Approximate State Boundary

$^{36}54^{000m}$N 2000- meter Universal Transverse Mercator grid values, Zone 17 North

Imagery Date(s):	2013
Imagery Source(s):	United States Department of Agriculture National Agriculture Imagery Program
Coordinate System:	Universal Transverse Mercator, Zone 17 North North American Datum 1983

Map 12-032A **January 11, 2016**

FINAL ORDER ADOPTING

ST. AUGUSTINE INLET MANAGEMENT IMPLEMENTATION PLAN

WHEREAS on August 31, 1998, the Florida Department of Environmental Protection (Department) adopted the St. Augustine Inlet Management Study Implementation Plan, which established inlet sand bypassing objectives, called for restoration of critically eroded downdrift beaches, promoted natural sediment bypassing, called for the implementation of a dune management program on downdrift beaches, and called for implementation of a comprehensive beach and offshore monitoring program that would be used to identify beach placement locations for future bypassing efforts and to revalidate the adopted sediment budget, and

WHEREAS the existing inlet protocol to place an average annual objective of 510,000 cubic yards of sediment on the beach in areas of greatest need was determined by the sediment budget developed in the study *St. Augustine Inlet Management Plan* (Taylor Engineering, 1997), which was conducted in partnership with the St. Augustine Port, Waterway and Beach District, and

WHEREAS the sand bypassing objectives of the St. Augustine Inlet Management Study Implementation Plan were accomplished by placement of inlet maintenance dredging material on the beaches south of the inlet and by use of the inlet ebb tidal shoal as a sand source for the St. Johns County Shore Protection Project at St. Augustine Beach. However, the volume of sediment removed from the inlet shoals exceeded the established bypassing objective of 510,000 cy and led to concern about potential erosion[1] impacts to the beaches adjacent to the inlet, and

WHEREAS in 2008, the Florida Legislature amended Section 161.142, Florida Statutes, finding, "It is in the public interest to replicate the natural drift of sand which is interrupted or altered by inlets to be replaced and for each level of government to undertake all reasonable efforts to maximize inlet sand bypassing to ensure that beach-quality sand is placed on adjacent eroding beaches. Such activities cannot make up for the historical sand deficits caused by inlets but shall be designed to balance the sediment budget of the inlet and adjacent beaches and extend the life of proximate beach-restoration projects so that periodic nourishment is needed less frequently", and

WHEREAS, the U.S. Army Corps of Engineers and St. Augustine Port, Waterway and Beach District are the entities that are responsible for the maintenance dredging of St. Augustine Inlet. Therefore, in accordance with the provisions of Subsection 161.142(6), Florida Statutes, they are the entities responsible for the extent of erosion and for measures to correct such erosion, and

---

[1] As used in this document, the term "erosion" means wearing away of land or the removal of consolidated or unconsolidated material from the coastal system by wind or wave action, storm surge, tidal or littoral currents or surface water runoff. As used in this document, the term "accretion" means the buildup of land or accumulation of unconsolidated material within the coastal system caused by wind and wave action, storm surge, or tidal or littoral currents. The description of coastal processes in this document are not intended to affect title to real property or real property boundaries.

WHEREAS the Department contracted with the Beaches and Shores Resource Center (BSRC), Florida State University, to compile new and historical data and information regarding coastal processes and inlet and shoreline dynamics, as reported in *Inlet Management Restudy for St. Augustine Inlet, St. Johns County, Florida* (Walton et al, 2011), and

WHEREAS the U.S. Army Corps of Engineers, Jacksonville District, developed a regional sediment budget for St. Augustine Inlet and St. Johns County for the 11-year period between 1998/99 and 2010 (USACE, 2012), and

WHEREAS USACE (2012) provides an Inlet Sink Analysis by evaluating the historic shoreline changes and the inlet's sink effect. The analysis determined the inlet's sink effect to be about 278,100 cy per year, with a maximum beach erosion rate north of the inlet to R83 of -98,800 cy per year, and a maximum beach erosion rate south of the inlet to R152 of -179,300 cy per year, and

WHEREAS the Department has developed an updated implementation plan that contains corrective measures to mitigate the identified impacts of the inlet, and

WHEREAS this revised inlet management plan is consistent with the Department's program objectives under Chapter 161, Florida Statutes,

THEREFORE:

The Department does hereby adopt the following implementation strategies, as set forth in attachment A, "St. Augustine Inlet 2013 Summary of Findings Report and Inlet Management Implementation Plan Update," hereby incorporated by reference. Future inlet management activities shall be consistent with the following eight strategies:

1) Continue to transfer sediment from the inlet system to the adjacent beaches meeting a bypassing objective of 278,000 cubic yards per year as determined by the Inlet Sink Analysis provided in the document, *Regional Sediment Budget for St. Augustine Inlet and St. Johns County, FL, 1998/1999-2010* (USACE, 2012). The material obtained from the inlet system shall be distributed to the adjacent Atlantic Ocean fronting beaches with a placement ratio of approximately one-third of material placement to the north and two-thirds of material placement to the south.
2) Inlet sand transfer material shall be placed in designated critically eroded areas to the north or south of the inlet between R84 and R152, St. Johns County, in accordance with Implementation Strategy #1.
3) Inlet dredge material may be obtained from the federal navigation channel, the intracoastal waterway channel, and encroaching flood shoals adjacent to the federal channel, including the Porpoise Point borrow area for placement in accordance with Implementation Strategies #1 and #2.
4) The south lobe of the ebb shoal and the federal navigation channel, including below the authorized project depth may be used as the primary sources of sand for the St. Johns County Shore Protection Project in an amount not to exceed 179,000 cubic yards per year times the number of years between beach nourishment events. However, additional

material may be removed from the authorized navigation channel when necessary for required interim navigation channel maintenance dredging.

5) Engineering and geotechnical investigations shall be conducted of additional borrow areas to meet the inlet bypassing objective. These investigations shall identify the beach quality and quantity of material available, as well as any potential impact on the inlet system or adjacent beaches.
6) Feasibility investigations shall be conducted of the north jetty to determine the beach management benefits and impacts of possible jetty modifications, including but not limited to sand tightening, lengthening, and raising elevations. The impact evaluation shall specifically identify any physical impact to the inlet system or adjacent beaches including Anastasia State Park.
7) A comprehensive beach and inlet hydrographic monitoring program shall be implemented to evaluate performance and impact of existing projects and to update and define the inlet sediment budget. The monitoring program shall include topographic and bathymetric profile surveys at each of the Department's reference monuments between R80 and R157, and along the Porpoise Point spit. Monitoring shall also include bathymetric surveys of the inlet system, including the entire inlet ebb and flood shoal complex between not less than R116 and R132, including the navigation channels and attachment bars, and the navigation easement adjacent to and including the shoreline of the Porpoise Point spit.
8) The inlet sand bypassing objective in Implementation Strategy #1 may be updated following a review and analysis of additional monitoring data collected over at least a five (5) year period. The updated inlet sand bypassing objective shall not become effective less than two (2) years prior to a scheduled beach nourishment of the shore-protection project in order to allow adequate time for project planning and design.

Inlet management actions that implement the strategies contained in this plan are subject to further evaluation, and subsequent authorization or denial, as part of the Department's permitting process. Activities that implement these adopted strategies shall be eligible for state financial participation pursuant to Section 161.143, Florida Statutes, subject to Department approval and an appropriation from the Florida Legislature. The level of State funding shall be determined based upon the activity being conducted and the Department's applicable statutes and rules. The Department may choose not to participate financially if the proposed method of implementation is not cost effective or fails to meet the intent of Section 161.142, Florida Statues, and the adopted inlet management strategies. Nothing in this plan precludes the evaluation and potential adoption of other strategies for the effective management of St. Augustine Inlet and the adjacent beaches through further revision to that plan as may be properly adopted.

Execution of this Final Order constitutes agency action. Any Florida corporation not for profit which meets the requirements of Subsection 403.412(6), Florida Statutes, and any person whose substantial interests will be determined or affected by the Final Order may petition the Department for a formal or informal administrative hearing pursuant to Section 120.569 or 120.57, Florida Statutes, as set forth in the attached Notice of Rights, to challenge the provisions of this Final Order.

If the Department proposes to issue a permit that implements the strategies in this Final Order, any Florida corporation not for profit which meets the requirements of Subsection 403.412(6), Florida Statutes, and any person whose substantial interests will be determined or affected by the proposed permit may petition the Department for a formal or informal administrative hearing pursuant to Section 120.569 or 120.57, Florida Statutes, as set forth in the Notice of Rights attached to the permit. The scope of a challenge to a permit approval or denial is limited to whether the agency action complies with the permitting criteria. Agency action previously subject to challenge or administrative review will not be subject to challenge at the time of permit approval or denial.

APPROVED FOR ADOPTION

Mark P. Thomasson, P.E.
Division of Water Resource Management
Department of Environmental Protection

1/17/14
Date

FILING AND ACKNOWLEDGEMENT

FILED, on this date with the designated Department Clerk, pursuant to Section 120.52, F.S., receipt of which is hereby acknowledged.

Deputy Clerk

1/17/14
Date

NOTICE OF RIGHTS

The Department's proposed agency action shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes, before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed action decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within twenty-one days of receipt of this written notice.

Under Rule 62-110.106(4), Florida Administrative Code, a person whose substantial interests are affected by the Department's action may request an extension of time to file a petition for an administrative hearing. Requests for extension of time must be filed (received by the clerk) with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the end of the time period for filing a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), Florida Statutes, must be filed within twenty-one days of publication of the notice or within twenty-one days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), Florida Statutes, however, any person who asked the Department for notice of agency action may file a petition within twenty-one days of receipt of such notice, regardless of the date of publication.

The failure of any person to file a petition or request for extension of time within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;

(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, Florida Administrative Code.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under Section 120.573, Florida Statutes, is not available.

Once this decision becomes final, any party to the final agency action has the right to seek judicial review of it under Section 120.68, Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this decision is filed with the clerk of the Department.

ATTACHMENT A

ST. AUGUSTINE INLET

2014 SUMMARY OF FINDINGS REPORT
and
INLET MANAGEMENT IMPLEMENTATION PLAN UPDATE

Introduction

Pursuant to Subsection 161.101(2), Florida Statutes, the Florida Department of Environmental Protection (Department) is the beach and shore preservation authority for the State of Florida. As part of the Departments' statewide beach management plan adopted pursuant to Section 161.161, Florida Statutes, the Department is adopting this inlet management plan for St. Augustine Inlet in St. Johns County, Florida (Figure 1). This plan updates an existing plan for St. Augustine Inlet to make the plan consistent with current statutes and observed erosion[1] conditions.

On August 31, 1998, the Florida Department of Environmental Protection (Department) adopted the St. Augustine Inlet Management Study Implementation Plan. This plan was based upon recommendations and supporting data compiled in the study report, *St. Augustine Inlet Management Plan* (Taylor Engineering, Inc., 1997). The study was conducted in partnership with the St. Augustine Port, Waterway and Beach District, under the provisions of Section 161.161, Florida Statutes, for the purposes of evaluating the erosive impact of the inlet on adjacent beaches, and to recommend corrective measures to mitigate identified impacts.

The adopted plan (FDEP, 1998) established inlet sand bypassing objectives and called for implementation of a comprehensive beach and offshore monitoring program that would be used to identify beach placement locations for future bypassing efforts and to revalidate the sediment budget.

The sand bypassing objectives of the 1998 inlet management plan were accomplished by placement of inlet maintenance dredging material on the beaches south of the inlet and by use of the inlet ebb tidal shoal as a sand source for the St. Johns County Shore Protection Project at St. Augustine Beach. However, the volume of sediment removed from the inlet shoals exceeded the established bypassing objective of 510,000 cy and led to concern about potential erosion impacts to the beaches adjacent to the inlet. Consequently, the Department initiated a new study of St. Augustine Inlet to revalidate the sediment budget and to adopt an updated inlet management plan.

---

[1] As used in this document, the term "erosion" means wearing away of land or the removal of consolidated or unconsolidated material from the coastal system by wind or wave action, storm surge, tidal or littoral currents or surface water runoff. As used in this document, the term "accretion" means the buildup of land or accumulation of unconsolidated material within the coastal system caused by wind and wave action, storm surge, or tidal or littoral currents. The description of coastal processes in this document are not intended to affect title to real property or real property boundaries.

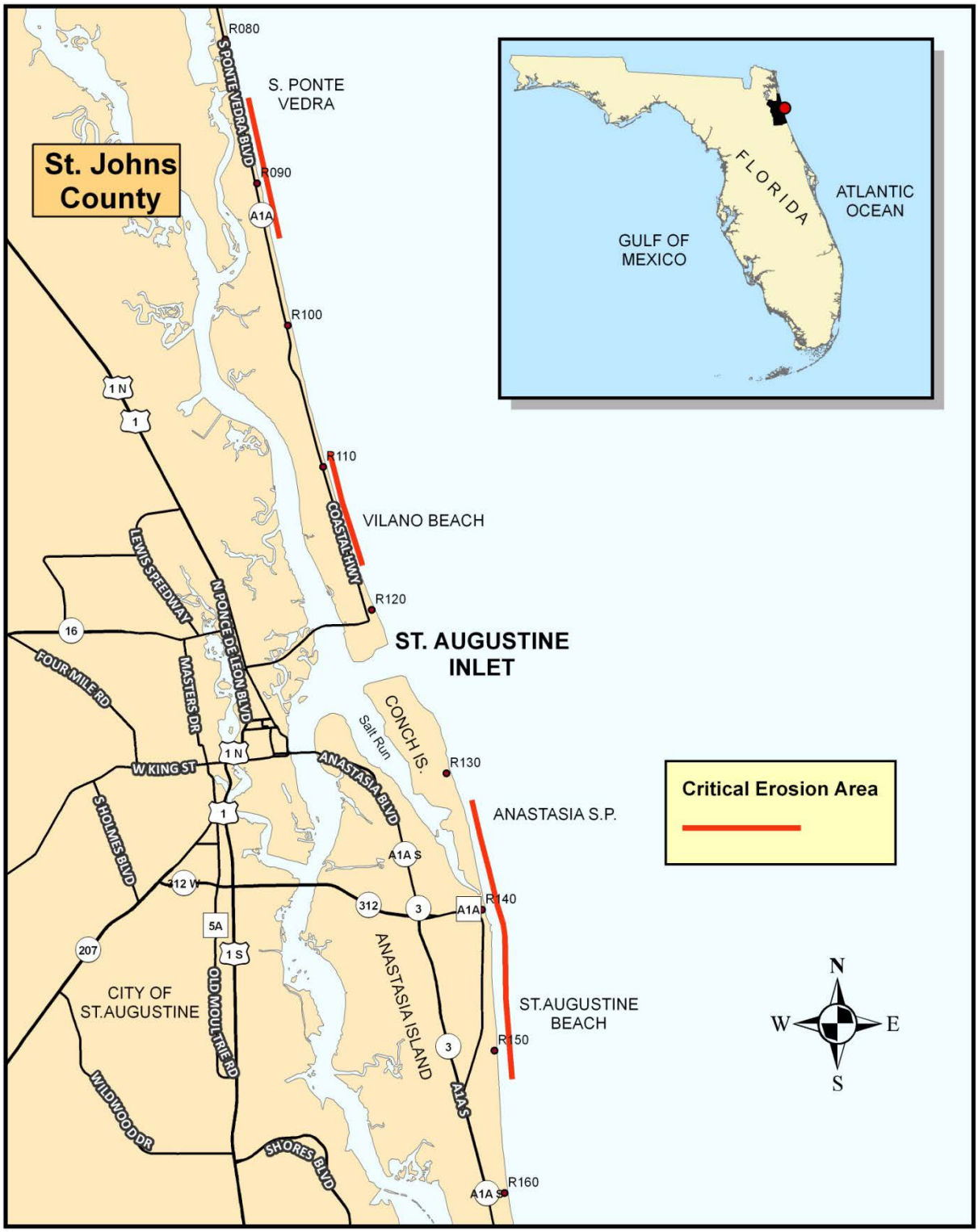


Figure 1. General Location Map

The Department's study was conducted under a contract with the Beaches and Shores Resource Center (BSRC), Florida State University, to compile new and historical data and information regarding coastal processes and inlet and shoreline dynamics, as reported in *Inlet Management Restudy for St. Augustine Inlet, St. Johns County, Florida* (Walton et al, 2011). Additionally, the U.S. Army Corps of Engineers (Jacksonville District), developed a regional sediment budget for St. Augustine Inlet and St. Johns County for the 11-year period between 1998/99 and 2010 (USACE, 2012).

These studies, as well as other referenced analyses, have been evaluated by the staff of the Department as it relates to statutory responsibilities and program objectives. As a result of that evaluation, the Department has developed a recommended inlet management plan to meet those responsibilities and objectives. Adoption of the plan will facilitate and streamline the coastal construction permitting process during its implementation by providing a basis for consistency determination, and enable the responsible entities to seek financial assistance from the Department for the conduct of management activities authorized in the plan.

The Department conducted two technical workshops on November 30, 2011 and February 22, 2012, to foster the development of an updated inlet management plan. The workshops were attended by representatives of the U.S. Army Corps of Engineers (Jacksonville District), the U.S. Fish and Wildlife Service, the Florida Inland Navigation District, the Florida Park Service (Anastasia State Park), St. Johns County, the St. Augustine Port, Waterway, and Beach District, the South Ponte Vedra – Vilano Beach Restoration Association, and other interested parties. The Department also presented a draft plan to the St. Augustine Port, Waterway, and Beach District on March 19, 2013, at their regularly scheduled District Board meeting.

Statutory Responsibilities and Program Objectives

In 2008, the Florida Legislature amended Section 161.142, Florida Statutes, finding,

> "It is in the public interest to replicate the natural drift of sand which is interrupted or altered by inlets to be replaced and for each level of government to undertake all reasonable efforts to maximize inlet sand bypassing to ensure that beach-quality sand is placed on adjacent eroding beaches. Such activities cannot make up for the historical sand deficits caused by inlets but shall be designed to balance the sediment budget of the inlet and adjacent beaches and extend the life of proximate beach-restoration projects so that periodic nourishment is needed less frequently."

Pursuant to 161.143, Florida Statutes,

> "Studies, projects and activities for the purpose of mitigating the erosive effects of inlets and balancing the sediment budget on the inlet and adjacent beaches must be supported by separately approved inlet management plans or inlet components of the statewide comprehensive beach management plan."

The Department, with the assistance of university based resources, may conduct inlet management studies consistent with Subsections 161.142(7) and 161.143(4), Florida Statutes,

> "to determine, calculate, refine and achieve general consensus regarding net annual transport volumes to be used for the purpose of planning and prioritizing inlet management projects."

The St. Augustine Port, Waterway and Beach District is the local sponsor of the federally-authorized St. Augustine Inlet Navigation Project (Figure 2), and in partnership with the U.S. Army Corps of Engineers, they are the entities responsible for maintenance dredging, and consequently, mitigating the extent of erosion caused by the inlet, as specified in Subsection 161.142(6), Florida Statutes.

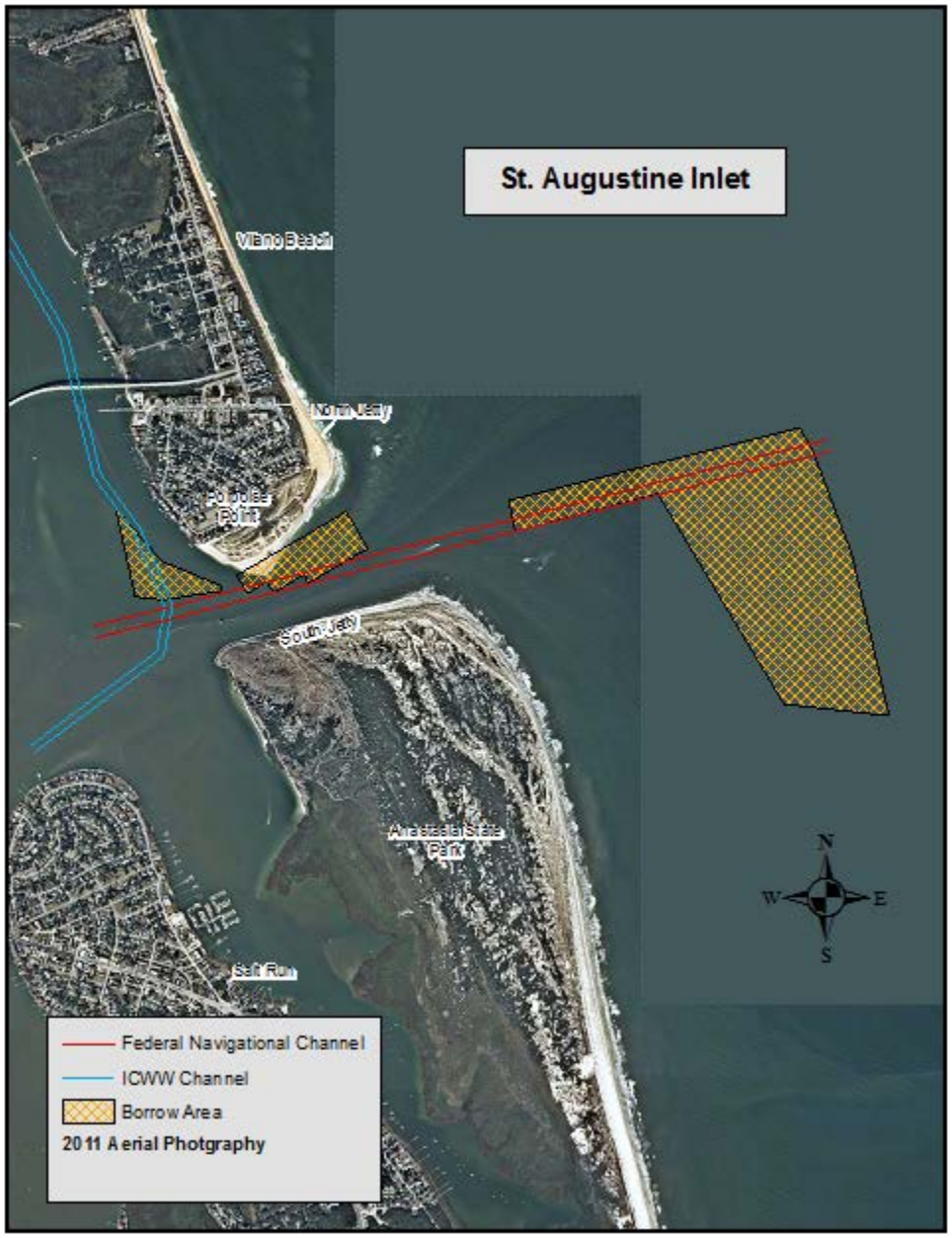


Figure 2. St. Augustine Inlet with Federal Project Dredging Areas

<u>History of St. Augustine Inlet</u>

St. Augustine Inlet is located on the northeast coast of Florida about 35 miles south of the St. Johns River Entrance at Jacksonville (Figure 1). Historical origins of the once natural tidal inlet adjacent to the city of St. Augustine are not clear; however, a natural inlet has existed throughout modern history since the founding of the Spanish colonial city in the early 1500s. The tidal inlet connects the Atlantic Ocean with an estuarine system of lagoons and tidal creeks, and is subject to a semi-diurnal (twice-daily) tidal regime. The dominant tidal lagoons that connect to the inlet are the Tolomato River extending northward and the Matanzas River extending to the south. Aligned generally northwest to southeast, the original natural inlet channel exists today as a connecting lagoon separating Conch Island from Anastasia Island south of the existing inlet.

In 1940, the U.S. Army Corps of Engineers dredged a new east to west channel through the barrier island at a location over two miles north of the natural inlet (Figure 3). In 1941, a short north jetty was constructed at Vilano Point north of the new channel. Described as a terminal groin in the Corps of Engineers' design documents, the boulder mound structure stabilized the Atlantic Ocean shoreline immediately to the north yet allowed substantial sand transport into the inlet, which has created the large land mass south of the jetty (terminal groin) known as Porpoise Point.

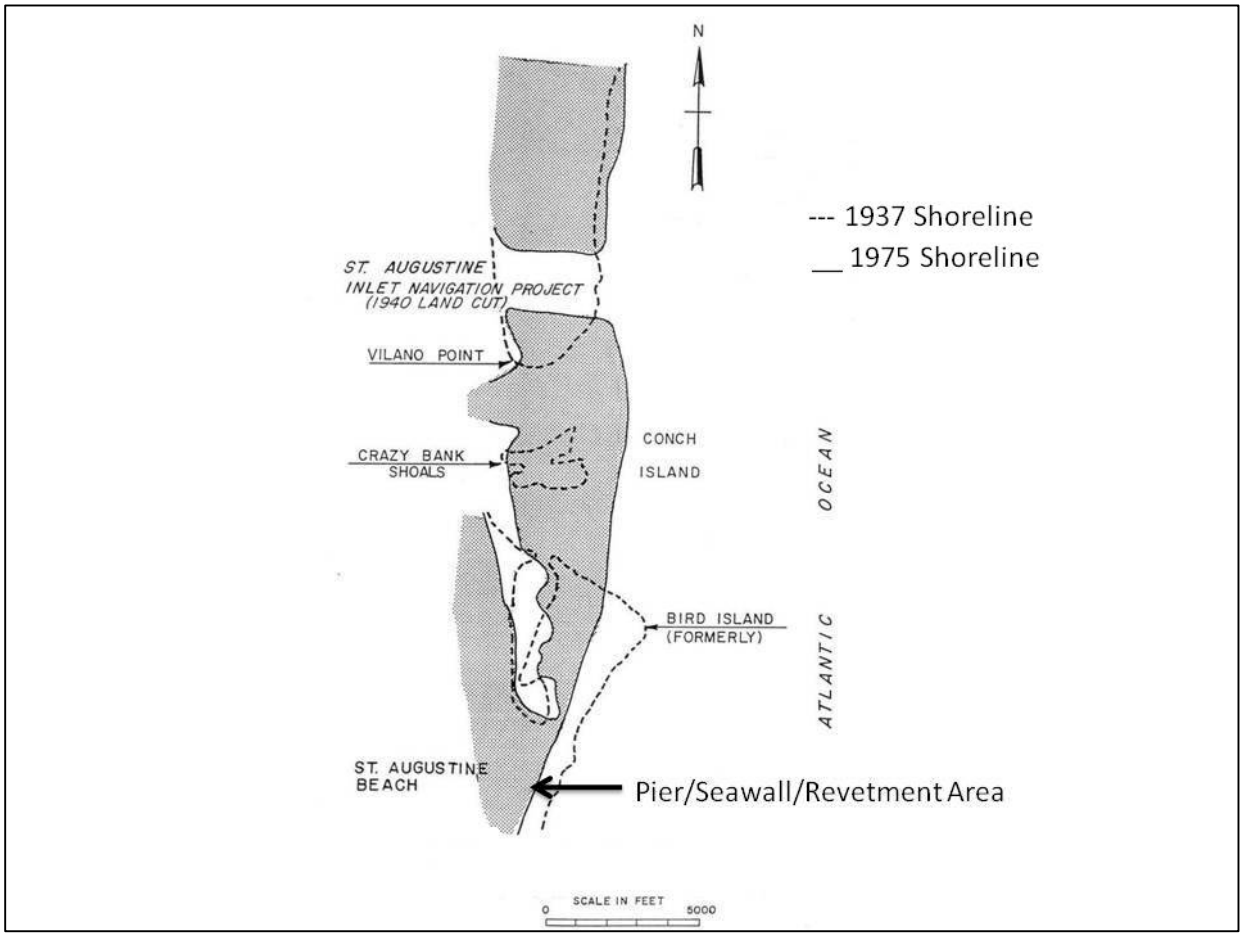


Figure 3. Historical Shoreline Reconfiguration (USACE, 1979)

During the 1940's, the severed land mass that was south of the new inlet channel merged with the intertidal shoals of the original natural inlet. This created what is now called Conch Island, which includes the ocean shoreline of the Anastasia State Park. The old inlet closed at its southern terminus leaving the lagoon now called Salt Run.

In 1957, the USACE constructed a south jetty along the north shoreline of Conch Island. Today, the authorized federal channel is 200 feet wide to a depth of -16 feet Mean Low Water (MLW). The inlet's throat, or narrowest section of the inlet, is roughly 1,000 feet wide (Photo 1). With continued southward transport of sand into the inlet through the north jetty causing growth of Porpoise Point, a portion of the inlet channel is being pushed southward against the south jetty.

Photo 1. Looking East across St. Augustine Inlet with Porpoise Point to the left (2006)

Between 1940 and 1986, 1,373,000 cubic yards of sand was dredged to maintain the federal navigation channel at the inlet with offshore disposal of the dredged material. In 1996, 170,000 cubic yards of maintenance dredging material was placed on the beaches to the south adjacent to the city of St. Augustine Beach.

There are currently two designated critically eroded beach segments north of St. Augustine Inlet located between R84 and R94 (South Ponte Vedra Beach) and between R109 and R117 (Vilano Beach). There is currently one designated critically eroded beach segment to the south of the inlet between R132 and R152 (Anastasia State Park and St. Augustine Beach). In the future, areas currently not listed may become designated critically eroded or areas currently designated critical may lose that designation and become delisted.

During the 1980s, a federal beach erosion control study was conducted for St. Johns County and determined that the navigation channel and inlet relocation had a negative impact on beaches to the south (USACE, 1991). The federally authorized St. Johns County Shore Protection Project, located south of the inlet between R137 and R150, was reauthorized in 1999 to include mitigation of the effects of the navigation project. Beach restoration was initially conducted in 2003 with the placement of 4.2 million cubic yards of sand between R132 and R151 (a length of 3.8 miles). Material was obtained from the inlet's active ebb tidal shoal and channel. In 2005, following the impact of the 2004 hurricane season, an additional 2.8 million cubic yards of sand was dredged from the channel and ebb shoal, and placed between R137 and R151 (2.9 miles). Again in 2012, an additional 2.2 million cubic yards of sand was dredged from the navigation channel, the south lobe of the ebb shoal, and the inner harbor shoal borrow area adjacent Porpoise Point, and placed between R139 and R147. Roughly one fourth of the total material dredged, or 564,000 cubic yards, was obtained from the south lobe of the inlet ebb shoal.

Study Summaries

A number of studies have been conducted through the years to develop an estimate of the longshore sediment transport along the littoral system in the vicinity of St. Augustine Inlet [Walton, 1973; USACE, 1979; Fields et al., 1988; USACE, 1991; Taylor Engineering, 1996; PBS&J, 2009; Walton et al., 2011; and USACE, 2012].

In the study conducted by the Beaches and Shores Resource Center for the Department, Walton et al (2011) developed a new estimate of longshore sediment transport using the Littoral Drift Rose (LDR) concept and three recent hindcast model wave information sets, plus 2009 bathymetric data, and updated current and tidal prism data. A sediment budget was developed for three cells between R100-R122 (north of inlet), R122-R124 (the inlet), and R124-R156 (south of inlet). The updated sediment budget presented the net longshore transport to the south.

Walton et al (2011) recommended discontinuing further dredging of the north lobe of the inlet's ebb shoal, because such activity would cause a reduction in natural bypassing of inlet sediment. Along with limiting dredging of the ebb shoal borrow area that is immediately south of the channel, the study recommends than an area of relic shoal further to the south be developed as a potential future borrow source (Figure 4).

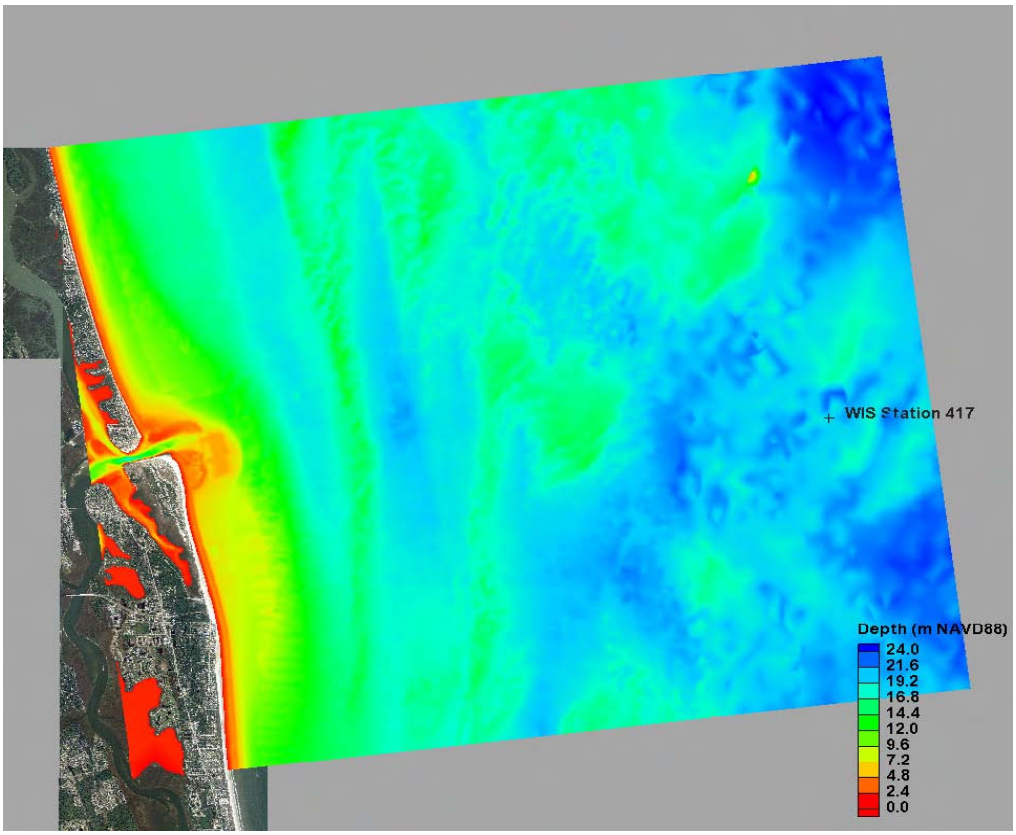


Figure 4. 2007 Offshore Bathymetry (PBS&J, 2009)

Bathymetric survey data for the ebb tidal shoal is available for 1998 and 2010. These surveys were compared to create a morphologic change map, as shown in Figure 5.

In the latest study, USACE (2012) compared beach profile data for 1999 and 2010, and analyzed volume changes using the Regional Morphology Analysis Program. The sand fill placement volumes for 2000 through 2005 were accounted for, and Figure 6 presents the volume changes with and without the beach nourishment volumes.

The USACE (2012) conducted an Inlet Sink Analysis by evaluating the historic shoreline changes and the inlet's sink effect. This analysis first assesses the inlet's littoral impact within the inlet, and identifies the shoreline lengths of inlet impact. Results of this analysis determined that north of the inlet a maximum erosion rate of -98,800 cubic yards per year occurred between the inlet and R83, whereas south of the inlet a maximum erosion rate of -179,300 cubic yards per year occurred between the inlet and R152. The total inlet sink effect was observed to be about 278,100 cubic yards per year.

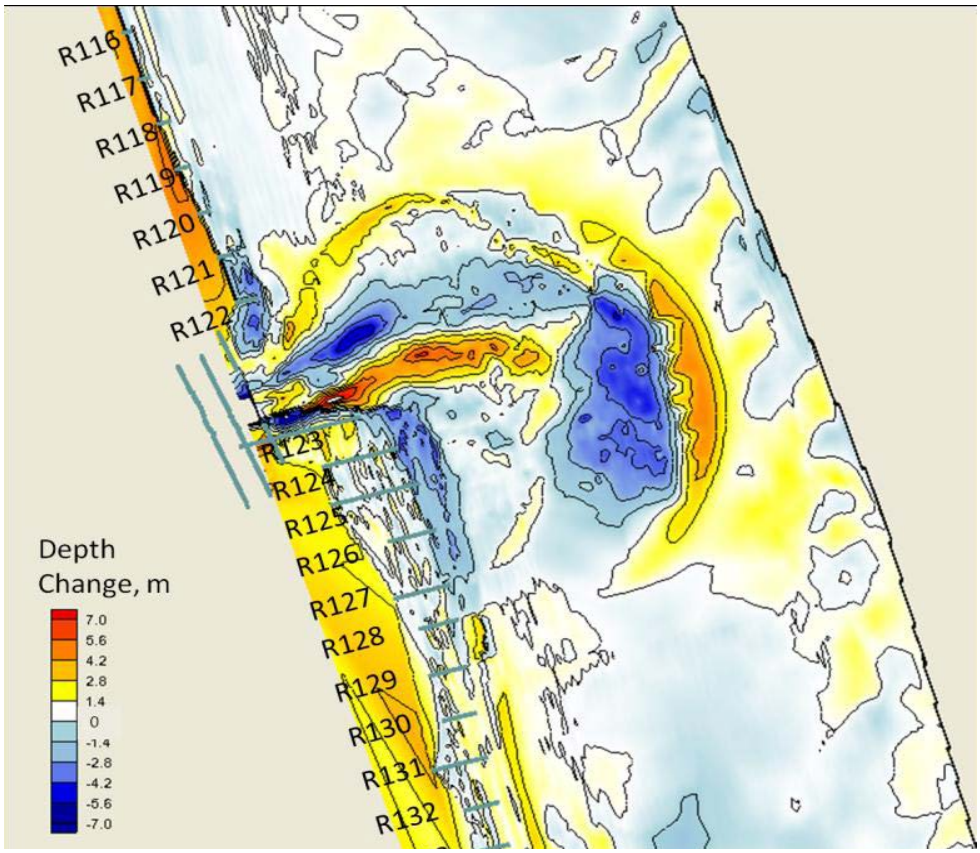


Figure 5. Ebb Shoal Bathymetric Change, 1998 – 2010 (USACE, 2012)

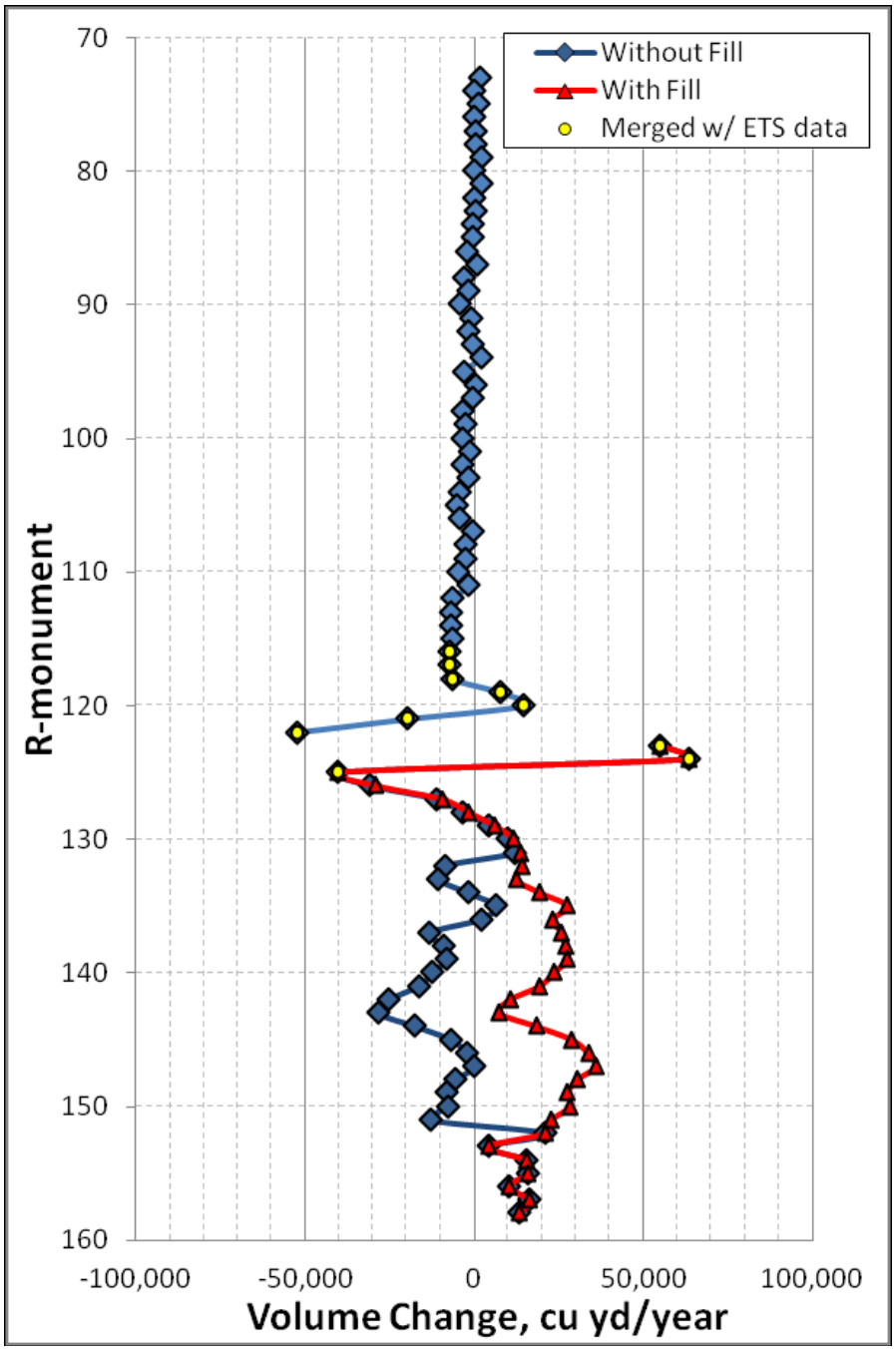


Figure 6. Beach profile volume rate of change between 1999 and 2010 with and without beach fill (USACE, 2012).

Recommended Inlet Management Plan

The Department staff recommends the following implementation plan be adopted to meet the requirements of Chapter 161, Florida Statutes. Future inlet management activities shall be consistent with the following eight strategies.

1) Continue to transfer sediment from the inlet system to the adjacent beaches meeting an annualized bypassing objective of 278,000 cubic yards per year as determined by the Inlet Sink Analysis provided in the document, *Regional Sediment Budget for St. Augustine Inlet and St. Johns County, FL, 1998/1999-2010* (USACE, 2012). The material obtained from the inlet system shall be distributed to the adjacent Atlantic Ocean fronting beaches with a placement ratio of approximately one-third of material placement to the north and two-thirds of material placement to the south.
2) Inlet sand transfer material shall be placed in designated critically eroded areas to the north or south of the inlet between R84 and R152, St. Johns County, in accordance with Implementation Strategy #1.
3) Inlet dredge material may be obtained from the federal navigation channel, the intracoastal waterway channel, the south lobe of the ebb shoal and flood shoals adjacent to the federal channel, including the Porpoise Point borrow area, for placement in accordance with Implementation Strategies #1 and #2.
4) The south lobe of the ebb shoal and the federal navigation channel, including below the authorized project depth may be used as the primary sources of sand for the St. Johns County Shore Protection Project in an amount not to exceed 179,000 cubic yards per year times the number of years between beach nourishment events. However, additional material may be removed from the authorized navigation channel when necessary for required interim navigation channel maintenance dredging.
5) Engineering and geotechnical investigations shall be conducted of additional borrow areas to meet the inlet bypassing objective. These investigations shall identify the beach quality and quantity of material available, as well as any potential dredging impact on the inlet system or adjacent beaches.
6) Feasibility investigations may be conducted of the north jetty to determine the beach management benefits and impacts of possible jetty modifications, including but not limited to sand tightening, lengthening, and raising elevations. The impact evaluation shall specifically identify any physical impact to the inlet system or adjacent beaches including Anastasia State Park.
7) A comprehensive beach and inlet hydrographic monitoring program shall be implemented to evaluate performance and impact of existing projects and to update the inlet sediment budget. The monitoring program shall include topographic and bathymetric profile surveys at each of the Department's reference monuments between R80 and R157, and along the Porpoise Point spit. Monitoring shall also include bathymetric surveys of the inlet system, including the inlet flood shoal complex and the entire ebb shoal between not less than R116 and R132, as well as the navigation channels and the navigation easement adjacent to and including the shoreline of the Porpoise Point spit.
8) The inlet sand bypassing objective in Implementation Strategy #1 may be updated following a review and analysis of additional monitoring data collected over at least a five (5) year period. The updated inlet sand bypassing objective shall not become

effective less than two (2) years prior to a scheduled beach nourishment of the shore-protection project in order to allow adequate time for project planning and design.

Implementation Discussion

Implementation Strategy #1
A future sediment budget is dependent upon meteorological conditions and the resulting wave climate, which cannot be predicted with any reasonable accuracy. The most practical means of determining a sand placement protocol is to utilize the most recent volumetric change data for the beaches adjacent to the inlet. The Inlet Sink Analysis provided in the document, *Regional Sediment Budget for St. Augustine Inlet and St. Johns County, FL, 1998/1999-2010* (USACE, 2012) provides this data and is the basis for the adopted sediment budget. The updated sand placement protocol is based upon this adopted sediment budget, which includes the two-thirds to the south and the one-third to the north split in inlet dredge material placement on the adjacent beaches.

Implementation Strategy #2
Priorities at the time of fill placement will be those areas designated as a critically eroded beach at the time of the inlet dredging project. Various placement methodologies, including hydraulic pipeline and truck-haul, may be conducted. Hydraulic fill placement from the navigation channels and encroaching shoals may be the most feasible means to nourish Vilano Beach during an interim maintenance dredging event. Truck haul projects from a Porpoise Point borrow area may be the most feasible method to nourish South Ponte Vedra Beach. Nothing in this plan precludes a methodology that might be more cost effective or less impactive to environmental resources.

Implementation Strategy #3
Figure 2 shows the existing federal channels and borrow areas where the impoundment of the coastal littoral sediment occurs. The justification of bypassing the sediment from any combination of the identified channels or borrow areas is to achieve the inlet management plan strategies of #1 and #2. Beach compatible material would be placed on the beach in designated critically eroded areas.

Implementation Strategy #4
In accordance with Section 161.142, Florida Statutes, the inlet bypassing activities should be designed to extend the life of the St. Johns County Shore Protection Project. Consequently, the maintenance dredging of the inlet should be conducted in conjunction with beach nourishment of the shore protection project. The intent of this strategy is to not over-dredge the inlet's ebb shoal. Walton et al (2011) specifically recommended against dredging of the north lobe of the inlet's ebb shoal. At this time, limited dredging within the designated federal borrow area on the south lobe of the ebb shoal appears to be recoverable for the time period between nourishment events while combining it with the channel maintenance projects. However, it is likewise understood that maintenance of the federal navigation channel may require exceeding the 179,000 cubic yard per year limitation, so this implementation strategy allows that additional channel dredging when necessary.

Implementation Strategy #5
Likely sources of inlet bypassing material include additional portions of Porpoise Point and inlet flood tidal shoals west of the inlet, which has the potential to assist the bypassing requirement to the north. Walton et al (2011) recommended investigating the relic ebb shoal located between the inlet's active ebb shoal and the St. Johns County Pier as a supplemental sand source for the shore protection project not intended to meet the bypassing requirement to the south. The dredged material from the federal navigation project and approved ebb shoal borrow area shall be the primary source of fill material for the shore protection project.

Implementation Strategy #6
Walton et al (2011) likewise recommended investigating the north jetty (terminal groin), specifically to sand tighten and raise it two feet. The purpose of these structural modifications would be to increase stability of beaches north of the inlet. Vilano Beach would likely be the only beneficiary of these changes, which would probably not extend as far north as South Ponte Vedra Beach. Such structural modifications, including any lengthening, would have to be carefully evaluated so as not to have any adverse impacts such as disrupting natural bypassing at the inlet. Impacts to the beaches both north and south of the inlet would have to be evaluated.

Implementation Strategy #7
A comprehensive beach and inlet hydrographic monitoring program is the most important element to managing the future sediment budget at St. Augustine Inlet. Topographic and bathymetric surveys provide the most reliable data to estimate the volumetric impact of the inlet and to establish a placement protocol that complies with the statutory mandate of Section 161.142, Florida Statutes. At present, surveys conducted for the shore protection project will provide monitoring data for inlet management.

Implementation Strategy #8
It is understood that the sediment budget will vary somewhat over time and that the total volume and/or the proportion of fill placement may need to be modified from that adopted in Implementation Strategy #1. It is not appropriate to modify the fill placement protocol as a result of the impact of major storms or short term influences. A minimum period of five years of data, obtained in Implementation Strategy #7, is selected as necessary to represent the latest trend in inlet sediment processes.

References

Fields, M.L., Marino, J.N., and Weishar, L.L., 1988. *Effects of Florida Tidal Inlets on Adjacent Shorelines*, Proceedings, National Beach Preservation Technology Conference, pp. 383-393.

PBS&J, 2009. *St. Johns County Shore Stabilization Feasibility Study*.

Srinivas, R., Schropp, S.J., and Taylor, R.B., 1996. *St. Augustine Inlet Management Plan – Part 2*, Taylor Engineering, Inc.

United States Army Corps of Engineers, 1979. *Feasibility Report for Beach Erosion Control, St. Johns County, FL*, Jacksonville District (CESAJ).

United States Army Corps of Engineers, 1991. *St. Johns County, FL, Beach Erosion Control Project*, Jacksonville District, Special Report.

United States Army Corps of Engineers, 2012. *Regional Sediment Budget for St. Augustine Inlet and St. Johns County, FL, 1998/1999-2010*, Jacksonville District (CESAJ/ERDC/CHL), Letter Report, 21 p.

Walton, T.L., Jr., 1973. *Littoral Drift Computations along the Coast of Florida by Means of Ship Wave Observations*, University of Florida, Coastal and Oceanographic Engineering Laboratory Report No. 15.

Walton, T.L., Jr., Dean, R.G., Gay, J., Manausa, M., Wang, R., 2011. *Inlet Management Restudy for St. Augustine Inlet, St. Johns County, Florida*, Florida State University, Beaches and Shores Resource Center, 112 p.

United States Department of the Interior

U. S. FISH AND WILDLIFE SERVICE

7915 BAYMEADOWS WAY, SUITE 200
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:
FWS Log No. 04EF1000-2016-CPA-0042

October 25, 2016

Gina P. Ralph, Ph.D.
Jacksonville District Corps of Engineers
Planning and Policy Division Environmental Branch
701 San Marco Boulevard
Jacksonville, FL 32207

Re: St. Johns County Storm Risk Feasibility Study CBRA Consistency

Dear Dr. Ralph:

Thank you for your email correspondence and attachments received on May 25, 2016 and October 12, 2016 requesting the U.S. Fish and Wildlife Service determine whether the U.S. Army Corps of Engineers (USACE) St. Johns County Storm Risk Feasibility Study (Recommended Plan) is consistent with the Coastal Barrier Resources Act (CBRA).

Your request of October 12, 2016 stated: "The Recommended Plan includes the construction of a 60 ft. berm along 2.6 miles of beach from R-103.5 to R-116.5. The project template will include a dune feature that reflects the average 2015 dune position. One thousand foot tapers will extend from the northern and southern ends of the berm extension, connecting the extension to the existing shoreline. The addition of tapers results in sand placement from R102.5 to R117.5 along three miles of shoreline. The initial construction would require approximately 1.3 mcy of sand, which would be obtained from the St. Augustine Inlet system, including the ebb, flood, and Vilano Point shoals, the Federal navigation channel, and any associated shoals. The anticipated duration of the initial construction would be approximately 3.3 months. Future nourishments would require approximately 866,000 cy of material, and the nourishment interval for this project is approximately 12 years.

Your May 25, 2016, consultation request stated: "The placement site is located adjacent to and within two designated units of the John H. Chafee Coastal Barrier Resources System (CBRS), including Usinas Beach (Unit P04A) and Conch Island (Unit P05; see enclosed map of the CBRS units). The Coastal Barrier Resources Act (CBRA) of 1982 and the Coastal Barrier Resources Improvement Act (CBRIA) of 1990 limit federally subsidized development in CBRS Units to limit the loss of human life by discouraging development in high risk areas, to reduce wasteful expenditures of Federal resources, and to protect the natural resources associated with coastal barriers."

USACE included a map of the CBRS unit boundaries with the consultation letter using the boundaries found on the USFWS website. However, the USACE noted that the GIS layers did

not extend to the -30 ft. contour, which is the actual extent of the CBRS unit. We have reviewed the revised map that shows the full extent of the CBRS unit boundary and the inclusion of the inlet system sand source in CBRS unit P05.

The USACE has indicated the Recommended Plan is consistent with the current St. Augustine Inlet Management Plan, which has been ongoing since it was first approved by the Florida Department of Environmental Protection (FDEP) in 2014.

The St. Augustine Inlet was created and stabilized in the early 1940s. Since the stabilization and prior to the CBRA of 1982, maintenance of the inlet and associated Federal navigation channel has affected transport of sand in the surrounding areas. The south lobe of the ebb shoal and the inlet complex have been used for the Federal St. Augustine Beach project since its authorization in 1998. Since the initial nourishment, St. Augustine Beach has stabilized and the seawall has been almost constantly buried by sand, ensuring the beach is resilient to storm events. Following the removal of sediment from the ebb shoal in the early 2000s, FDEP and USACE have conducted significant modeling of the inlet system to identify its sediment transport mechanisms.

As a result, sea turtle nesting habitat has improved at St. Augustine Beach due to beach nourishment. Similarly, material placed at Anastasia Island State Park has helped the formation of dune habitat through direct placement (during initial project construction) and through Aeolian transport of beach sand. Cooperation between State and Federal agencies has improved sand management of the inlet complex in a way that contributes to habitat for protected species, while mitigating for the change to sediment transport caused by the creation of the inlet in the early 1940s.

After careful review of the June 12, 1995 letter from the Department of the Interior to the USACE regarding CBRA and a beach renourishment project at Folly Beach, SC; section 6 of CBRA which allows nonstructural projects for shoreline stabilization that are designed to mimic, enhance, or restore a natural stabilization system; and the best available scientific information regarding the history of sand management, renourishment, and its effects on trust resources, the Service has determined that the Recommended Plan is consistent with CBRA. The Service, in accordance with section 7 of the Endangered Species Act of 1973, will continue to work with the USACE to ensure that impacts will be minimized and benefits maximized in regard federally threatened and endangered species.

If you have any questions or concerns about this consultation, please feel free to contact Zakia Williams of my staff at 904-731-3119.

Sincerely,

for Jay B. Herrington
Field Supervisor

TEMPLATE FOR INTERAGENCY CBRA CONSULTATIONS

The Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 *et seq*.) encourages the conservation of hurricane prone and biologically rich coastal barriers. No new expenditures or financial assistance may be made available under authority of any Federal law for any purpose within the System Units of the John H. Chafee Coastal Barrier Resources System (CBRS) including: construction or purchase of roads, structures, facilities, or related infrastructure, and most projects to prevent the erosion of or otherwise stabilize any inlet, shoreline, or inshore area. However, the appropriate Federal officer, after consultation with the U.S. Fish and Wildlife Service (Service), may make Federal expenditures and financial assistance available within System Units for activities that meet one of the CBRA's exceptions (16 U.S.C. 3505). The CBRA imposes no restrictions on actions and projects within the CBRS that are carried out with State, local, or private funding. Any response from the Service to a CBRA consultation request is in the form of an opinion only. The Service has not been granted veto power. **The responsibility for complying with the CBRA and the final decision regarding the expenditure of funds for a particular action or project rests with the Federal funding agency.**

There are two types of units within the CBRS, System Units and Otherwise Protected Areas (OPAs). OPAs are denoted with a "P" at the end of the unit number (e.g., "FL-64P"). Most new Federal expenditures and financial assistance, including Federal flood insurance, are prohibited within System Units. The only Federal spending prohibition within OPAs is on Federal flood insurance; other Federal expenditures are permitted. **Consultation with the Service is not needed if the proposed action or project is located within an OPA.** However, agencies providing disaster assistance that is contingent upon a requirement to purchase flood insurance after the fact are advised to disclose the OPA designation and information on the restrictions on Federal flood insurance to the recipient prior to the commitments of funds.

The Service has developed the attached template to help facilitate the CBRA consultation process. This form, and any additional documentation, may be submitted to the appropriate Ecological Services Field Office to fulfill the CBRA's consultation requirement.

Additional Resources:

CBRS Mapper: *https://www.fws.gov/cbra/maps/mapper.html*

CBRS shapefile and Web Map Service: *https://www.fws.gov/cbra/maps/Boundaries.html*

CBRA consultations: *https://www.fws.gov/cbra* under "Project Consultations"

CBRS in/out property determinations: *https://www.fws.gov/cbra/Determinations.html*

Ecological Services Field Office contact information: *https://www.fws.gov/offices*

DATE: 11 April 2022

NAME: Angela E. Dunn
TITLE: Environmental Branch Chief, Planning Division
OFFICE: U. S. Army Corps of Engineers, Jacksonville District
STREET ADDRESS: 701 San Marco Blvd
CITY, STATE ZIP: Jacksonville, FL 32207

The U.S. Army Corps of Engineers, Jacksonville District, requests a consultation with the U.S. Fish and Wildlife Service (Service) under the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 *et seq*.) for the proposed sand placement on St. Johns County Coastal Storm Risk Management Project (Vilano Beach and South Ponte Vedra Beach reaches) for the Draft Environmental Assessment for Additional Offshore Borrow Areas – St. Johns County, Florida (SJC) Shore Protection Project (SPP) and SJC, Florida Coastal Storm Risk Management (CSRM).

Project Location

Insert project location. The CBRS Mapper can be used to identify the CBRS unit number(s) at: *http://www.fws.gov/cbra/Maps/Mapper.html.*

The action or project is located in St. Johns County, Florida within (or partially within) Unit(s) P04A of the Coastal Barrier Resources System (CBRS).

Description of the Proposed Action or Project

Provide a brief description of the action or project, including the Federal funding source.

The SJC SPP and SJC CSRM projects are located along the SJC shoreline in northeast Florida, specifically South Ponte Vedra, Vilano, and St. Augustine Beach areas (see Figure 1). The purpose of the SJC SPP and CSRM projects are to reduce the risk of potential damages from waves, erosion, and storm surge caused by coastal storms to structures and infrastructure along the St. Johns County shoreline. Renourishment projects at SJC SPP have been constructed in 2005 (0.8 mcy), 2008 (2.8 mcy), 2012 (2.1 mcy), and 2018 (0.9 mcy). Initial construction beach fill operations for SJC CSRM were completed on January 6, 2021. Approximately 1.3 million cubic yards (cy) of sand coming from the St. Augustine Inlet flood shoal were placed between R102.5 and R117.5.

The Preferred Alternative described in the draft NEPA document is in Federal waters (>3 nautical miles offshore) on the Outer Continental Shelf (OCS), approximately 6-8 miles offshore, in the S-1 and N-3 sand borrow areas (see Figure 1). The Preferred Alternative includes dredging borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) to obtain beach compatible fill material for the continued renourishment of the St. Augustine Beach and Vilano authorized projects shorelines, respectively. These are the closest proven sand sources near SJC CSRM and SJC SPP. Beach compatible fill would be dredged from the ocean bottom from S-1 and N-3 and placed along the SJC SPP and SJC CSRM shoreline, respectively. The proposed offshore borrow areas N-3 and S-1 may be utilized as early as 2022. The anticipated dredging interval infrequent and is approximately every 5-15 years, however dredging may occur sporadically for emergency use. Hopper dredging, transport, and placement is expected to occur for approximately 60-120 days to obtain the necessary volumes.

The purpose of the Preferred Alternative is to obtain beach compatible fill material from borrow areas S-1 (SJC SPP) and N-3 (SJC CSRM) for the continued renourishment of the St. Augustine Beach and South Ponte Vedra and Vilano Beach authorized projects shorelines, respectively. The continued use of the St.

Augustine Inlet as the primary/only sand source in SJC for the SJC SPP and SJC CSRM projects is unsustainable. Therefore, the new borrow sources S-1 and N-3 are needed to support future nourishment, potential emergency projects, and conceivable future authorized projects in SJC, specifically SJC CSRM and SPP. The proposed action does not alter sand placement location and frequency, as described in the prior project consultations.

The initial construction of the Vilano Beach reach of the SJC CSRM, sand placement for which commenced in October 2020 and was completed in February 2021, placed approximately 1.3 million cubic yards (mcy) of sand on the beach (Corps 2017). The authorized project calls for the placement of periodic nourishment of approximately 866,000 cubic yards (cy) of beach compatible fill every 12 years from the St. Augustine Inlet Complex. The design template is characterized by a 60-foot extension at the +8-foot North American Vertical Datum of 1988 (NAVD88) contour of the idealized existing (August 2015) beach profile between the berm (+8 ft-NAVD88) and the estimated depth of closure (-20 feet NAVD88). The authorized design template also includes a dune feature that reflects maintenance of the existing (August 2015) dune condition. The proposed action would reconstruct the project. In November 2021 a Nor'easter storm caused major erosion to the project.

Project work also includes, but is not limited to, beach tilling, construction/vibration control and monitoring, turbidity monitoring, environmental species monitoring, beach fill remediation, and incidental related work.

The funding source for this project is Flood Control Coastal Emergency (FCCE).

Attachment 1 is documentation from SJC regarding the damages and vulnerabilities to state road A1A to support the exemption which we are seeking for P04A CBRS consultation, General Exception, of 16 U.S.C. 3505(a)(3) that sand placement supports necessary maintenance of the roadway given that the A1A road is a state road and considered an essential link. It looks like the whole segment of A1A is vulnerable due to the proximity to the shoreline. SRA1A was breached within this CBRA Zone in a few places during Hurricanes Matthew, Irma and Dorian. In one event, FDOT had to bring in sand to hold the water back from further road erosion under an emergency order. The roadway is a bottleneck in this area and it is a critical roadway for emergencies, hurricane evacuation, life/limb, safety, etc.. We would use FCCE funds for this (1) time emergency event to place sand within the 2,000 ft CBRA zone.

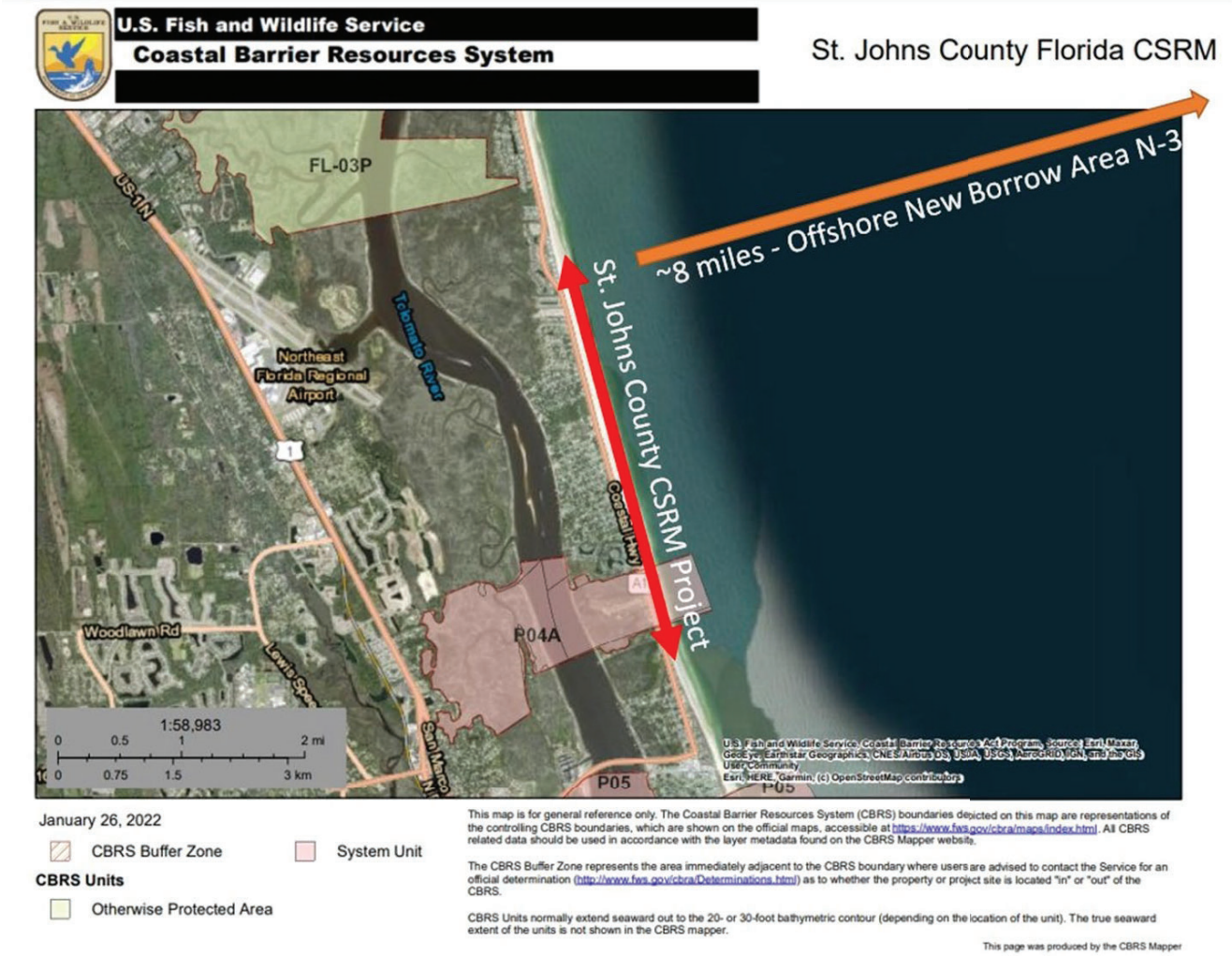


Figure 1. St. Johns County CSRM Project and CBRS Unit P04A

<u>Applicable Exception(s) under 16 U.S.C. 3505(a)</u>
Identify the appropriate exception(s) for the action or project under the CBRA (16 U.S.C. 3505(a)).

General Exceptions

☐ 16 U.S.C. 3505(a)(1): Any use or facility necessary for the **exploration, extraction, or transportation of energy resources** which can be carried out only on, in, or adjacent to a coastal water area because the use or facility requires access to the coastal water body.

☐ 16 U.S.C. 3505(a)(2): The **maintenance or construction of improvements of existing Federal navigation channels** (including the Intracoastal Waterway) and related structures (such as jetties), including the disposal of dredge materials related to such maintenance or construction. A Federal navigation channel or a related structure is an existing channel or structure, respectively, if it was authorized before the date on which the relevant System unit

or portion of the System Unit was included within the CBRS.

☒ 16 U.S.C. 3505(a)(3): The maintenance, replacement, reconstruction, or repair, but not the expansion, of **publicly owned or publicly operated roads, structures, or facilities that are essential links** in a larger network or system.

☐ 16 U.S.C. 3505(a)(4): **Military activities** essential to national security.

☐ 16 U.S.C. 3505(a)(5): The construction, operation, maintenance, and rehabilitation of **Coast Guard facilities** and access thereto.

Specific Exceptions
These exceptions must also be consistent with all three purposes of the CBRA (see "Justification" section below).

☐ 16 U.S.C. 3505(a)(6)(A): **Projects for the study, management, protection, and enhancement of fish and wildlife resources and habitats**, including acquisition of fish and wildlife habitats, and related lands, stabilization projects for fish and wildlife habitats, and recreational projects.

☐ 16 U.S.C. 3505(a)(6)(B): Establishment, operation, and maintenance of **air and water navigation aids** and devices, and for access thereto.

☐ 16 U.S.C. 3505(a)(6)(C): Projects under the **Land and Water Conservation Fund Act** of 1965 (16 U.S.C. 4601-4 through 11) and the **Coastal Zone Management Act** of 1972 (16 U.S.C. 1451 et seq.).

☐ 16 U.S.C. 3505(a)(6)(D): **Scientific research**, including aeronautical, atmospheric, space, geologic, marine, fish and wildlife, and other research, development, and applications.

☐ 16 U.S.C. 3505(a)(6)(E): Assistance for **emergency actions essential to the saving of lives and the protection of property and the public health and safety**, if such actions are performed pursuant to sections 5170a, 5170b, and 5192 of title 42 **and are limited to actions that are necessary to alleviate the emergency.**

☐ 16 U.S.C. 3505(a)(6)(F): Maintenance, replacement, reconstruction, or repair, but not the expansion (except with respect to United States route 1 in the Florida Keys), of **publicly owned or publicly operated roads, structures, and facilities.**

☐ 16 U.S.C. 3505(a)(6)(G): **Nonstructural projects for shoreline stabilization** that are designed to mimic, enhance, or restore a natural stabilization system.

Justification for Exception(s)
Briefly explain how the proposed action or project meets the exception(s) under the CBRA identified above. ***If the exception(s) cited above is under 16 U.S.C 3505(a)(6), the justification should also include an explanation of how the proposed action or project is consistent with the***

***three purposes of the CBRA**, which are to minimize: (1) the loss of human life; (2) wasteful expenditure of Federal revenues; and (3) damage to fish, wildlife, and other natural resources associated with the coastal barriers by restricting Federal expenditures and financial assistance which have the effect of encouraging development.*

Contact Information

Include contact information and where the response should be sent.

NAME: Angela E. Dunn
TITLE: Environmental Branch Chief, Planning Division
OFFICE: U. S. Army Corps of Engineers, Jacksonville District
STREET ADDRESS: 701 San Marco Blvd
CITY, STATE ZIP: Jacksonville, FL 32207
Email: Angela.E.Dunn@usace.army.mil
Please CC: Darren.J.Pecora@usace.army.mil and Andrew.J.Loschiavo@usace.army.mil

FUNDING AGENCY SIGNATORY AND TITLE

Angela Dunn
Chief, Environmental Branch

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2022.04.12 08:10:42 -04'00'

U.S. Fish and Wildlife Service Response

Below is the Service's response to U. S. Army Corps of Engineers, Jacksonville District request for a consultation under the CBRA for the proposed construction of sand placement on St. Johns County Coastal Storm Risk Management Project (Vilano Beach and South Ponte Vedra Beach reaches) for the Draft Environmental Assessment for Additional Offshore Borrow Areas – St. Johns County, Florida (SJC) Shore Protection Project (SPP) and SJC, Florida Coastal Storm Risk Management (CSRM)This response represents the Service's opinion. **The final decision regarding the expenditure of funds for this action or project rests with the Federal funding agency.** U. S. Army Corps of Engineers, Jacksonville District has fulfilled its obligation to consult with the Service under the CBRA for this particular action or project within the CBRS. Please note that any new commitment of Federal funds associated with this action or project, or change in the project design and/or scope, is subject to the CBRA's consultation requirement.

The Service has reviewed the information provided by U. S. Army Corps of Engineers, Jacksonville District, and believes the referenced action/project is:

☐ Not located within a System Unit of the CBRS and the CBRA does not apply (except with respect to the restrictions on Federal flood insurance)

☒ Located within a System Unit of the CBRS and meets the exception(s) to the CBRA selected above

☐ Located within a System Unit of the CBRS and meets different exception(s) than the one(s) selected above (see additional information/comments below)

☐ Located within a System Unit of the CBRS and does not meet an exception to the CBRA (see additional information/comments below)

☐ Due to many competing priorities, the Service is unable to provide an opinion on the applicability of the CBRA's exceptions to this action/project at this time. The U. S. Army Corps of Engineers, Jacksonville District, may elect to proceed with the action/project if it has determined that the action/project is allowable under the CBRA. Please note that any new commitment of Federal funds associated with this action/project or a related future project is subject to the CBRA's consultation requirement.

Additional Information/Comments

Include any additional information/comments. **This consult does not cover/include sand removal from the Inlet or Navigation Channel.**

This response does not constitute consultation for any project pursuant to section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) or comments afforded by the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 *et seq.*); nor does it preclude comment on any forthcoming environmental documents pursuant to the National Environmental Policy Act (83 Stat. 852; 42 U.S.C. 4321 *et seq.*).

SERVICE FIELD OFFICE SIGNATORY AND TITLE DATE

U.S. Fish and Wildlife Service
1875 Century Blvd NE,
Atlanta, GA 30345

Stationed at field office in Panama City, FL
1601 Balboa Avenue, Florida 32405
Phone: 850-769-0552 x 45228

4_19_2022

Patricia Kelly, Regions 2 & 4 CBRA Coordinator Date

FWS# 2202-0014002 StJohnsCountySandNourishment

The Service recommends that the local sponsor consider implementing actions to reduce erosion within the CBRS Unit. Such actions might include limited beach driving, post and roping upper beach areas to encourage vegetation growth and expansion. We also recommend reduce beach cleaning and darkened skies for coastal species conservation.

March 30, 2022

USACE Jacksonville District
Attn: Jason Harrah

Re: CBRS Discussion

Storm Impacts to, and Vulnerability of, A1A from R-114.2 through R-116.2

The first major storm to impact this section of shoreline was Hurricane Matthew in October 2016. A1A was over washed from R-113.6 through R-116.1, carrying sand from the beach onto A1A and into the land and structures on the west side of A1A (Figure 1 and 2). Just over a year later Hurricane Irma caused significant erosion to the same section of shoreline prompting the FDEP to perform an emergency sand placement event from R-114.8 through R-116 (Figures 3 – 6). In 2019, Hurricane Dorian caused an over wash of A1A near R-114.2 (Figure 7-9). I have also included the most recent photos which were taken post-November 2021 Nor'easter (Figure 10 – 11). This section of A1A is a critical section of the only evacuation route for the region. If this section of A1A were to be breached any north/south access of emergency vehicles as well as any evacuating population would be cut off. Please consider this information as justification for A1A road protection/maintenance being a leading effort for sand placement in this reach of the project.

- Hurricane Matthew
  - Over Washed A1A from R-113.6 through R-116.1
    - October 8, 2016 NOAA aerial imagery (Figure 1)
    - October 10, 2016 FDEP ground shots R-114.5 looking south (Figure 2)
- Hurricane Irma
  - Erosion up to A1A and emergency sand placement from R-114.8 through R-116
    - September 14, 2017 NOAA aerial imagery (Figure 3)
    - September 18, 2017 FDEP ground shots (Figure 4 and 5)
    - October 29, 2017 Google Earth imagery (Figure 6)
- Hurricane Dorian
  - September 4, 2019 SJC ground photos of A1A over wash near R-114.2 (Figure 7, 8, and 9)
- Post-Nor'easter November 2021
  - November 8, 2021 SJC Drone imagery of R-116 through R-115 (Figure 10 and 11)
- Reports
  - March 20, 2018 SR A1A Coastal Erosion Risk Analysis Study, St Johns County, FL by Intera Incorporated for the Florida Department of Transportation (FDOT) District 2.
    - Stated R-114, R-115, and R-115 are highly vulnerable to erosion (attached)
  - March 2017 St. Johns County, Florida CSRM Final Integrated Feasibility Study and Environmental Assessment

(https://www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/StJohns/StJohns_FeasibilityStudy_EA_Final_MainReport_20170315_508.pdf?ver=2017-04-19-084059-083)

- "Without a project in place, SR A1A will likely be damaged in portions of the study area. The most vulnerable portion is approximately 500 feet north and 1,500 feet south of R115 in the Vilano Beach reach" (Page 51, Section 2.2.2)
- "As described elsewhere in this report, SR A1A is designated as a National Scenic and Historic Coastal Byway, is the only evacuation route for the region, and is a major north-south thoroughfare for the area. After the 2008 hurricane season, areas of the dune were eroded to within five feet of SR A1A in portions of the Vilano Beach reach around R115, within the southern-half of the Recommended Plan area. If SR A1A were to be breached in this location, any north/south access of emergency vehicles to affected areas, as well as any evacuating population, would be cut off. SR A1A is the evacuation route for approximately 6,000 residents on the barrier island. As shown in Figure 4-2, there are no other north/south roads in this vicinity. The Recommended Plan reduces the risk of damage to SR A1A and maintains its use as the only evacuation route, ingress/egress for emergency vehicles, as well as maintaining a corridor for the resident population to return once conditions are safe." (Page 165, Section 4.5)

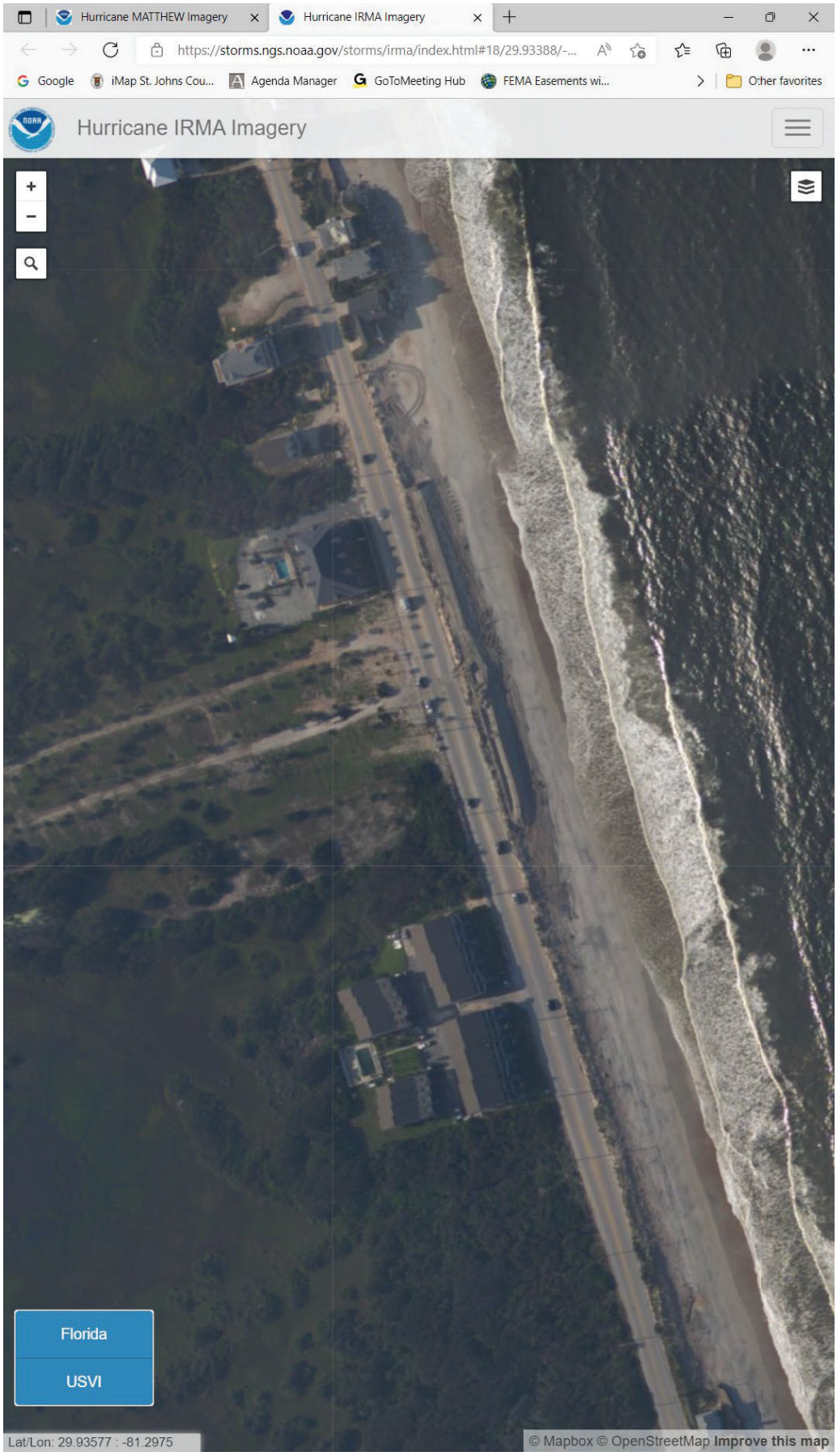
Figures on following pages

2018 SR A1A Coastal Erosion Risk Analysis Study attached

Hurricane Matthew Over Wash - October 8, 2016 NOAA aerial imagery (Figure 1)

Link: https://geodesy.noaa.gov/storm_archive/storms/matthew/index.html

Hurricane Matthew Over Wash - October 10, 2016 FDEP ground shots R-114.5 looking south (Figure 2)

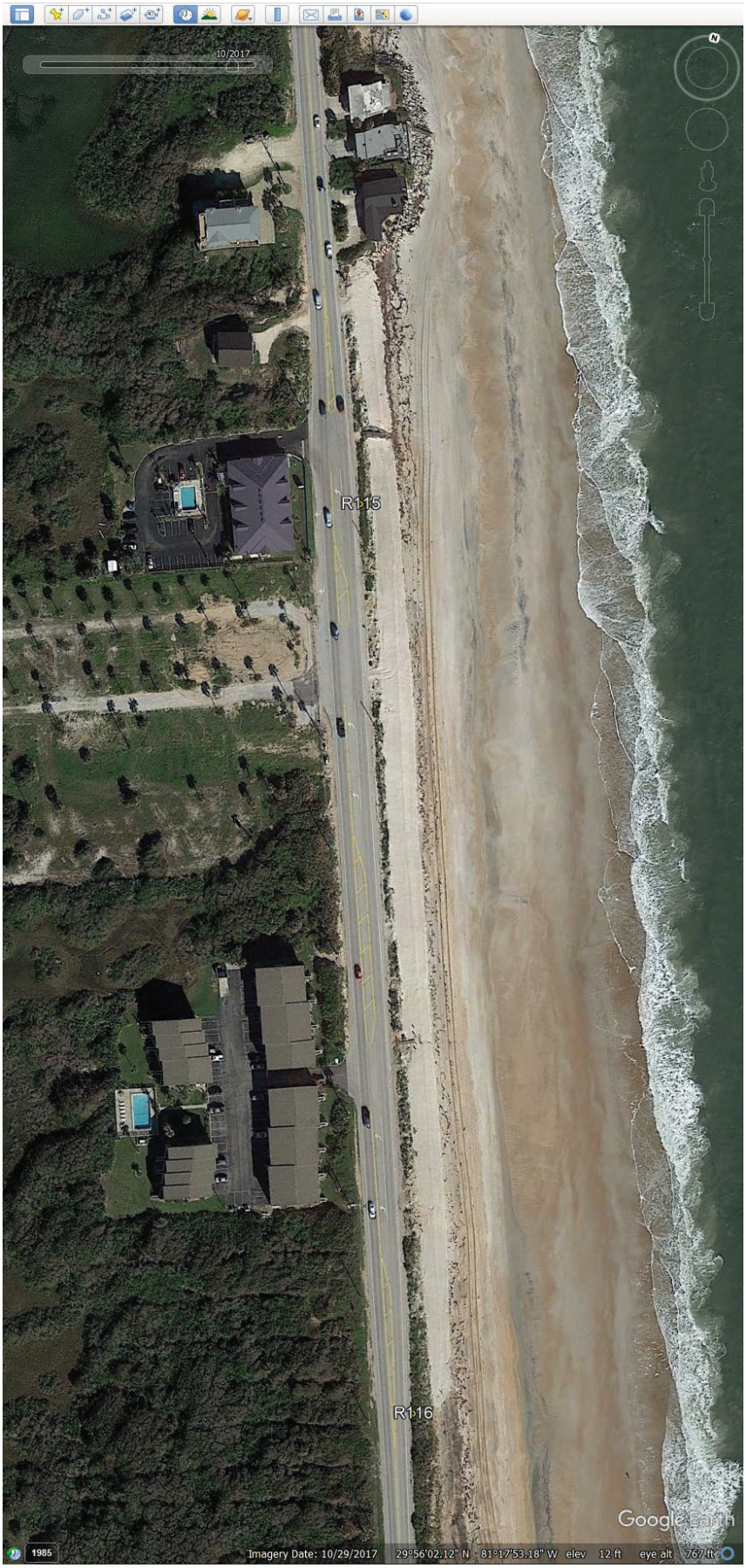


Hurricane Irma Emergency Sand Placement - September 14, 2017 NOAA aerial imagery (Figure 3)

Link: https://storms.ngs.noaa.gov/storms/irma/index.html#19/29.93335/-81.29808

Hurricane Irma Emergency Sand Placement - September 18, 2017 FDEP ground shots (Figure 4)

Hurricane Irma Emergency Sand Placement - September 18, 2017 FDEP ground shots (Figure 5



Hurricane Irma Emergency Sand Placement - October 2017 Google aerial imagery (Figure 6)

Hurricane Dorian Over Wash - September 4, 2019 SJC ground photos of A1A over wash near R-114.2 (Figure 7)

Hurricane Dorian Over Wash - September 4, 2019 SJC ground photos of A1A over wash near R-114.2 (Figure 8)

Hurricane Dorian Over Wash - September 4, 2019 SJC ground photos of A1A over wash near R-114.2 (Figure 9)

Post-Nor’easter November 2021 - November 8, 2021 SJC Drone imagery R-115 (Figure 10)

Post-Nor’easter November 2021 - November 8, 2021 SJC Drone imagery R-116 (Figure 11)

INTERA Incorporated
2114 NW 40th Terrace, Suite A1
Gainesville, Florida, USA 32605
352.415.4015

March 20, 2018

Gaelan Bishop, P.E.
Senior Engineer III, Transportation
FDOT District Two GEC, Office
Atkins
840 SW Main Blvd., Suite 102
Lake City, FL 32025

RE: SR A1A Coastal Erosion Risk Analysis Study, St. Johns County, FL

Dear Mr. Bishop,

The Florida Department of Transportation (FDOT) District 2 commissioned a study of the SR A1A corridor from near Guana River Road south to the Vilano Bridge (approximately 7.5 miles) to determine segments of roadway vulnerable to erosion failures during various coastal storm events. Atkins subcontracted INTERA Incorporated to help make this vulnerability assessment.

The present study consists of four parts: (1) site observations, (2) coastal analyses including long-term shoreline change and storm-induced erosion, (3) a vulnerability assessment, and (4) opportunities to partner with other agencies to ameliorate any vulnerable areas.

Site Observations

On November 30, 2017, two INTERA coastal engineers visited the study area. The observations intended to help evaluate and identify vulnerable areas where potential loss of pavement/shoulder integrity is possible. Where applicable, observations focused on the height of any escarpments relative to the toe of the dune slope, the distance of the toe of the dune slope from the apparent line of wave runup (e.g., wrack line or line of debris), and the width of the shoulder from the edge of pavement. Concern centers on additional erosion of the dune face and ultimately loss of shoulder/pavement that may occur as a result of future storms. Erosion of the toe can lead to cascading failure of the slope and ultimately to loss of shoulder width.

Table 1 presents field observation notes at select locations. The table also references corresponding photographs that depict the observations noted and reference monuments (survey control). The Florida Department of Environmental Protection (FDEP) maintains an extensive, statewide network of survey control originally established by the Florida Department of Natural Resources in the early 1970's. These locations serve as temporally consistent base points to originate beach profile surveys since that time. They also provide a good reference when observing site conditions. The study area extended from FDEP reference monuments R-83 through R-120 (Figure 1).

Table 1. Field Observations Summary

Locations	Observations
GTMNERR Store Walkover & Parking Lot to SPV Park Walkover & Parking Lot (R-83 to R-95)	North end of study area. Near the Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR), a relatively wide beach existed with an enhanced dune (likely sand trucked from an inland sand source) (Figure 2). South of R-86 and until R-94 (approximately 9,000 ft), local residents have built seawalls constructed of wood, vinyl, and steel (Figure 3). For the most part, the wrack line lied at the toe of dunes and seawalls. At the SPV access, the county has placed upland sand to help protect it (Figure 4). Overall, dunes generally wide when vegetated and no structures. Elsewhere, beach is wide during low tide with narrow to no dunes fronting structures.
SPV Park Walkover & Parking Lot to Euclid St. Footpath & Parking Lot (R-95 to R-109)	Similar to north of the access, walls of various types begin again immediately south of access. Vacant lots adjacent to seawalls appeared to experience large erosion offset relative to neighboring unprotected areas (Figure 5). South of R-97, dune widths generally increased. Serenata Beach Club and condominiums (near R-102 and R-103) pushes SR A1A farther west than in other locations along the study area. South of the club, some lots have dunes eroded through the middle of the residences' footprints (Figure 6) such as near R-104. A low, narrow dune exists near R-105 (Figure 7). A mix of seawalls and temporary walls with dune fill generally stops at Fifth St (between R-107 and R-108).
Euclid St. Footpath & Parking Lot to North Beach Park Walkover & Parking Lot (R-109 to R-113)	No dry beach exists at high tide. A mix of walls and unprotected, eroded dunes (Figure 8). Many seawalls of various materials. Some gaps between the walls exist.
North Beach Park Walkover & Parking Lot to Nease Beachfront Park Walkover & Parking Lot (R-113 to R-118)	Little development along this stretch of shoreline. Some protected while others not (Figure 9). Dune recession allowed to occur at unprotected property. A rock revetment exists near R-115. A segment of roadway (R-115 to R-116) had an enhanced dune (likely with sand trucked from an inland sand source). However, dune is very narrow and low (Figure 10). Wrack line at dune toe.
Nease Beachfront Park Walkover & Parking Lot to near Vilano Bridge (R-118 to R-120)	Roadway set very far back from waterline.

Attachment A shows more site observation photographs collected during the entire field visit.

Figure 1. Location Map

Figure 2. Looking South from GTMNERR Access

Figure 3. Looking North at Various Types of Seawalls Intending to Protect Local Residences

Figure 4. Looking North at Sand Placed to Protect County Access

Figure 5. Looking West at Eroded Dune Adjacent to Seawall Termination Point

Figure 6. Lots with Severely Eroded Dunes

Figure 7. Low Spot in Dune System (Breached by Storms) near Eden Bay Dr.

Figure 8. Looking North at Mix of Dune Fill and Seawalls South of Euclid St.

Figure 9. Looking North at Development South of North Beach Park

Figure 10. Looking South along Relatively Unprotected Section of Roadway (R-115 to R-116)

Coastal Analyses

Long-term Shoreline Change Rates

This section examines historical shoreline behavior to identify trends of shoreline accretion and erosion along the study area. Shoreline changes generally indicate subaerial or dry beach behavior. The shoreline change rate, determined for FDEP reference monuments R-83 through R-120 (Figure 1), quantifies shoreline advancement or recession near the project area. The historical mean high water (MHW) shoreline position dataset includes the years 1860 to 2017 (including the effects of hurricanes Matthew [2016] and Irma [2017]).

The historical shoreline change rate is a function of long-term beach processes — accretive and episodic, storm-induced erosive events. The MHW shoreline position data referenced the shoreline locations as a range and azimuth (70° from north) from the fixed reference monuments. Notably, the FDEP recognizes the questionable quality and limited potential usefulness of all data generated before 1972, given source problems. The MHW line for the area lies near +1.7 ft North American Vertical Datum of 1988 (NAVD88). The average shoreline change rate represents the average of three different methods — end point, least squares, and rate averaging — as presented in Foster and Savage (1989). The end-point method takes the difference between the first survey distance and the end survey distance divided by the time between surveys to yield an approximate shoreline change per year. The second method applies the least squares

method to fit a straight line to the shoreline positions versus time. The slope of this best-fit line indicates the rate of shoreline change. The rate-averaging method determines the shoreline change rate for each successive survey period.

Figures 11-13 present the shoreline changes calculated via the three methods and three different periods — 1860 to 2017, 1972 to 2017, and 1993/1995/1999 to 2017. The start dates for the latter period vary because of survey availability at each examined reference monument.

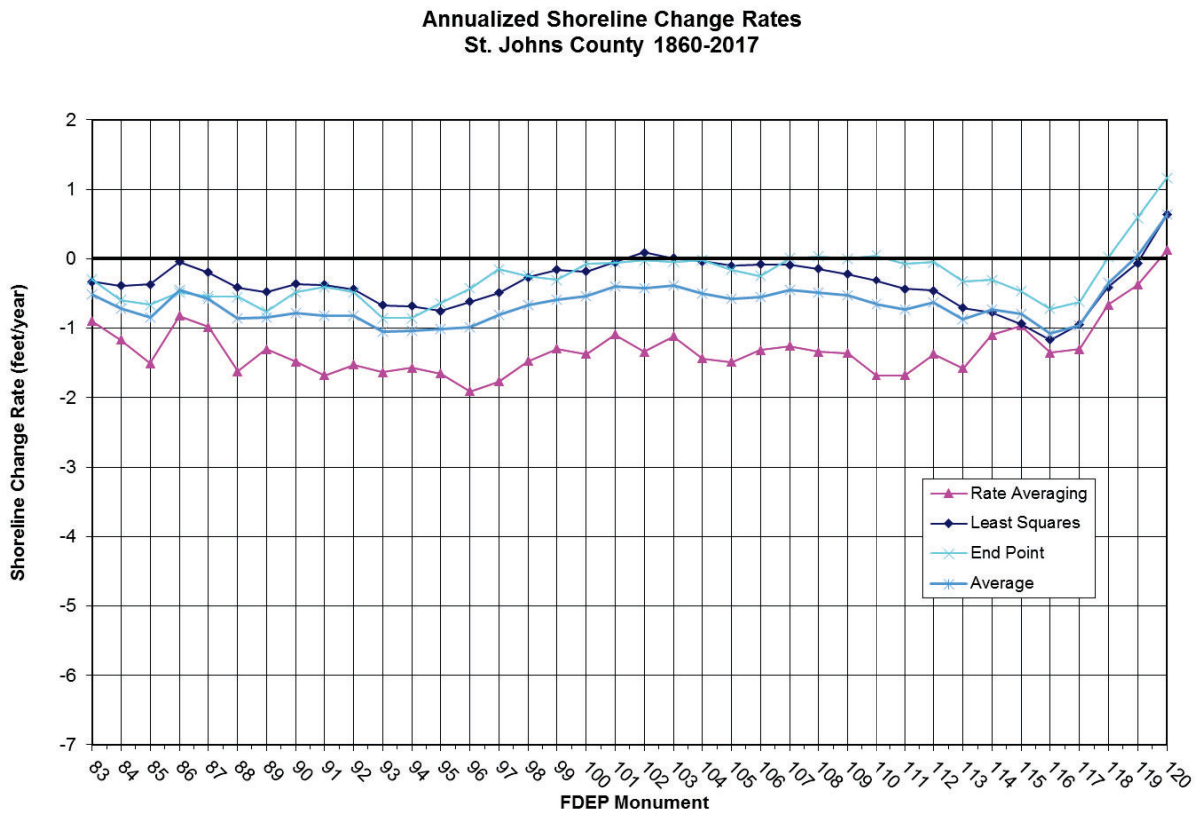


Figure 11. Shoreline Change Rates (1860-2017)

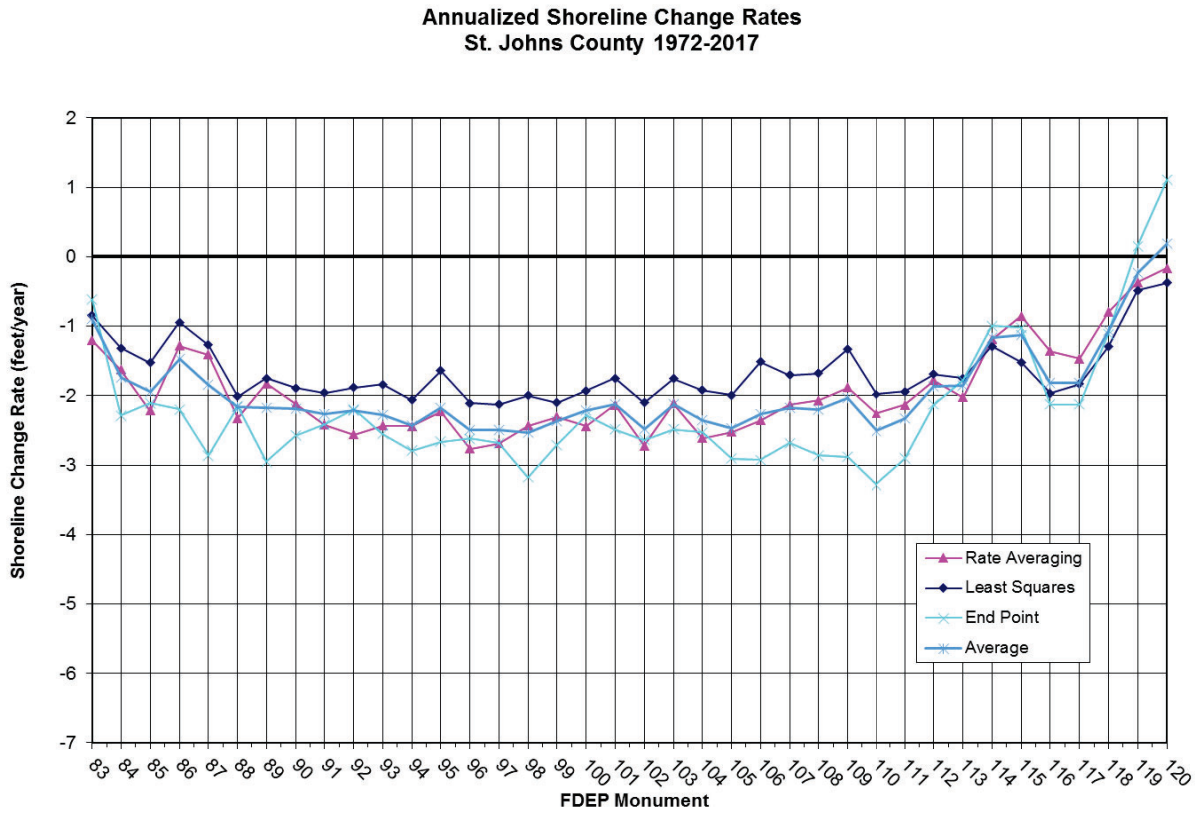


Figure 12. Shoreline Change Rates (1972-2017)

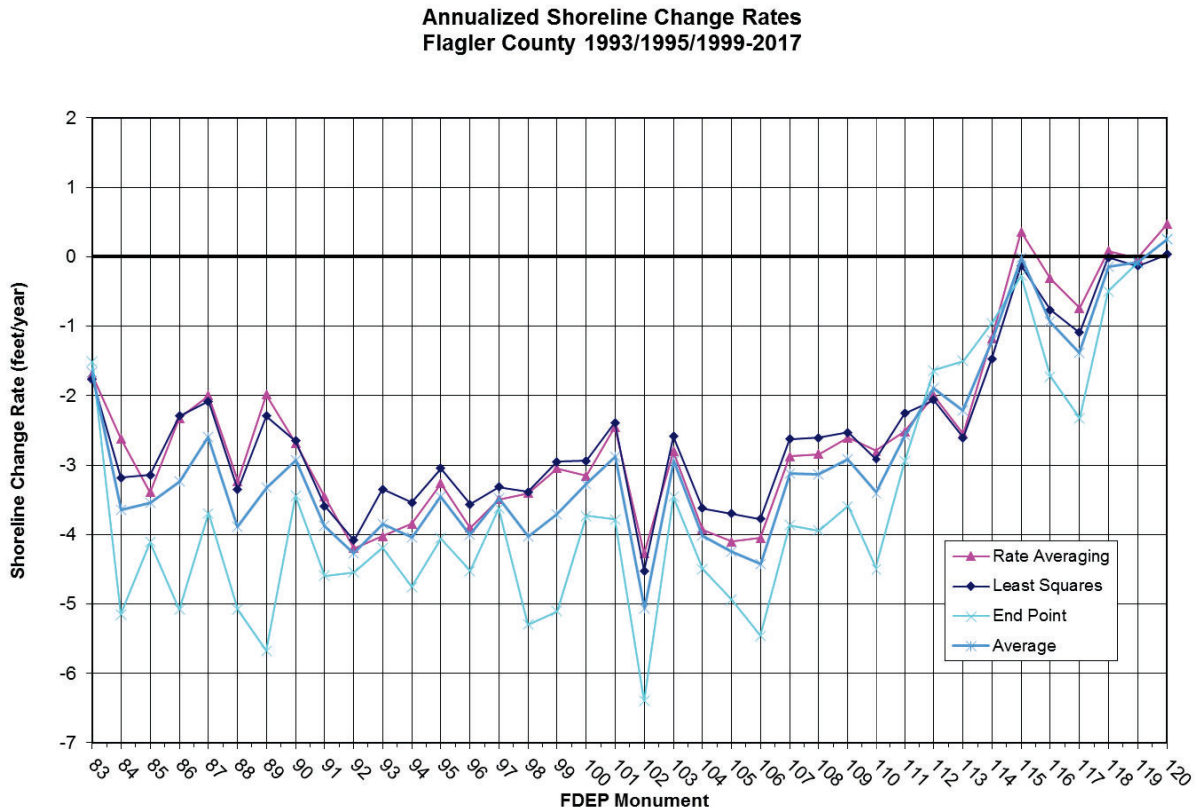


Figure 13. Shoreline Change Rates (1993/1995/1999-2017)

With the exception of very near St. Augustine Inlet (R-120), the beach shows an erosive trend for all methods and examined periods. Across the entire study area, the average shoreline change rate equals about -0.6, -1.9, and -2.9 ft/yr (erosion) during these three periods. Investigating data from 1972 to 2015, the U.S. Army Corps of Engineers (USACE) (2017) report a shoreline change rate of -1.3 ft/yr for R-84 to R-104 (South Ponte Vedra), -1.7 ft/yr for R-104 to R-117 (Vilano Beach), and +0.3 ft/yr for R-117 to R-122 (Vilano Beach). A similar trend appears evident in Figure 12, which covers a similar time but includes hurricanes Matthew and Irma.

The MHW positions reveal an erosive behavior across most of the study area. Until recently, hurricanes have generally not affected the shoreline since 1999. As such, the shoreline position trends generally reflect caused by means other than tropical events (e.g., northeasters and longshore transport). Therefore, any vulnerability analysis should consider these shoreline change rates.

Storm-Induced Erosion

In addition to long-term shoreline changes, INTERA evaluated episodic storms' effects on shorelines within the study area. INTERA applied the Federal Emergency Management Agency's (FEMA) methodology to determine beach/dune erosion at each of the 38 FDEP reference monument locations assessed above. This method is essentially the storm erosion methodology FEMA study contractors apply to map coastal V-zones for a Flood Insurance Study (FIS). This method requires classifying dune erosion as dune retreat or dune removal depending on the dune area lying above the peak storm tide elevation and seaward of

the dune peak. If sufficient area exists, a storm causes a dune to retreat. If not, a storm removes the dune. Figure 14 depicts these two cases. The critical dune areas originate from a relationship between dune erosion area and storm return period (recurrence interval) (Figure 15). Table 2 presents dune erosion areas for select storm return periods. Peak storm tide elevations originate from the St. Johns County FIS (FEMA, 2011).

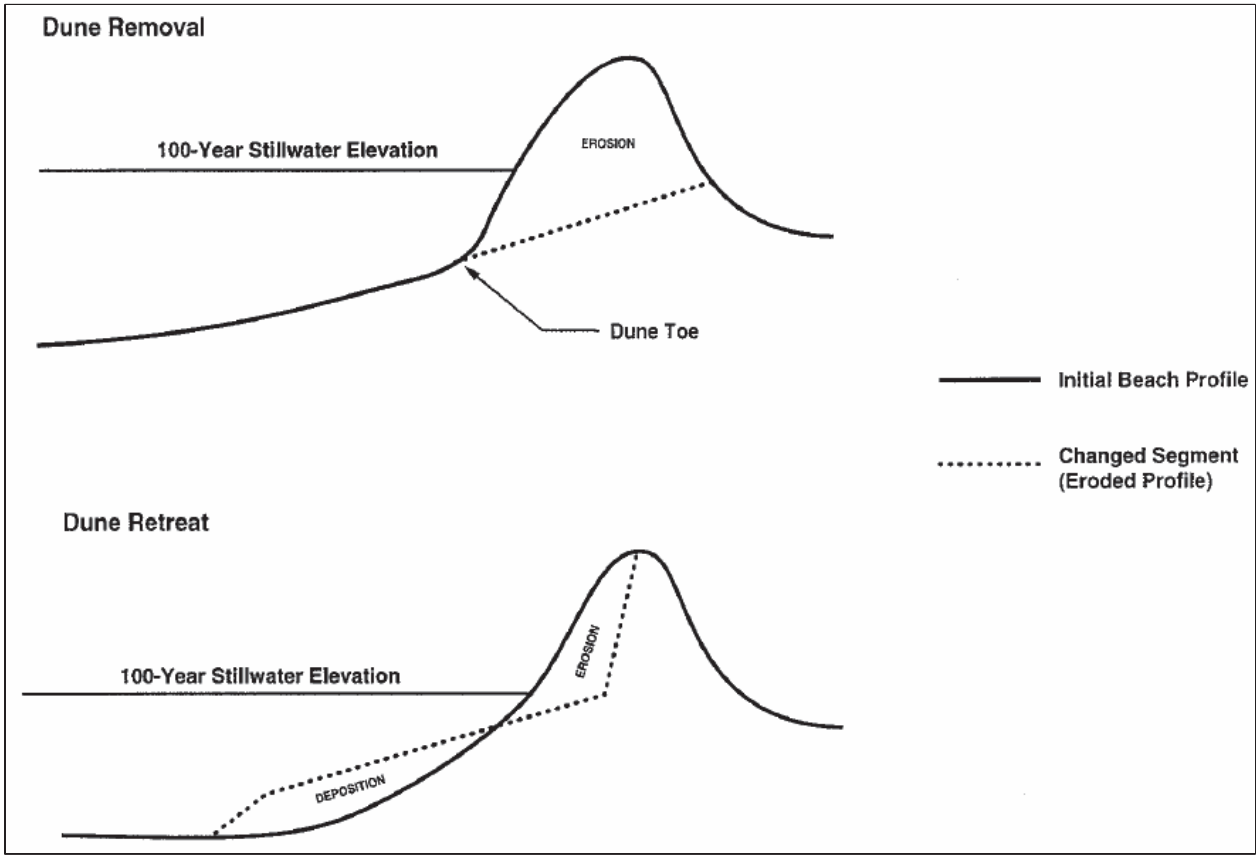


Figure 14. Sketch of Dune Removal and Dune Retreat Cases (FEMA, 2007)

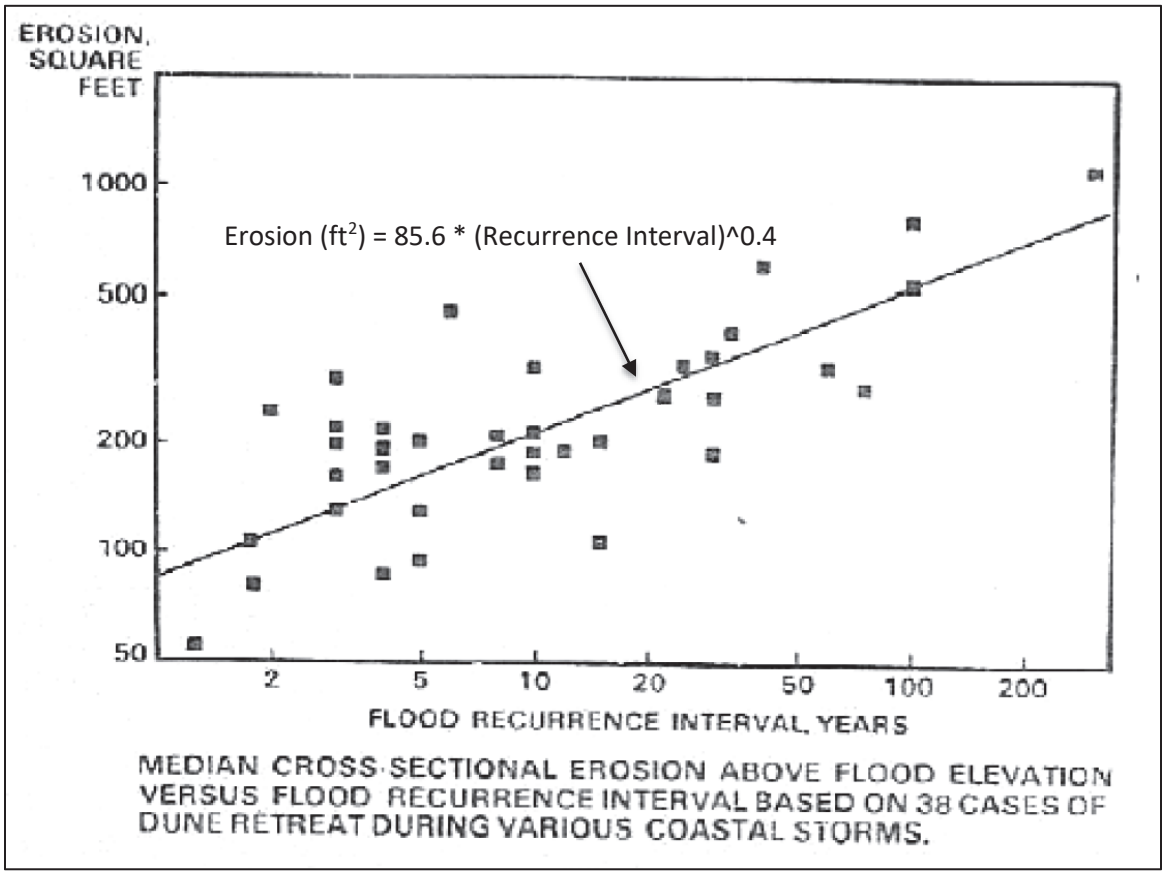


Figure 15. Dune Erosion Areas versus Return Period based on Hallermeier and Rhodes (1988)

Table 2. Dune Erosion Areas for Select Return Periods

Return Period (yrs)	Dune Erosion Area (square feet or cubic feet/foot)
10	215
50	409
100	540
500	1,030

This study applied this erosion method to determine the landward limit of the erosion, critical to assessing the vulnerability to the roadway. The following paragraph describes a typical application for a 100-yr event. First, one calculates the dune area above the 100-yr stillwater level and seaward of the dune peak or rear shoulder peak of a ridge-type dune. If this area exceeds 540 square feet (sf), then one draws an eroded profile with a duneface slope of 1H:1V, a connecting slope of 40H:1V, and a lower slope of 12.5H:1V (lower panel of Figure 14). After fixing the landward tie-in location of the eroded profile by ensuring the eroded area above the stillwater level and seaward of the 1H:1V line equals 540 sf, one adjusts the lower part of the profile until the deposition and erosion areas match. If the dune area above the 100-yr stillwater level and seaward of the dune peak or rear shoulder peak of a ridge-type dune falls below 540 sf, then one constructs a dune removal profile. This profile consists of locating the seaward

dune toe and drawing a 50H:1V line landward from this point until intersecting the landward side of the dune (upper panel of Figure 14).

Storm-induced erosion analyses applied post-Hurricane Irma beach profiles obtained from the FDEP (https://floridadep.gov/water/beaches) and based on USACE LiDAR data. Determining the appropriate beach profile to use requires a comparison of post-Hurricane Irma beach profile data with historic beach profile data at each FDEP reference monument (R-83 to R-120) for analysis. Some users of the USACE LiDAR data have noted occasional issues with it. This check revealed the reliability of the post-Irma survey data at each reference monument location. Once completed for each monument, determination of the landward extent of the erosion for each beach profile commenced.

Figures 16 and 17 show the 10-, 50-, 100-, and 500-yr eroded profiles at R-91, approximately 1.5 miles south of Guana River Rd, and R-115, near the Ocean Sands Inn. Note that, just like these two examples, eroded profiles consisted of both dune retreat and removal types based on the post-Hurricane Irma beach profiles (2017_09). Attachment B contains the full set of results at each monument.

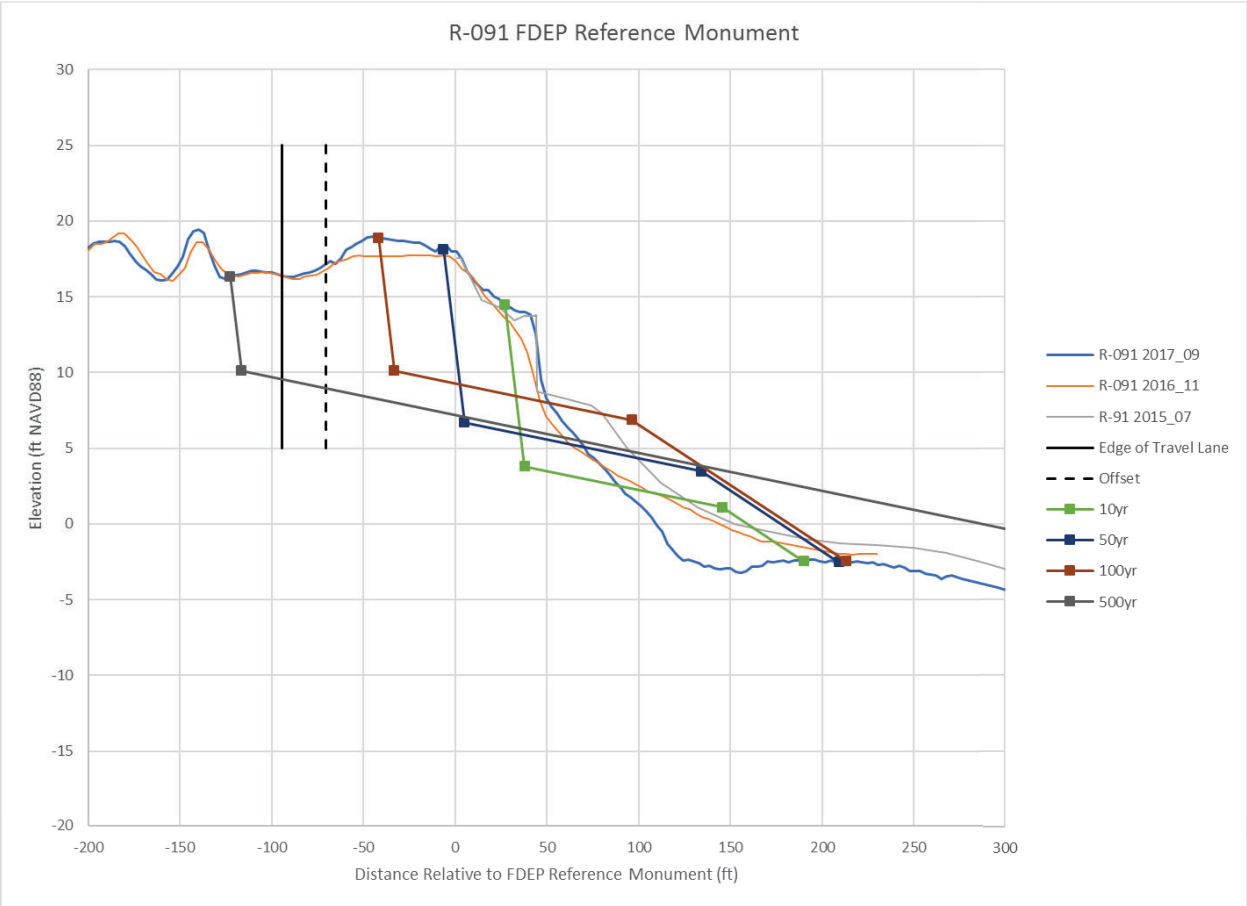


Figure 16. Predicted Eroded Profiles at R-91 for Various Return Period Storms

Figure 17. Predicted Eroded Profiles at R-115 for Various Return Period Storms

After calculating the landward limit of storm erosion for 4 events – 10-, 50-, 100-, and 500-yr return period storms – at each monument, determining the proximity of the erosion escarpment to the road helped establish the degree of failure risk. If the erosion escarpment fell landward of the roadway's clear zone, then this study would consider the roadway vulnerable to erosion. From FDOT (2017), the desired clear zone for this type of roadway likely ranges from 18 (R-117 to R-120) to 24 ft (R-83 to R-117) depending on location. Derivation of the edge of the travel lane originated from 2005 FDOT SR A1A roadway rehabilitation plans provided by Atkins (Gaelan Bishop, November 1, 2017, personal communication). By way of example, figures 16 and 17 show the locations of the edge of the travel lane and corresponding offset (or seaward edge of the clear zone) at R-91 and R-115. As shown, the landward extent of erosion from the 500-yr storm lies landward of this offset at R-91, while the landward extent of erosion from all but the 10-yr storm lies landward of this offset at R-115. Note that the 100- and 500-yr erosion profiles lie on top of each other at R-115. Visual observations at these locations support these results.

Table 3 summarizes the effects of various return period storms along the study area in its present (post-Hurricane Irma, September 2017) state (noted in red). Based on post-Hurricane Irma conditions, 10-yr storms do not affect the roadway's clear zone. Note that at R-83, the 50-yr storm produces an erosion scarp landward of the clear zone while the 100- and 500-yr storms do not because very little dune exists

to erode above the corresponding surge elevations. Notably, this study only addresses erosion. Wave runup and overtopping of the roadway could also damage the roadway.

Table 3. Predicted Storm-Induced Erosion Results for Beach in Present State and 10 yrs into Future

FDEP Reference Monument	Erosion Scarp Landward of Clear Zone			
	10-yr Storm	50-yr Storm	100-yr Storm	500-yr Storm
83		Present	Future	Future
84		Future	Present	Present
85		Future	Present	Present
86		Future	Present	Present
87		Present	Present	Present
88			Future	Present
89			Future	Present
90			Present	Present
91				Present
92			Present	Present
93			Present	Present
94		Present	Present	Present
95			Future	Present
96			Future	Present
97				Present
98			Future	Present
99			Future	Present
100			Future	Present
101			Future	Present
102				
103				
104		Future	Present	Present
105		Future	Present	Present
106		Future	Present	Present
107		Future	Present	Present
108				Present
109			Present	Present
110	Future	Future	Present	Present
111				Present
112	Future	Future	Present	Present
113		Future	Present	Present
114		Present	Present	Present
115	Future	Present	Present	Present
116	Future	Present	Present	Present
117			Present	Present
118				
119				
120				

To provide a more complete understanding of the threat of coastal erosion to the roadway, this study assessed storm-induced erosion after a period of long-term shoreline recession. As described above, INTERA calculated long-term shoreline change rates at each monument. Combining the post-erosion profiles and the long-term erosion rates served to develop adjusted, post-erosion profiles should the beach continue to erode at historical rates and then become subject to a storm. When the long-term shoreline change rate indicates erosion, translating the post-erosion profiles landward by a distance equal to the product of the long-term shoreline change rate (given in ft/year) and the period of interest (say, 10 yrs) accounts for erosion expected to occur at the site, on average, over the period. These adjusted profiles serve as input for assessing distances from the edge of pavement to the landward edge of erosion. Locations where accretive or stable shorelines occur will see no profile adjustments.

For most of the project area, Figure 3 suggests a recession rate of -2 ft/yr. Exceptions include R-83 to R-86 and R-118 to R-120 where rates of -1.5 and -0.5 ft/yr appear appropriate. Multiplying by a time period of 10 yrs (an estimate of time before management actions might occur), these rates correspond to translating the post-erosion profiles landward by 15 (R-83 to R-86), 20 (R-87 to R-117), and 5 ft (R-118 to R-120). For example, under present conditions, only 100- and 500-yr storms produce escarpments that fall landward of the clear zone offset line at R-113. Ten years from now, the 50-yr storm could also produce an escarpment that falls landward of the clear zone offset line at R-113.

Table 3 also summarizes the effects of various return period storms along the study area 10 yrs into the future (noted in orange). After 10 yrs of long-term erosion, 10-yr storms encroach the clear zones at R-110, R-112, R-115, and R-116. Similarly, the number of locations where 50-yr storms encroach clear zones increases from 6 to 16.

Vulnerability Assessment

Based on site observations, long-term shoreline change rates, and the storm-induced erosion assessment, Table 4 rates the vulnerability of the roadway as low (un-highlighted), medium (orange highlight), and high (red highlight) by FDEP reference monument. The table shows vulnerabilities based on present conditions (with coastal analyses based on post-Hurricane Irma surveys) and conditions 10 yrs into the future. Note that this assessment excluded consideration of existing seawalls identified during the site visit because the durability of these hard structures to various return period storms is unknown. Furthermore, homeowners may have permitted some of these seawalls as temporary. Additionally, this assessment only considers the clear zone and roadway exposed to erosion as vulnerable.

While erosion may not affect the clear zone or roadway, water overtopping the roadway during a storm may occur. Unaccounted in the storm-induced erosion method utilized in this study (or other more sophisticated cross-shore erosion modeling), this effect may cause local scour at the landward edges of the roadway. INTERA staff observed these effects firsthand after Hurricane Ivan (2005) in the Florida Panhandle.

At present, the clear zone/roadway is highly vulnerable to erosion at R-83, R-87, R-94, and R-114 to R-116. In the future, the areas from R-83 to R-87, R-94, R-104 to R-107, R-110, and R-112 to R-116 may become highly vulnerable. Overall, the assessment identified 16% (6/38) of the clear zone/roadway as highly vulnerable, 39% (15/38) as having a medium vulnerability, and 45% (17/38) as having a low vulnerability to erosion in the beach's present state. Ten years into the future, the assessment identified 42% (16/38), 34% (13/38), and 24% (9/38) as having a high, medium, and low vulnerability to erosion.

Table 4. Vulnerability of Clear Zone/Roadway to Erosion

FDEP Reference Monument	Landmark	Present (post-Irma)	Future (10 yrs)
83	Guana River Rd.	High	High
84	2719 S. Ponte Vedra Blvd.	Medium	High
85	2741 S. Ponte Vedra Blvd.	Medium	High
86		Medium	High
87	2795 S. Ponte Vedra Blvd.	High	High
88	2823 S. Ponte Vedra Blvd.	Low	Medium
89	---	Low	Medium
90	2875 S. Ponte Vedra Blvd.	Medium	Medium
91	2903 S. Ponte Vedra Blvd.	Low	Low
92	2931 S. Ponte Vedra Blvd.	Medium	Medium
93	2957 S. Ponte Vedra Blvd.	Medium	Medium
94	Yellow Bill Ln.	High	High
95	SPV Park Walkover & Parking Lot	Low	Medium
96	Beachside Dr.	Low	Medium
97	3047 S. Ponte Vedra Blvd.	Low	Low
98	3056 S. Ponte Vedra Blvd.	Low	Medium
99	Turtle Bay Ln.	Low	Medium
100	3114 S. Ponte Vedra Blvd.	Low	Medium
101	Tides Edge Pl.	Low	Medium
102	Serenata Beach	Low	Low
103	Serenata Beach	Low	Low
104	---	Medium	High
105	Eden Bay Dr.	Medium	High
106	Sandcastle Ln.	Medium	High
107	Third St. Walkover	Medium	High
108	---	Low	Low
109	Euclid St. Foot Path & Parking Lot	Medium	Medium
110	4020 Coastal Hwy.	Medium	High
111	Boating Club Rd. Walkover	Low	Low
112	3810 Coastal Hwy.	Medium	High
113	North Beach Park Walkover & Parking Lot	Medium	High
114	Carcaba Rd. Walkover	High	High
115	Ocean Sands Beach Inn	High	High
116	---	High	High
117	3245 SR A1A	Medium	Medium
118	3148 SR A1A	Low	Low
119	3056 SR A1A	Low	Low
120	Oak Ave.	Low	Low

While the USACE utilizes criteria other than susceptibility to erosion to determine federal interest in a shore protection project, it identified the shoreline segment from approximately R-104 to R-116 as a project worthy of federal participation for shore protection over a 50-yr period (USACE, 2017). Notably, the present vulnerability assessment also identifies this area as potentially highly vulnerable in the future. The USACE project would consist of a dune and 60-ft equilibrium dry beach extension from the +8 ft NAVD88 contour and requiring renourishing approximately once every 12 yrs. The 60-ft extension represents the minimum beach width needed to provide optimal storm damage reduction benefits to the project area. The USACE would initially build a beach wider than 60 ft and waves/currents would naturally erode the beach. Once the beach erodes back to within the 60-ft design template, then the USACE would renourish the beach (i.e., place more sand).

Notably, Taylor Engineering (2009), as a subcontractor, prepared a coastal engineering study for a part of this study area on behalf of the FDOT. That study examined the erosion a new seawall might experience along the section of SR A1A near R-115 to R-116.

Partnering with Other Agencies

As observed during the site visits, shore protection — to protect homes, beach accesses, and in some instances SR A1A — generally consist of a hodgepodge of seawalls and dune fill. Opportunities may exist for the FDOT to partner with other agencies with an interest in protecting upland infrastructure to construct shore protection in a more planned manner.

As alluded above, the USACE has identified a $78 million, 50-yr beach nourishment project from R-104 to R-116. This recommended plan received approval from the USACE Civil Works Review Board in March 2017 and signoff on the Chief of Engineers report in August 2017. Next steps include review by the Office of the Assistant Secretary of the Army for Civil Works and Office of Management and Budget (OMB) and Congressional authorization for design, permitting, and construction (www.saj.usace.army.mil). In this era of no legislative earmarks, the OMB decides on funding. At the time of this writing, a benefit-to-cost (B/C) ratio of 2.5 with a 7% discount rate is the typical cutoff for funding. As currently presented, the St. Johns County project has a B/C ratio of 1.3. Should funding come through, the local sponsor (St. Johns County) must bear 77% of the project cost for initial construction and 82.3% for subsequent nourishments (USACE, 2017). This project would help address the medium to highly vulnerable roadway from R-104 to R-116. However, this project is likely a few years away from initiating construction.

Another, perhaps more imminent, endeavor includes a potential dune restoration project funded by the FDEP and local residents (through taxes collected by St. Johns County). The project, replacing sand lost during Hurricane Matthew, would run from R-76 to R-117 (9 miles) and place approximately 20 cy/ft at a cost of about $24 million. The state would fund 50% of the project with a local match. The county is currently contemplating establishing a Municipal Services Taxing Unit to collect taxes to help meet the local match. Should local residents agree and the state allocates its intended funds, the county anticipates construction commencing as early as November 2018. The FDOT could support part of this project either through supporting larger dune/beach fills at vulnerable locations or supporting a portion of the currently contemplated project.

Notably, INTERA understands that the FDOT District 5 is supporting dune restoration along the Flagler Beach and Beverly Beach shorelines adjacent to SR A1A by contributing approximately $12-16 million toward dune restoration.

Recommendations

Present and potential future beach conditions, absent the effects of local homeowner seawalls, suggests that the FDOT consider protecting SR A1A from erosion along three main areas: (1) R-83 to R-87, (2) R-94, and (3) R-104 to R-116. Conceptually, the FDOT could construct seawalls, similar to one contemplated from R-115 to R-116, to protect these areas, contribute to a dune restoration project, or fund some combination of seawall installation and dune restoration.

Closing the gaps between existing, permanent seawalls may prove a viable option in protecting the roadway from future erosion. Conceptually, a seawall with a 15-20-ft exposed height, concrete cap, and anchor might cost approximately $1,000 per linear foot to furnish and install. Alternatively, the FDOT may want to consider contributing to the ongoing, planned dune restoration projects to help protect the roadway. For example, dune restoration may make sense in areas where homeowners have already placed seawalls (with unquantified level of protection) to provide additional protection to the roadway than afforded by the seawalls alone. Figure 18 shows a conceptual level cross section with a 20 cy/ft dune fill placed adjacent to a seawall. Recent construction costs suggest dune fill from upland sand plants and offshore borrow areas equal about $50/cy and $25/cy. For a 20 cy/ft fill density, these costs correspond to $1,000 and $500 per linear foot of dune fill placed depending on the sand source. Assuming future upper beach erosion rates mimic those experienced over the last decade, this amount of dune fill may last about 15 years. Note that by partnering with other agencies, the FDOT may realize cost savings to protect SR A1A.

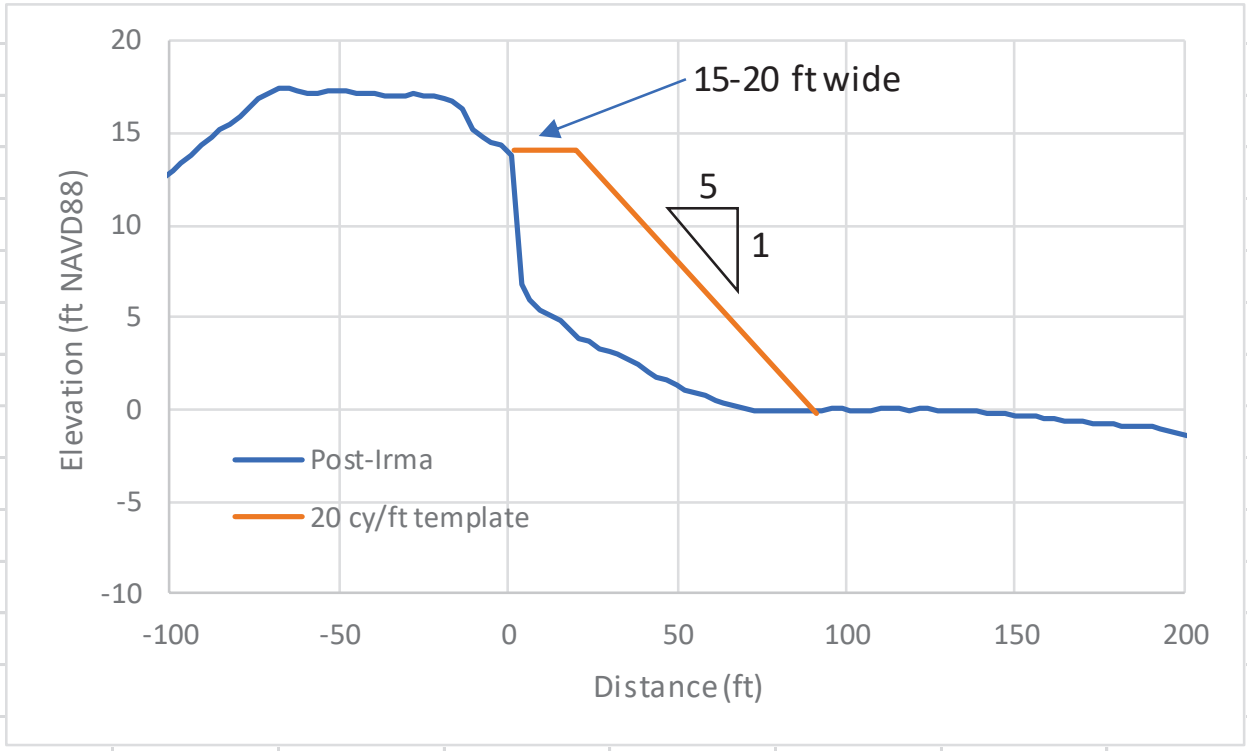


Figure 18. Conceptual Level Dune Fill Template Adjacent to Seawall

Aside from the identified vulnerable areas, prudence dictates monitoring other areas periodically and especially after storms. Good tools include beach survey profiles and aerials collected in the area by the FDEP as part of its Regional Coastal Monitoring Data collection program every four years.

Sincerely,

INTERA Incorporated

Michael R. Krecic, P.E.
Senior Coastal Engineer

Enclosure

References

Florida Department of Transportation (FDOT). 2017. *Plans Preparation Manual, Volume 1, Design Criteria and Process*. Tallahassee, FL.

Federal Emergency Management Agency (FEMA). 2007. *Guidelines and Specifications for Flood Hazard Mapping Partners*. Washington, DC.

Federal Emergency Management Agency (FEMA). 2011. *Flood Insurance Study, St. Johns County, Florida and Incorporated Areas*. Washington, DC.

Hallermeier, R.J. and Rhodes, P.E. 1988. Generic Treatment of Dune Erosion for 100-Year Event. In Edge, B.L. (Ed.) *Coastal Engineering 1988*. American Society of Civil Engineers, NY, 1197-1211.

Taylor Engineering, Inc. 2009. *A1A Vilano Beach Seawall Scour Analysis, St. Johns County, FL*. Jacksonville, FL.

U.S. Army Corps of Engineers (USACE). 2017. *St. Johns County, Florida, South Ponte Vedra Beach, Vilano Beach, and Summer Haven Reaches, Coastal Storm Risk Management Project, Final Integrated Feasibility Study and Environmental Assessment*. Jacksonville, FL.

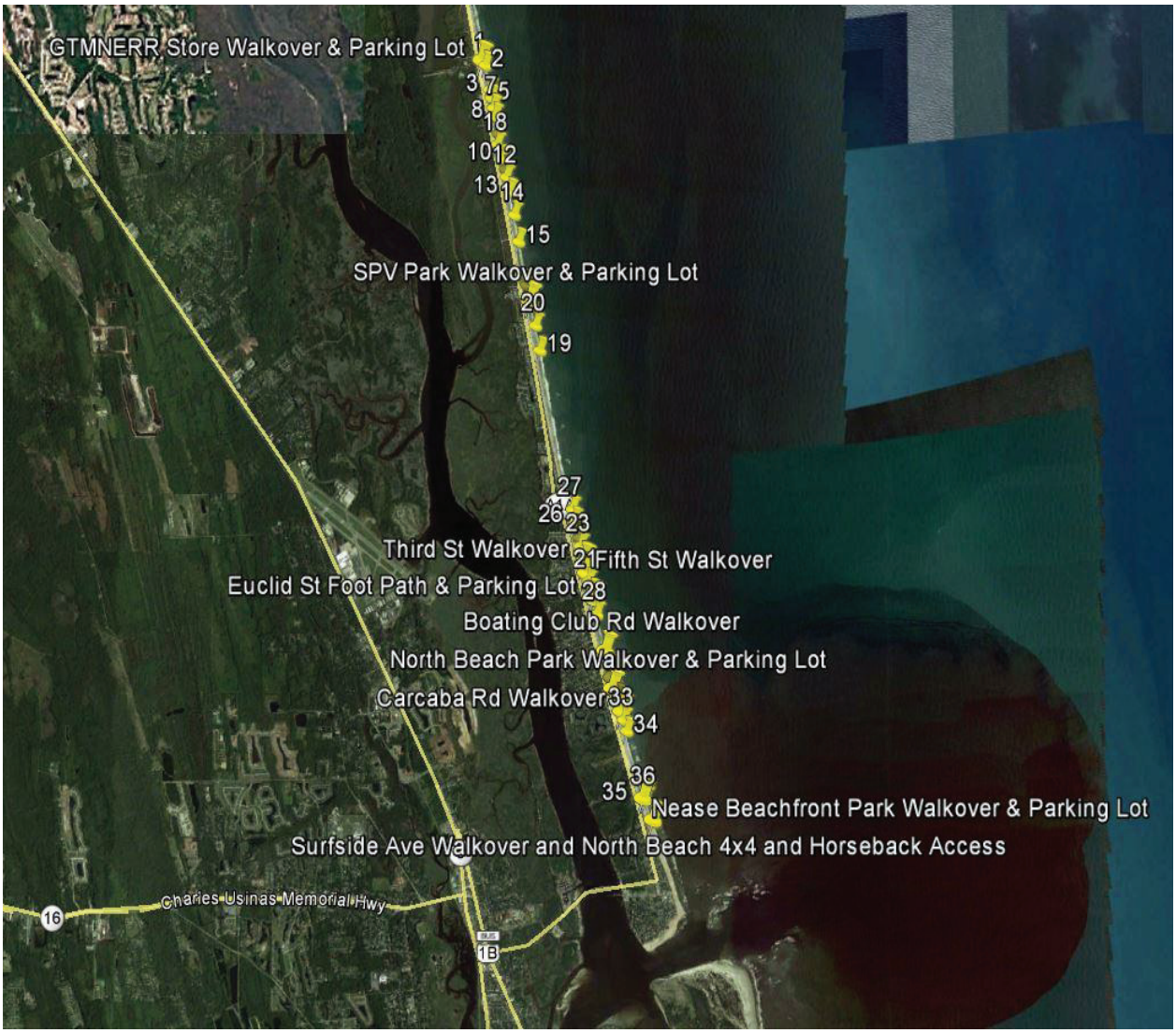
MICHAEL R. KRECIC
LICENSE
No 57509
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

This document has been digitally signed and sealed by Michael R. Krecic P.E. on 03/20/2018 with a Digital Signature.

Michael R Krecic
2018.03.20 09:05:19 -04'00'

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

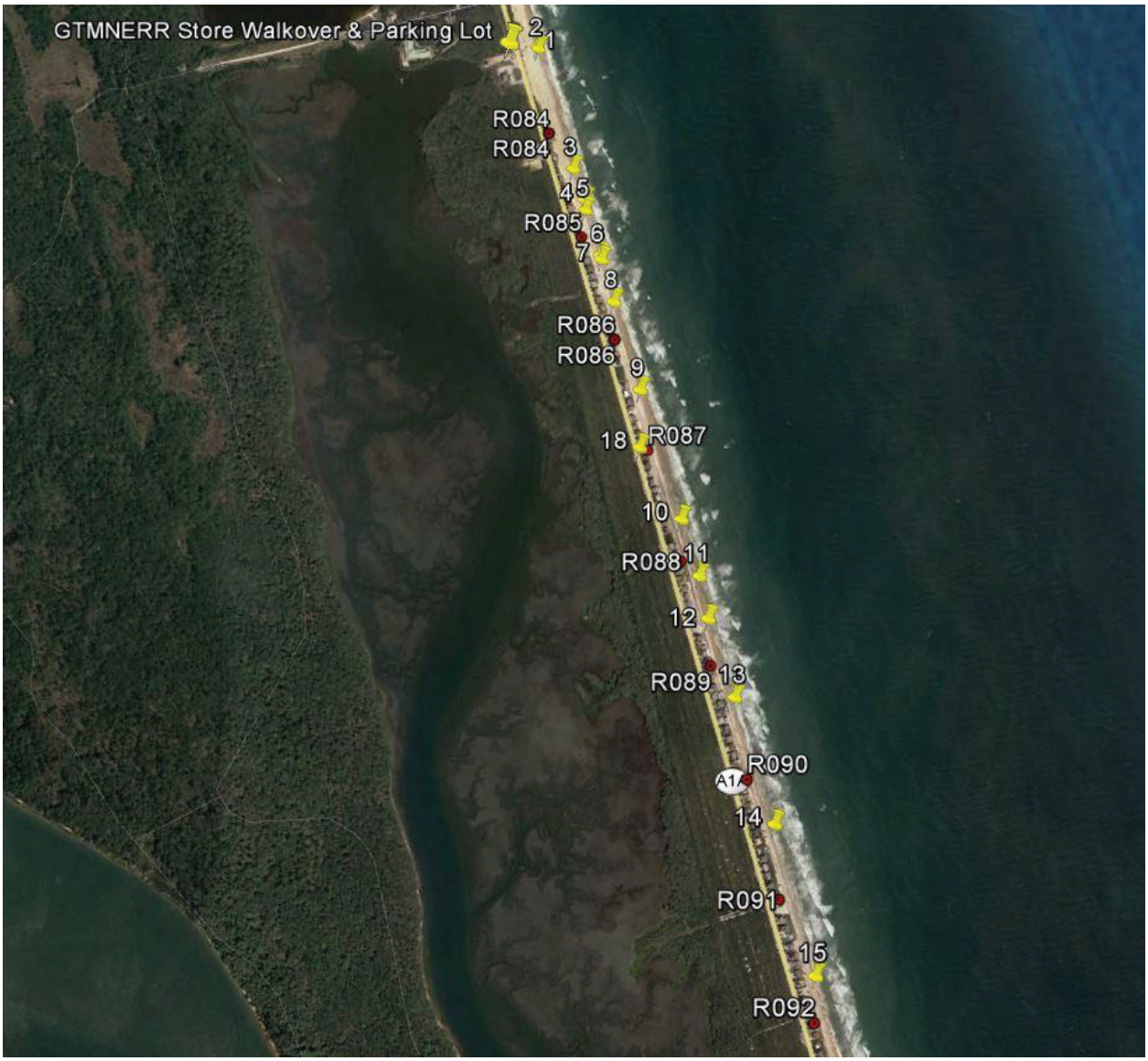


PHOTOGRAPH KEY

Notes: Photographs contained in this report document current state of SR A1A and the adjacent shoreline. Photograph keys on current and following pages indicate the location of each photograph.

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

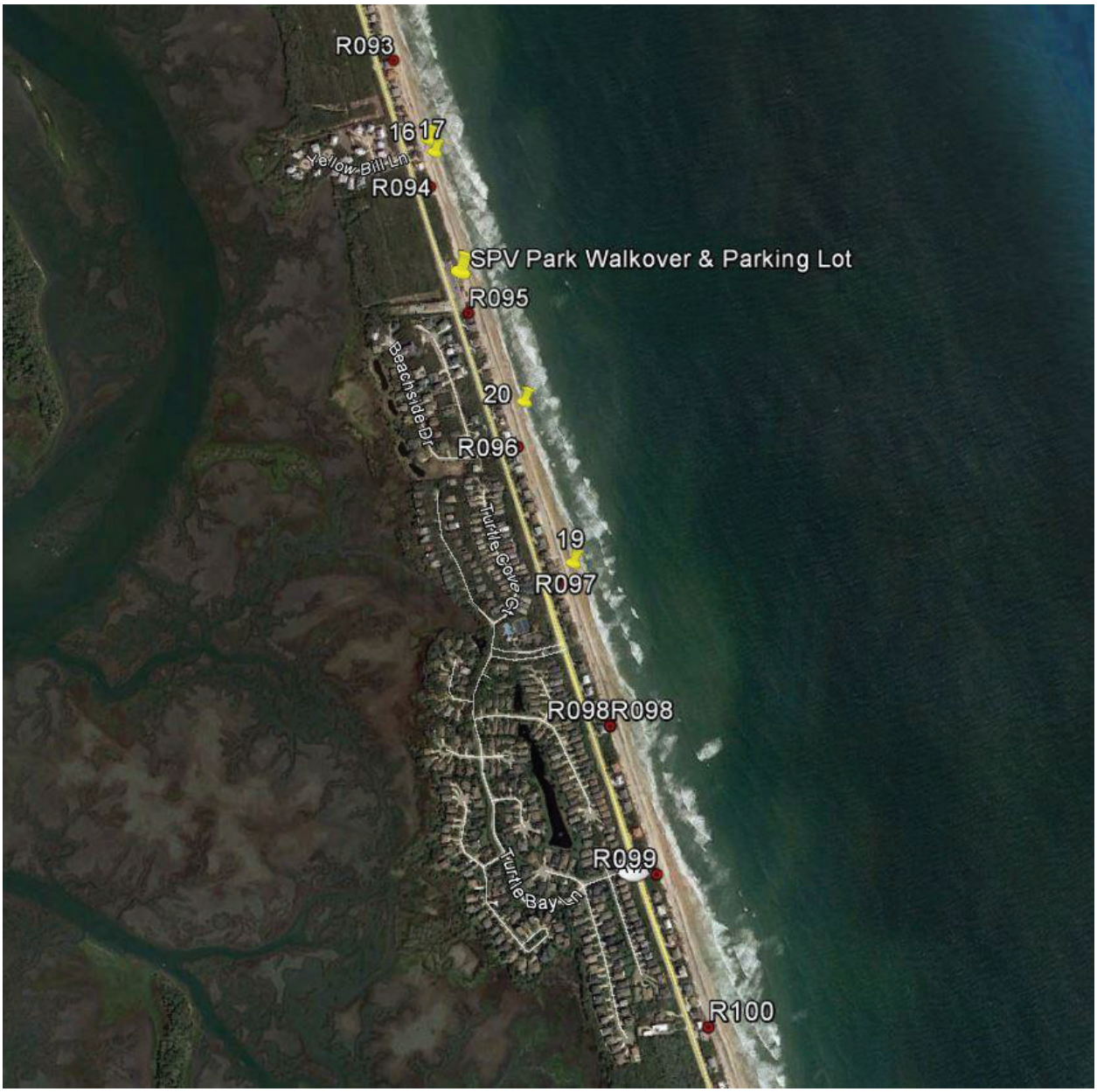
LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**



PHOTOGRAPH KEY (NORTH)

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

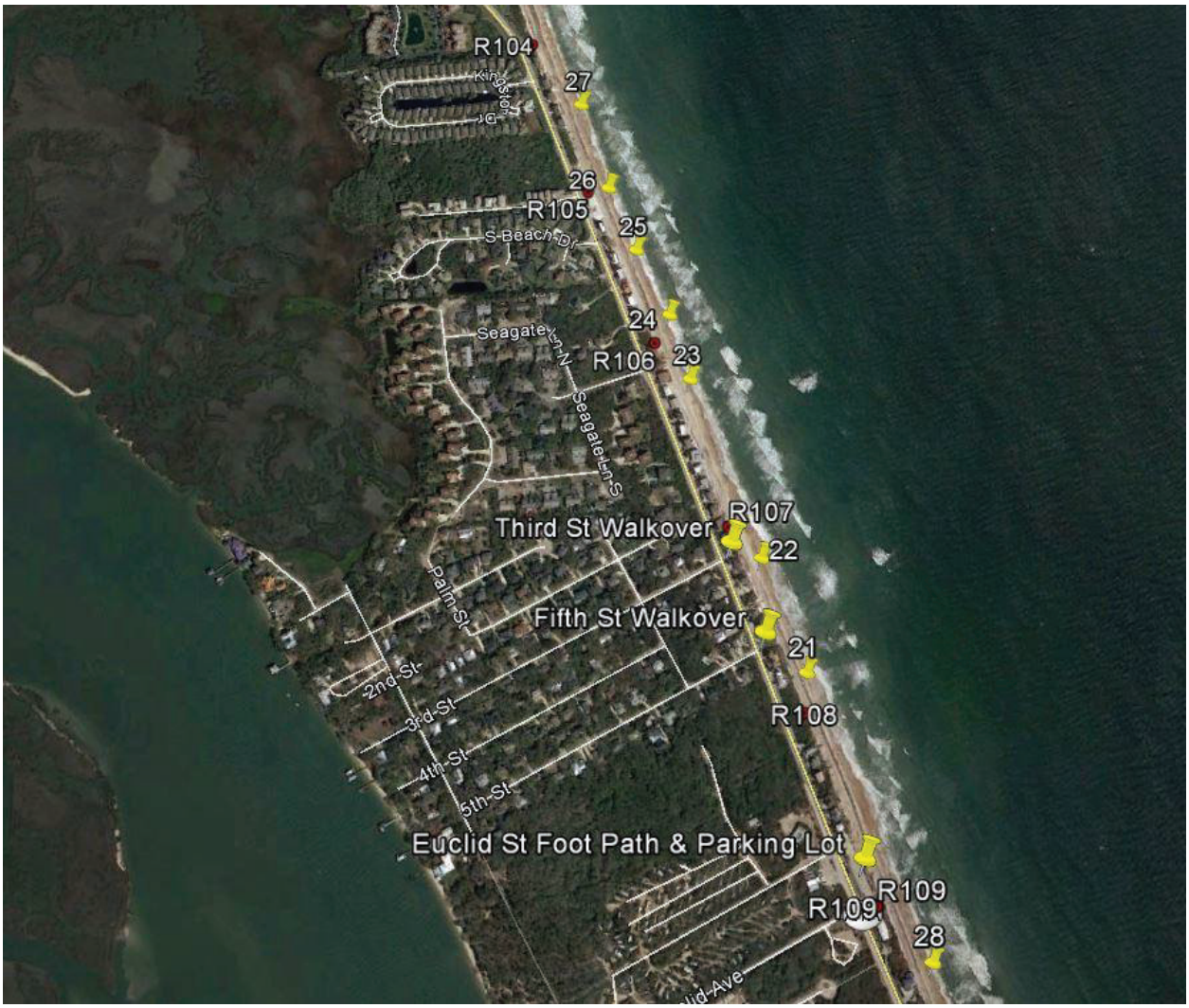
LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**



PHOTOGRAPH KEY (UPPER MIDDLE)

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

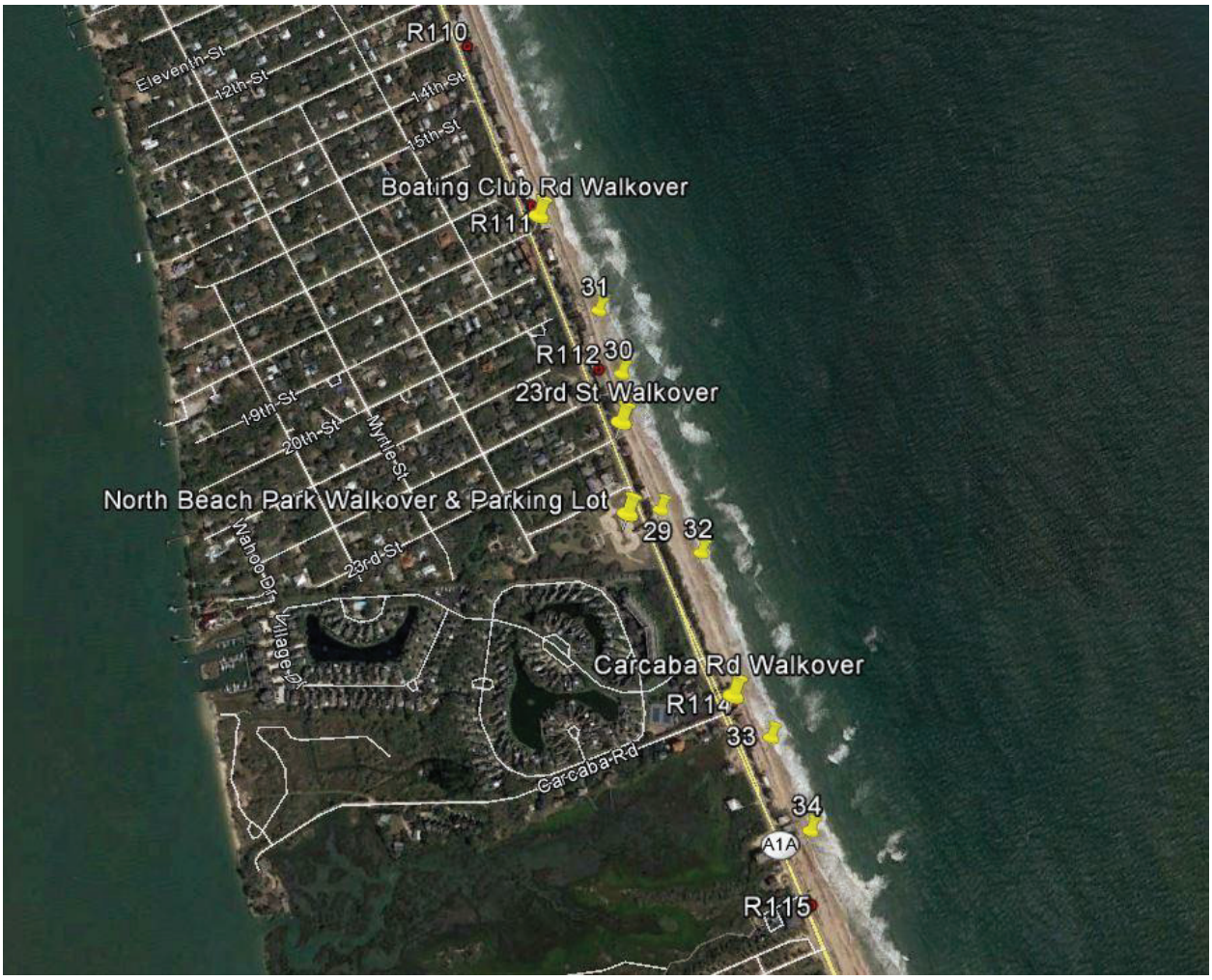
LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**



PHOTOGRAPH KEY (LOWER MIDDLE)

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**



ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 1

LATITUDE: 30° 1’20”N

LONGITUDE: 81° 19’22”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 2

LATITUDE: 30° 1’19”N

LONGITUDE: 81° 19’21.87”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 3

LATITUDE: 30° 1’8”N

LONGITUDE: 81° 19’19”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 4

LATITUDE: 30° 1’5”N

LONGITUDE: 81° 19’18”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 5

LATITUDE: 30° 1’4”N

LONGITUDE: 81° 19’18”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 6

LATITUDE: 30° 0’59.63”N

LONGITUDE: 81° 19’16.79”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 7

LATITUDE: 30° 0’59.25”N

LONGITUDE: 81° 19’16.67”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 8

LATITUDE: 30° 0’55.23”N

LONGITUDE: 81° 19’15.69”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 9

LATITUDE: 30° 0’46.96”N

LONGITUDE: 81° 19’13.59”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 10

LATITUDE: 30° 0’35.11”N

LONGITUDE: 81° 19’10.34”W

PHOTOGRAPH 11

LATITUDE: 30° 0’29.98”N

LONGITUDE: 81° 19’8.93”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 12

LATITUDE: 30° 0’26.20”N

LONGITUDE: 81° 19’8.36”W

PHOTOGRAPH 13

LATITUDE: 30° 0’19.27”N

LONGITUDE: 81° 19’6.32”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 14

LATITUDE: 30° 0’8.31”N

LONGITUDE: 81° 19’3.36”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 15

LATITUDE: 29° 59’55.59”N

LONGITUDE: 81° 19’0.61”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 16

LATITUDE: 29° 59’36.02”N

LONGITUDE: 81° 18’55.99”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 17

LATITUDE: 29° 59’35.01”N

LONGITUDE: 81° 18’55.53”W

PHOTOGRAPH 18

LATITUDE: 30° 0’41.72”N

LONGITUDE: 81° 19’14.04”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 19

LATITUDE: 29° 59’4.33”N

LONGITUDE: 81° 18’47.31”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 20

LATITUDE: 29° 59’16”N

LONGITUDE: 81° 18’50”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 21

LATITUDE: 29° 57’16.72”N

LONGITUDE: 81° 18’17.26”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 22

LATITUDE: 29° 57’22.96”N

LONGITUDE: 81° 18’19.11”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 23

LATITUDE: 29° 57’33.21”N

LONGITUDE: 81° 18’22.17”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 24

LATITUDE: 29° 57’37.02”N

LONGITUDE: 81° 18’23”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 25

LATITUDE: 29° 57’41.01”N

LONGITUDE: 81° 18’24.65”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 26

LATITUDE: 29° 57’44.90”N

LONGITUDE: 81° 18’26.01”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 27

LATITUDE: 29° 57’50.22”N

LONGITUDE: 81° 18’27.23”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 28

LATITUDE: 29° 57’1.88”N

LONGITUDE: 81° 18’12.26”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 29

LATITUDE: 29° 56’26.07”N

LONGITUDE: 81° 18’1.53”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

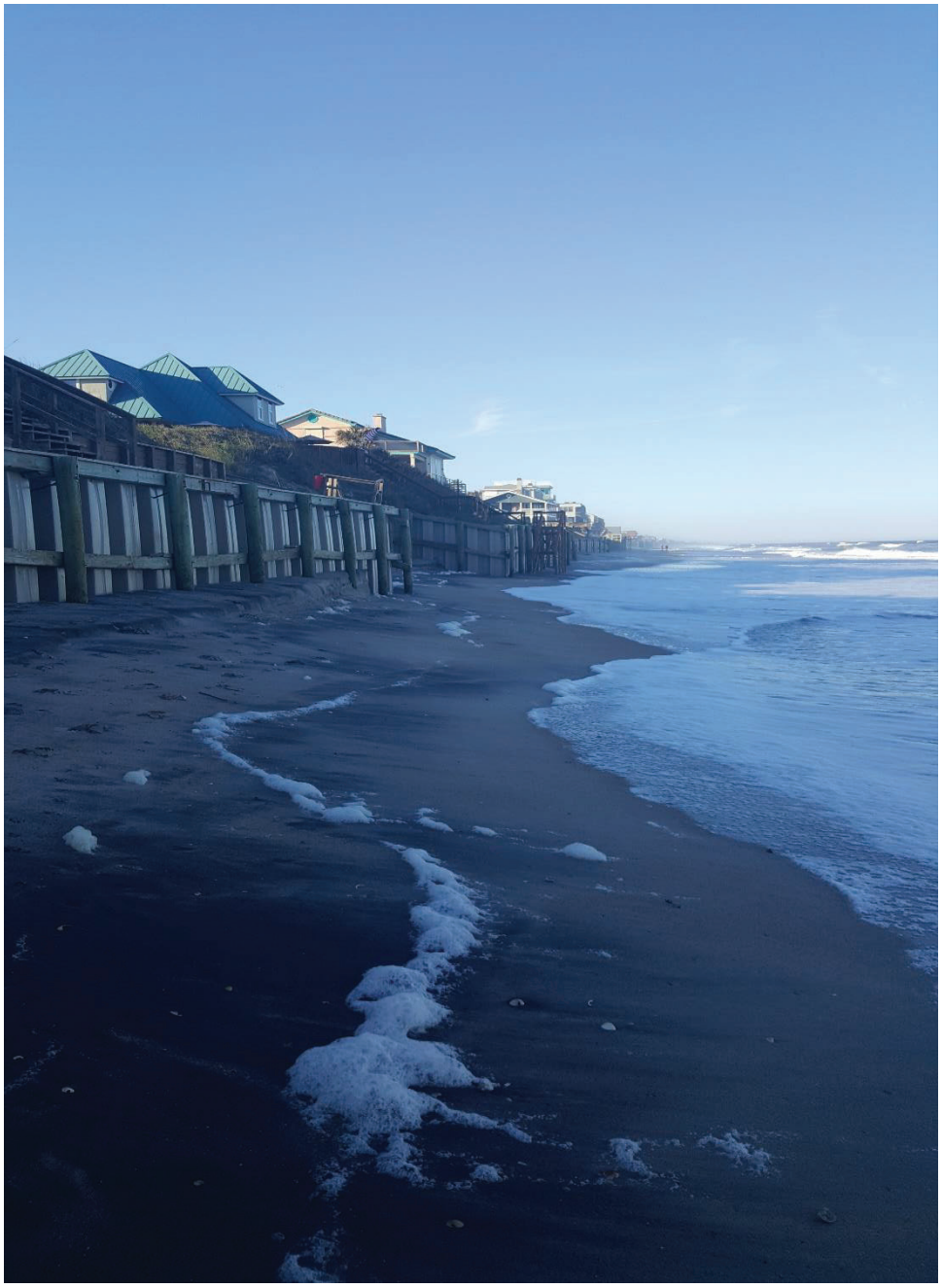
PHOTOGRAPH 30

LATITUDE: 29° 56’33.85”N

LONGITUDE: 81° 18’3.27”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017



PHOTOGRAPH 31

LATITUDE: 29° 56’37.59”N

LONGITUDE: 81° 18’4.41”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 32

LATITUDE: 29° 56’23.54”N

LONGITUDE: 81° 17’59.26”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 33

LATITUDE: 29° 56’13.46”N

LONGITUDE: 81° 17’56.05”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

PHOTOGRAPH 34

LATITUDE: 29° 56’8.53”N

LONGITUDE: 81° 17’54.23”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED DATE: 11/30/2017

PHOTOGRAPH 35

LATITUDE: 29° 55’37.82”N

LONGITUDE: 81° 17’43.09”W

ATTACHMENT A – SITE INSPECTION PHOTOGRAPHS

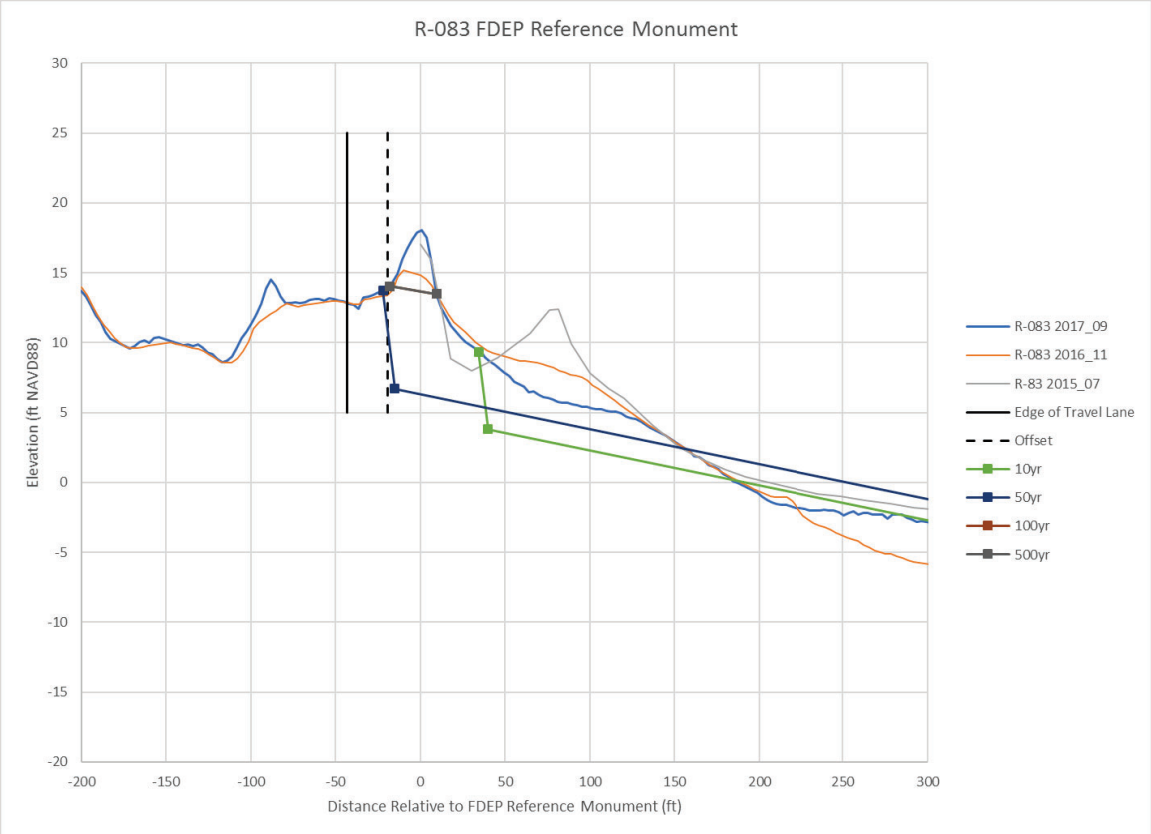
LOCATION: SOUTH PONTE VEDRA BEACH TO VILANO BEACH
INTERA INCORPORATED **DATE: 11/30/2017**

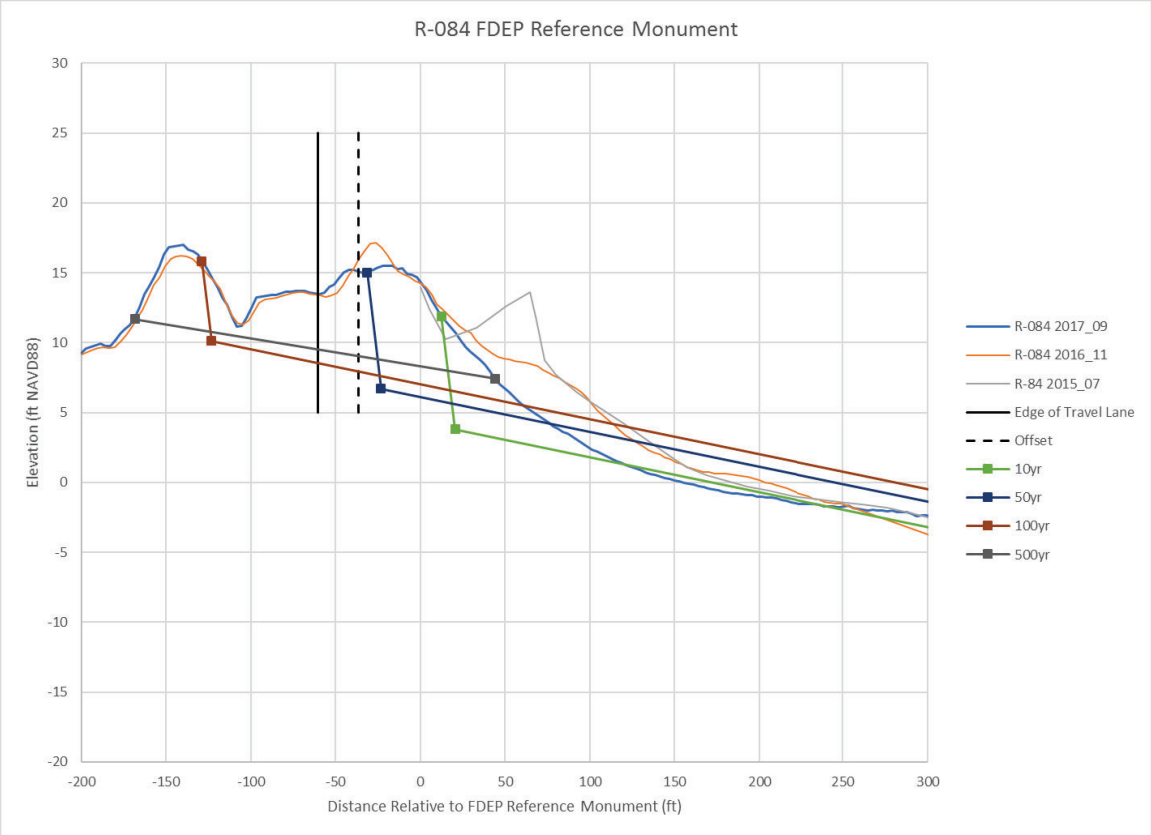
PHOTOGRAPH 36

LATITUDE: 29° 55’37.76”N

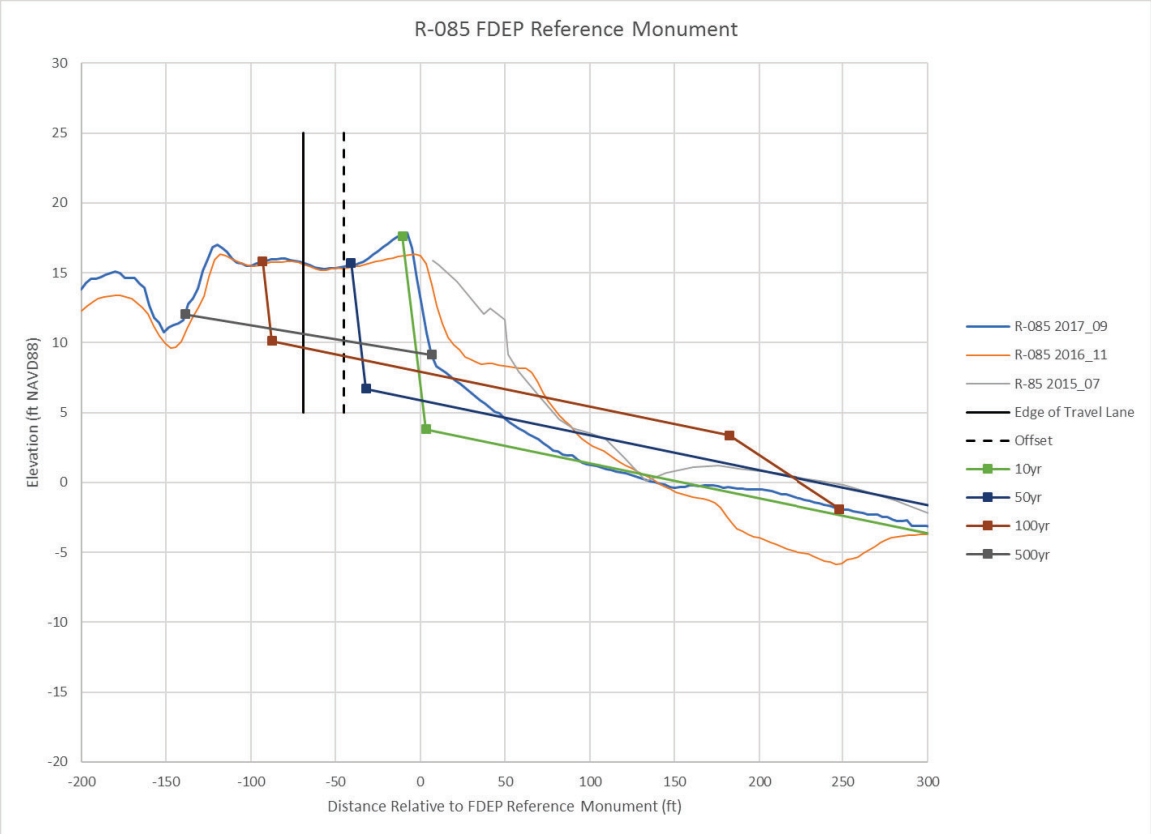
LONGITUDE: 81° 17’43.04”W

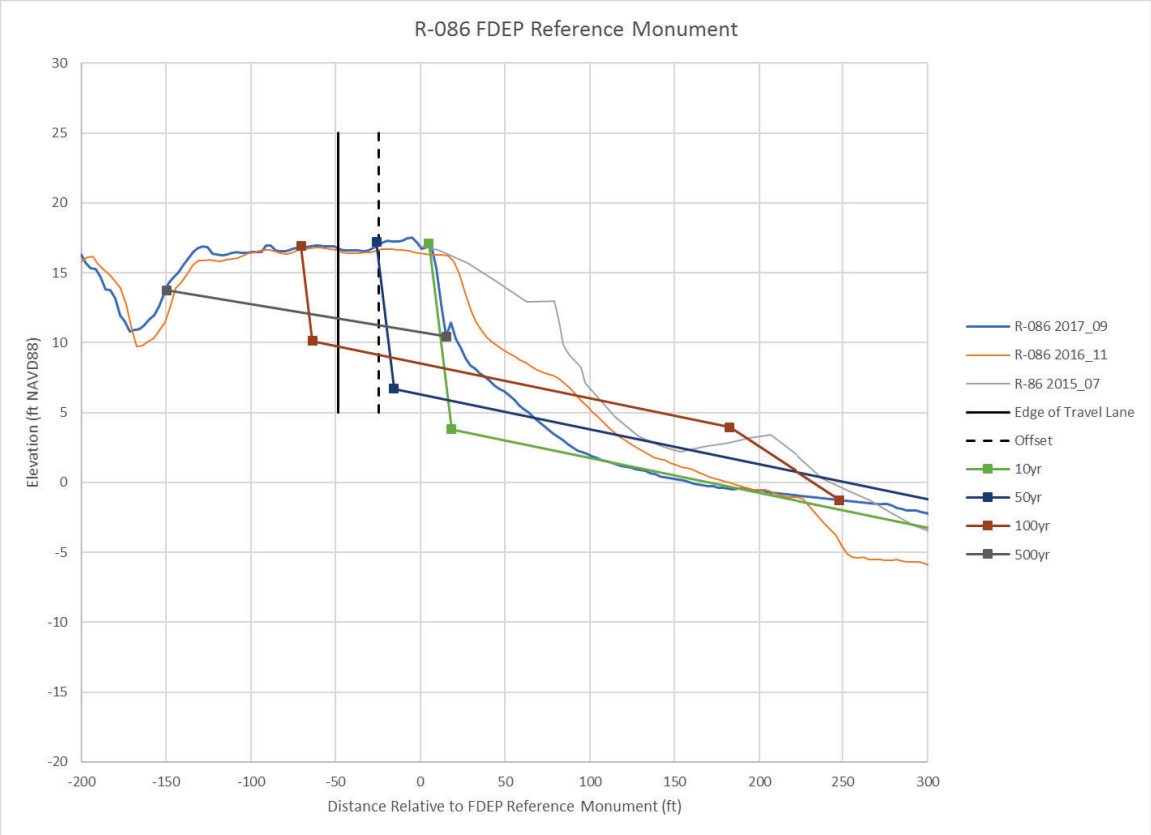
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



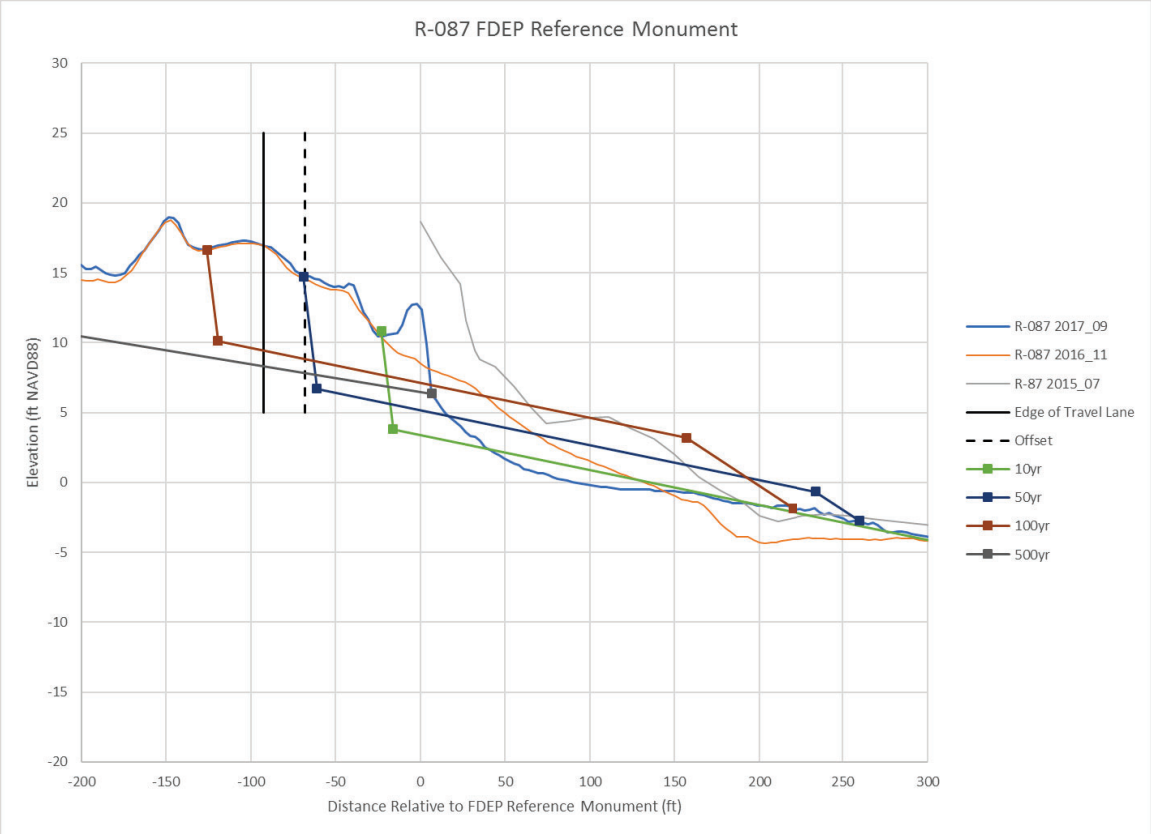


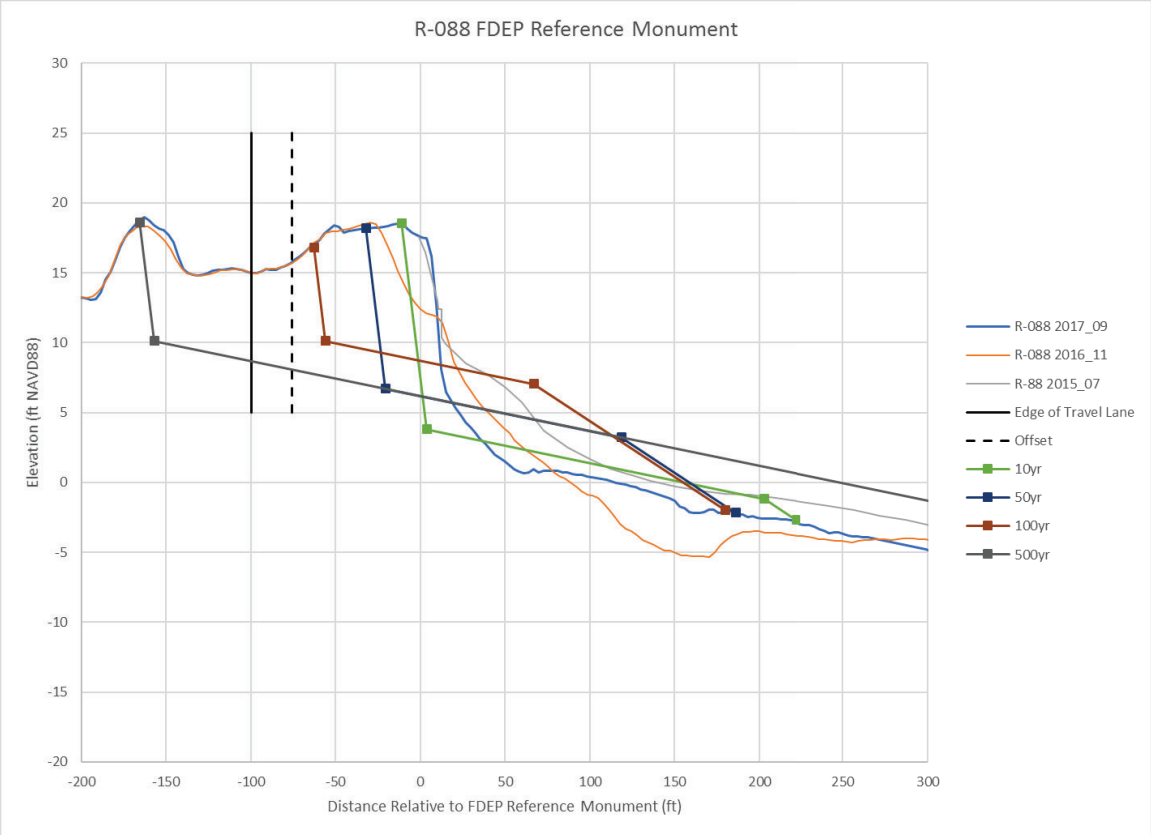
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



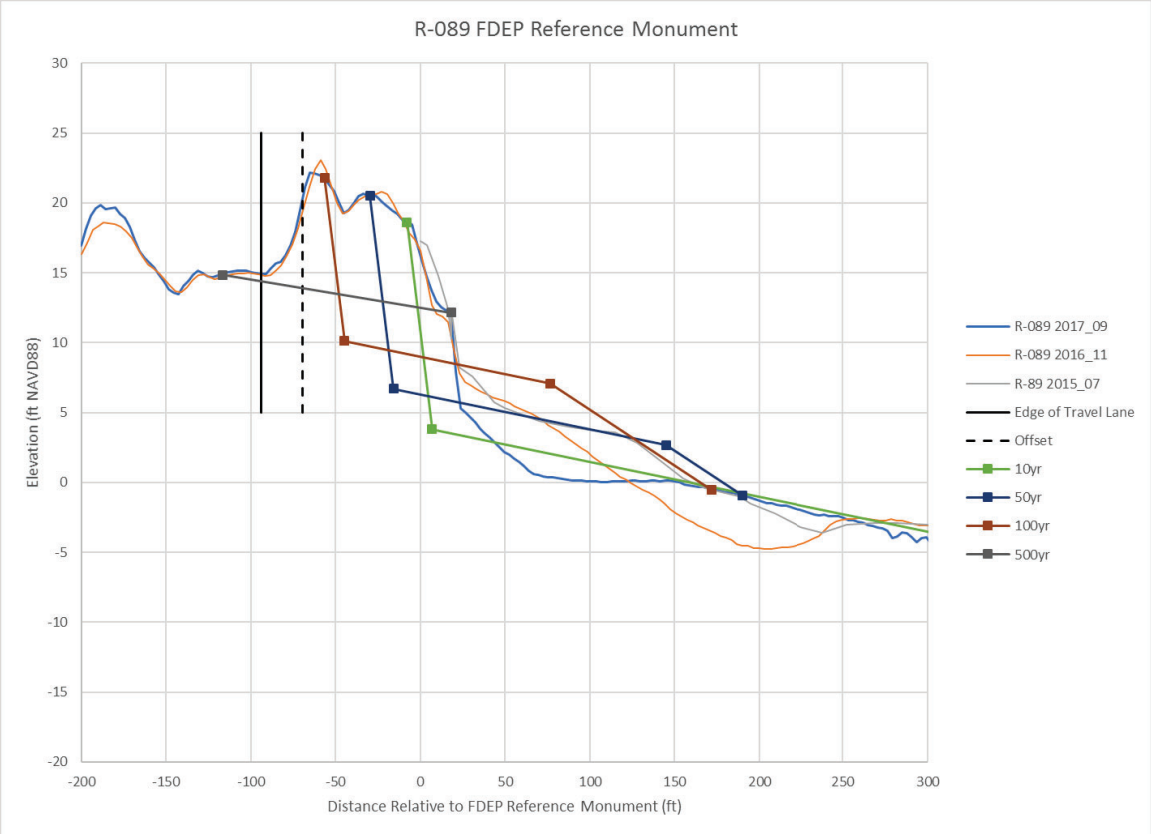


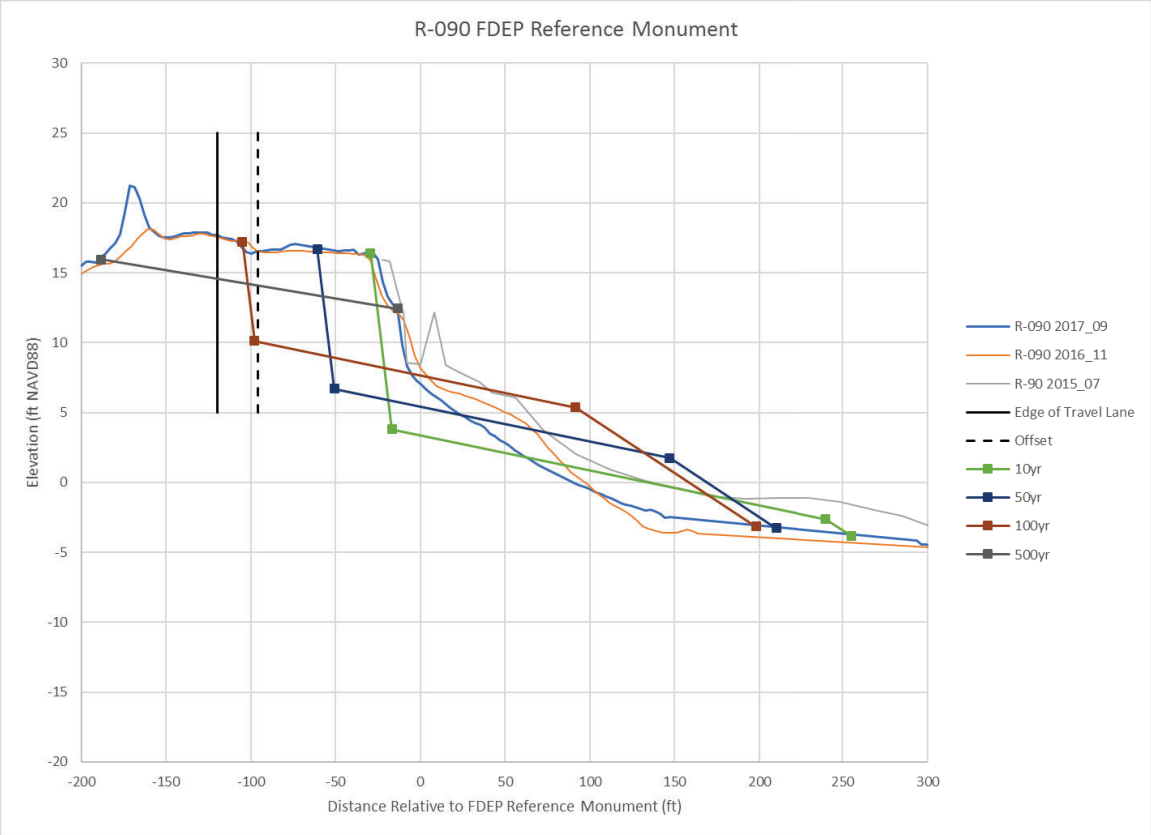
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



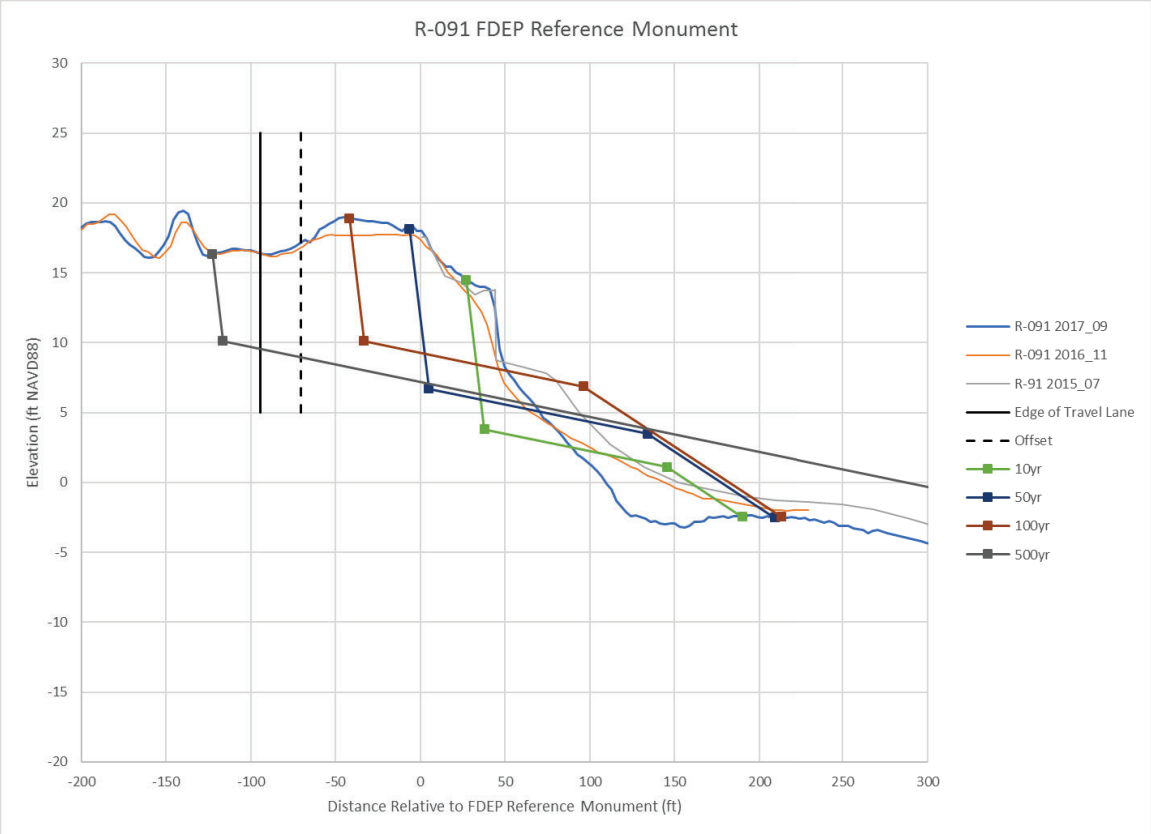


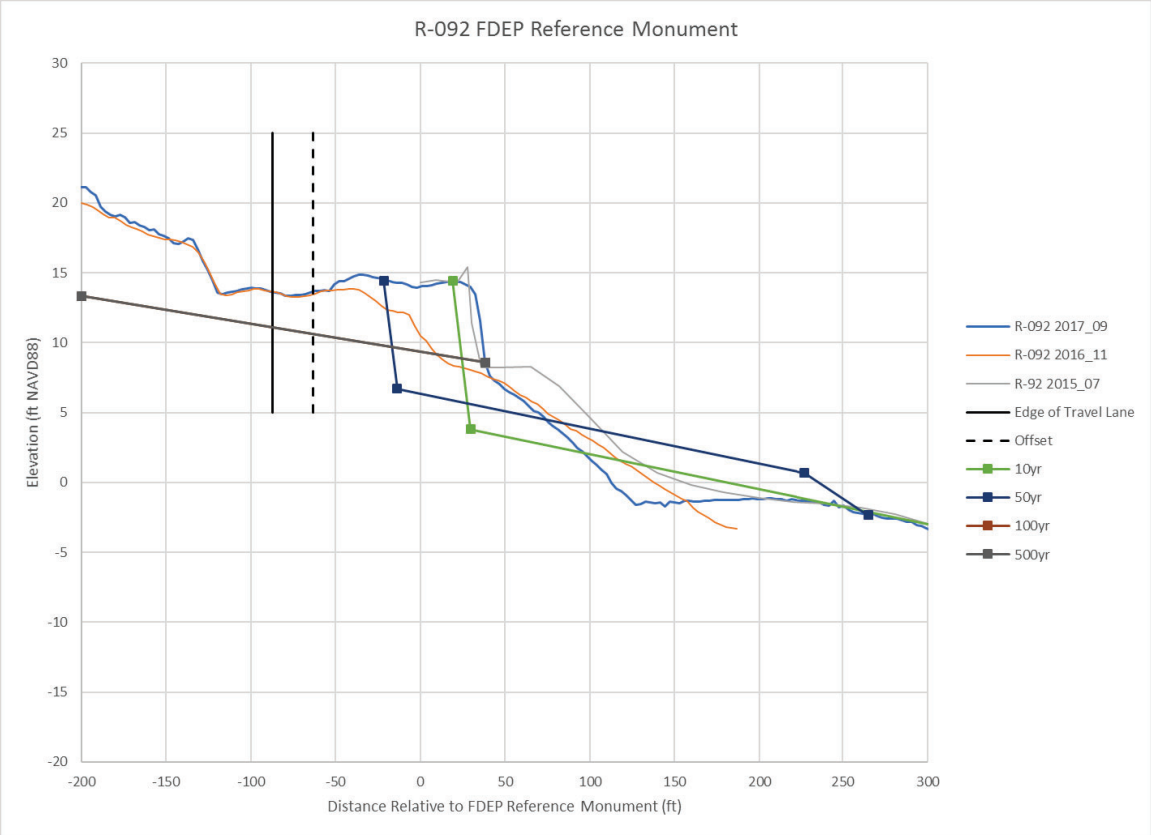
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



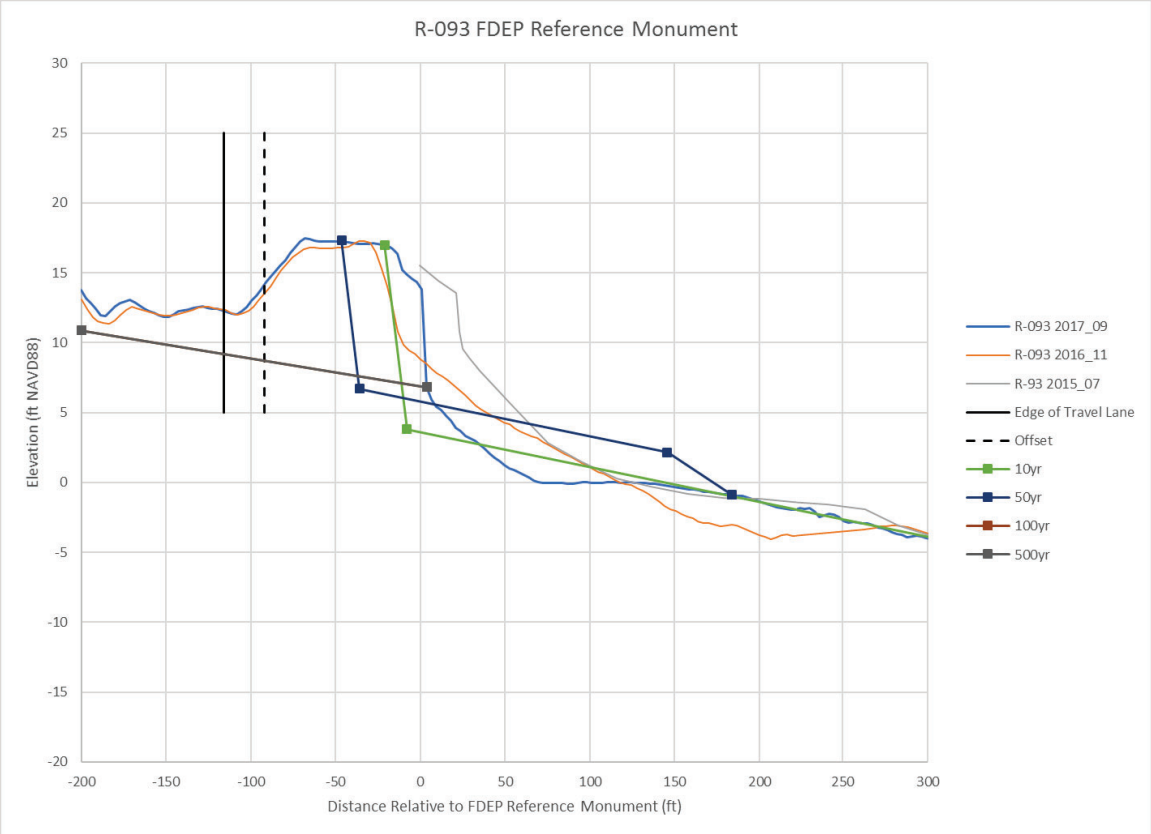


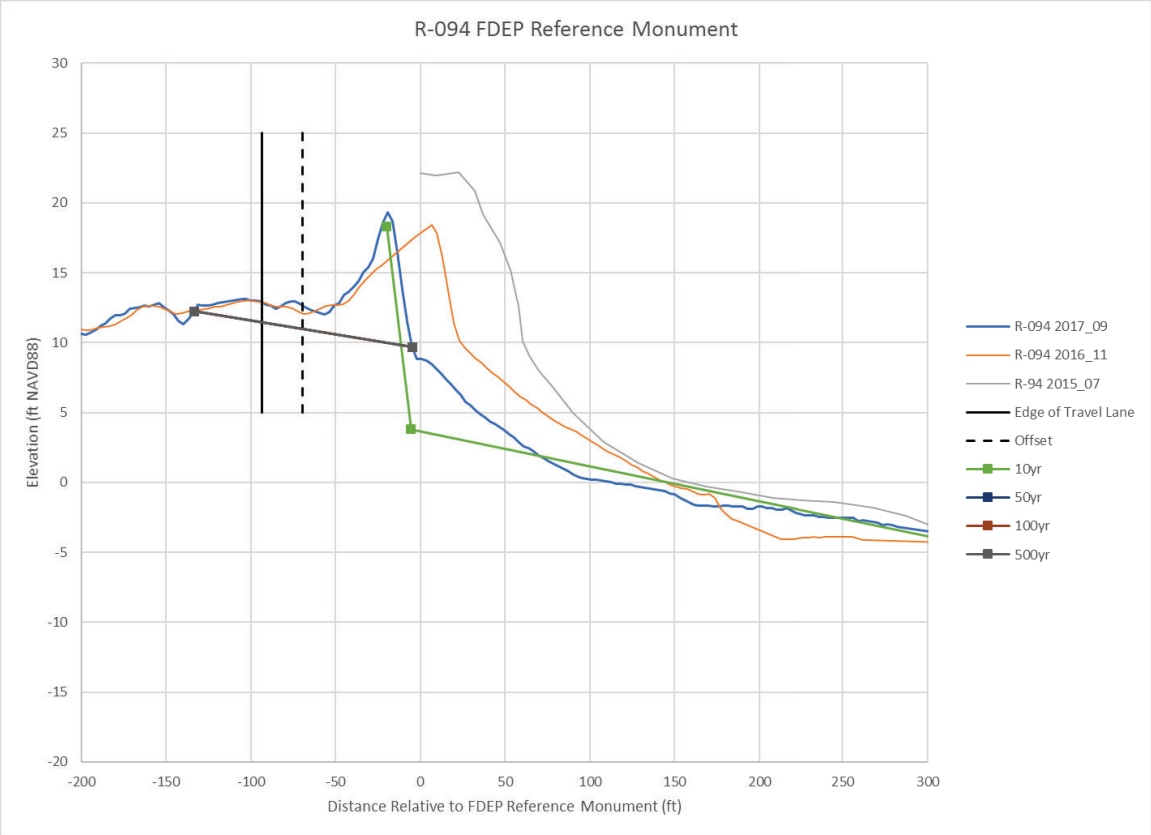
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



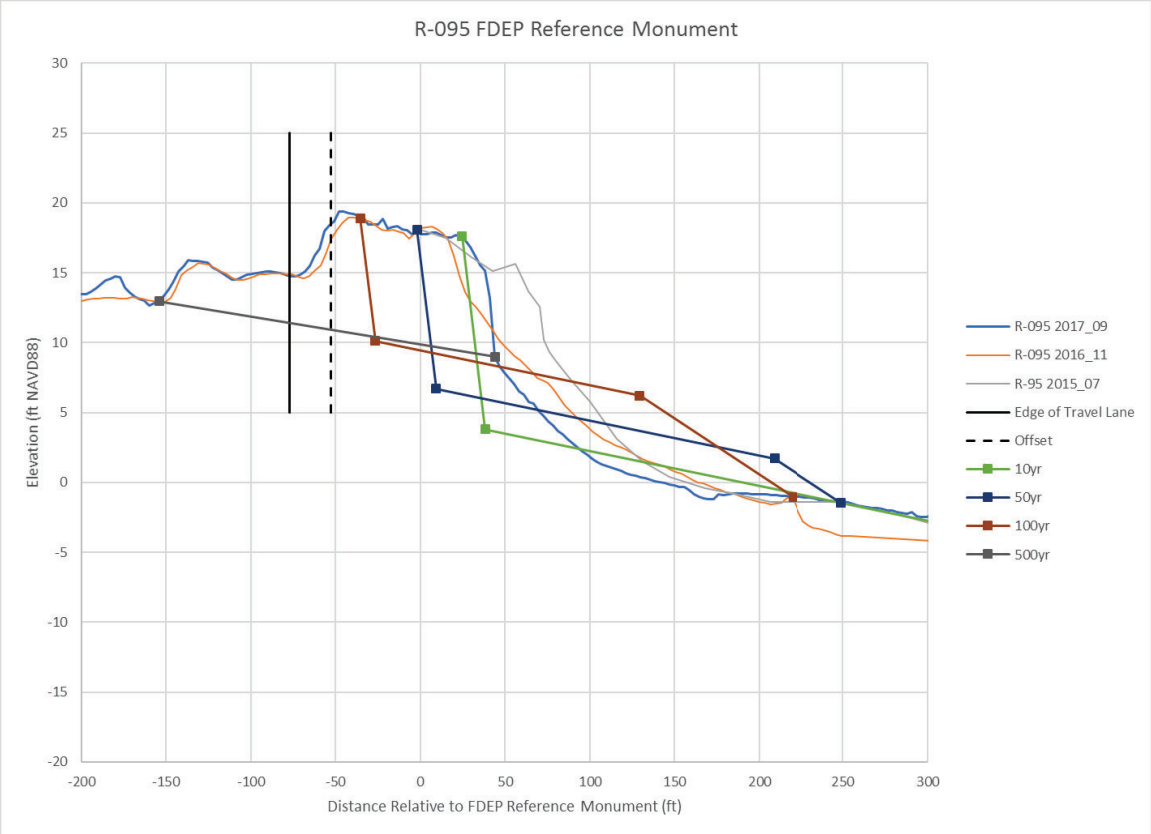


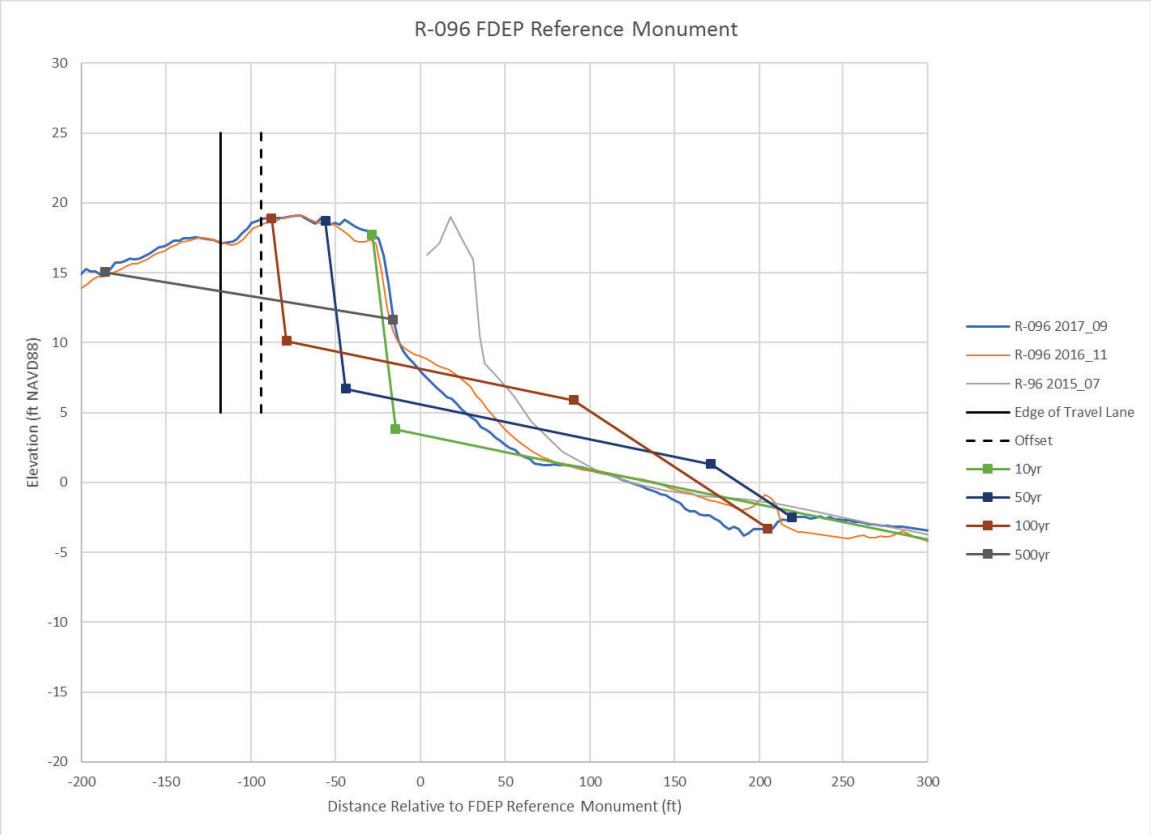
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



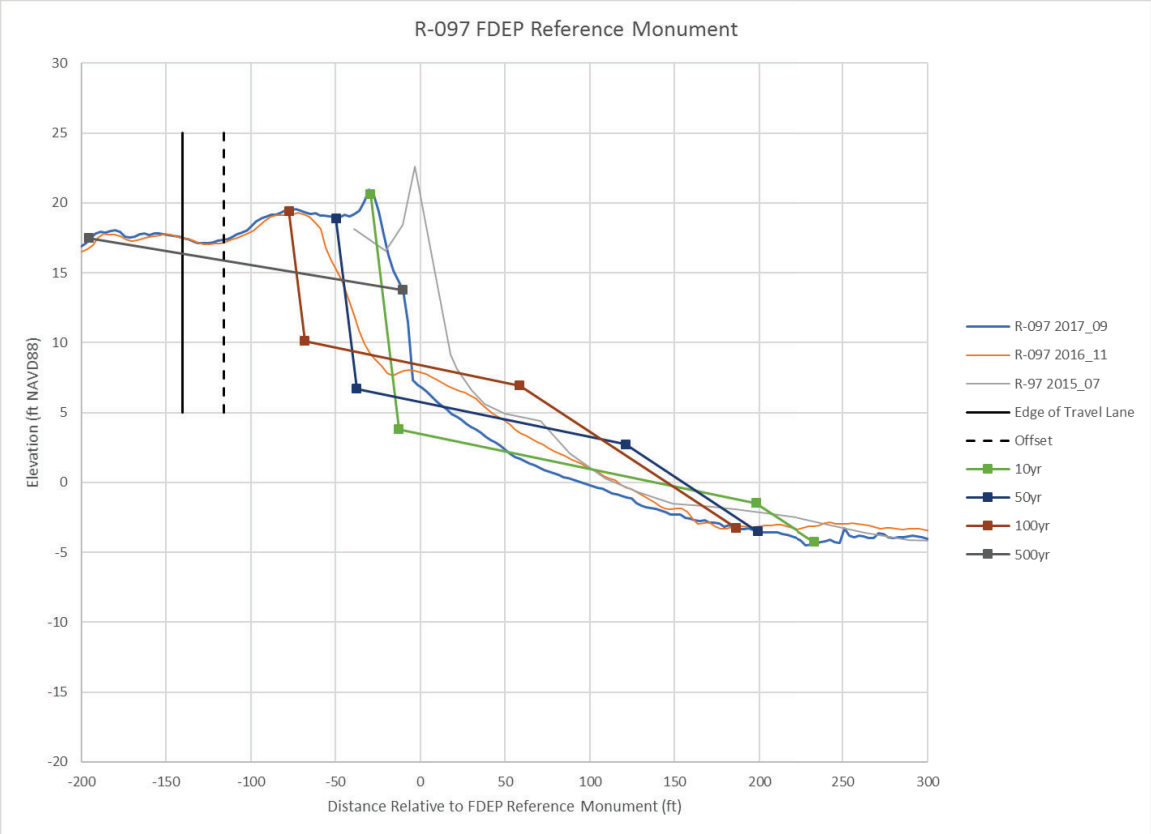


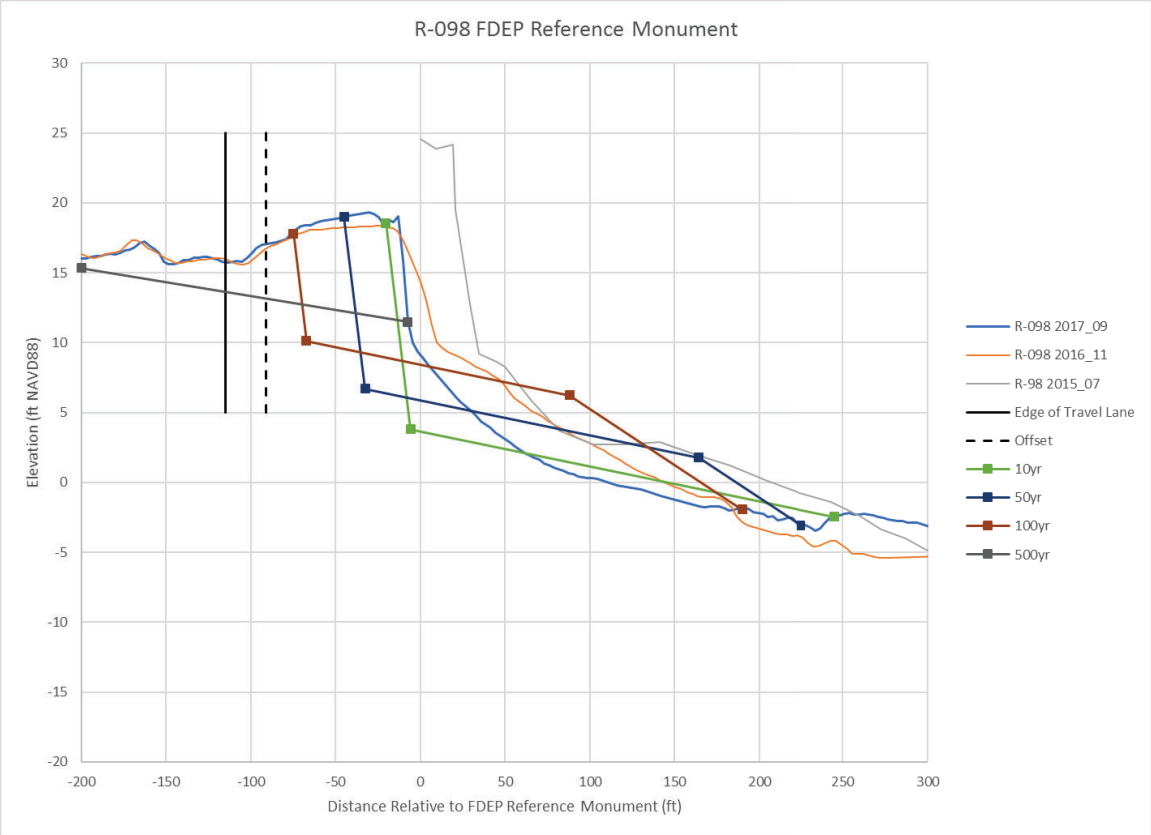
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



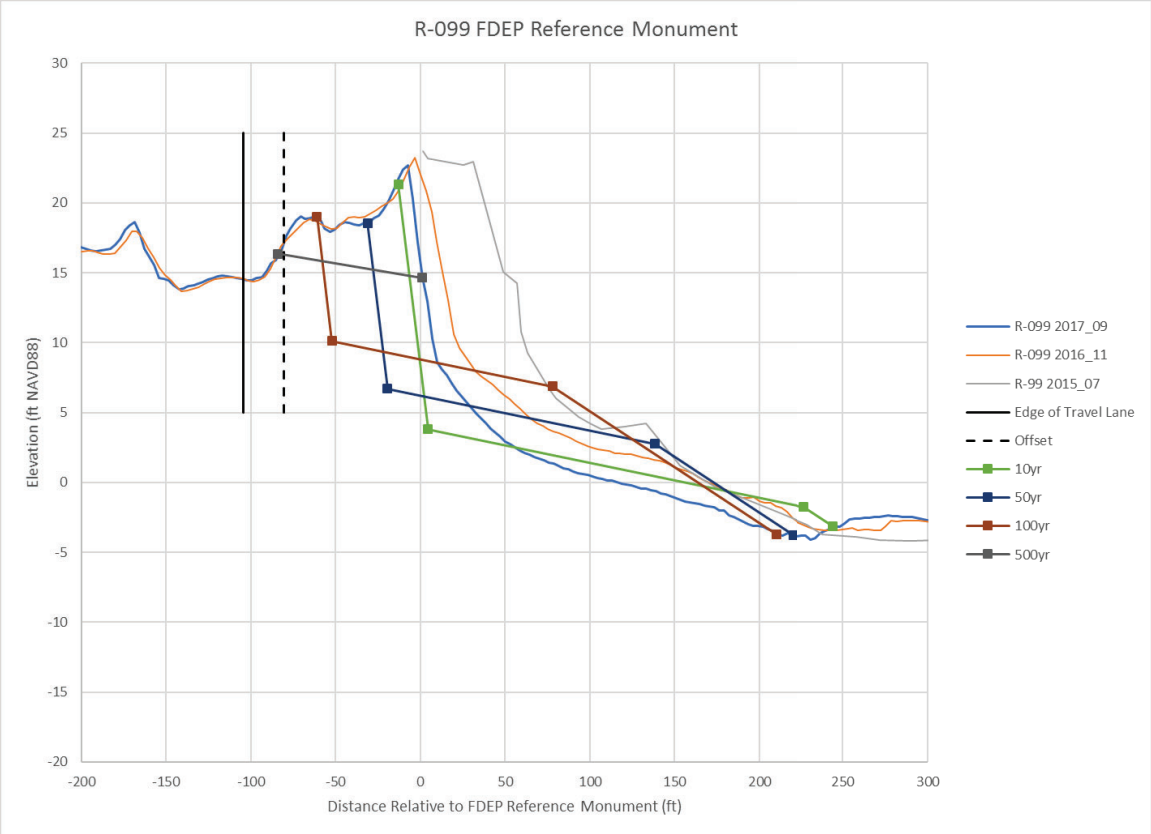


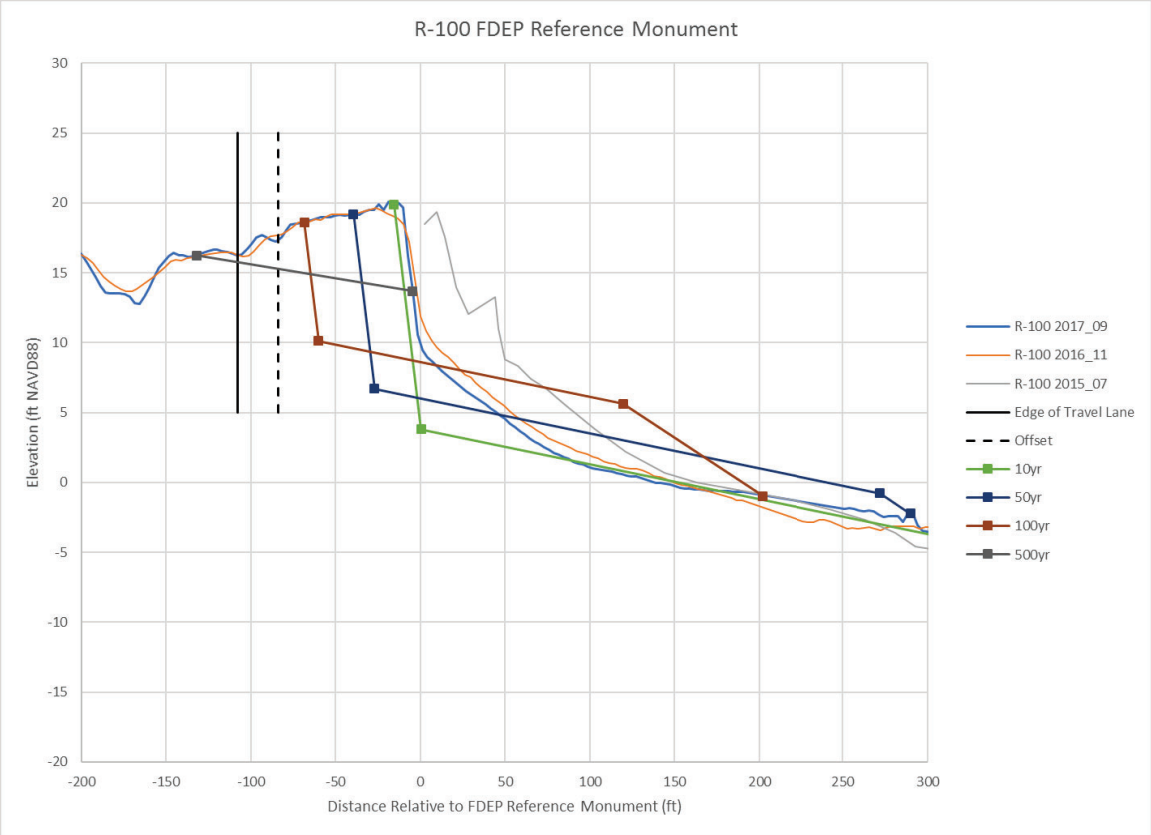
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



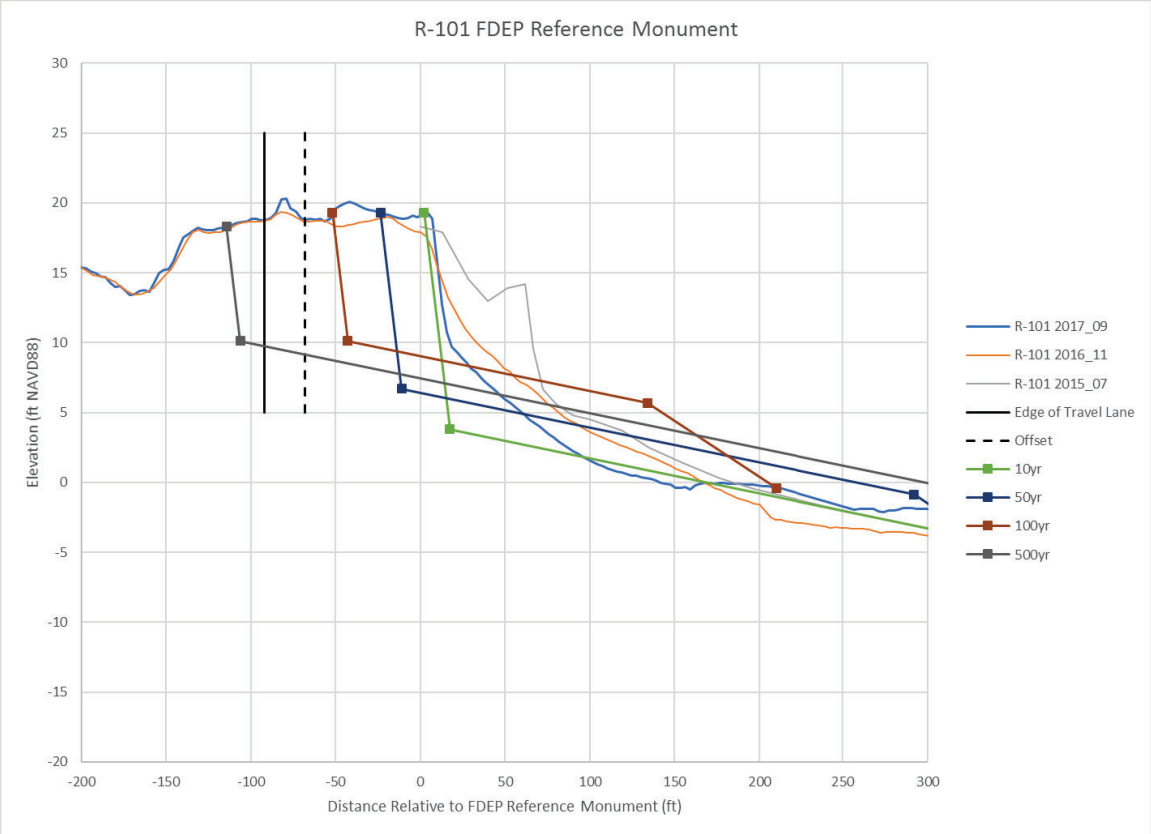


ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)

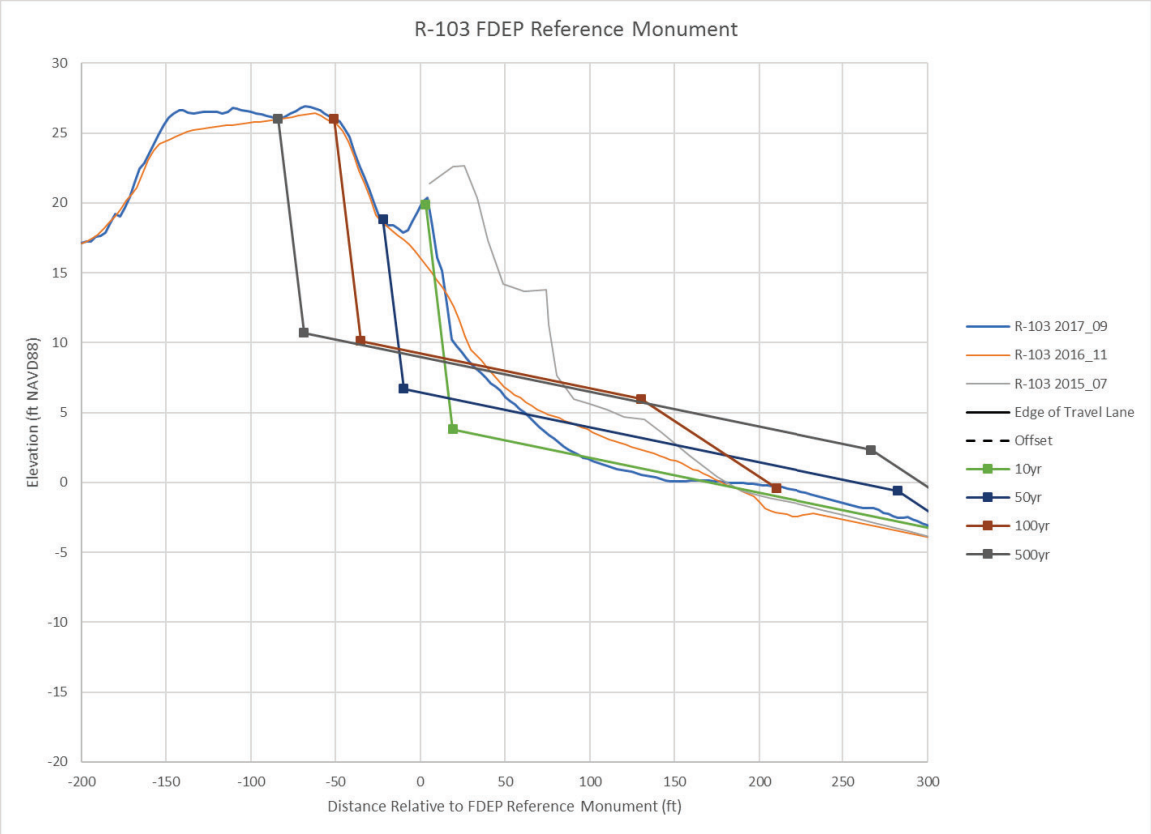


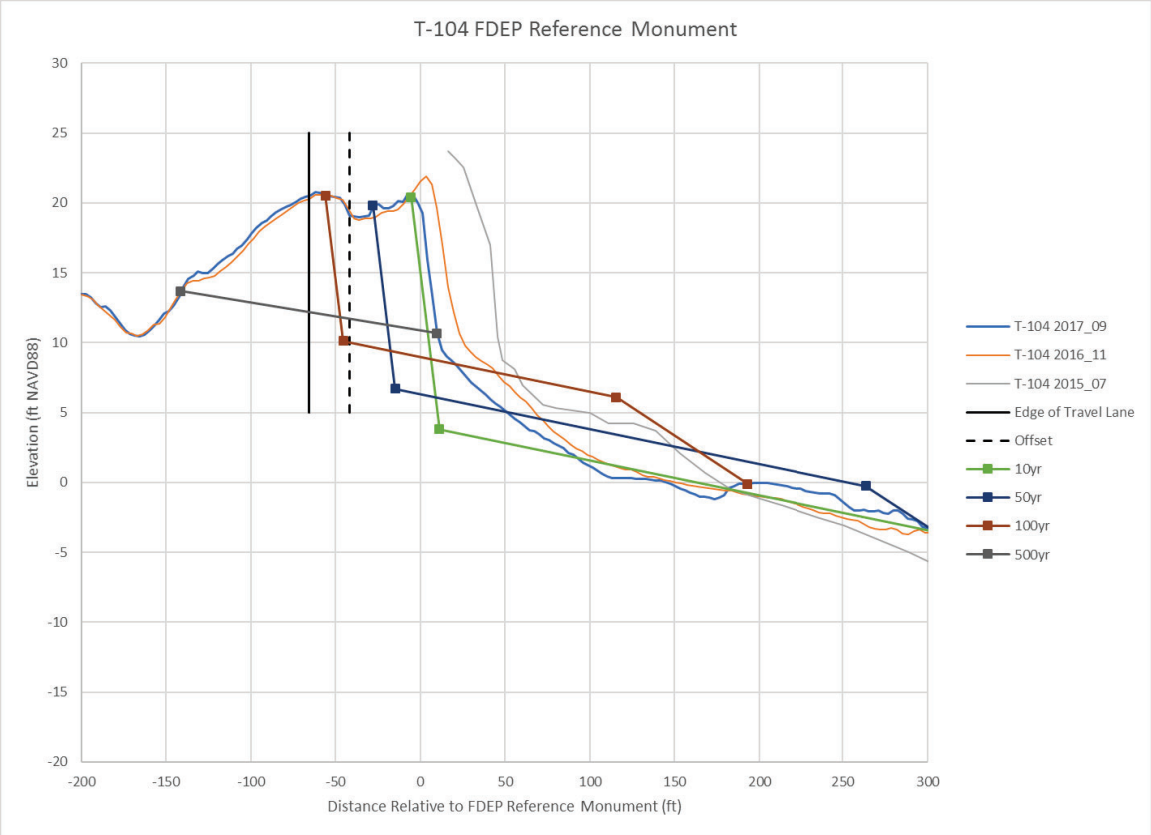


ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)

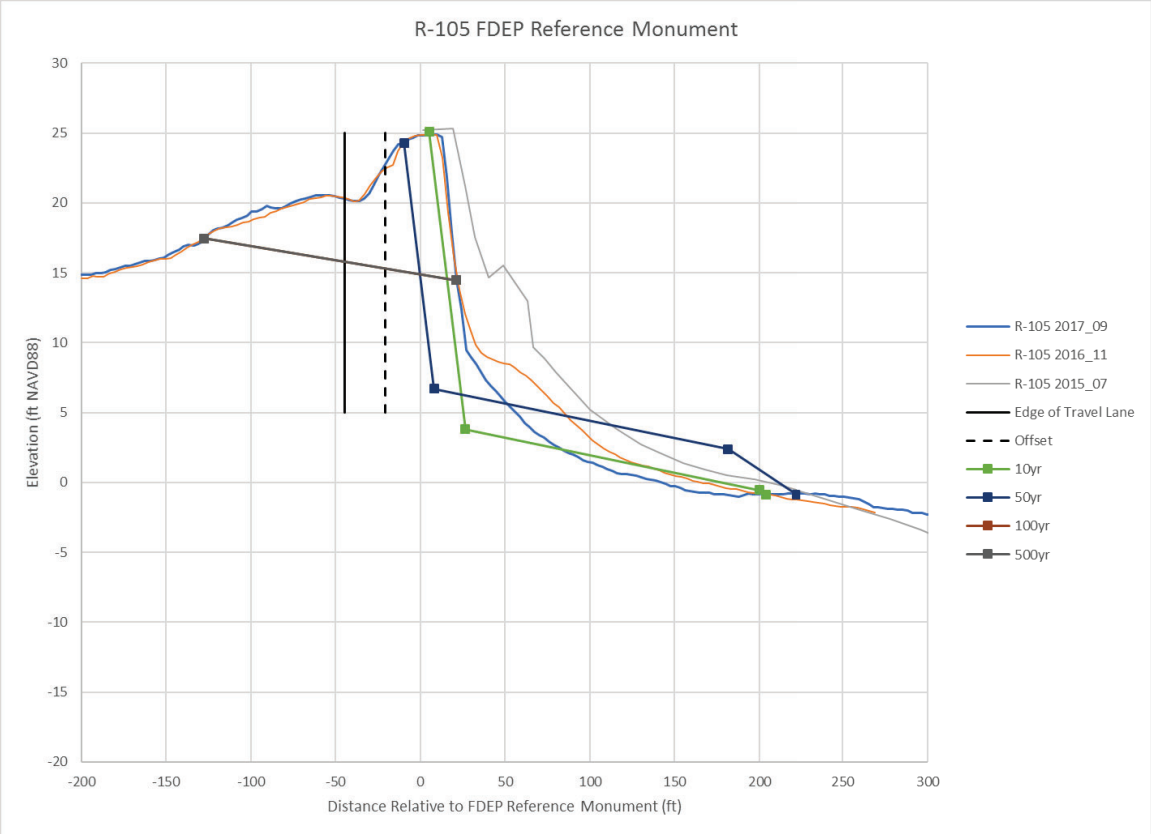


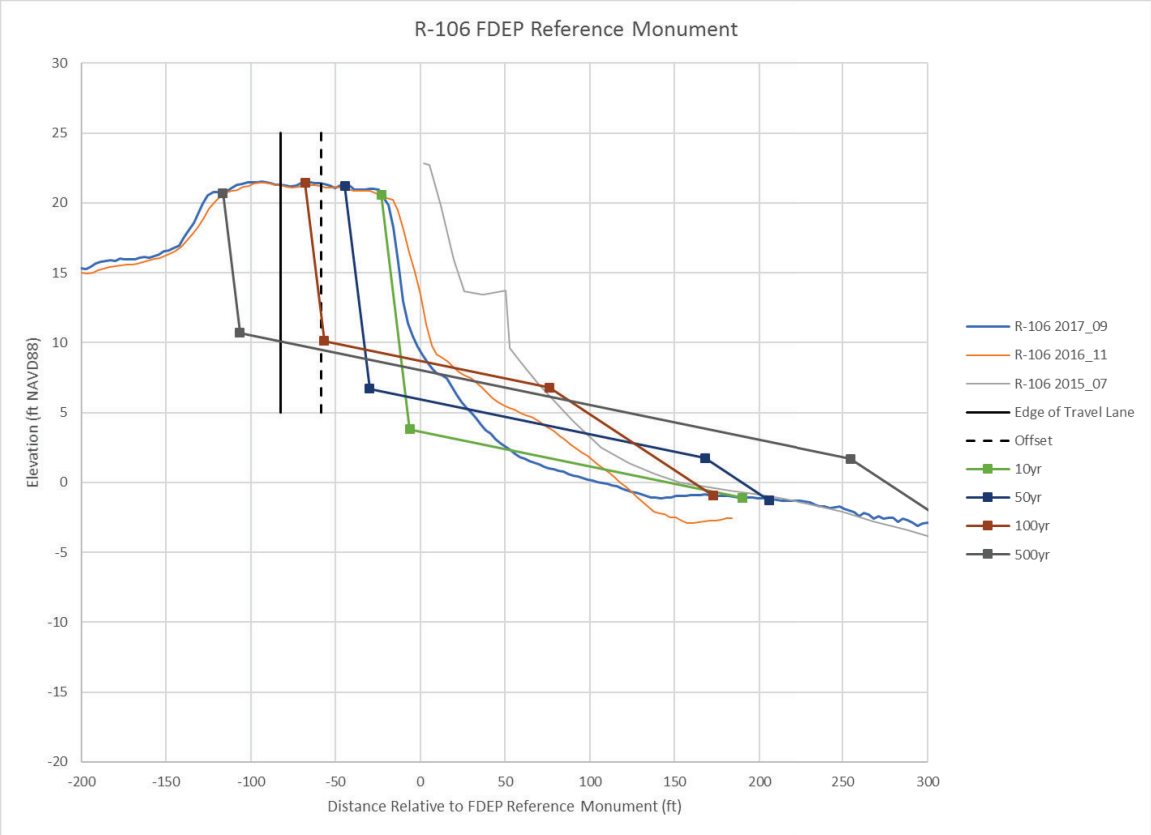
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



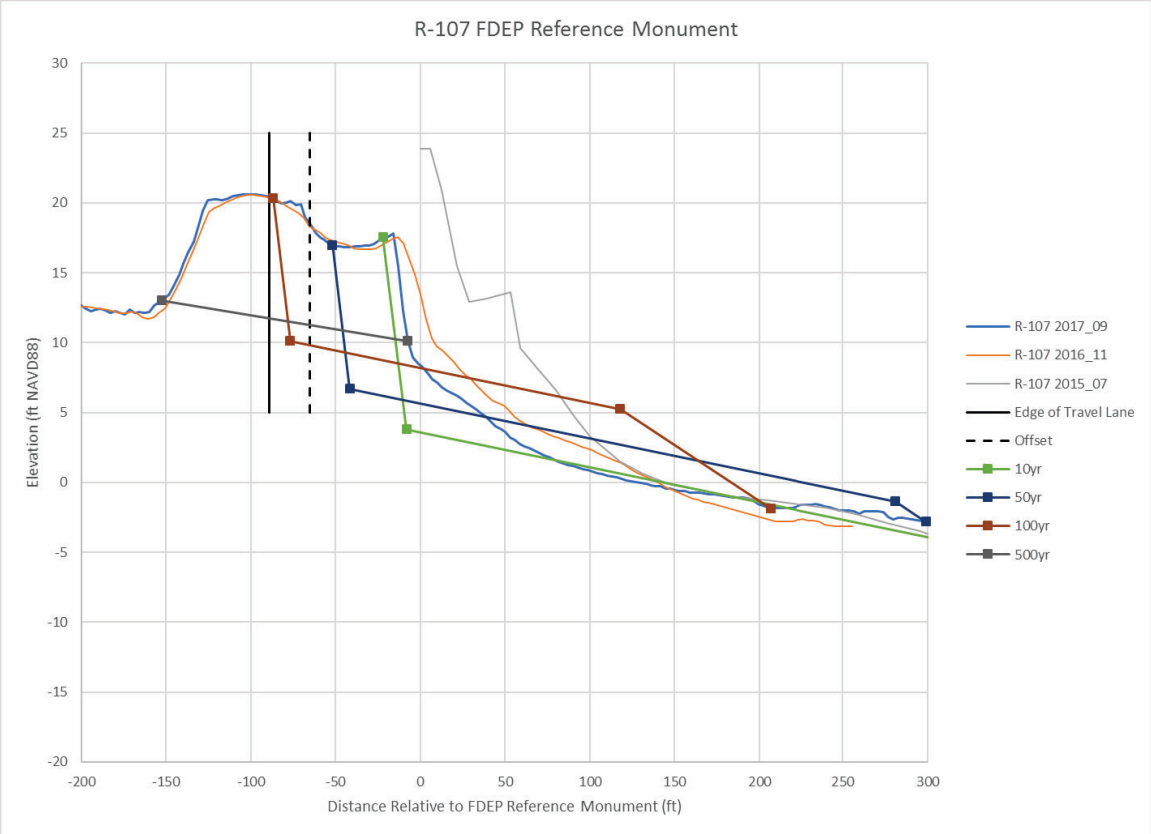


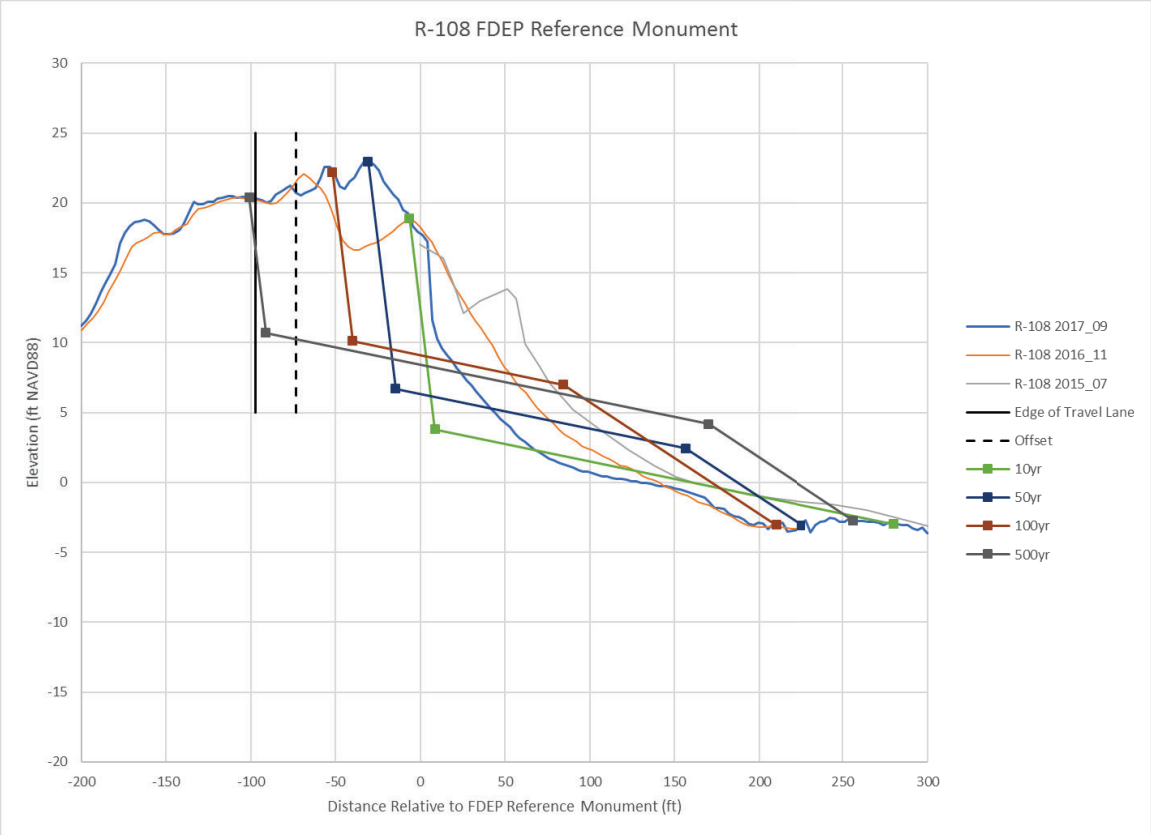
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



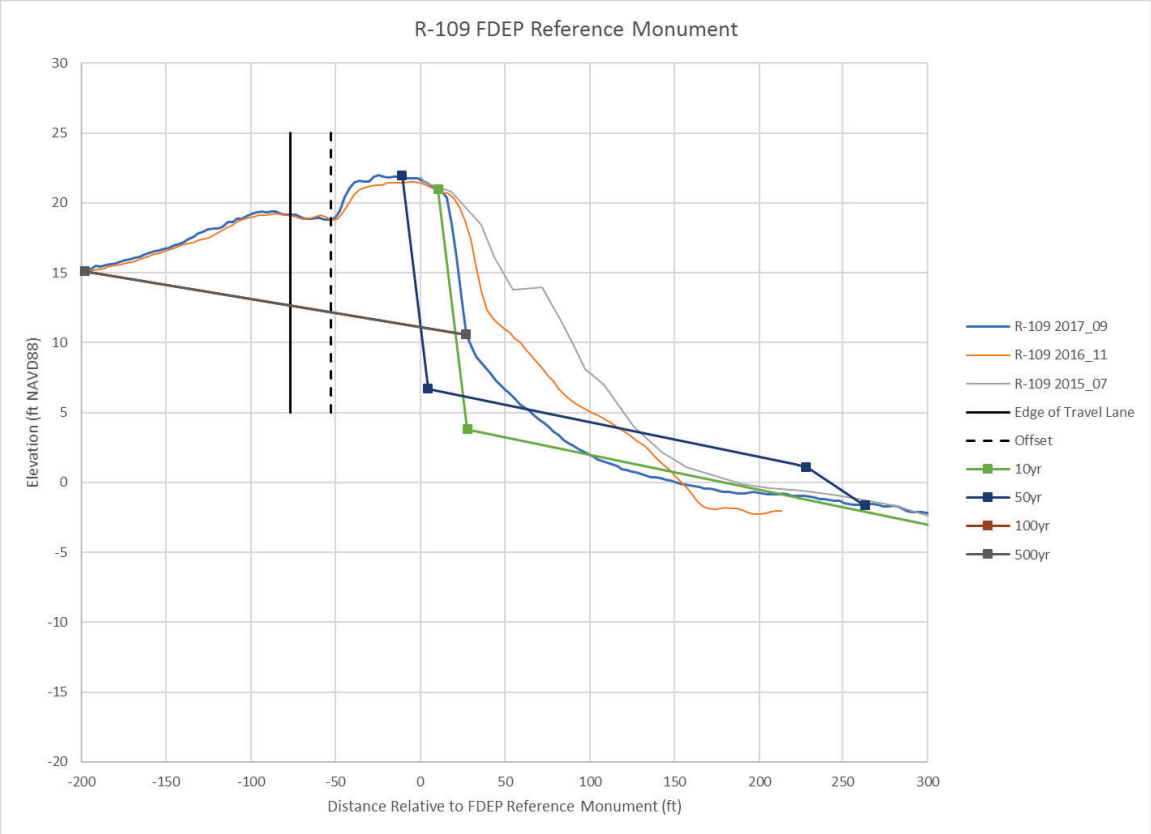


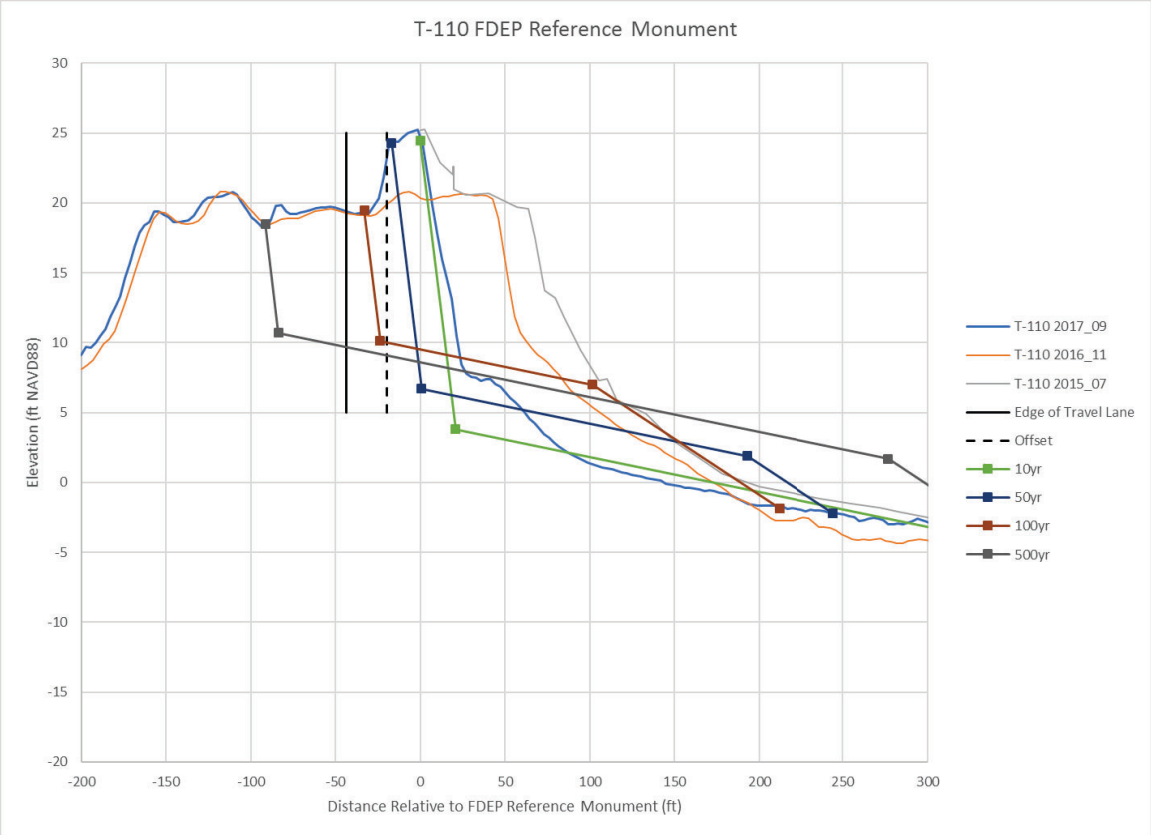
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



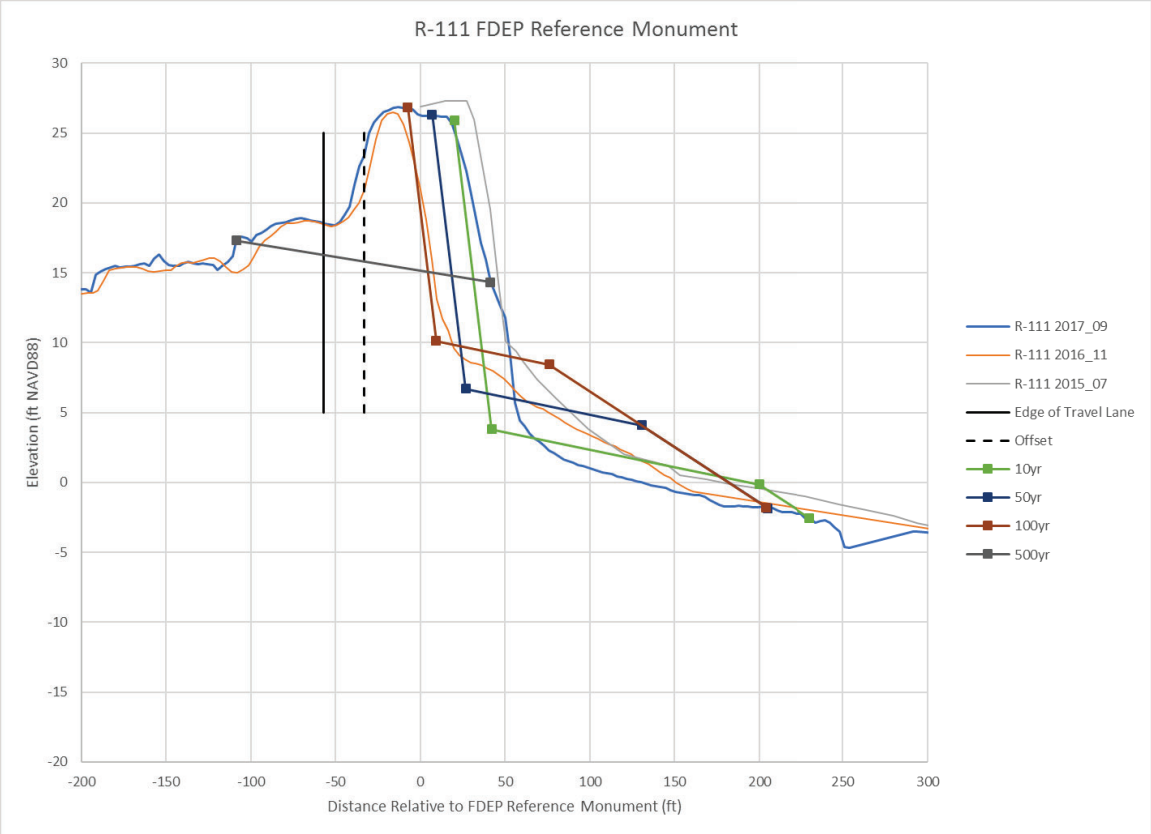


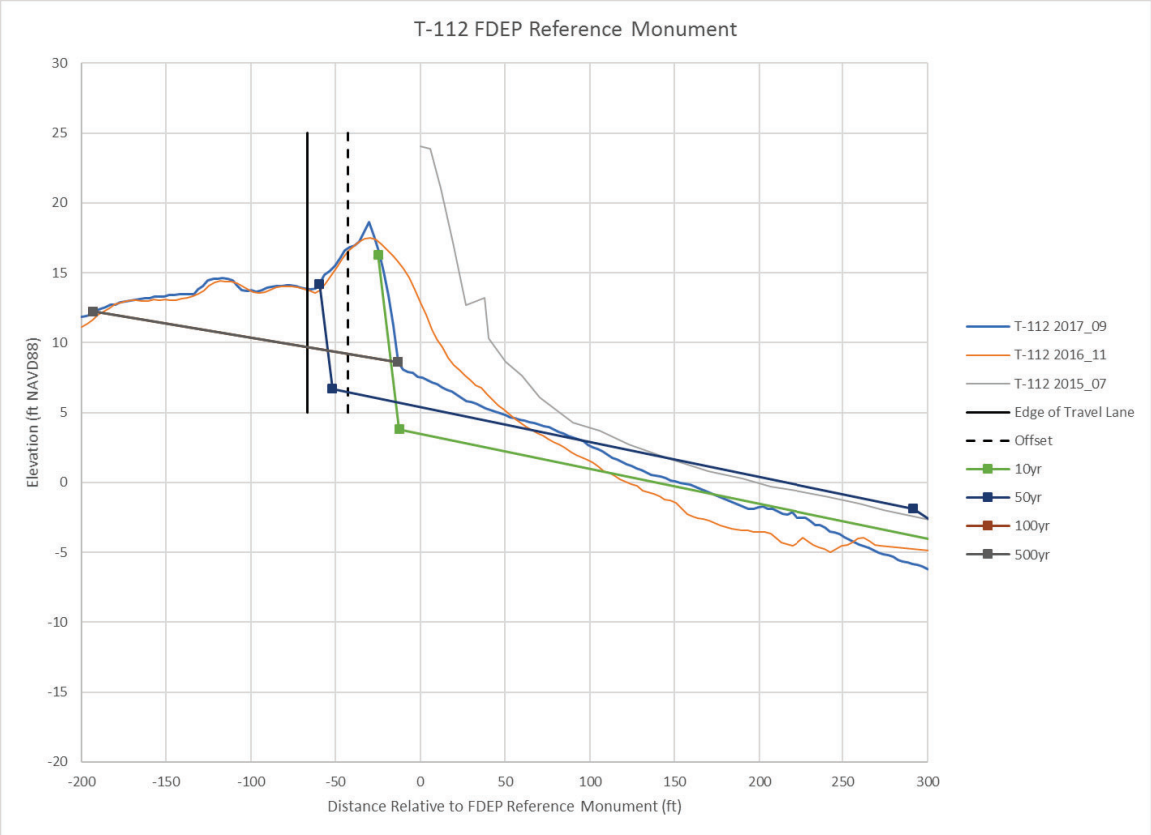
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



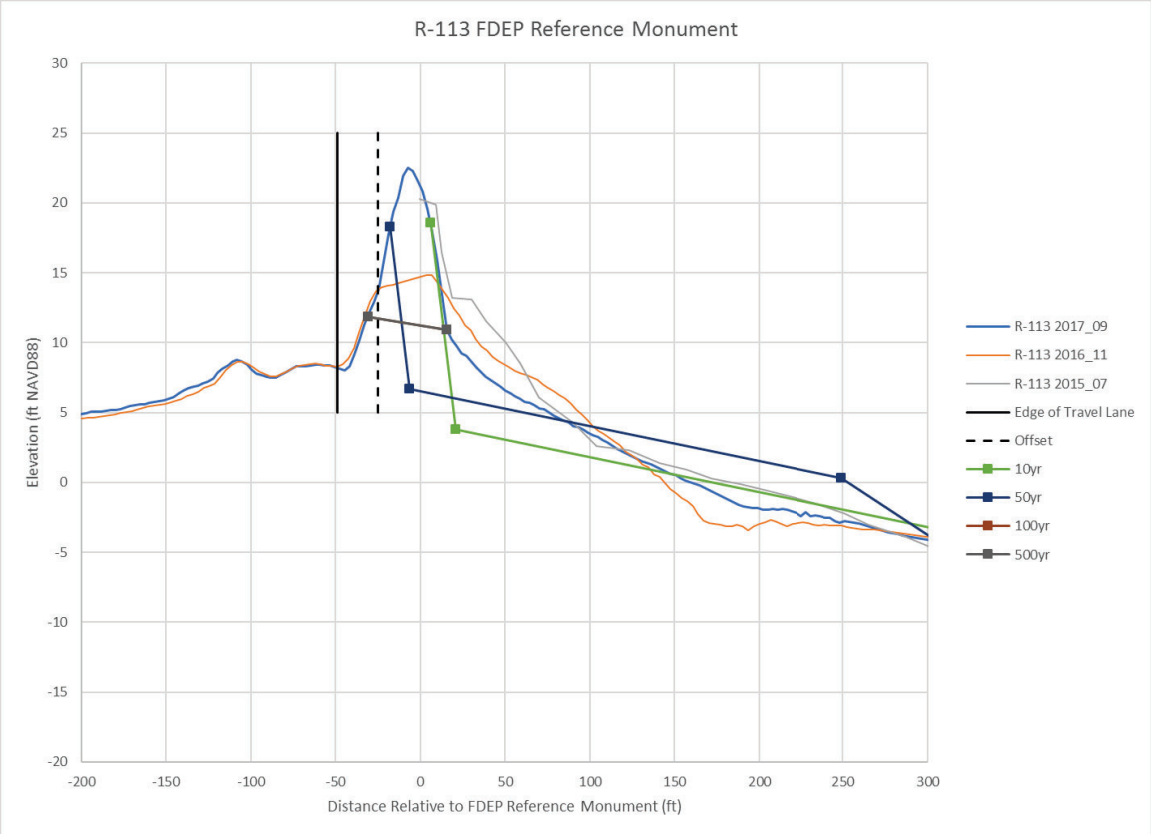


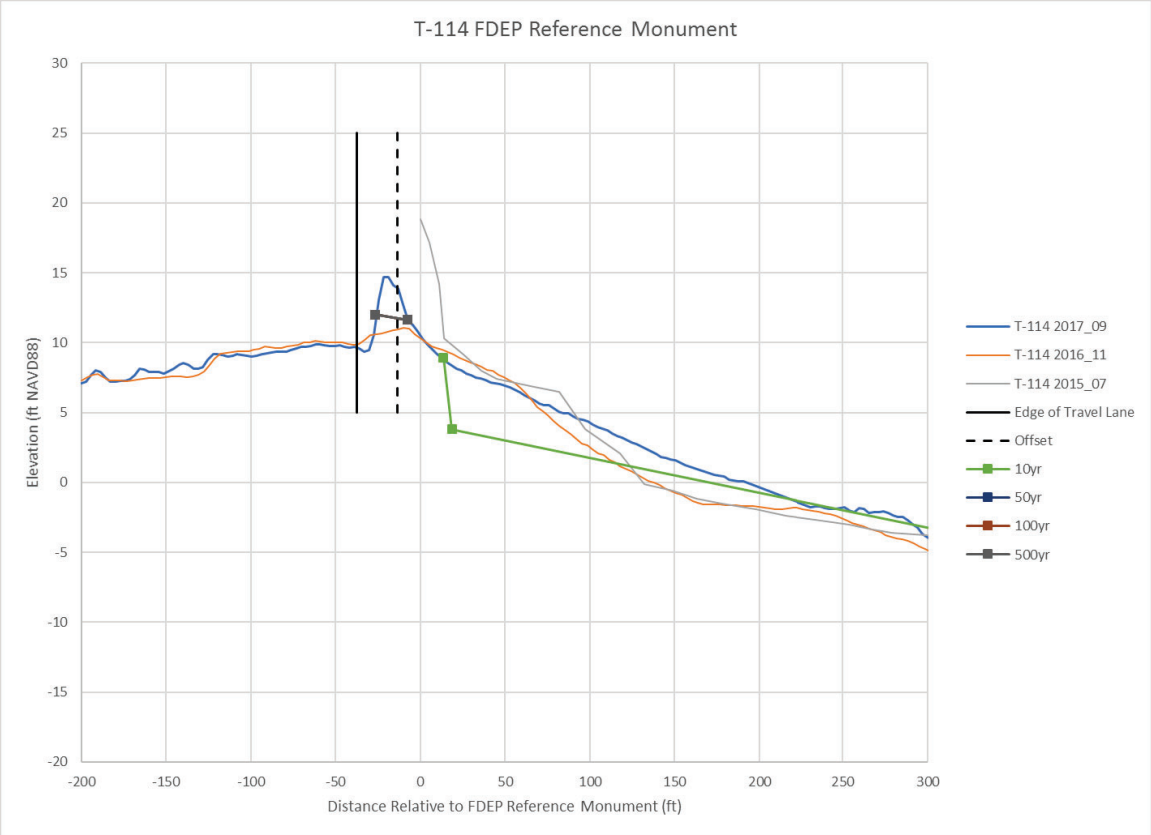
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



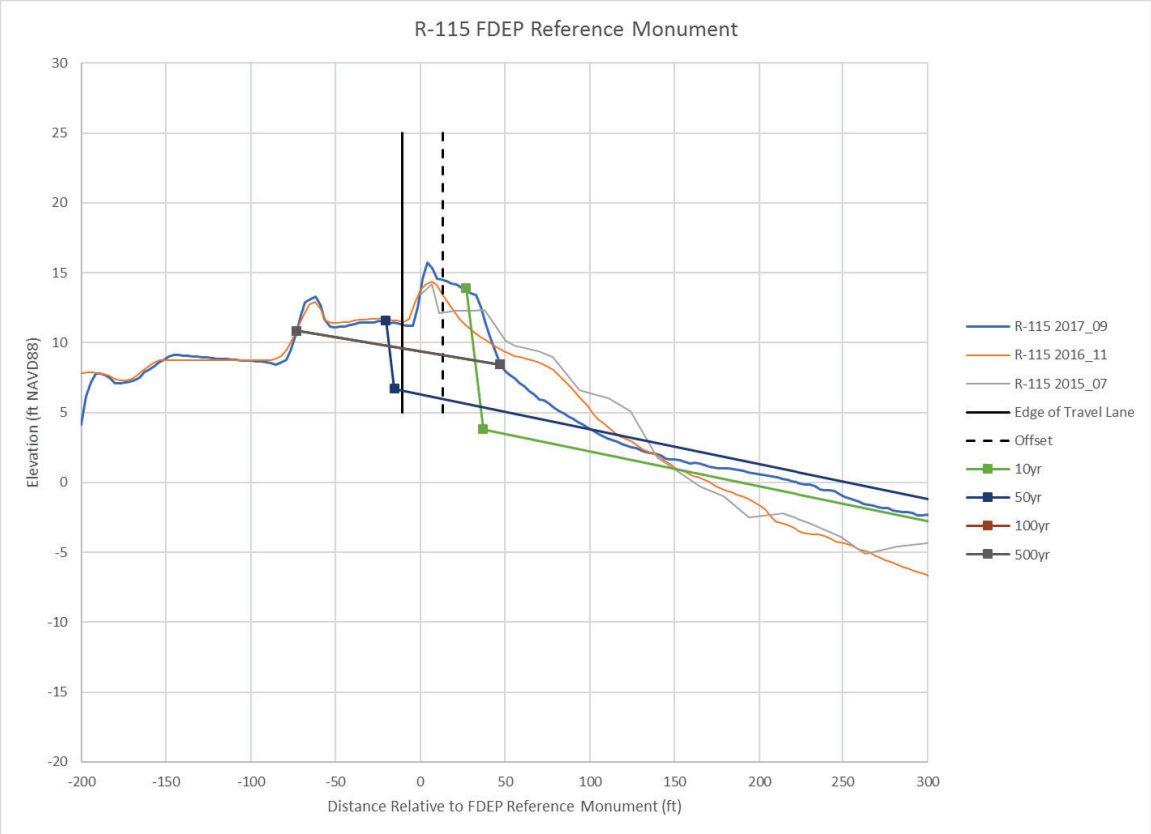


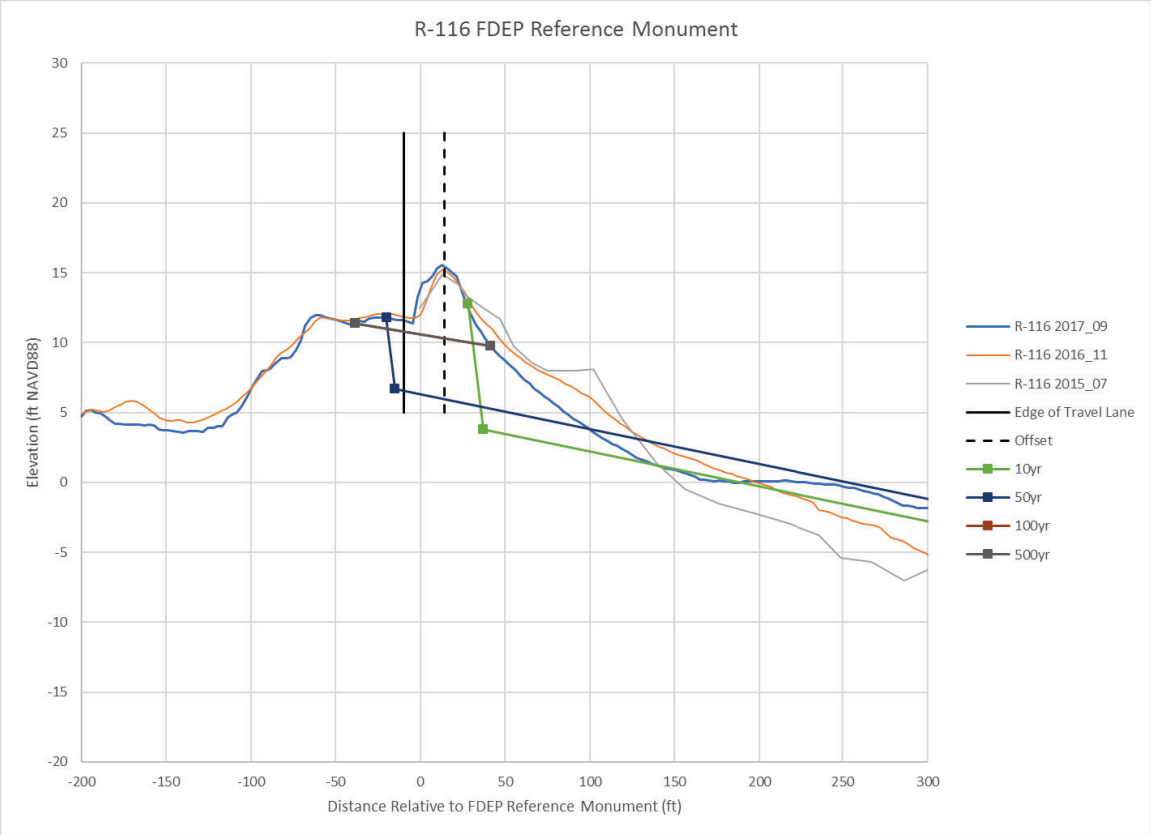
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



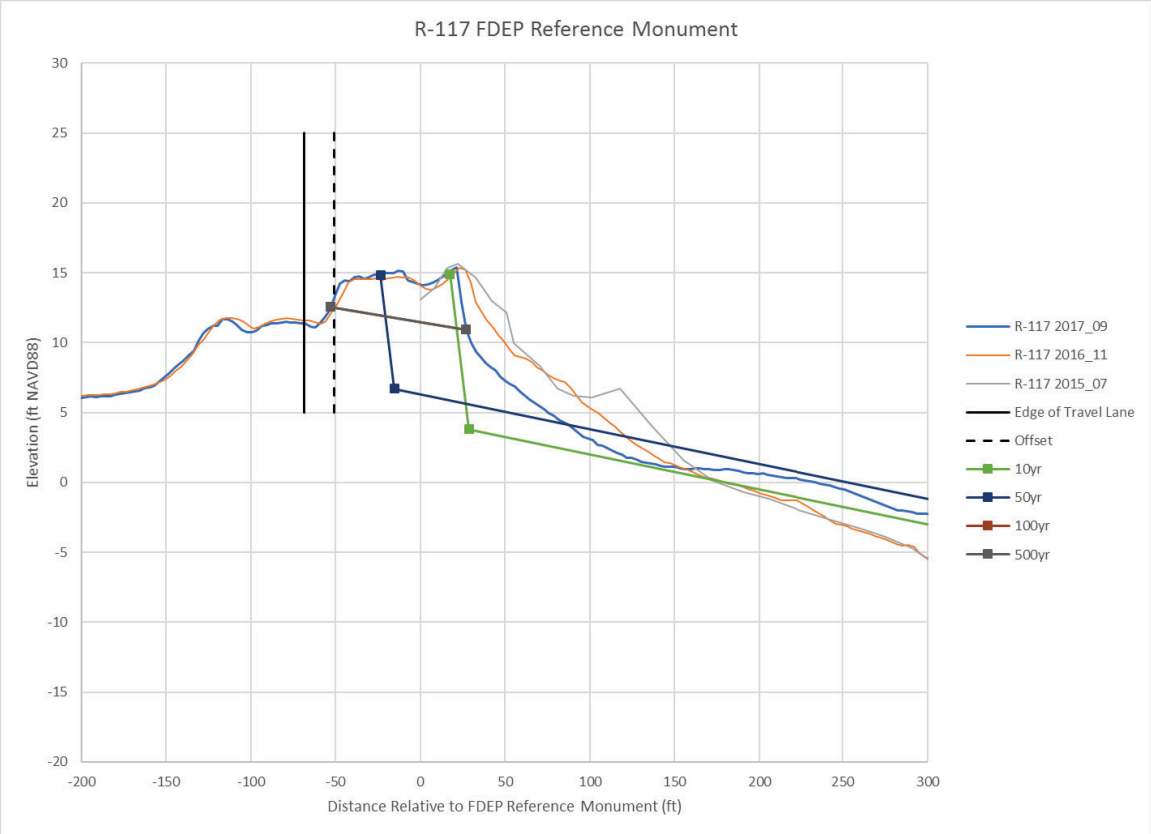


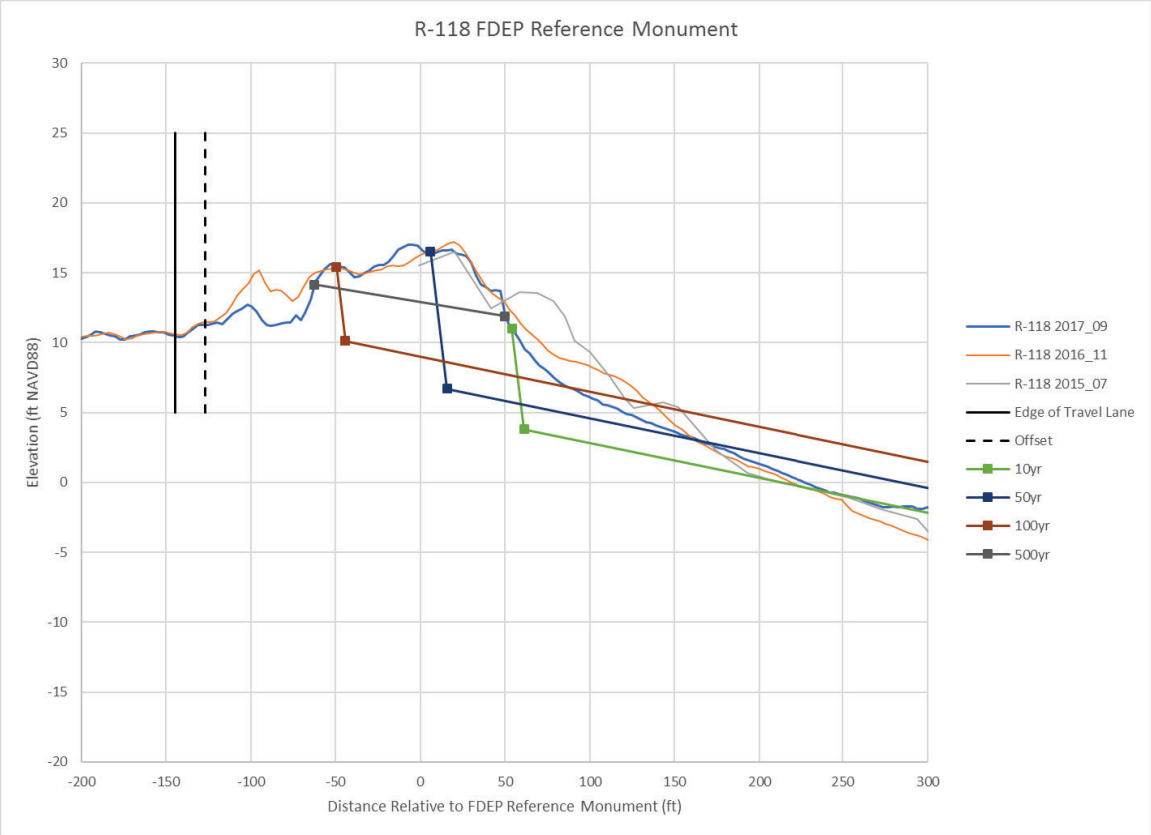
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)



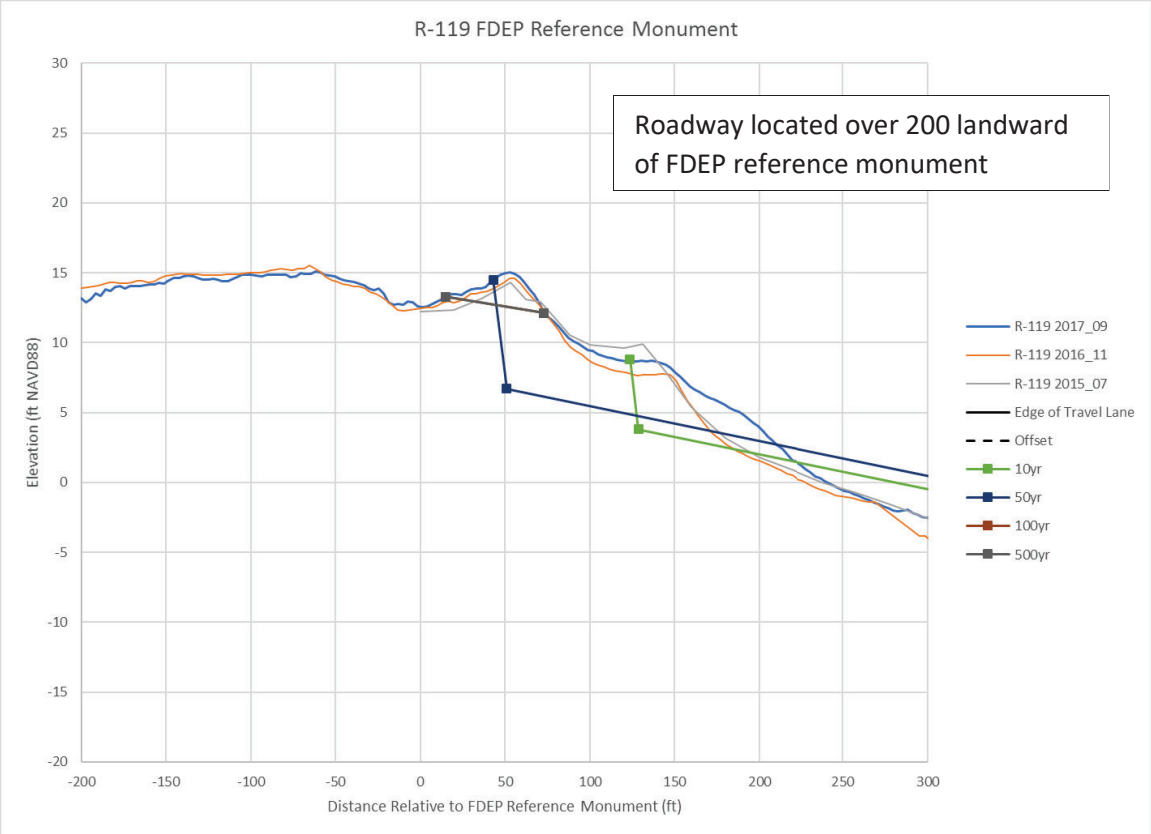


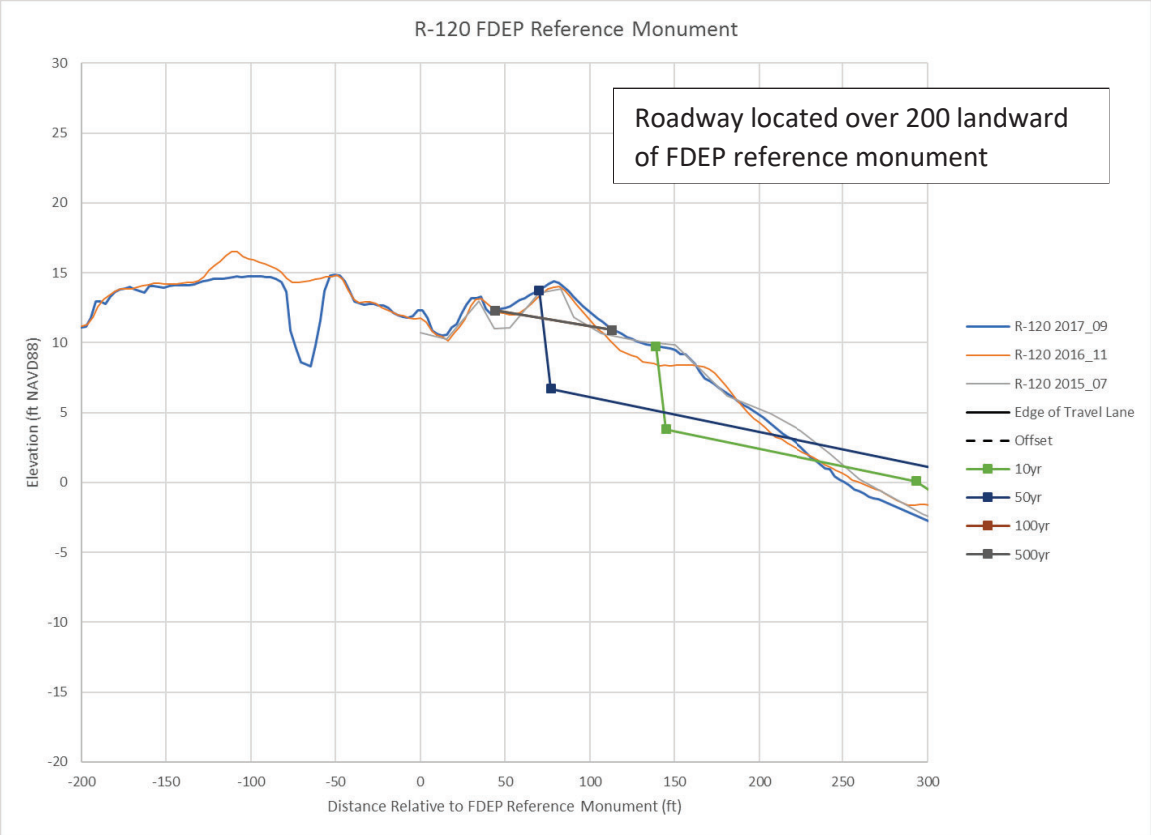
ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)





ATTACHMENT B – STORM-INDUCED EROSION PROFILES (NO LONG-TERM RECESSION)





DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

03 November 2021

Planning and Policy Division
Environmental Branch

Doug Piatkowski
Bureau of Ocean Energy Management (BOEM)
Division of Environmental Assessment
381 Elden Street, MS4042
Herndon, Virginia 20170-4817

Dear Mr. Piatkowski:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is preparing a National Environmental Policy Act (NEPA) document for evaluation of two separate Engineering Documentation Reports (EDR) to identify new supplemental sand borrow sources for previously authorized federal projects in St. Johns County, Florida: St. Johns County Coastal Storm Risk Management (CSRM) (Vilano Beach) and St. Johns County Shore Protection Project (SPP) (St. Augustine Beach). Outer Continental Shelf (OCS) offshore sand borrow sites (S-1 for St. Johns SPP and N-3 for St. Johns CSRM) are being studied and proposed to supplement the previously authorized sand borrow source, St. Augustine Inlet Complex. These federal projects provide shoreline erosion protection, hurricane and storm damage reduction, and related purposes to the shores of St. Johns County, Florida.

Pursuant to 40 CFR 1501.8 and 40 CFR 1506.2, the Corps formally requests the participation of the Bureau of Ocean Energy Management (BOEM) as a cooperating agency during the NEPA process. The purpose of this request is to designate the Corps as the lead federal agency to ensure NEPA compliance for evaluation of two proposed supplemental sand sources (S-1 and N-3) in two (2) separate EDRs. The project would most likely involve the use of OCS mineral resources; therefore, we request that the BOEM serve as a cooperating agency during the required NEPA process. The Corps further requests that BOEM serve as a joint agency on environmental requirements related to the Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Coastal Zone Management Act, and Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). Pursuant to the ESA, the Corps will notify the U.S. Fish and Wildlife Service and National Marine Fisheries Service of its lead role and BOEM's cooperating role, should BOEM provide agreement to serve as a cooperating and joint agency. Additionally, the Corps will include BOEM in all future correspondence with federal and state agencies.

The Corps appreciates a response to this invitation within 30 days of the date of this letter. The Corps requests in your letter response that BOEM state formally whether the agency wishes to contribute to the project as a cooperating and joint agency. If you have any questions on this request or the project, please contact Mr. Darren Pecora, the project biologist, at 904-232-2286 or via email at Darren.J.Pecora@usace.army.mil. We look forward to an efficient and productive relationship with BOEM regarding this important NEPA document.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2021.11.03 13:36:00 -04'00'

Angela E. Dunn
Chief, Environmental Branch

United States Department of the Interior
BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

November 10, 2021

Ms. Angela Dunn
Planning and Policy Division
Chief, Environmental Branch
U.S. Army Corps of Engineers, Jacksonville District
701 San Marco Boulevard
Jacksonville, Florida 32207-8175

Dear Ms. Dunn:

Thank you for your recent letter requesting that the Bureau of Ocean Energy Management (BOEM) become a cooperating agency during the National Environmental Policy Act (NEPA) for the evaluation of two separate Engineering Documentation Reports (EDR) to identify new borrow sources for previously authorized Federal projects in St. Johns County, Florida: St. Johns County Coastal Storm Risk Management (CSRM) (Vilano Beach) and St. Johns County Shore Protection Project (SPP) (St. Augustine Beach). These two projects may require use of borrow areas located in the Outer Continental Shelf (OCS) (S-1 borrow area for St. Johns SPP and N-3 borrow area for St. Johns CSRM).

BOEM welcomes the opportunity to participate in the preparation of NEPA documents and agrees to serve as a cooperating agency since the BOEM has jurisdiction over marine mineral leasing on the OCS. As a cooperating agency, the BOEM expects to: participate and provide input in the NEPA process at the earliest possible time; assume, at the request of U.S. Army Corps of Engineers (USACE), responsibility for developing information and preparing environmental analyses for which BOEM has special expertise; make available staff support, at the lead agency's request, to enhance the interdisciplinary capability of USACE; provide comment on NEPA documents; and use our own funds to accomplish these responsibilities.

BOEM recognizes the importance of participating in the required Endangered Species Act (ESA) Section 7 consultations; the Magnuson-Stevens Fishery and Conservation Management Act Essential Fish Habitat (EFH) consultation (Section 305); the National Historic Preservation Act (NHPA) Section 106 process; and the Coastal Zone Management Act (CZMA) Section 307 consistency process. BOEM recognizes the USACE as the lead federal agency for the above projects.

As the lead federal agency for ESA Section 7 and the EFH consultations, the USACE must notify the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) of its lead role and BOEM's cooperating role. BOEM expects that USACE, as lead agency, would work with BOEM to ensure existing biological opinions from FWS and NMFS are

applicable to BOEM's part of the Federal action and/or expect to jointly submit the ESA Section 7 and EFH assessments to FWS and NMFS, if applicable. BOEM expects USACE be the lead federal agency for NHPA Section 106 and CZMA Section 307 compliance with the BOEM acting in a consulting role. BOEM requests that USACE notify the State Historic Preservation Office, Tribal Historic Preservation Officers, and the Florida Department of Environment Protection of BOEM's involvement in the undertakings and proposed actions. We would greatly appreciate to be included on all correspondence to other federal, state, and other agencies concerning this project and welcome the opportunity to review and provide comments on any draft correspondence.

BOEM also recognizes the unique legal relationship of the United States with federally recognized Tribal Governments. Consistent with Department of the Interior policy, BOEM must engage in Government-to-Government consultation if these proposed projects may have tribal implications. We assume the U.S. Army Corps of Engineers, as the lead federal agency for the projects, would make this determination, involving BOEM, and, as circumstances warrant, invite interests of expression of potentially affected Tribes to initiate consultation. If a consultation is requested by one or more Tribes, BOEM would participate in the consultation process to ensure effective collaboration and informed Federal decision-making.

In addition to participating in the environmental review and consultations, we also would appreciate the opportunity to participate in any Project Delivery Team meetings related to these EDRs. Topics of interest to BOEM include the identification of OCS sand resources, interpretation and management of geophysical and geological data, and design and use plans for borrow areas located on the OCS. BOEM geoscientists can provide special expertise and contribute upon request.

BOEM looks forward to working with your team. If you would like to discuss any of these items further, please contact Doug Piatkowski at (703) 787-1833 or by e-mail at Douglas.Piatkowski@boem.gov.

Sincerely,

GEOFFREY WIKEL

Digitally signed by GEOFFREY WIKEL
Date: 2021.11.10 15:31:48 -05'00'

Geoffrey Wikel
Marine Minerals Resource Management Branch
Marine Minerals Division

cc:

Ms. Gretchen Ehlinger, USACE
Mr. Darren Pecora, USACE
Mr. Jason Harrah, USACE

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

July 28, 2021

Maureen A. Bornholdt
Program Manager
Office of Renewable Energy Programs
Bureau of Ocean Energy Management
381 Elden Street, HM 1328
Herndon, Virginia 20170

Re: St. Johns County Sand Borrow Area Validation Report

Dear Ms. Bornholdt:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is currently studying the effects to cultural resources related to its St. Johns County Sand Borrow Area Validation Study (Project) in St. Johns County, Florida. Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and it's implementing regulations (36 C.F.R. § 800), the Corps has determined that the Project constitutes an undertaking as defined in 36 C.F.R. § 800.16(y).

The Project study area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The Corps is in the process of evaluating alternative sand sources to allow continued placement of sand in support of Coastal Storm Risk Management Projects in St. Johns County, Florida. The Corps will conduct submerged cultural resources surveys of previously unsurveyed borrow areas in accordance with applicable standards.

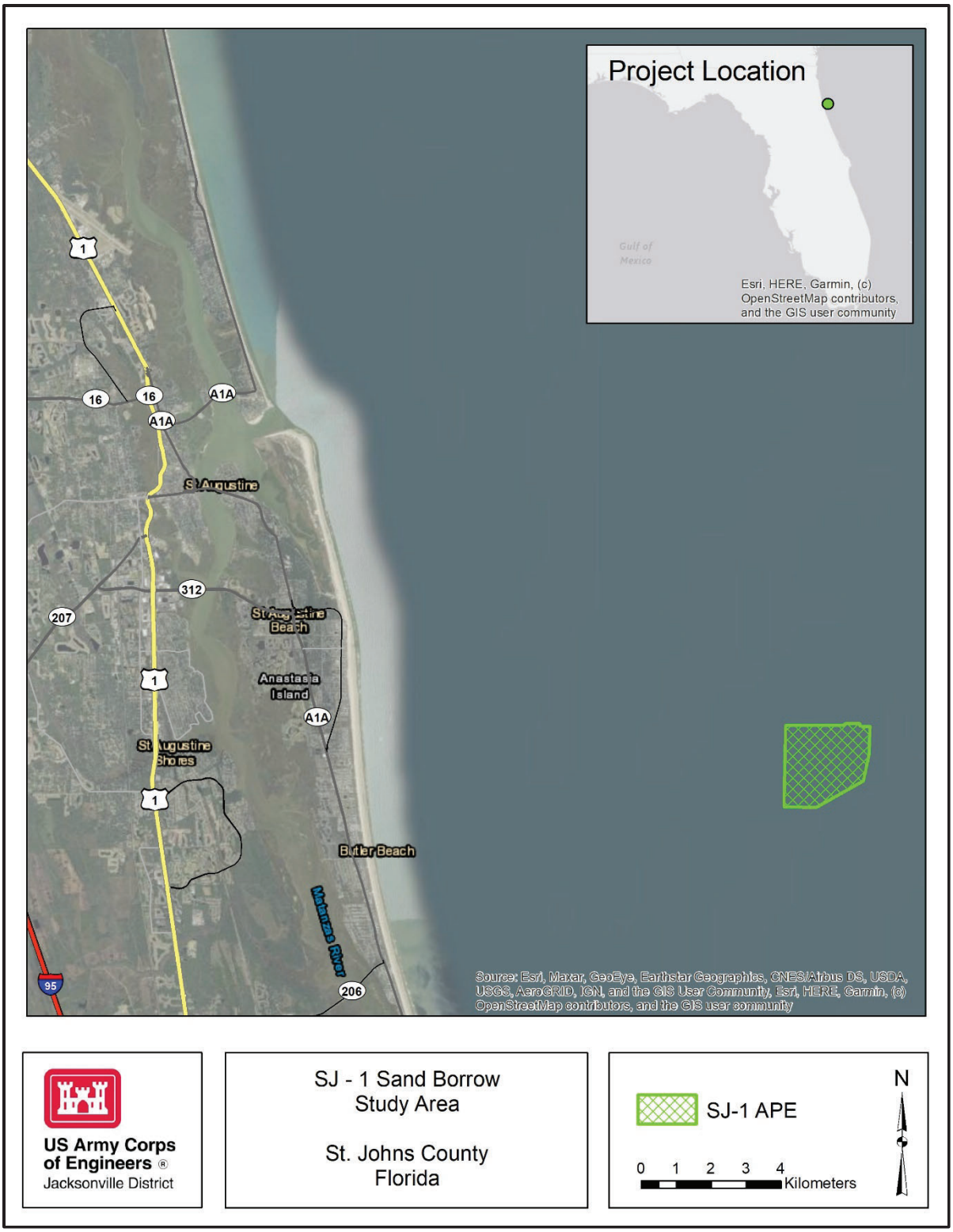
Pursuant to 36 CFR 800.3 the Corps is initiating consultation with your office regarding the development of the Project. Please contact Mr. Brian Seymour with any additional questions or concerns by email at Brian.R.Seymour@usace.army.mil or by telephone at (904) 232-3028.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2021.07.29 07:22:23 -04'00'

Angela E. Dunn
Chief, Environmental Branch

Enclosure:



Enclosure 1. St. Johns County Sand Borrow Area Validation study area.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

July 28, 2021

Corain Lowe-Zepeda
Tribal Historic Preservation Officer
Muscogee (Creek) Nation
P.O. Box 580
Okmulgee, OK 74447

Re: St. Johns County Sand Borrow Area Validation Report

Dear Ms. Lowe-Zepeda:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is currently studying the effects to cultural resources related to its St. Johns County Sand Borrow Area Validation Study (Project) in St. Johns County, Florida. Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and it's implementing regulations (36 C.F.R. § 800), the Corps has determined that the Project constitutes an undertaking as defined in 36 C.F.R. § 800.16(y).

The Project study area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The Corps is in the process of evaluating alternative sand sources to allow continued placement of sand in support of Coastal Storm Risk Management Projects in St. Johns County, Florida. The Corps will conduct submerged cultural resources surveys of previously unsurveyed borrow areas in accordance with applicable standards.

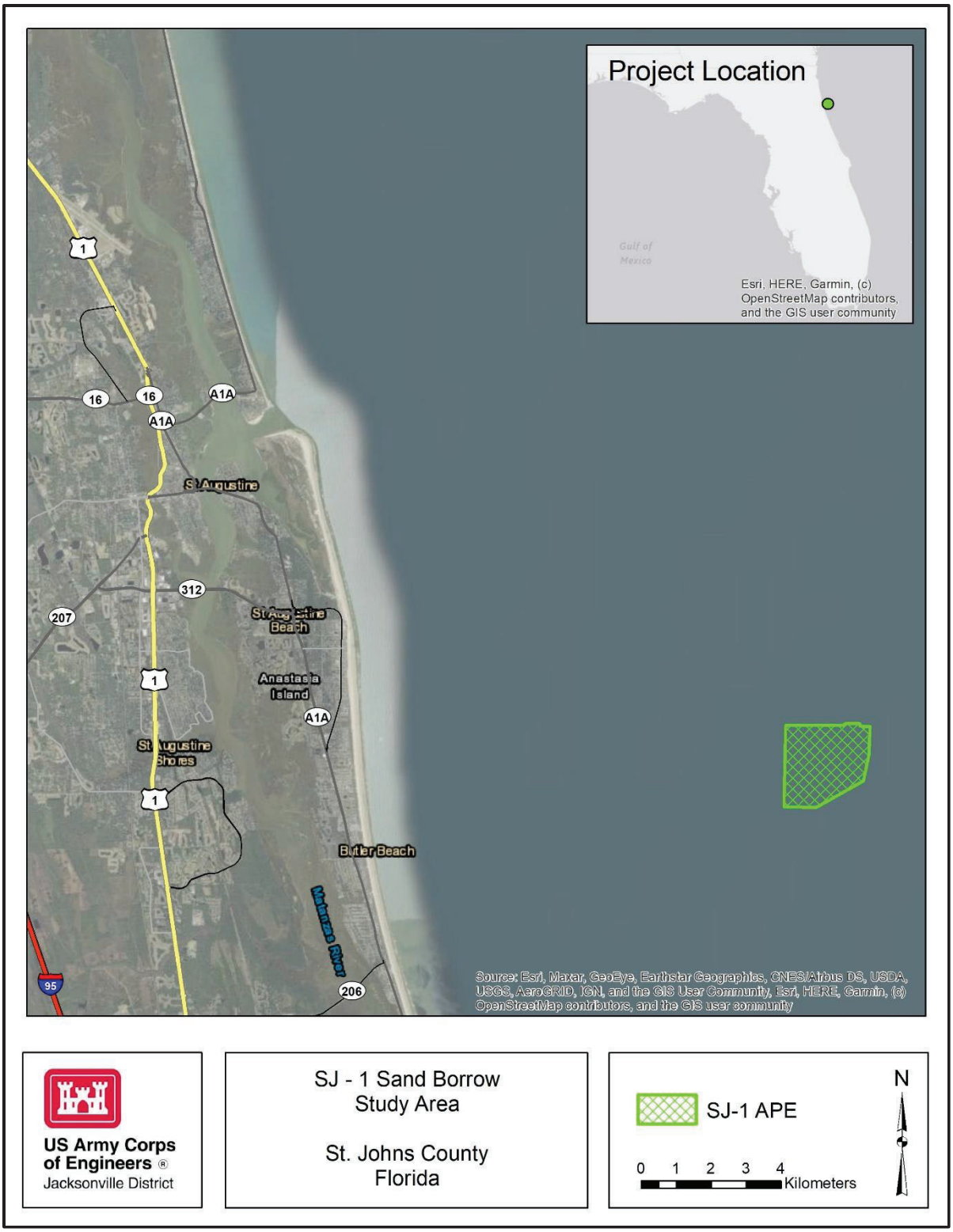
Pursuant to 36 CFR 800.3 the Corps is initiating consultation with your office regarding the development of the Project. Please contact Mr. Brian Seymour with any additional questions or concerns by email at Brian.R.Seymour@usace.army.mil or by telephone at (904) 232-3028.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2021.07.29 07:21:52 -04'00'

Angela E. Dunn
Chief, Environmental Branch

Enclosure:



Enclosure 1. St. Johns County Sand Borrow Area Validation study area.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

July 28, 2021

David Frank
Tribal Historic Preservation Officer
Seminole Nation of Oklahoma
PO Box 1498
Wewoka, OK 74884

Re: St. Johns County Sand Borrow Area Validation Report

Dear Mr. Frank:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is currently studying the effects to cultural resources related to its St. Johns County Sand Borrow Area Validation Study (Project) in St. Johns County, Florida. Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and it's implementing regulations (36 C.F.R. § 800), the Corps has determined that the Project constitutes an undertaking as defined in 36 C.F.R. § 800.16(y).

The Project study area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The Corps is in the process of evaluating alternative sand sources to allow continued placement of sand in support of Coastal Storm Risk Management Projects in St. Johns County, Florida. The Corps will conduct submerged cultural resources surveys of previously unsurveyed borrow areas in accordance with applicable standards.

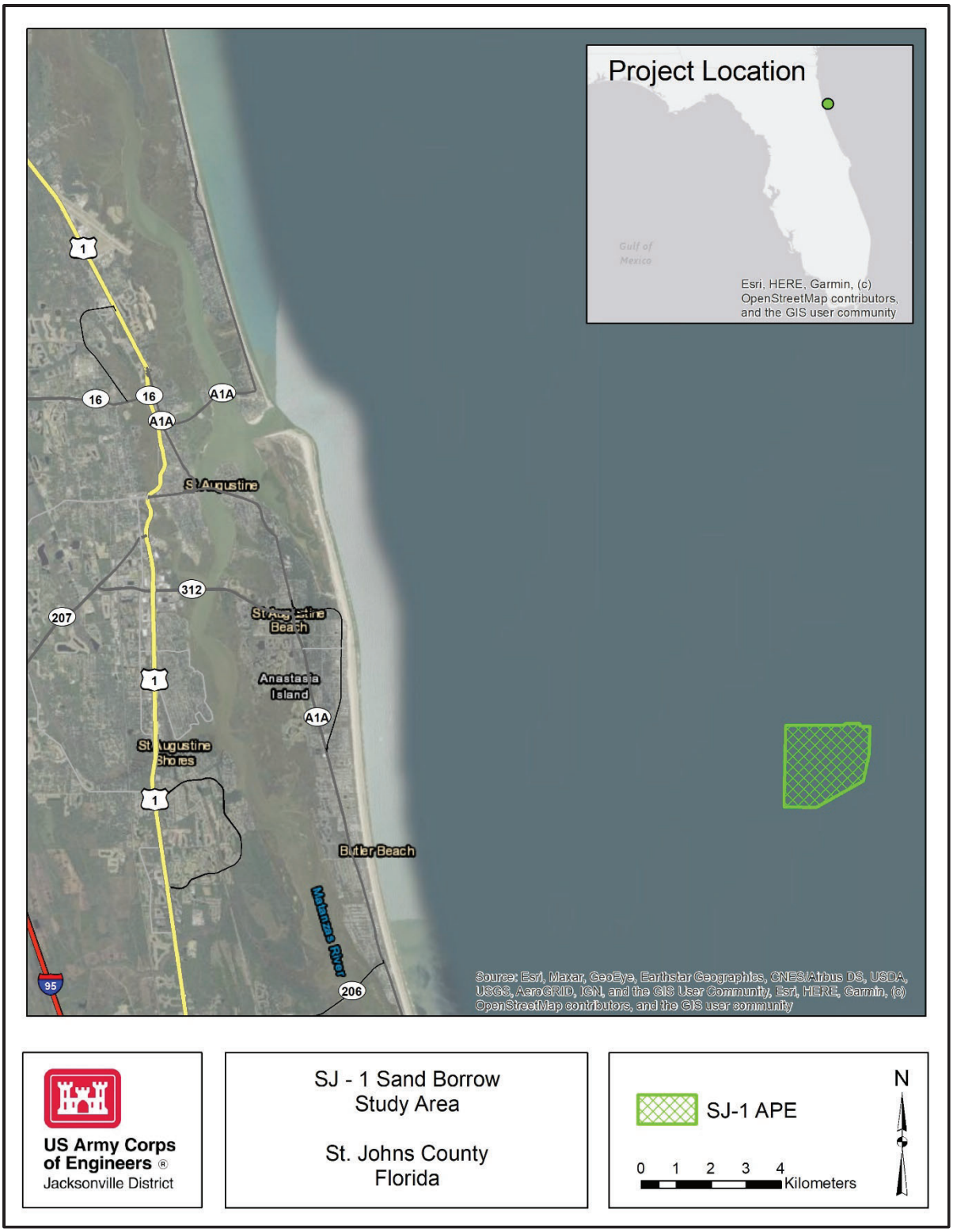
Pursuant to 36 CFR 800.3 the Corps is initiating consultation with your office regarding the development of the Project. Please contact Mr. Brian Seymour with any additional questions or concerns by email at Brian.R.Seymour@usace.army.mil or by telephone at (904) 232-3028.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2021.07.29 07:21:22 -04'00'

Angela E. Dunn
Chief, Environmental Branch

Enclosure:



Enclosure 1. St. Johns County Sand Borrow Area Validation study area.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

July 28, 2021

Mr. Gaylen Cloud
Tribal Historic Preservation Officer (Acting)
Thlopthlocco Tribal Town
PO Box 188
Okemah, OK 74859

Re: St. Johns County Sand Borrow Area Validation Report

Dear Mr. Cloud:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is currently studying the effects to cultural resources related to its St. Johns County Sand Borrow Area Validation Study (Project) in St. Johns County, Florida. Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and it's implementing regulations (36 C.F.R. § 800), the Corps has determined that the Project constitutes an undertaking as defined in 36 C.F.R. § 800.16(y).

The Project study area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The Corps is in the process of evaluating alternative sand sources to allow continued placement of sand in support of Coastal Storm Risk Management Projects in St. Johns County, Florida. The Corps will conduct submerged cultural resources surveys of previously unsurveyed borrow areas in accordance with applicable standards.

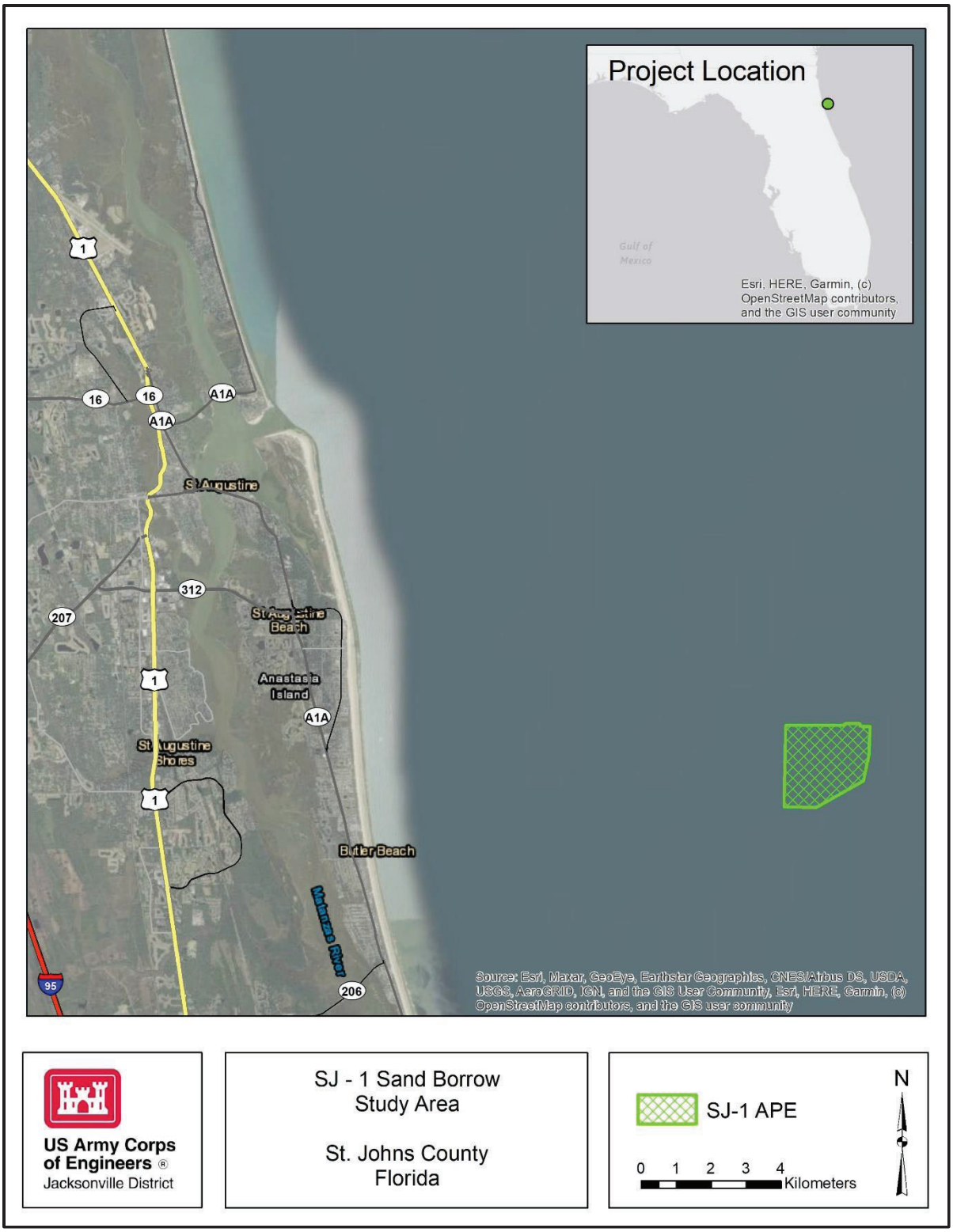
Pursuant to 36 CFR 800.3 the Corps is initiating consultation with your office regarding the development of the Project. Please contact Mr. Brian Seymour with any additional questions or concerns by email at Brian.R.Seymour@usace.army.mil or by telephone at (904) 232-3028.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2021.07.29 07:20:46 -04'00'

Angela E. Dunn
Chief, Environmental Branch

Enclosure:



Enclosure 1. St. Johns County Sand Borrow Area Validation study area.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

July 28, 2021

Kevin Donaldson
NAGPRA/Section 106 Representative
Miccosukee Tribe of Indians of Florida
P.O. Box 440021
Tamiami Station
Miami, FL 33144

Re: St. Johns County Sand Borrow Area Validation Report

Dear Mr. Donaldson:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is currently studying the effects to cultural resources related to its St. Johns County Sand Borrow Area Validation Study (Project) in St. Johns County, Florida. Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and it's implementing regulations (36 C.F.R. § 800), the Corps has determined that the Project constitutes an undertaking as defined in 36 C.F.R. § 800.16(y).

The Project study area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The Corps is in the process of evaluating alternative sand sources to allow continued placement of sand in support of Coastal Storm Risk Management Projects in St. Johns County, Florida. The Corps will conduct submerged cultural resources surveys of previously unsurveyed borrow areas in accordance with applicable standards.

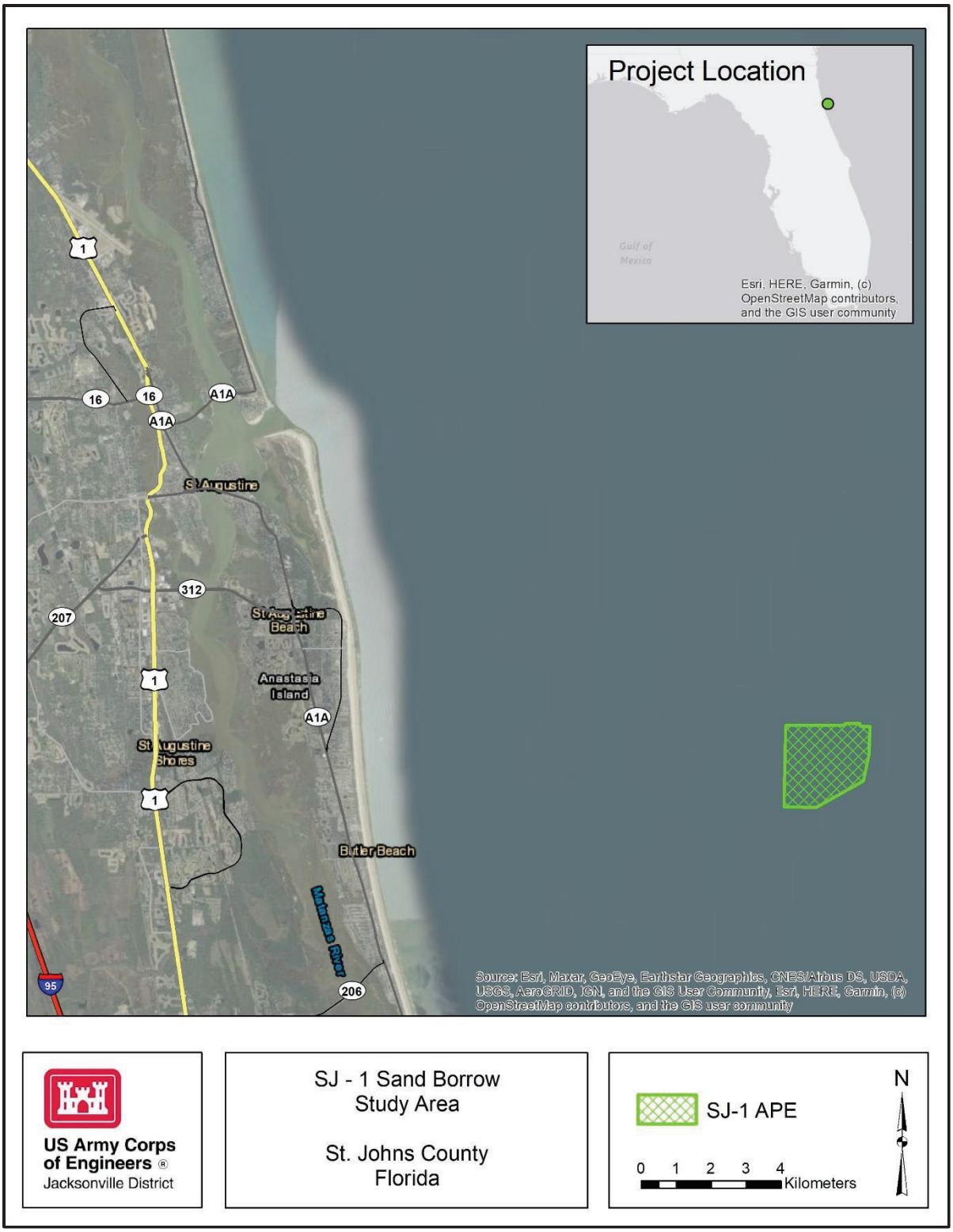
Pursuant to 36 CFR 800.3 the Corps is initiating consultation with your office regarding the development of the Project. Please contact Mr. Brian Seymour with any additional questions or concerns by email at Brian.R.Seymour@usace.army.mil or by telephone at (904) 232-3028.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2021.07.29 07:19:31 -04'00'

Angela E. Dunn
Chief, Environmental Branch

Enclosure:



Enclosure 1. St. Johns County Sand Borrow Area Validation study area.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

July 28, 2021

Dr. Paul N. Backhouse, Ph.D.
Senior Director, Heritage, Environment, Resources Office
Seminole Tribe of Florida
Ah-Tah-Thi-Ki Museum
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440

Re: St. Johns County Sand Borrow Area Validation Report

Dear Dr. Backhouse:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is currently studying the effects to cultural resources related to its St. Johns County Sand Borrow Area Validation Study (Project) in St. Johns County, Florida. Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and it's implementing regulations (36 C.F.R. § 800), the Corps has determined that the Project constitutes an undertaking as defined in 36 C.F.R. § 800.16(y).

The Project study area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The Corps is in the process of evaluating alternative sand sources to allow continued placement of sand in support of Coastal Storm Risk Management Projects in St. Johns County, Florida. The Corps will conduct submerged cultural resources surveys of previously unsurveyed borrow areas in accordance with applicable standards.

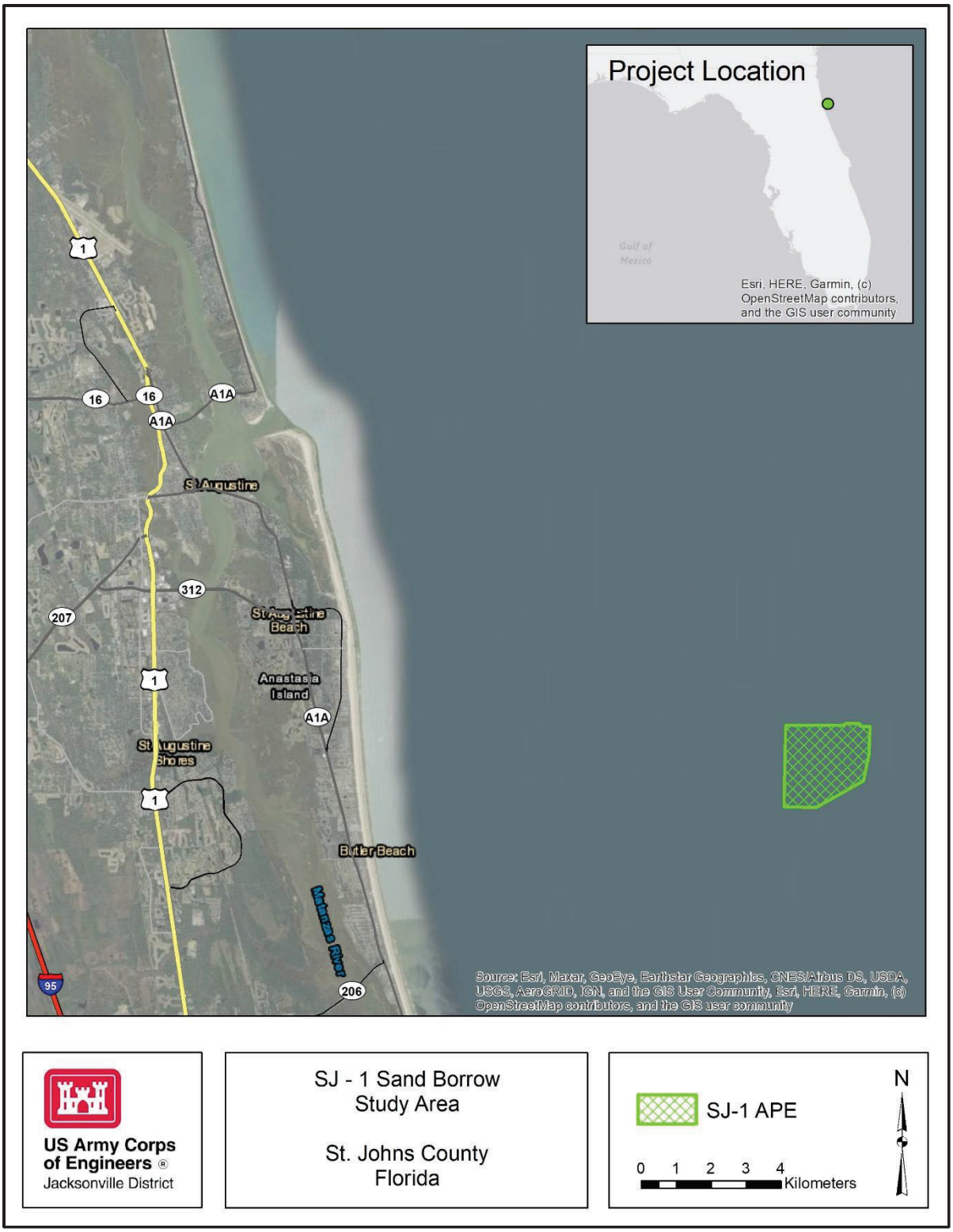
Pursuant to 36 CFR 800.3 the Corps is initiating consultation with your office regarding the development of the Project. Please contact Mr. Brian Seymour with any additional questions or concerns by email at Brian.R.Seymour@usace.army.mil or by telephone at (904) 232-3028.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2021.07.29 07:20:16 -04'00'

Angela E. Dunn
Chief, Environmental Branch

Enclosure:



Enclosure 1. St. Johns County Sand Borrow Area Validation study area.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division
Environmental Branch

July 28, 2021

Tim Parsons, Ph.D.
State Historic Preservation Officer
Division of Historical Resources
500 South Bronough Street
Tallahassee, Florida 32399-0250

Re: St. Johns County Sand Borrow Area Validation Report

Dear Dr. Parsons:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is currently studying the effects to cultural resources related to its St. Johns County Sand Borrow Area Validation Study (Project) in St. Johns County, Florida. Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and it's implementing regulations (36 C.F.R. § 800), the Corps has determined that the Project constitutes an undertaking as defined in 36 C.F.R. § 800.16(y).

The Project study area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The Corps is in the process of evaluating alternative sand sources to allow continued placement of sand in support of Coastal Storm Risk Management Projects in St. Johns County, Florida. The Corps will conduct submerged cultural resources surveys of previously unsurveyed borrow areas in accordance with applicable standards.

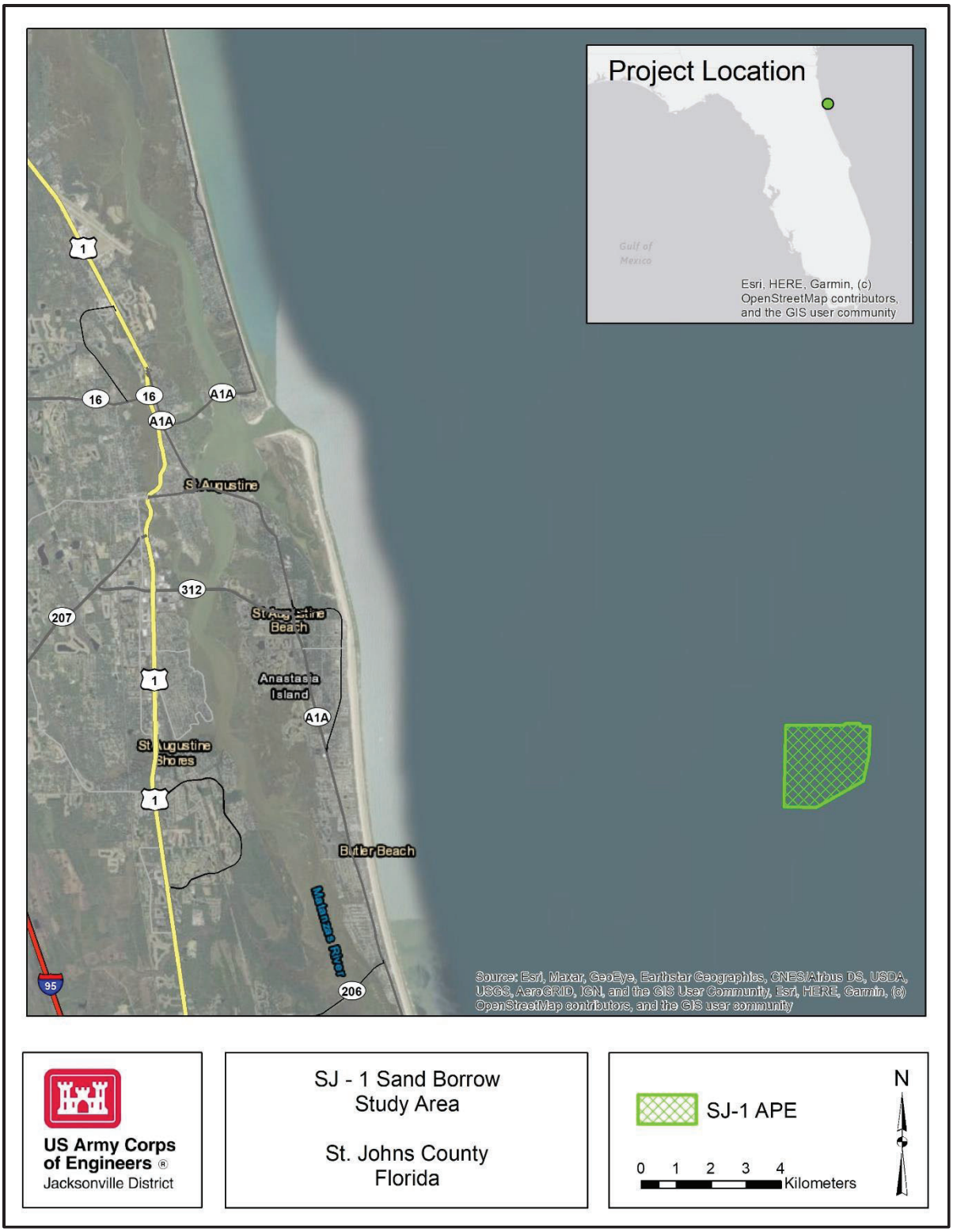
Pursuant to 36 CFR 800.3 the Corps is initiating consultation with your office regarding the development of the Project. Please contact Mr. Brian Seymour with any additional questions or concerns by email at Brian.R.Seymour@usace.army.mil or by telephone at (904) 232-3028.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2021.07.29 07:18:53 -04'00'

Angela E. Dunn
Chief, Environmental Branch

Enclosure:



Enclosure 1. St. Johns County Sand Borrow Area Validation study area.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

January 6, 2022

Planning and Policy Division
Environmental Branch

Douglas N. Piatkowski
Marine Biologist
Marine Minerals Division, Office of Strategic Resources
Bureau of Ocean Energy Management
1105 Upper Reach Drive
Wilmington, NC 28409

Re: Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project

Dear Mr. Piatkowski:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is drafting an Environmental Assessment (EA) and Engineering Documentation Report (EDR) regarding the St. Johns County Shoreline Protection Project in St. Johns County, Florida. The EA addresses the effects to the human environment of the design refinements present in the EDR. The effects include potential effects to cultural resources under the National Environmental Policy Act and an assessment of adverse effects to historic properties under Section 106 of the National Historic Preservation Act of 1966. The design refinements include a new sand source, the S-1 borrow area, and new pipeline placement areas. The area of potential effects (APE) for the borrow area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The pipeline placement areas are located immediately offshore of existing, permitted beach nourishment locations (Enclosure 2).

The Corps contracted SEARCH, Inc. (SEARCH) to conduct a submerged cultural resources assessment survey of the S-1 borrow area portion of APE. The attached draft report, titled S*ubmerged Cultural Resource Assessment Survey for the St. Johns County Sand Borrow Area Project, St. Johns County, Florida,* details the project background, survey methods and materials, collected data, and concludes with data analysis based on the history of the project area and site conditions. The survey identified ten acoustic contacts that likely represent flotsam and jetsam of the type expected along active coastlines, as well as two low amplitude, short duration magnetic anomalies likely representing small, isolated ferrous objects. Sub-bottom profiler imagery illustrates an APE entirely devoid of buried reflectors indicative of paleo-landforms. Based on the above stated information, the Corps has determined that sand

borrow dredging of the proposed new S-1 borrow area poses no effect to historic properties.

In addition, the EDR identifies new pipeline placements to be necessary for areas of beach that require nourishment in South Ponte Vedra, Vilano Beach, and St. Augustine Beach (Enclosure 2). The Corps has determined the APE previously shared with your office by letter on July 28, 2021 requires expansion to include the pipeline placement area. This new pipeline placement area has not been subject to previous cultural resources assessment surveys. As such, the Corps is conducting submerged cultural resources assessment surveys of the APE for the previously unsurveyed pipeline placement area in accordance with applicable standards. The EDR does not modify the existing and previously approved sand placement areas, borrow areas, and pipeline corridors for projects.

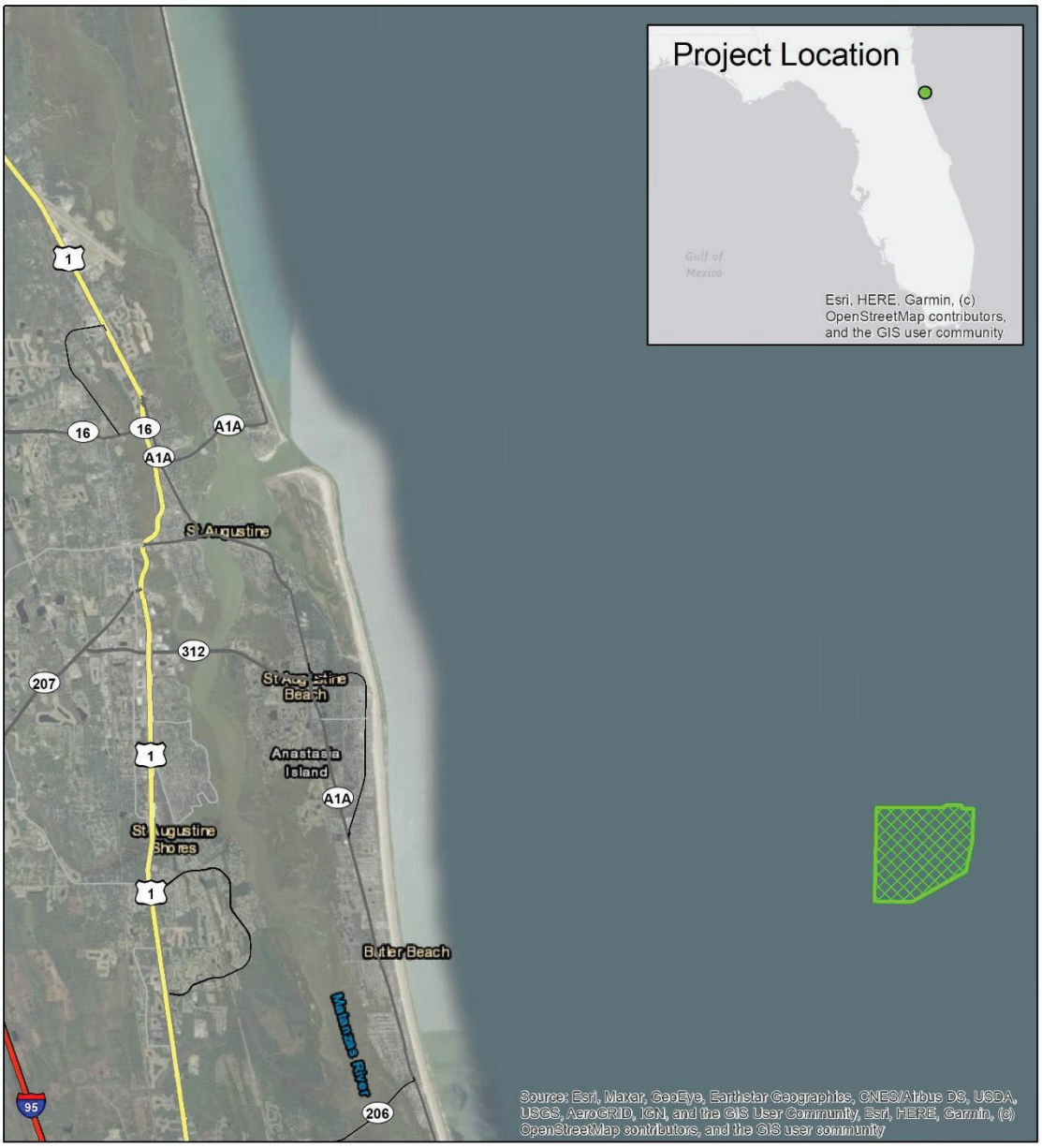
Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), as amended and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect to historic properties in the S-1 borrow area APE, as well as any comments on the enclosed draft report within 30 days from receipt of this letter. If there are any questions or comments, please contact Mr. Brian Seymour at (904) 232-3028 or by e-mail at Brian.R.Seymour@usace.army.mil.

Sincerely,

Digitally signed by DUNN.ANGELA.E.1300303923
Date: 2022.01.06 12:44:30 -05'00'

Angela E. Dunn
Chief, Environmental Branch

Enclosure



US Army Corps of Engineers ®
Jacksonville District

S - 1 Sand Borrow Study Area

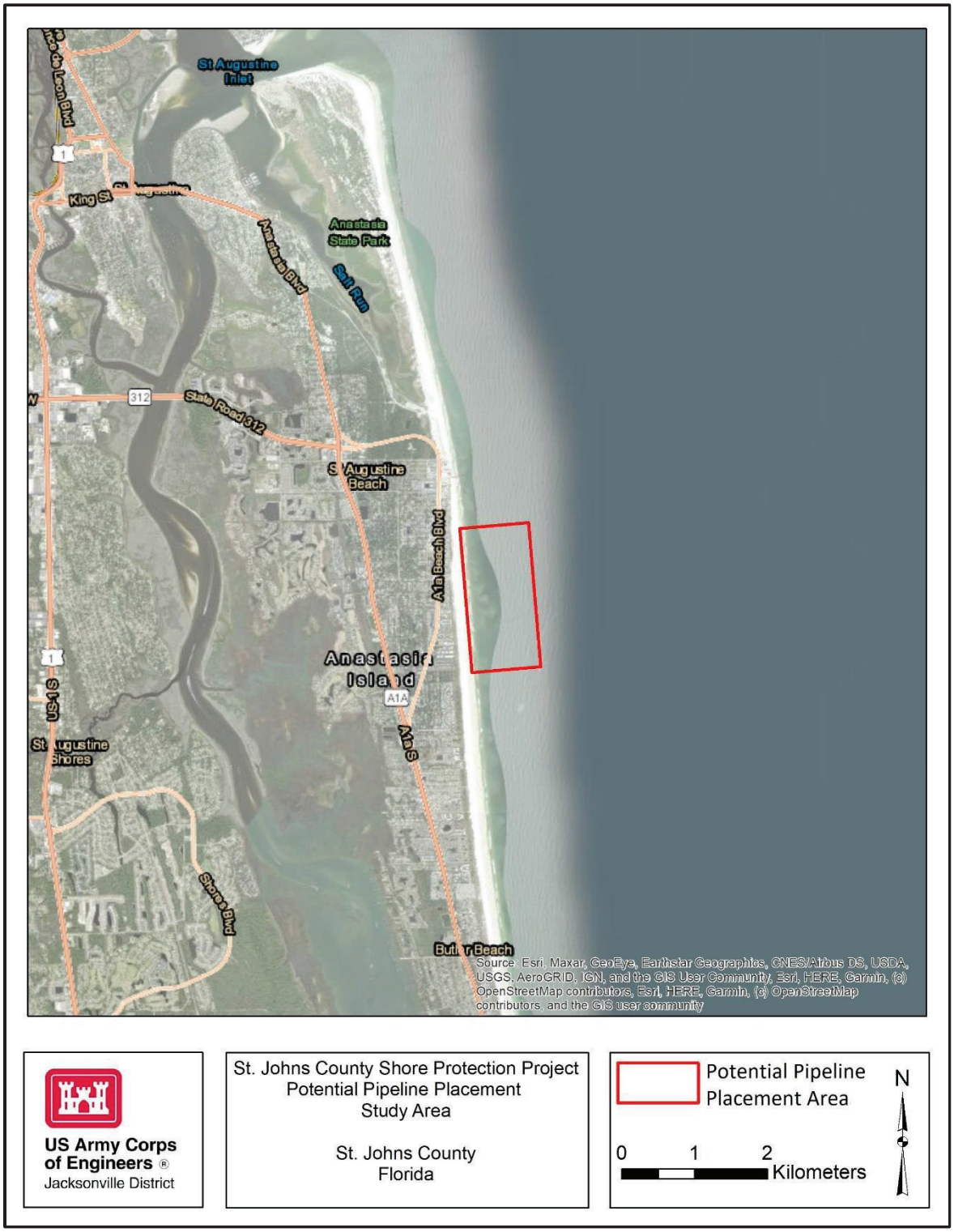
St. Johns County Florida

S -1 APE

0 1 2 3 4 Kilometers

N

Enclosure 1. St. Johns County Sand Borrow Area S-1 APE.



Enclosure 2. St. Johns County Shore Protection Project potential new pipeline placement study areas.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

December 21, 2021

Planning and Policy Division
Environmental Branch

Corain Lowe-Zepeda
Tribal Historic Preservation Officer
Muscogee (Creek) Nation
P.O. Box 580
Okmulgee, OK 74447

Re: Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project

Dear Ms. Lowe-Zepeda:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is drafting an Environmental Assessment (EA) and Engineering Documentation Report (EDR) regarding the St. Johns County Shoreline Protection Project in St. Johns County, Florida. The EA addresses the effects to the human environment of the design refinements present in the EDR. The effects include potential effects to cultural resources under the National Environmental Policy Act and an assessment of adverse effects to historic properties under Section 106 of the National Historic Preservation Act of 1966. The design refinements include a new sand source, the S-1 borrow area, and new pipeline placement areas. The area of potential effects (APE) for the borrow area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The pipeline placement areas are located immediately offshore of existing, permitted beach nourishment locations (Enclosure 2).

The Corps contracted SEARCH, Inc. (SEARCH) to conduct a submerged cultural resources assessment survey of the S-1 borrow area portion of APE. The attached draft report, titled S*ubmerged Cultural Resource Assessment Survey for the St. Johns County Sand Borrow Area Project, St. Johns County, Florida,* details the project background, survey methods and materials, collected data, and concludes with data analysis based on the history of the project area and site conditions. The survey identified ten acoustic contacts that likely represent flotsam and jetsam of the type expected along active coastlines, as well as two low amplitude, short duration magnetic anomalies likely representing small, isolated ferrous objects. Sub-bottom profiler imagery illustrates an APE entirely devoid of buried reflectors indicative of paleo-landforms. Based on the above stated information, the Corps has determined that sand

borrow dredging of the proposed new S-1 borrow area poses no effect to historic properties.

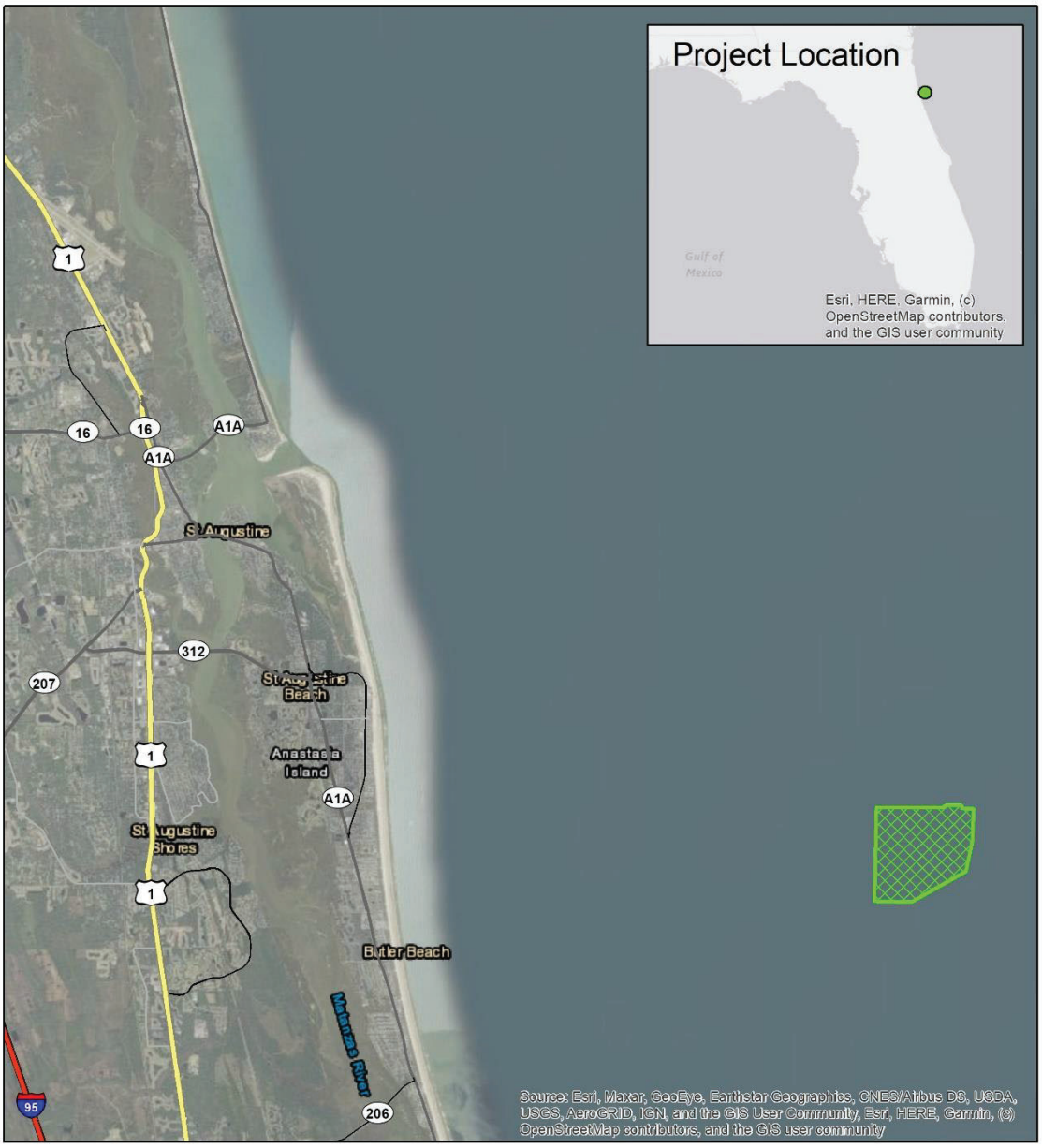
In addition, the EDR identifies new pipeline placements to be necessary for areas of beach that require nourishment in South Ponte Vedra, Vilano Beach, and St. Augustine Beach (Enclosure 2). The Corps has determined the APE previously shared with your office by letter on July 28, 2021 requires expansion to include the pipeline placement area. This new pipeline placement area has not been subject to previous cultural resources assessment surveys. As such, the Corps is conducting submerged cultural resources assessment surveys of the APE for the previously unsurveyed pipeline placement area in accordance with applicable standards. The EDR does not modify the existing and previously approved sand placement areas, borrow areas, and pipeline corridors for projects.

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), as amended and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect to historic properties in the S-1 borrow area APE, as well as any comments on the enclosed draft report within 30 days from receipt of this letter. If there are any questions or comments, please contact Mr. Brian Seymour at (904) 232-3028 or by e-mail at Brian.R.Seymour@usace.army.mil.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

Enclosure



US Army Corps of Engineers ®
Jacksonville District

S - 1 Sand Borrow Study Area

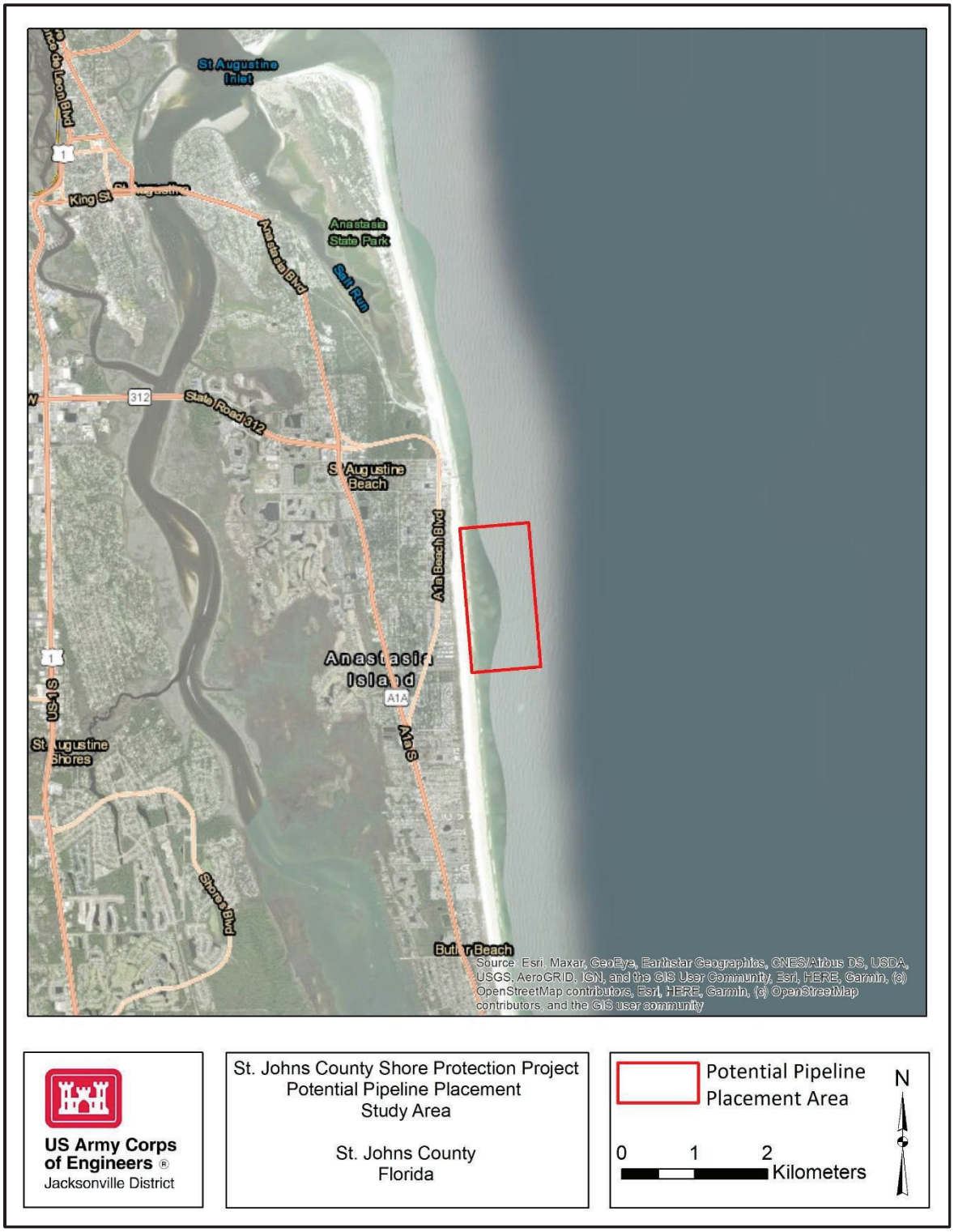
St. Johns County Florida

S -1 APE

0 1 2 3 4 Kilometers

N

Enclosure 1. St. Johns County Sand Borrow Area S-1 APE.



Enclosure 2. St. Johns County Shore Protection Project potential new pipeline placement study areas.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

December 21, 2021

Planning and Policy Division
Environmental Branch

David Frank
Tribal Historic Preservation Officer
Seminole Nation of Oklahoma
PO Box 1498
Wewoka, OK 74884

Re: Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project

Dear Mr. Frank:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is drafting an Environmental Assessment (EA) and Engineering Documentation Report (EDR) regarding the St. Johns County Shoreline Protection Project in St. Johns County, Florida. The EA addresses the effects to the human environment of the design refinements present in the EDR. The effects include potential effects to cultural resources under the National Environmental Policy Act and an assessment of adverse effects to historic properties under Section 106 of the National Historic Preservation Act of 1966. The design refinements include a new sand source, the S-1 borrow area, and new pipeline placement areas. The area of potential effects (APE) for the borrow area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The pipeline placement areas are located immediately offshore of existing, permitted beach nourishment locations (Enclosure 2).

The Corps contracted SEARCH, Inc. (SEARCH) to conduct a submerged cultural resources assessment survey of the S-1 borrow area portion of APE. The attached draft report, titled S*ubmerged Cultural Resource Assessment Survey for the St. Johns County Sand Borrow Area Project, St. Johns County, Florida,* details the project background, survey methods and materials, collected data, and concludes with data analysis based on the history of the project area and site conditions. The survey identified ten acoustic contacts that likely represent flotsam and jetsam of the type expected along active coastlines, as well as two low amplitude, short duration magnetic anomalies likely representing small, isolated ferrous objects. Sub-bottom profiler imagery illustrates an APE entirely devoid of buried reflectors indicative of paleo-landforms. Based on the above stated information, the Corps has determined that sand

borrow dredging of the proposed new S-1 borrow area poses no effect to historic properties.

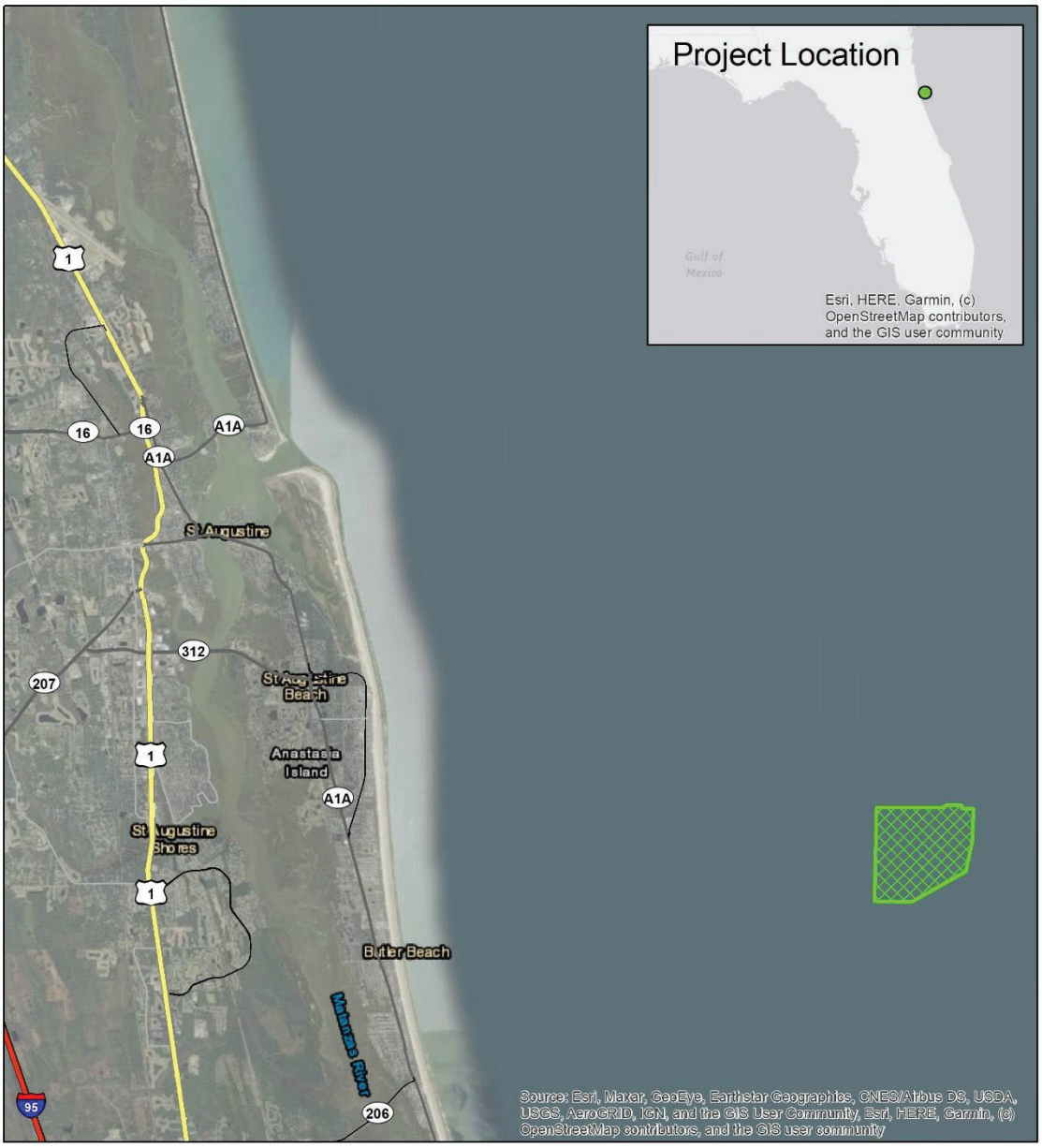
In addition, the EDR identifies new pipeline placements to be necessary for areas of beach that require nourishment in South Ponte Vedra, Vilano Beach, and St. Augustine Beach (Enclosure 2). The Corps has determined the APE previously shared with your office by letter on July 28, 2021 requires expansion to include the pipeline placement area. This new pipeline placement area has not been subject to previous cultural resources assessment surveys. As such, the Corps is conducting submerged cultural resources assessment surveys of the APE for the previously unsurveyed pipeline placement area in accordance with applicable standards. The EDR does not modify the existing and previously approved sand placement areas, borrow areas, and pipeline corridors for projects.

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), as amended and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect to historic properties in the S-1 borrow area APE, as well as any comments on the enclosed draft report within 30 days from receipt of this letter. If there are any questions or comments, please contact Mr. Brian Seymour at (904) 232-3028 or by e-mail at Brian.R.Seymour@usace.army.mil.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

Enclosure



US Army Corps of Engineers ®
Jacksonville District

S - 1 Sand Borrow Study Area

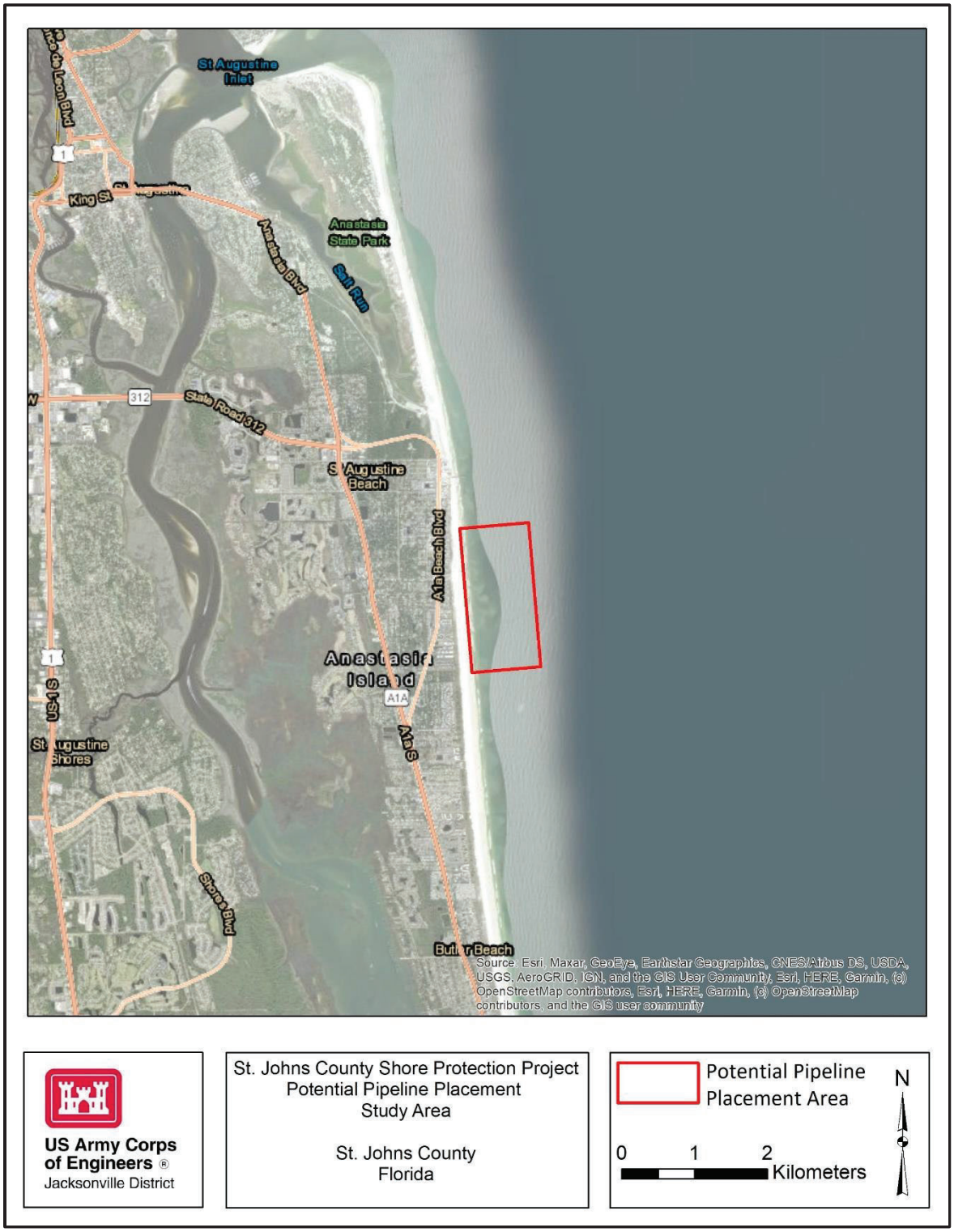
St. Johns County Florida

S -1 APE

0 1 2 3 4 Kilometers

N

Enclosure 1. St. Johns County Sand Borrow Area S-1 APE.



Enclosure 2. St. Johns County Shore Protection Project potential new pipeline placement study areas.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

December 21, 2021

Planning and Policy Division
Environmental Branch

Mr. Gaylen Cloud
Tribal Historic Preservation Officer (Acting)
Thlopthlocco Tribal Town
PO Box 188
Okemah, OK 74859

Re: Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project

Dear Mr. Cloud:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is drafting an Environmental Assessment (EA) and Engineering Documentation Report (EDR) regarding the St. Johns County Shoreline Protection Project in St. Johns County, Florida. The EA addresses the effects to the human environment of the design refinements present in the EDR. The effects include potential effects to cultural resources under the National Environmental Policy Act and an assessment of adverse effects to historic properties under Section 106 of the National Historic Preservation Act of 1966. The design refinements include a new sand source, the S-1 borrow area, and new pipeline placement areas. The area of potential effects (APE) for the borrow area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The pipeline placement areas are located immediately offshore of existing, permitted beach nourishment locations (Enclosure 2).

The Corps contracted SEARCH, Inc. (SEARCH) to conduct a submerged cultural resources assessment survey of the S-1 borrow area portion of APE. The attached draft report, titled S*ubmerged Cultural Resource Assessment Survey for the St. Johns County Sand Borrow Area Project, St. Johns County, Florida,* details the project background, survey methods and materials, collected data, and concludes with data analysis based on the history of the project area and site conditions. The survey identified ten acoustic contacts that likely represent flotsam and jetsam of the type expected along active coastlines, as well as two low amplitude, short duration magnetic anomalies likely representing small, isolated ferrous objects. Sub-bottom profiler imagery illustrates an APE entirely devoid of buried reflectors indicative of paleo-landforms. Based on the above stated information, the Corps has determined that sand

borrow dredging of the proposed new S-1 borrow area poses no effect to historic properties.

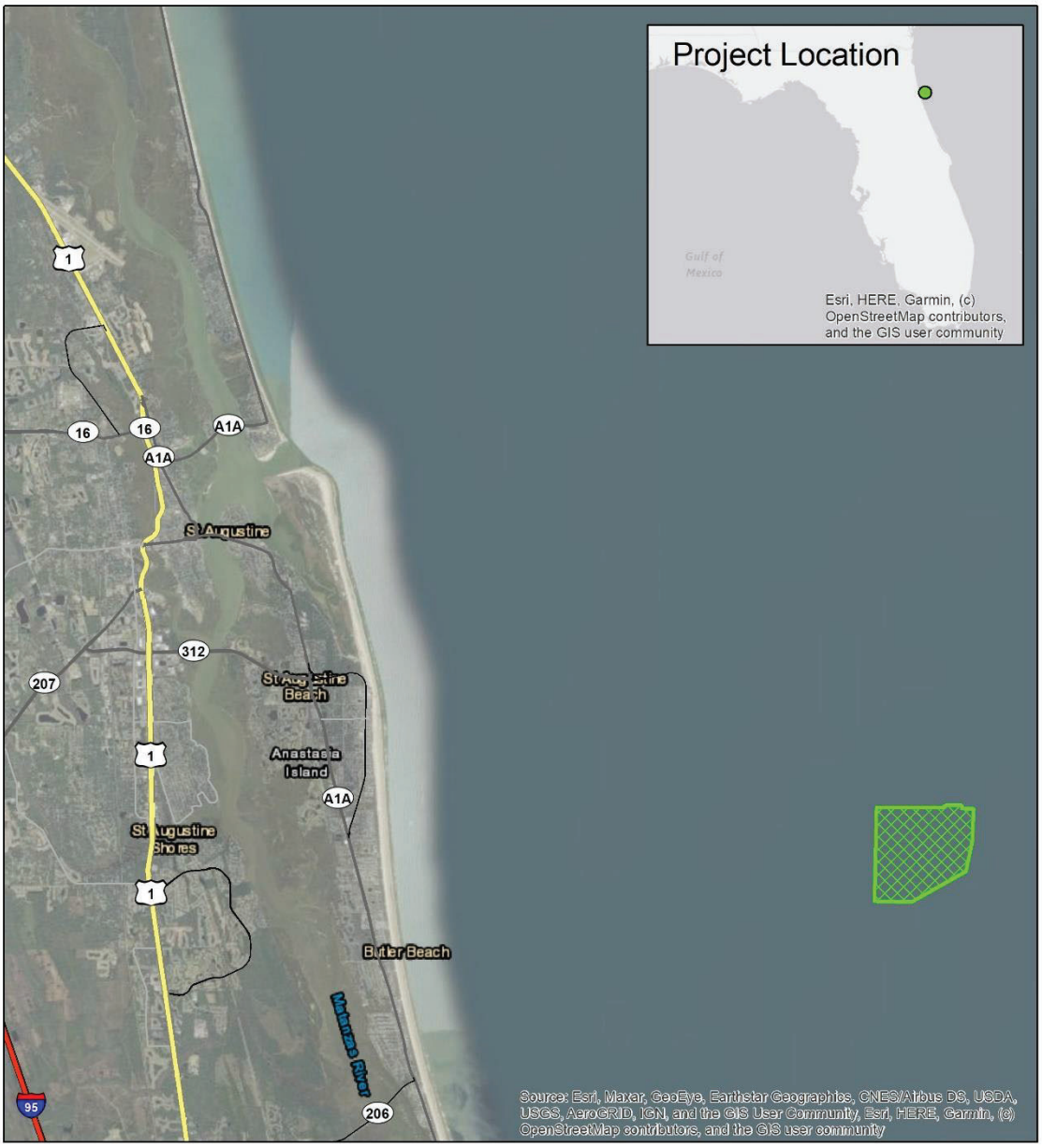
In addition, the EDR identifies new pipeline placements to be necessary for areas of beach that require nourishment in South Ponte Vedra, Vilano Beach, and St. Augustine Beach (Enclosure 2). The Corps has determined the APE previously shared with your office by letter on July 28, 2021 requires expansion to include the pipeline placement area. This new pipeline placement area has not been subject to previous cultural resources assessment surveys. As such, the Corps is conducting submerged cultural resources assessment surveys of the APE for the previously unsurveyed pipeline placement area in accordance with applicable standards. The EDR does not modify the existing and previously approved sand placement areas, borrow areas, and pipeline corridors for projects.

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), as amended and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect to historic properties in the S-1 borrow area APE, as well as any comments on the enclosed draft report within 30 days from receipt of this letter. If there are any questions or comments, please contact Mr. Brian Seymour at (904) 232-3028 or by e-mail at Brian.R.Seymour@usace.army.mil.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

Enclosure



US Army Corps of Engineers ®
Jacksonville District

S - 1 Sand Borrow Study Area

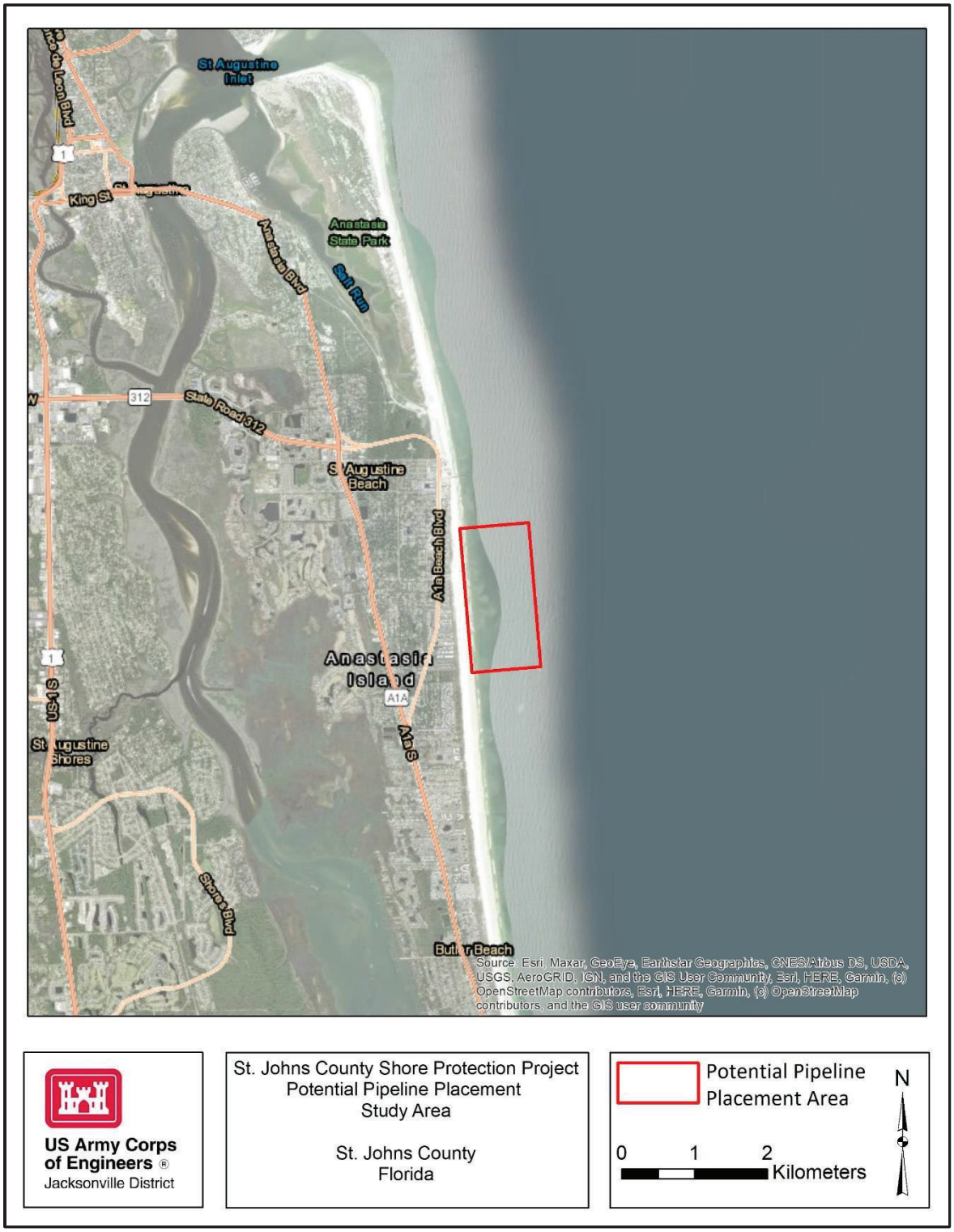
St. Johns County Florida

S -1 APE

0 1 2 3 4 Kilometers

N

Enclosure 1. St. Johns County Sand Borrow Area S-1 APE.



Enclosure 2. St. Johns County Shore Protection Project potential new pipeline placement study areas.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

December 21, 2021

Planning and Policy Division
Environmental Branch

Kevin Donaldson
NAGPRA/Section 106 Representative
Miccosukee Tribe of Indians of Florida
P.O. Box 440021
Tamiami Station
Miami, FL 33144

Re: Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project

Dear Mr. Donaldson:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is drafting an Environmental Assessment (EA) and Engineering Documentation Report (EDR) regarding the St. Johns County Shoreline Protection Project in St. Johns County, Florida. The EA addresses the effects to the human environment of the design refinements present in the EDR. The effects include potential effects to cultural resources under the National Environmental Policy Act and an assessment of adverse effects to historic properties under Section 106 of the National Historic Preservation Act of 1966. The design refinements include a new sand source, the S-1 borrow area, and new pipeline placement areas. The area of potential effects (APE) for the borrow area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The pipeline placement areas are located immediately offshore of existing, permitted beach nourishment locations (Enclosure 2).

The Corps contracted SEARCH, Inc. (SEARCH) to conduct a submerged cultural resources assessment survey of the S-1 borrow area portion of APE. The attached draft report, titled S*ubmerged Cultural Resource Assessment Survey for the St. Johns County Sand Borrow Area Project, St. Johns County, Florida,* details the project background, survey methods and materials, collected data, and concludes with data analysis based on the history of the project area and site conditions. The survey identified ten acoustic contacts that likely represent flotsam and jetsam of the type expected along active coastlines, as well as two low amplitude, short duration magnetic anomalies likely representing small, isolated ferrous objects. Sub-bottom profiler imagery illustrates an APE entirely devoid of buried reflectors indicative of paleo-landforms. Based on the above stated information, the Corps has determined that sand

borrow dredging of the proposed new S-1 borrow area poses no effect to historic properties.

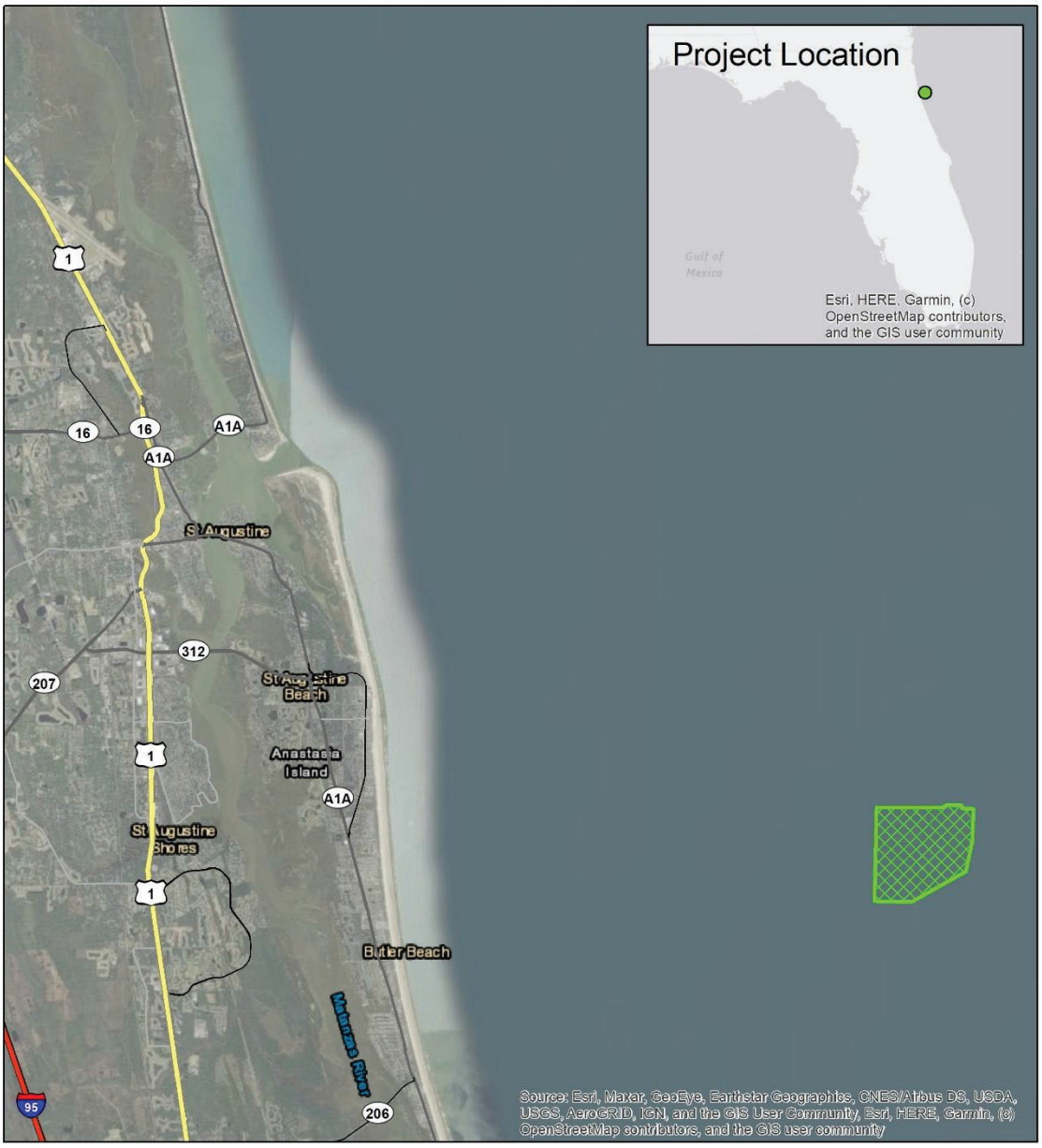
In addition, the EDR identifies new pipeline placements to be necessary for areas of beach that require nourishment in South Ponte Vedra, Vilano Beach, and St. Augustine Beach (Enclosure 2). The Corps has determined the APE previously shared with your office by letter on July 28, 2021 requires expansion to include the pipeline placement area. This new pipeline placement area has not been subject to previous cultural resources assessment surveys. As such, the Corps is conducting submerged cultural resources assessment surveys of the APE for the previously unsurveyed pipeline placement area in accordance with applicable standards. The EDR does not modify the existing and previously approved sand placement areas, borrow areas, and pipeline corridors for projects.

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), as amended and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect to historic properties in the S-1 borrow area APE, as well as any comments on the enclosed draft report within 30 days from receipt of this letter. If there are any questions or comments, please contact Mr. Brian Seymour at (904) 232-3028 or by e-mail at Brian.R.Seymour@usace.army.mil.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

Enclosure



US Army Corps of Engineers ®
Jacksonville District

S - 1 Sand Borrow Study Area

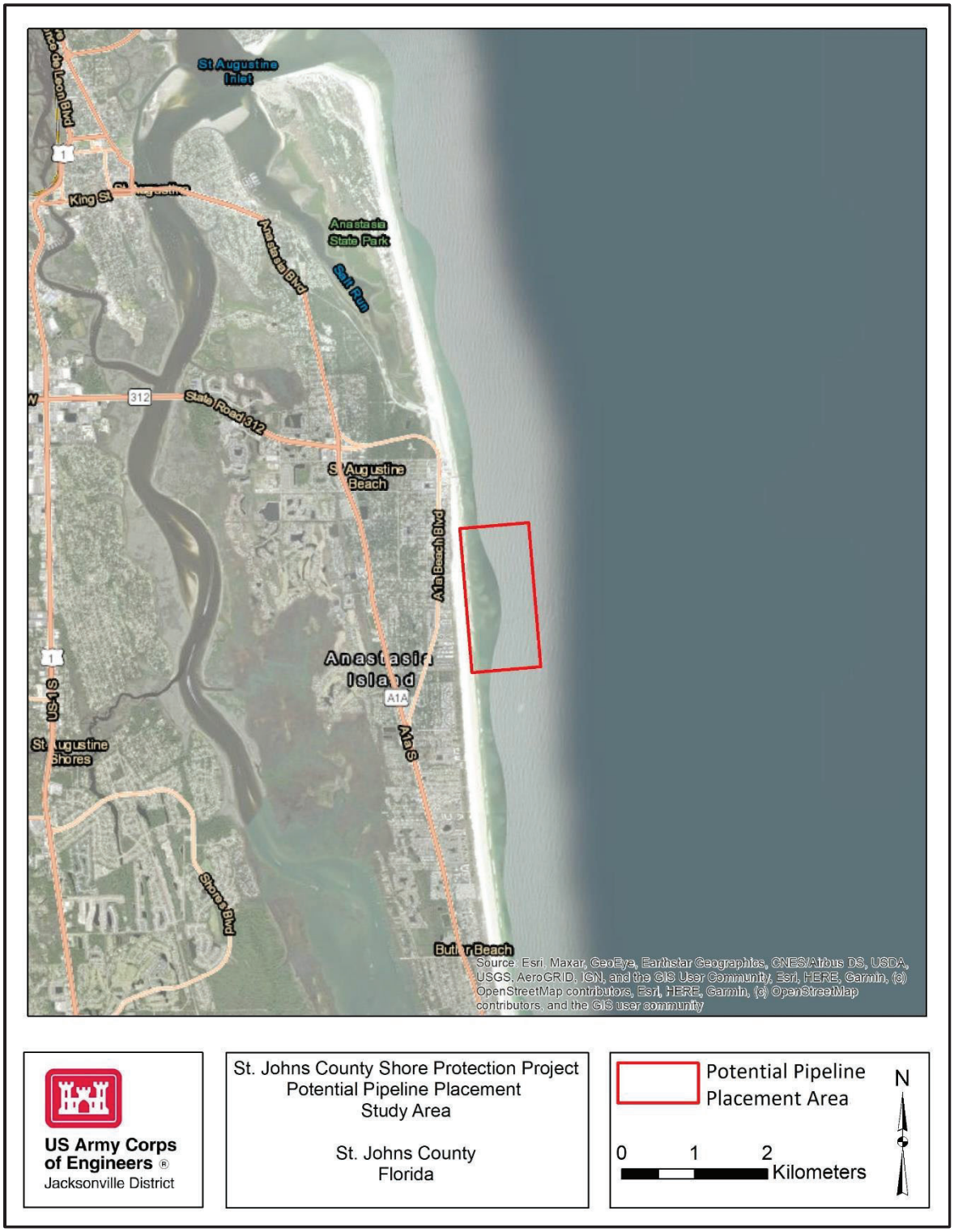
St. Johns County Florida

S -1 APE

0 1 2 3 4 Kilometers

N

Enclosure 1. St. Johns County Sand Borrow Area S-1 APE.



Enclosure 2. St. Johns County Shore Protection Project potential new pipeline placement study areas.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

December 21, 2021

Planning and Policy Division
Environmental Branch

Dr. Paul N. Backhouse, Ph.D.
Senior Director, Heritage, Environment, Resources Office
Seminole Tribe of Florida
Ah-Tah-Thi-Ki Museum
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440

Re: Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project

Dear Dr. Backhouse:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is drafting an Environmental Assessment (EA) and Engineering Documentation Report (EDR) regarding the St. Johns County Shoreline Protection Project in St. Johns County, Florida. The EA addresses the effects to the human environment of the design refinements present in the EDR. The effects include potential effects to cultural resources under the National Environmental Policy Act and an assessment of adverse effects to historic properties under Section 106 of the National Historic Preservation Act of 1966. The design refinements include a new sand source, the S-1 borrow area, and new pipeline placement areas. The area of potential effects (APE) for the borrow area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The pipeline placement areas are located immediately offshore of existing, permitted beach nourishment locations (Enclosure 2).

The Corps contracted SEARCH, Inc. (SEARCH) to conduct a submerged cultural resources assessment survey of the S-1 borrow area portion of APE. The attached draft report, titled S*ubmerged Cultural Resource Assessment Survey for the St. Johns County Sand Borrow Area Project, St. Johns County, Florida,* details the project background, survey methods and materials, collected data, and concludes with data analysis based on the history of the project area and site conditions. The survey identified ten acoustic contacts that likely represent flotsam and jetsam of the type expected along active coastlines, as well as two low amplitude, short duration magnetic anomalies likely representing small, isolated ferrous objects. Sub-bottom profiler imagery illustrates an APE entirely devoid of buried reflectors indicative of paleo-landforms. Based on the above stated information, the Corps has determined that sand

borrow dredging of the proposed new S-1 borrow area poses no effect to historic properties.

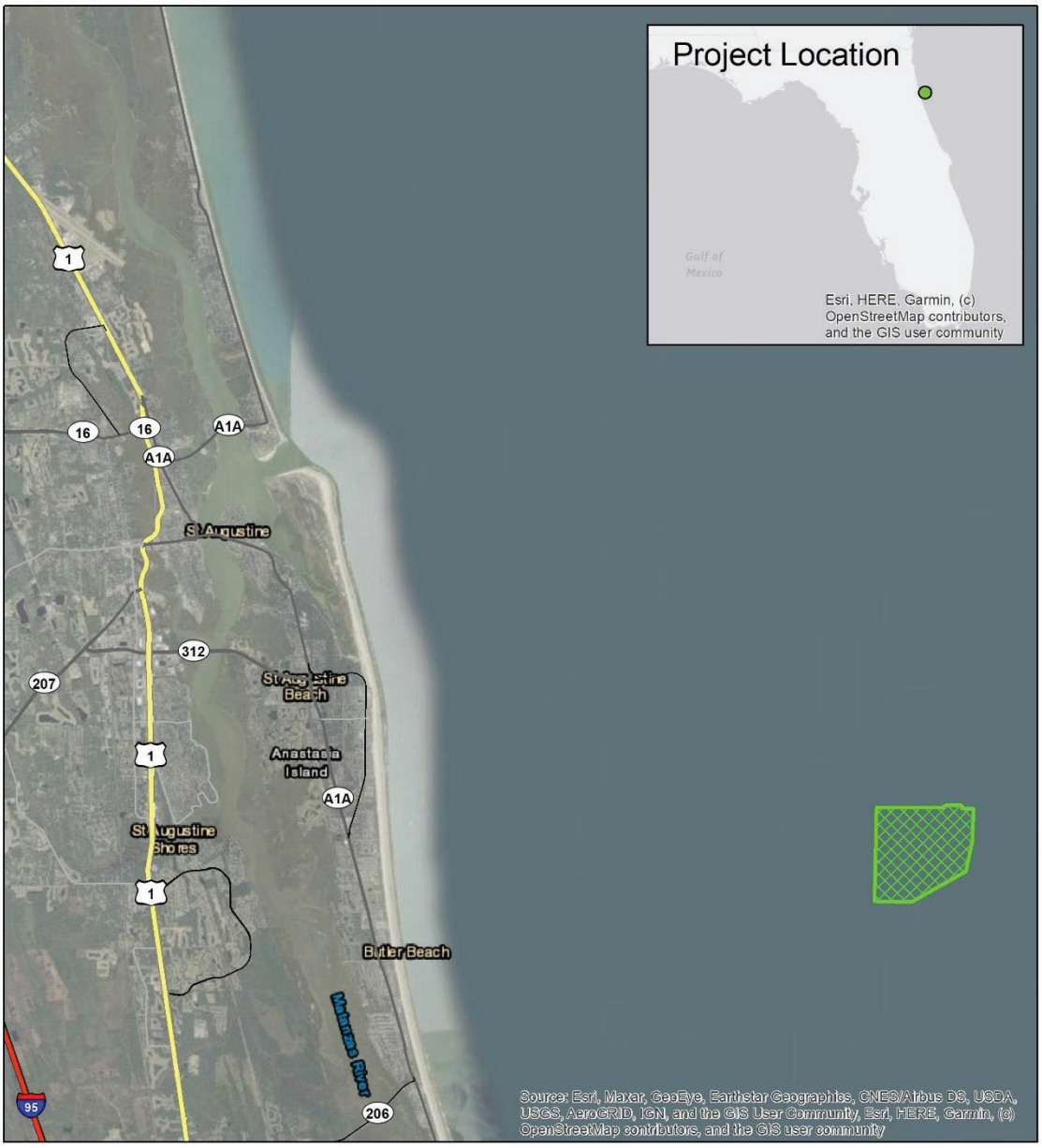
In addition, the EDR identifies new pipeline placements to be necessary for areas of beach that require nourishment in South Ponte Vedra, Vilano Beach, and St. Augustine Beach (Enclosure 2). The Corps has determined the APE previously shared with your office by letter on July 28, 2021 requires expansion to include the pipeline placement area. This new pipeline placement area has not been subject to previous cultural resources assessment surveys. As such, the Corps is conducting submerged cultural resources assessment surveys of the APE for the previously unsurveyed pipeline placement area in accordance with applicable standards. The EDR does not modify the existing and previously approved sand placement areas, borrow areas, and pipeline corridors for projects.

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), as amended and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect to historic properties in the S-1 borrow area APE, as well as any comments on the enclosed draft report within 30 days from receipt of this letter. If there are any questions or comments, please contact Mr. Brian Seymour at (904) 232-3028 or by e-mail at Brian.R.Seymour@usace.army.mil.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

Enclosure



US Army Corps of Engineers ®
Jacksonville District

S - 1 Sand Borrow Study Area

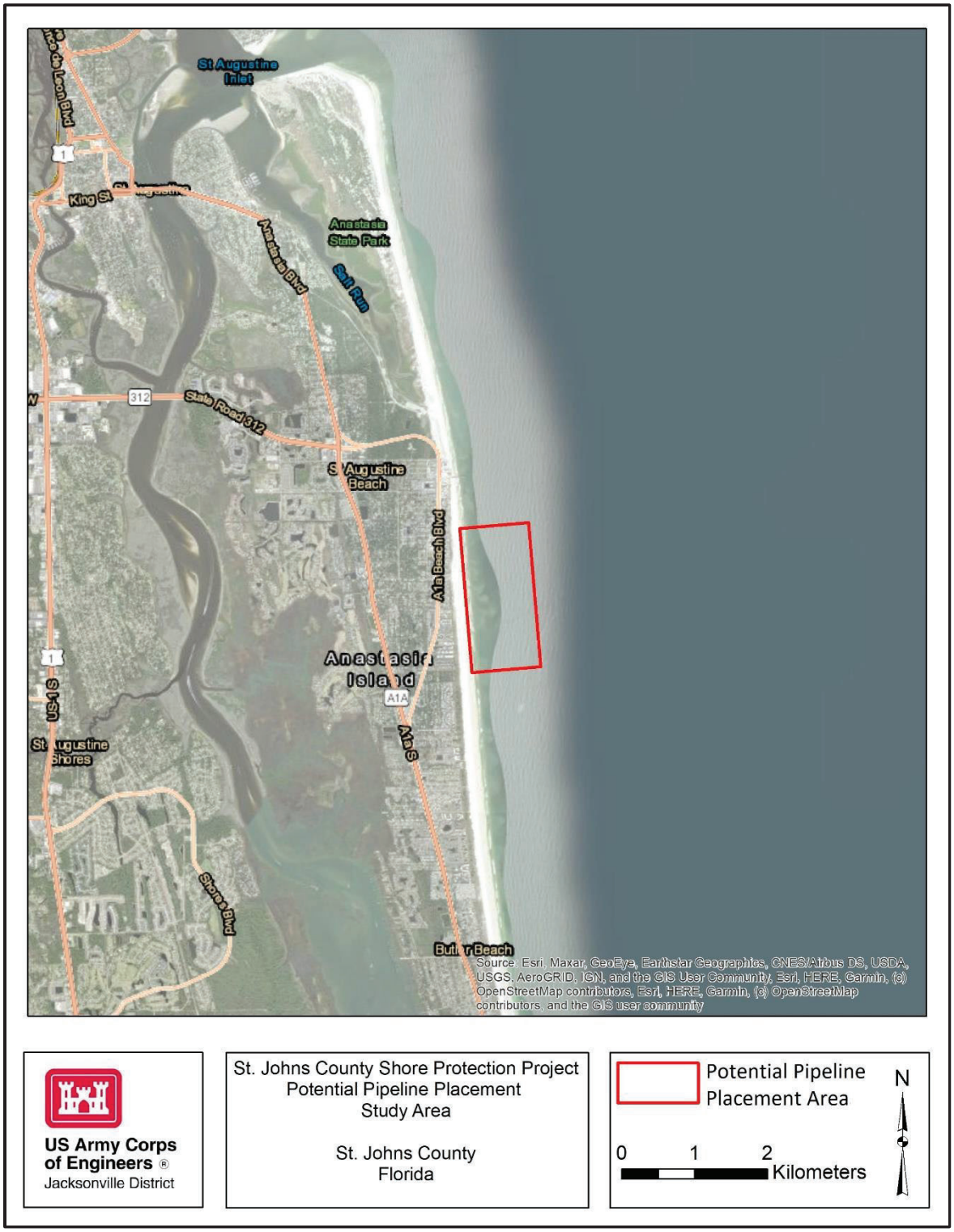
St. Johns County Florida

S -1 APE

0 1 2 3 4 Kilometers

N

Enclosure 1. St. Johns County Sand Borrow Area S-1 APE.



Enclosure 2. St. Johns County Shore Protection Project potential new pipeline placement study areas.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

December 21, 2021

Planning and Policy Division
Environmental Branch

Tim Parsons, Ph.D., SHPO
Division of Historical Resources
State Historic Preservation Officer
500 South Bronough Street
Tallahassee, Florida 32399-0250

Re: Additional Offshore Borrow Areas – St. Johns County, Florida Shore Protection Project

Dear Dr. Parsons:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is drafting an Environmental Assessment (EA) and Engineering Documentation Report (EDR) regarding the St. Johns County Shoreline Protection Project in St. Johns County, Florida. The EA addresses the effects to the human environment of the design refinements present in the EDR. The effects include potential effects to cultural resources under the National Environmental Policy Act and an assessment of adverse effects to historic properties under Section 106 of the National Historic Preservation Act of 1966. The design refinements include a new sand source, the S-1 borrow area, and new pipeline placement areas. The area of potential effects (APE) for the borrow area is centered about 11 miles southeast from the St. Augustine Inlet in Bureau of Ocean Energy Management (BOEM) managed waters and encompasses an area of approximately 1,233 acres (Enclosure 1). The pipeline placement areas are located immediately offshore of existing, permitted beach nourishment locations (Enclosure 2).

The Corps contracted SEARCH, Inc. (SEARCH) to conduct a submerged cultural resources assessment survey of the S-1 borrow area portion of APE. The attached draft report, titled S*ubmerged Cultural Resource Assessment Survey for the St. Johns County Sand Borrow Area Project, St. Johns County, Florida,* details the project background, survey methods and materials, collected data, and concludes with data analysis based on the history of the project area and site conditions. The survey identified ten acoustic contacts that likely represent flotsam and jetsam of the type expected along active coastlines, as well as two low amplitude, short duration magnetic anomalies likely representing small, isolated ferrous objects. Sub-bottom profiler imagery illustrates an APE entirely devoid of buried reflectors indicative of paleo-landforms. Based on the above stated information, the Corps has determined that sand

borrow dredging of the proposed new S-1 borrow area poses no effect to historic properties.

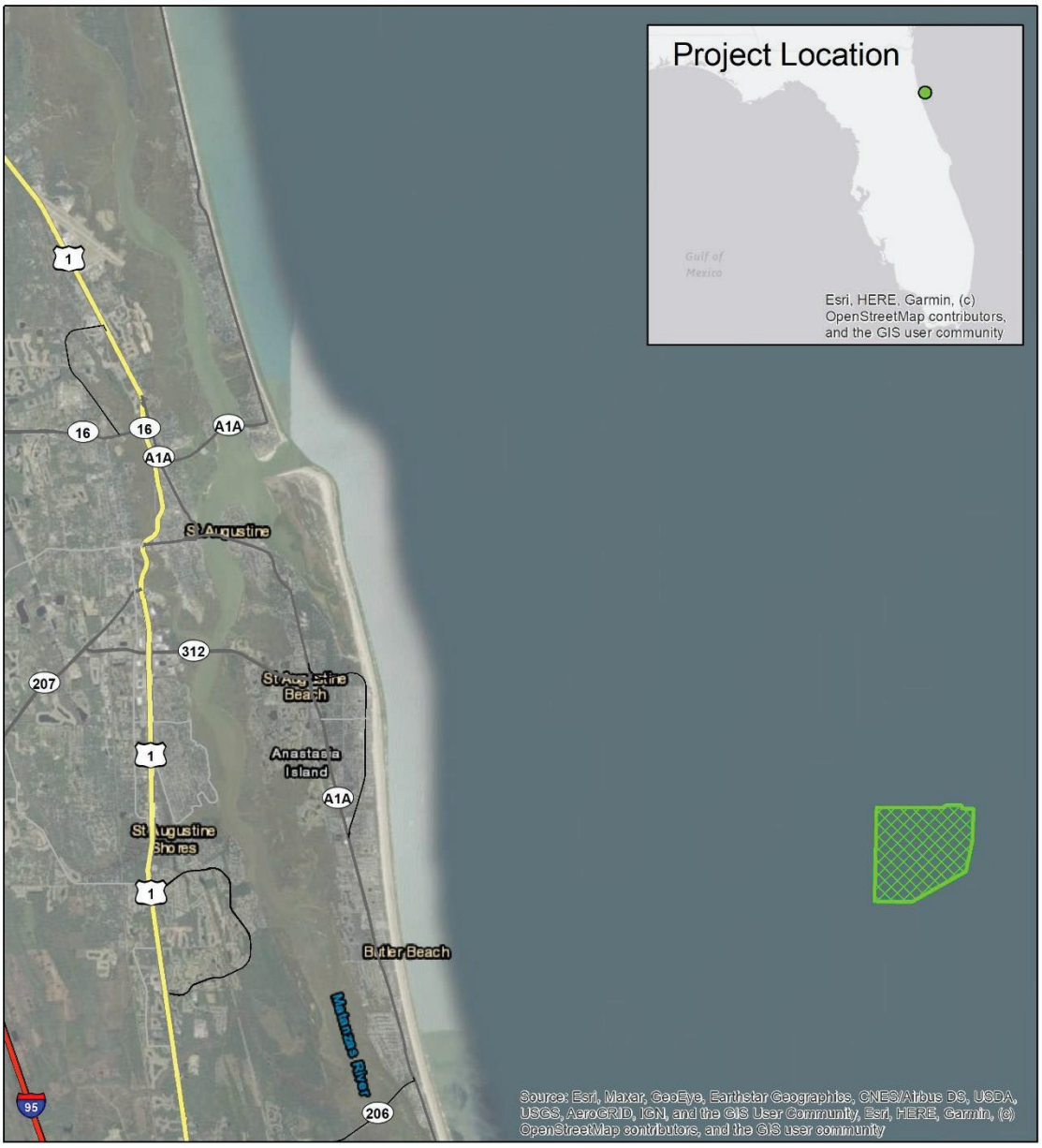
In addition, the EDR identifies new pipeline placements to be necessary for areas of beach that require nourishment in South Ponte Vedra, Vilano Beach, and St. Augustine Beach (Enclosure 2). The Corps has determined the APE previously shared with your office by letter on July 28, 2021 requires expansion to include the pipeline placement area. This new pipeline placement area has not been subject to previous cultural resources assessment surveys. As such, the Corps is conducting submerged cultural resources assessment surveys of the APE for the previously unsurveyed pipeline placement area in accordance with applicable standards. The EDR does not modify the existing and previously approved sand placement areas, borrow areas, and pipeline corridors for projects.

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), as amended and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect to historic properties in the S-1 borrow area APE, as well as any comments on the enclosed draft report within 30 days from receipt of this letter. If there are any questions or comments, please contact Mr. Brian Seymour at (904) 232-3028 or by e-mail at Brian.R.Seymour@usace.army.mil.

Sincerely,

Angela E. Dunn
Chief, Environmental Branch

Enclosure



US Army Corps of Engineers ®
Jacksonville District

S - 1 Sand Borrow Study Area

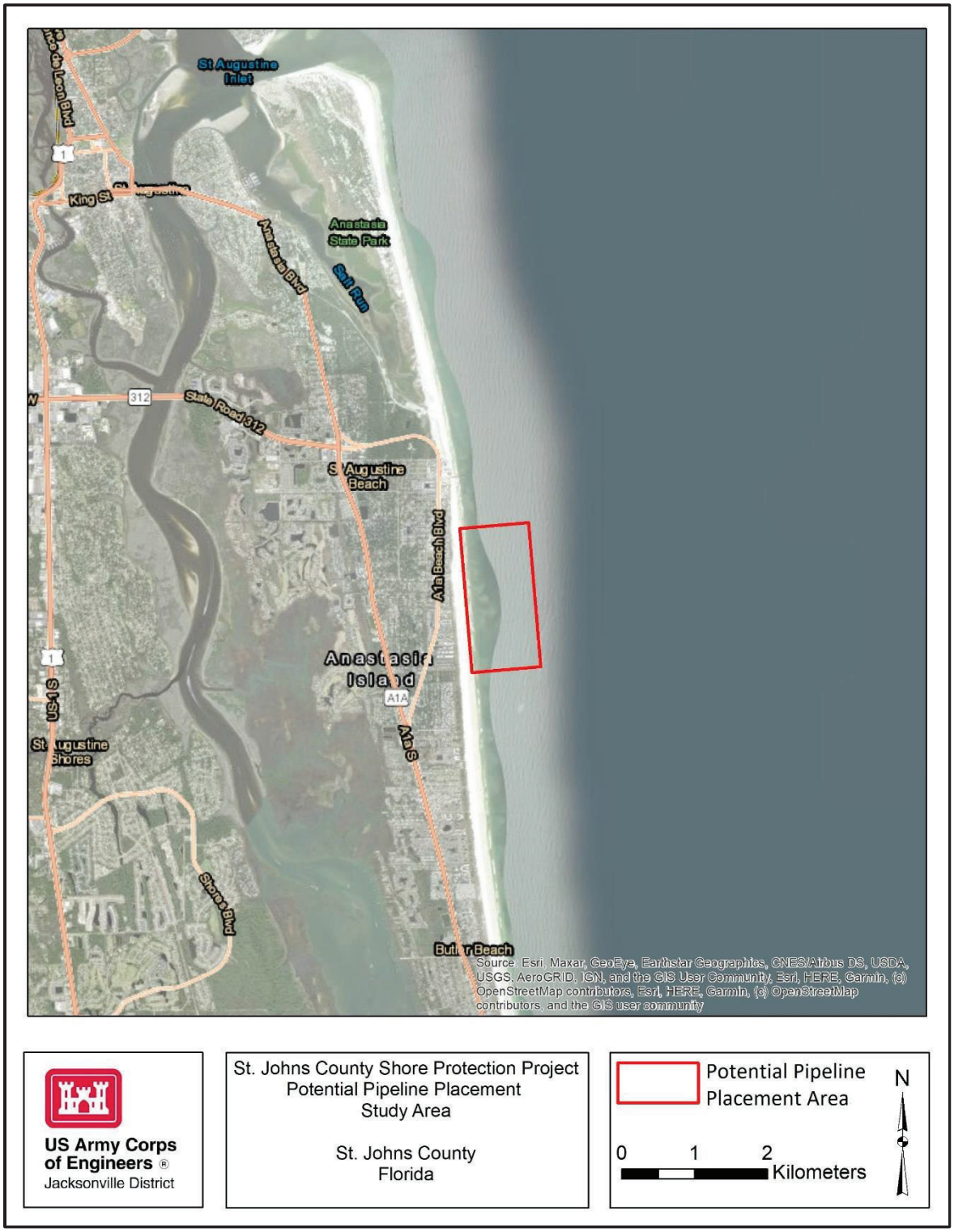
St. Johns County Florida

S -1 APE

0 1 2 3 4 Kilometers

N

Enclosure 1. St. Johns County Sand Borrow Area S-1 APE.



Enclosure 2. St. Johns County Shore Protection Project potential new pipeline placement study areas.

FLORIDA DEPARTMENT of STATE

RON DESANTIS
Governor

LAUREL M. LEE
Secretary of State

Brian R. Seymour
Jacksonville Permits Section
Post Office Box 4970
Jacksonville, Florida, 32232

February 15, 2022

RE: DHR Project File No.: 2022-0226, Received by DHR: January 7, 2021
Project: *Submerged CRAS for Sand Borrow Area Project Additional Offshore Borrow Areas Florida Shore Protection Project*
County: St. Johns

Mr. Seymour:

The Florida State Historic Preservation Officer reviewed the referenced report for completeness and sufficiency in accordance with *Chapter 1A-46*, as well as possible effects on historic properties listed, or eligible for listing, on the *National Register of Historic Places.* The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, and its implementing regulations in *36 CFR Part 800: Protection of Historic Properties.*

Our office reviewed the information provided by the applicant in the referenced report. Based on our review of the report, we concur that the proposed undertaking will have no effect to historic properties listed, or eligible for listing, in the National Register of Historic Places. The referenced report is considered complete and sufficient.

If you have any questions, please contact Joseph Bomberger, Historic Preservationist, by email at *Joseph.Bomberger@dos.myflorida.com*.

Sincerely,

Kelly L Chase
For

Timothy A Parsons, Ph.D.
Director, Division of Historical Resources
& State Historic Preservation Officer

From:	Stahl, Chris
To:	Pecora, Darren J CIV USARMY CESAJ (USA)
Cc:	State_Clearinghouse
Subject:	[URL Verdict: Suspect][Non-DoD Source] State Clearance Letter for FL202201249440C - Draft EA, Additional Offshore Borrow Areas –Coastal Storm Risk Management Project (South Ponte Vedra Beach And Vilano Beach Reaches), St Johns County, Florida.
Date:	Friday, March 18, 2022 3:16:32 PM

March 18, 2022

Darren J. Pecora
United States Army Corps of Engineers
701 San Marco Boulevard
Jacksonville, Florida 32207-8175

RE: Department of Defense, Office of the Chief of Engineers, Department of the Army, BEACH EROSION CONTROL PROJECTS, Draft Environmental Assessment Additional Offshore Borrow Areas – Shore Protection Project - Coastal Storm Risk Management Project (South Ponte Vedra Beach and Vilano Beach Reaches), St Johns County, Florida
SAI # FL202201249440C

Dear Darren:

Florida State Clearinghouse staff has reviewed the proposal under the following authorities: Presidential Executive Order 12372; § 403.061(42), Florida Statutes; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

Please contact Kim Mann, (904) 256-1564 of the Florida Department of Environmental Protection's Northeast District Permitting Program to request a permit determination for this project.

Based on the information submitted and minimal project impacts, the state has no objections to the subject project and therefore, it is consistent with the Florida Coastal Management Program (FCMP).

Thank you for the opportunity to review the proposed project. If you have any questions or need further assistance, please don't hesitate to contact me at (850) 717-9076.

Sincerely,

Chris Stahl

Chris Stahl, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection

3800 Commonwealth Blvd., M.S. 47
Tallahassee, FL 32399-2400
ph. (850) 717-9076
State.Clearinghouse@floridadep.gov