

STUDY INITIATION FACT SHEET

1. **Proposed Project Name:** St. Catherines Island, Georgia Streambank Protection Study

2. **Congressional Delegation:**

Senators: Johnny Isakson (R-GA) and David Perdue (R-GA)

Representative: Earl L. "Buddy" Carter (R), 1st Congressional District (GA-01)

3. **Site Visit Summary:**

At the request of Royce Hayes, Senior Director for Development, Research, Conservation, Education at the St. Catherines Island Foundation, Inc. (SCIF), an interdisciplinary team from Savannah District team visited St. Catherines Island (SCI) on 14 July 2017. The team went to investigate bank erosion described in the Foundation's request letter and assess whether the situation could be improved through the Continuing Authorities Program.

St. Catherines Island (SCI) is situated about 35 miles south of Savannah. It is one of Georgia's barrier islands and is made up of 22,000 acres including salt marsh, barrier beaches, maritime forests of different compositions depending on elevation, and old-field successional forests. The area between the Atlantic Intracoastal Waterway and the ocean is about 14,000 acres with the remaining acreage lying between the AIWW and the North and South Newport Rivers. SCI occupies 10 percent of Georgia's 110-mile coast. A third of the U.S. Atlantic seaboard salt marsh is along the Georgia coast, and St. Catherines Island sits in the middle of the most pristine of those marshes.

The team investigated an area toward the southern end of the island along Wamassee Creek. Mr. Hayes showed the team where historic and cultural resources and the ecosystem are threatened by streambank erosion along Wamassee Creek. The bank erosion threatens several features, including the following:

- thousands of years of Native American history
- Georgia's most important Spanish colonial settlement, where the oldest Catholic Church in the U.S. once stood
- sacred burial grounds
- maritime forest
- brackish marsh
- oyster reefs

Wamassee Creek is a meandering tidal creek approximately 50 to 65 feet in width. Each day, there are two high and low tides that fluctuate around 8 feet. Based on a review of historical aerial imagery, erosion rates in the subject area are estimated at around 3-6

feet per year along roughly 2,600 feet of bank line. Figure 1 shows the length of the eroding streambank. Figure 2 shows 12 palm trees that encircle the 16th century site of the church of Mission Santa Catalina de Guale where archeologists discovered over 400 buried Native Americans. Figure 3 is a picture of the Wamassee Creek; the tidal creek causing the erosion. Figure 4 is a representation of the bank erosion near the Mission site.

Due to the historic and cultural significance of this portion of the island, the District and the potential sponsor do not recommend cutting into the bank. The erosion occurring along Wamassee Creek has already started to expose Native American artifacts and gravesites. To avoid further disruption of the cultural resources at the site, the team recommends placing erosion protection along the face of the exposed bluff and into Wamassee Creek.

The District believes this project is technically feasible, eligible under the Continuing Authorities Program, and implementable. The team believes that the creek's medium-width and large tidal range will present a challenge for creek-side construction access. Construction access from land would require road construction and probably substantial cost to haul materials from the boat dock that is located approximately 3 miles north.

The District Project Manager briefed the sponsor on the study and project cost sharing requirements, project limits, Land, Easements, Rights-Of-Way, Relocation, and Disposal Areas, (LERRD), and Operation and Maintenance, Repair, Replacement and Rehabilitation (OMRR&R) requirements. The sponsor supports the project and is willing to cost share.



St. Catherines Island Erosion

Figure 1 : Eroding Bankline



Figure 2 : Mission Santa Catalina de Guale Site



Figure 3 : Tidal Creek Causing Erosion



Figure 4 : Representative Bank Erosion near Mission



Figure 5 : Fallen Tree near Burial Mound

4. Problem or Opportunity:

Section 14: Section 14 authorizes the Federal government to investigate methods to protect facilities owned by non-profit organizations that are used to provide public services that are open to all on equal terms. The study would address ways to reduce the imminent threat of the tidal erosion along approximately 1,500 feet of streambank along Wamassee Creek. The site contains valuable historic, archaeological, and ecological resources. St. Catherines Island is listed on the National Register of Historical Places. Over a million artifacts recovered from the site by the American Museum of Natural History in New York City are stored and exhibited at the Fernbank Museum of Natural History in Atlanta, Georgia.

Section 206: Section 206 authorizes the Federal government to develop ecosystem restoration and protection projects that improve the quality of the environment, are in the public interest, and are cost effective. The study would investigate methods to restore and protect the significant national, regional, and local ecosystem along approximately 2,600 feet of streambank.

The District believes that there are technically feasible ways to restore and protect the streambank of the Wamassee Creek from being eroded to prevent the loss of maritime forest. Maritime forest is a limited and rare coastal resource. The State of Georgia identifies this forest type as a habitat of concern. Georgia Department of Natural Resources (GA DNR) indicates that this shoreline, which protects the maritime forest, is the most highly eroding streambank on the coast of Georgia (Figure 6). SCl's maritime forest is at risk of being lost because it's far removed from a sediment source and is experiencing the impact of sea level rise. It is estimated that roughly 10 to 30 acres of maritime forest would be lost over the next 50 years. Once the maritime forest is lost, it cannot be replaced. In addition, approximately 0.6 acres of brackish marsh and 2,600 linear feet of potential oyster habitat could be restored. There is evidence of oyster populations (Figure 7), but the continual cutting of the streambank does not provide a stable environment for them. The streambank protection measure would have a secondary benefit of protecting the known historic and prehistoric sites.



Figure 6: Eroding Maritime Forest



Figure 7: Oyster Growth on Exposed Tree Roots

Recommendation: Although the goals, objectives, and problems equally fit the purposes both the Section 14 and 206 authorities, the District recommends pursuing this study under Section 14. Federal funding for the study and design and implementation would be more expeditious for Section 14 than Section 206. In addition, the potential sponsor would benefit more from the expeditious study and project implementation timelines of Section 14.

5. Potential Sponsor:

The organization that requested the Corps' assistance -- the St. Catherines Island Foundation (SCIF), is a private, non-profit corporation with qualified 501(C)(3) status from the Internal Revenue Service. They are a legally constituted body with full capability to perform the terms of any agreement. The Foundation is committed to sustaining the natural environment of St. Catherines Island and to promoting research, education, and conservation programs that benefit from its unique ecological character. The Foundation board oversees all programs and has current academic research relationships with prominent public universities providing ongoing and continued research opportunities. Their public goods and services are open to all on equal terms. SCIF preserves and maintains unique historic, archaeological, and ecological resources for the public. Information about these resources is distributed to the public through private, non-profit, and government websites, books, articles, and the Fernbank Museum of Natural History. Access to the Mission Santa Catalina de Guale site on St. Catherines Island is open to all researchers, collegiate educators, non-profit organization, and churches on equal terms. The Mission site is closed to the general public to conserve its natural, historic, and cultural resources. The beaches located on the northeastern side of the island are open to the public via boat access. Additional information about the Foundation can be found at the following web address:
<http://www.stcatherinesisland.org/>.

6. Eligibility Criteria:

a. Which CAP Authority applies? (Cite specific paragraph in Appendix F used to determine eligibility).

<input checked="" type="checkbox"/> 14	<input type="checkbox"/> 204
<input type="checkbox"/> 103	<input type="checkbox"/> 205
<input type="checkbox"/> 107	<input checked="" type="checkbox"/> 206
<input type="checkbox"/> 111	<input type="checkbox"/> 208
<input type="checkbox"/> 1135	

Applicable paragraph(s) used to determine eligibility in Appendix F, ER 1105-2-100: F-3; F-23 & F-30

F-3. General Principles.

a. Purpose. The purpose of the CAP is to plan and implement projects of limited size, cost, scope, and complexity. Although there is no specific minimum project size or cost, very small projects should not be pursued under CAP as they should be implemented by other Federal or non-Federal entities. Further, District Commanders, in coordination with the MSC Commanders, should consider termination of CAP feasibility activities when the estimated or actual total cost of feasibility studies equal or exceed the estimated implementation cost including LERRD value. Finally, large or complex problems should be pursued under the specifically authorized programs.

b. General Requirements. Projects recommended for implementation pursuant to CAP authorities must be justified in accordance with the requirements of the applicable project purpose as discussed in Appendix E of this regulation and must be implemented in accordance with the applicable legal and policy requirements as further discussed in Section III of Appendix F.

F-23. Section 14, Flood Control Act of 1946, as amended - Streambank and Shoreline Erosion Protection of Public Works and Non-Profit Public Services.

a. General. This program is designed to implement projects to protect public facilities and facilities owned by non-profit organizations that are used to provide public services that are open to all on equal terms. These facilities must have been properly maintained but be in imminent threat of damage or failure by natural erosion processes on stream banks and shorelines, and are essential and important enough to merit Federal participation in their protection. The streamlined formulation and justification procedures outlined in this paragraph are in recognition of the urgency of addressing such projects.

b. Eligible Facilities. Eligible facilities are: highways, highway bridge approaches, public works, churches, public and private non-profit hospitals, schools, and other public or non-profit facilities offering public services open to all on equal terms; and known historic properties whose significance has been demonstrated by a determination of eligibility for listing on, or actual listing on, the National Register of Historic Places. The historic properties must be open to all on equal terms.

F-30. Section 206, Water Resources Development Act of 1996, as amended - Aquatic Ecosystem Restoration.

a. General. The purpose of this authority is to develop aquatic ecosystem restoration and protection projects that improve the quality of the environment, are in the public interest, and are cost effective in accordance with current policies and procedures governing projects of the same type which are specifically authorized by Congress (See Section V of Appendix E of ER 1105-2-100).

b. Does the problem or opportunity appear to be of an appropriate scale that it can be addressed within the funding limitations of CAP?

Based on the length of eroding shoreline and common methods of protecting such sites, the District believes that the scale of the problem and potential opportunities are within the funding limitations of the Continuing Authorities Program.

7. Copy of Sponsor Request:

St. Catherines Island Foundation, Inc.

182 Camellia Road - Midway, Georgia 31320
912.884.5002 - fax 912.884.5021

July 10, 2017

Marvin L. Griffin, P.E.
Colonel, U.S. Army
Commanding
U.S. Army Corps of Engineers, Savannah District
100 W. Oglethorpe Avenue
Savannah, Georgia 31401

Dear Colonel Griffin:

I am writing on behalf of St. Catherines Island Foundation, Inc (SCIF) to request assistance in accordance with the provisions of Section 14, Streambank and Shoreline Erosion Protection; Section 206, Aquatic Ecosystem Restoration; and/or Section 22, Planning Assistance to States.

I am seeking assistance in addressing damages that are caused by tidal erosion at the site of Mission Santa Catalina de Guale on St. Catherines Island (SCI). This National Register of Historical Places (NRHP) listed, multicomponent, archaeological site is being carved away by increased tide action along Wamassee Creek. The creek is eroding St Catherines Island at a rate of 5-10 feet annually. The rapidly increasing rate of cut-bank erosion threatens thousands of years of Native American history, Georgia's most important Spanish settlement, the oldest Catholic Church in Georgia, (the oldest we know of in the US), and a large multispecies maritime forest, a forest type listed in the State of Georgia as a habitat of concern.

St. Catherines Island is an undeveloped barrier island, one of only a few. The understanding of the chronology of the first Europeans to live in the region and the knowledge of the native people who first encountered them is washing away with the tides.

Under the Continuing Authority Programs, I understand that the first \$100,000 of the feasibility study is fully funded by the Federal Government. If the feasibility study cost should exceed \$100,000, the SCIF would pay 50 percent of the excess (i.e. if total feasibility study costs are \$120,000, our responsibility is \$10,000).

I understand that we would be required to pay a minimum of 35 percent of the total cost of the project implementation (design and construction) following approval of the feasibility study. Credit is granted towards this amount for providing lands, easements, rights-of-way, relocations and disposal sites (LERRDs). However, the minimum cash requirement from SCIF would be five percent of the total project cost.

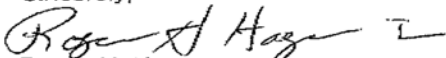
SCIF is a Georgian non-profit corporation with qualified 501(C) (3) status from the Internal revenue Service and a legally constituted body with full capability to perform under the terms of any agreement. Additionally, I am aware that it is the responsibility of SCIF to provide clean lands and to operate, maintain, repair, rehabilitate, and replace the project after it is completed.

I am aware that the Planning Assistance to States Program only produces a study. I understand that we would pay for 50 percent of that study either in-kind, in-cash, or some combination thereof.

I am aware that this letter serves as an expression of intent and not a contractual obligation and either party may discontinue the study process.

Please contact Royce Hayes at (912) 312-0791 or (912) 884-5002 to discuss SCIF's eligibility in these programs and to schedule a date for a site visit.

Sincerely,



Royce H. Hayes
Senior Director for Development,
Research, Conservation, Education

Cell: (912) 312-0791
Office: (912) 884-5002

8. Vicinity Map: St. Catherines Island is a barrier island located approximately 35 miles south of Savannah, Georgia, between St. Catherines Sound and Sapelo Sound.

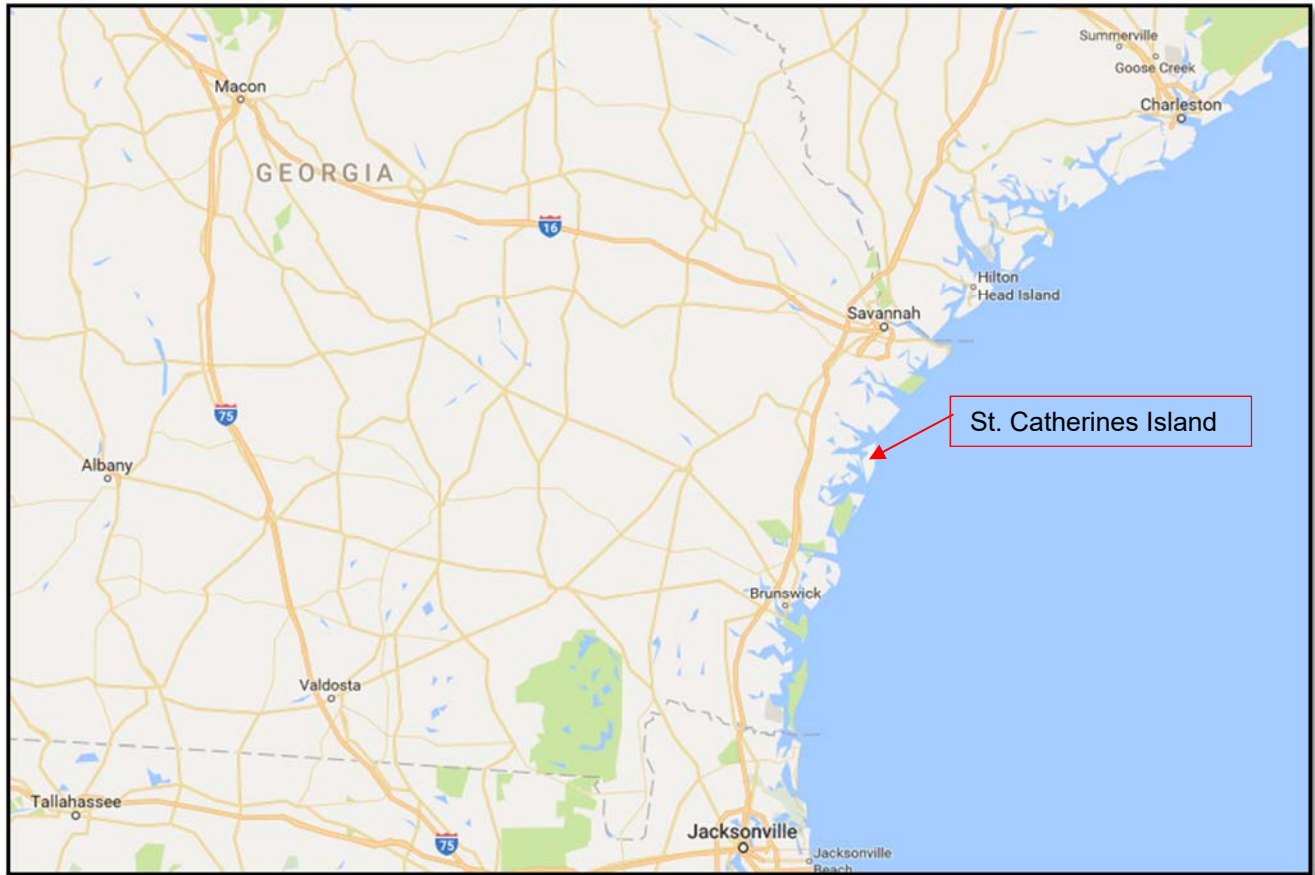


Figure 8: Vicinity Map