

# Evaluation Findings

## Georgia Coastal Management Program

June 2011 to August 2019

January 2020



Office for Coastal Management  
National Ocean Service  
National Oceanic and Atmospheric Administration  
United States Department of Commerce

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## Executive Summary

The Coastal Zone Management Act requires the National Oceanic and Atmospheric Administration's Office for Coastal Management to conduct periodic evaluations of the performance of states and territories with federally approved coastal management programs. This evaluation examined the operation and management of the Georgia Coastal Management Program by the Georgia Department of Natural Resources for the period from June 2011 to August 2019. The evaluation focused on three target areas: Communication and Stakeholder Engagement, Community Capacity Building, and Enhancing Shoreline Resilience.

The findings in this evaluation document will be considered by the NOAA Office for Coastal Management in making future financial award decisions concerning the coastal program. The evaluation came to these conclusions:

**Accomplishment:** The Georgia Coastal Management Program organized the Georgia Climate Conference that advanced knowledge of climate impacts and that has been hailed as a success by stakeholders throughout the state, encouraging support for future climate discussions.

**Accomplishment:** The Georgia Coastal Management Program has implemented an ongoing State of the Coastal Ecosystem Report Card designed to inform residents of trends affecting the ecosystem in which they live.

**Accomplishment:** The Georgia Coastal Management Program has been successful in collaborating with a number of federal and state partners to increase tools available for community-based coastal resource management.

**Accomplishment:** The Georgia Coastal Management Program has succeeded in making coastal communities more aware of their vulnerabilities from coastal hazards and supported them in the development of plans to promote resilient redevelopment by providing guidance tools and direct technical assistance.

**Accomplishment:** The Georgia Coastal Management Program has used innovative techniques and supported pilot projects to work with partners at the local level to make shorelines more resilient.

**Accomplishment:** The Georgia Coastal Management Program effectively coordinated the cleanup of marine debris following Hurricanes Matthew and Irma by using available technology to locate debris and plan for its removal, by developing best management practices for contractors, and by executing contracts under tight deadlines.

**Accomplishment:** The Georgia Coastal Management Program received approval of the Georgia Coastal Nonpoint Pollution Control Program and began implementation of that program.

**Recommendation:** The NOAA Office for Coastal Management recommends that the Georgia Coastal Management Program encourage the City of Tybee Island to record the methodology they followed in the reconstruction of the dune system to provide information for future efforts of a similar type both in Tybee Island and in other communities.

**Recommendation:** The NOAA Office for Coastal Management recommends that the Georgia Department of Natural Resources examine the permit approval process for habitat restoration and nature based shoreline protection projects to determine possible options for streamlining the process.

**Recommendation:** The NOAA Office for Coastal Management recommends that the Georgia Coastal Management Program conduct an analysis of techniques available to maintain effective enforcement, including technology, partnerships, and staffing.

This evaluation concludes that the Georgia Department of Natural Resources is satisfactorily implementing and enforcing its federally approved coastal program, adhering to the terms of the federal financial assistance awards, and addressing the coastal management needs identified in section 303(2)(A) through (K) of the Coastal Zone Management Act.

## Program Review Procedures

The NOAA Office for Coastal Management evaluated the Georgia Coastal Management Program in fiscal year 2019. The evaluation team consisted of Ralph Cantral, evaluation team lead, Lindy Betzhold, site liaison, and Lori Cary-Kothera, operations manager of the Science and Geospatial Division, all from the NOAA Office for Coastal Management. The support of the Georgia Coastal Management Program staff was crucial in conducting the evaluation, and their support is most gratefully acknowledged.

NOAA sent a notification of the scheduled evaluation to Mark Williams, Commissioner of the Georgia Department of Natural Resources, on March 12, 2019, and published a notice of “Intent to Evaluate” in the *Federal Register* on July 10, 2019. The Georgia Coastal Management Program posted a notice of the public meeting and opportunity to comment in the *Savannah Morning News* and the *Brunswick News* on July 19, 2019.

The evaluation process included a review of relevant documents and a survey of stakeholders, which helped identify three target areas for the evaluation: Communication and Stakeholder Engagement, Community Capacity Building, and Enhancing Shoreline Resilience. A site visit was also conducted, and the evaluation team held meetings with staff members and group discussions with stakeholders and program staff members about the target areas. In addition, a public meeting was held on Wednesday, August 28, 2019, at 5:30 p.m. at the Susan Shipman Environmental Learning Center, 1 Conservation Way, Brunswick, GA 31520, to provide an opportunity for members of the public to express their opinions about the implementation of the coastal program.

Stakeholders and members of the public were given the opportunity to provide written comments via email or U.S. mail through September 6, 2019. No written comments were received from the public or interested parties. The Office for Coastal Management then developed draft evaluation findings, which were provided to the coastal program for review, and the coastal program’s comments were considered in drafting the final evaluation findings.

Final evaluation findings for all coastal programs highlight the coastal program’s accomplishments in the target areas and include recommendations that are of two types:

**Necessary Actions** address programmatic requirements of the implementing regulations of the Coastal Zone Management Act (CZMA) and of the state coastal program approved by NOAA. These must be carried out by the dates specified. Failure to address necessary actions may result in a future finding of non-adherence and the invoking of interim sanctions, as specified in CZMA §312(c).

**Recommendations** are actions that the office believes would improve the program, but which are not mandatory. The state is expected to have considered the recommendations by the time of the next evaluation or by the dates specified.

## Evaluation Findings

The Georgia Coastal Management Program is a multi-faceted program of the Department of Natural Resources' Coastal Resources Division, authorized to balance economic development in the coastal zone with the preservation of natural, environmental, historic, archaeological, and recreational resources. The coastal management program provides technical assistance to local governments, property owners, developers, and the public. The coastal management program provides services in the 11 coastal counties of Georgia, including Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Wayne.

As a part of the federally approved Georgia Coastal Management Program, the Coastal Resources Division has regulatory authority over the marshlands, beaches, dunes, shoals, and tidal water bottoms through the Coastal Marshlands Protection Act and the Shore Protection Act. The coastal management program also serves as the trustee for all state-owned tidelands and authorizes activities within those resources.

### Target Area 1: Communication and Stakeholder Engagement

The Coastal Zone Management Act encourages state programs to keep the public informed and interact with stakeholders throughout the coastal area.

#### *Examples of Key Efforts*

The Georgia Coastal Management Program clearly excels at community outreach and engagement. During the review period, the program continued to lead the Coast Fest and Beach Week efforts of the Department of Natural Resources. These public outreach events have grown in their impacts. Coast Fest has become a huge event for the Brunswick area, with more than 9,000 participants in recent years.

The Governor of Georgia has appointed members to successive coastal advisory groups since 1992. In 2019, that group was re-appointed as a 20 member Coastal Advisory Council to advise the Department of Natural Resources on issues and activities in the development of programs and projects to conserve and manage the natural, cultural, and historic resources of the coastal area. The group both advises the coastal management program and serves as a conduit for information to coastal communities and residents to increase public understanding of the value and vulnerability of the state's coastal resources. A key role of the advisory council is to identify priority themes for each year's Coastal Incentive Grants.

In 2018, the coastal management program sponsored the first Georgia Climate Conference. It brought together more than 200 people from across the state to discuss current conditions and future actions that could make the coast more sustainable. Stakeholders view the conference as a success and feel that it has placed the Department of Natural Resources in a leadership

role to address the impacts of climate change statewide. This effort led to continued state coordination on climate issues and helped to secure commitments from additional funding sources to sponsor additional climate conferences in 2019 and 2020.

**Accomplishment:** The Georgia Coastal Management Program organized the Georgia Climate Conference that advanced knowledge of climate impacts and that has been hailed as a success by stakeholders throughout the state, encouraging support for future climate discussions.

In 2014, the program initiated a Coastal Georgia Ecosystem Report Card in partnership with the University of Maryland Center for Environmental Science. The purpose of the report card is to provide residents with a snapshot of current information related to 11 indicators that point to trends related to the overall health of the coast. The report card examines indicators related to wildlife, human health, and fisheries. In 2018, the report card gave an overall score of A-, showing improvement in several indicators over the previous years.

**Accomplishment:** The Georgia Coastal Management Program has implemented an ongoing State of the Coastal Ecosystem Report Card designed to inform residents of trends affecting the ecosystem in which they live.

The coastal management program has undertaken a project to help articulate the contributions of the various state and federal entities working along the Georgia coast to help better maximize the impacts of their programs. Many coastal communities struggle with understanding which agency can be helpful with which needs. In the first phase of this effort, the program developed a schematic that illustrates the various initiatives of the coastal management program and how they sustain, conserve, enhance, and protect the coast. This innovative tool has proven useful in interpreting the value of the program to coastal residents and communities.

The Georgia Coastal Management Program has developed two data portals and a mapping tool that have proven useful to partners throughout the coastal area. The Georgia Wetlands Restoration Access Portal and the Coastal Hazards Portal have connected users to a variety of useful data from a number of agencies. The Georgia Coastal and Marine Planner is a tool developed in conjunction with Georgia Tech to access a variety of maps, data, and resources to support coastal and marine planning. All three of these efforts have provided coastal communities with useful information for decision-making.

## **Target Area 2: Community Capacity Building**

In adopting the legislation to create the Georgia Coastal Management Program in 1998, the Georgia legislature wanted to ensure that the program supported management efforts at the local government level. The Coastal Incentive Grants program has shared more than \$20 million over the past 20 years with local governments, research institutions, and non-Department of

Natural Resources partners. The coastal management program has been successful in obtaining funding from other state and federal agencies to support the incentive grants.

### ***Examples of Key Efforts***

Stakeholders expressed strong support for the capacity-building activities of the Georgia Coastal Management Program, describing the program as incredibly responsive and proactive. The program was also referred to as a “network weaver,” bringing communities together with organizations that can help them. A hallmark of the organization has been providing technical assistance that is very relevant to local governments.

An example of providing direct assistance to communities is the purchase of orthographic photo and lidar data at the state level and then sharing the information through a regional coastal data set in partnership with the Coastal Regional Commission. The commission is a multi-county agency that serves the coastal counties and municipalities by providing geographic information system and information technology services, as well as comprehensive planning services. This partnership has led to the sharing of examples of storm modeling that are used in developing coastal hazard mitigation plans. The effort builds on the strength of both partners by combining the commission’s data on community characteristics with natural resources information.

In partnership with the Sapelo Island National Estuarine Research Reserve, the coastal management program has developed joint needs assessments to identify opportunities for outreach and training programs throughout the coastal area.

The Georgia Coastal Management Program has developed a strong relationship with the state’s emergency management professionals. The Georgia Emergency Management Agency has used the coastal hazard mitigation plans as models for inland counties now that the development of the plans is mandatory statewide for counties to be eligible for federal flood assistance. The coastal experiences have been especially helpful now that FEMA is including consideration of the impacts of climate change as a requirement for their local plans. The Coastal Management Program has also been working with coastal communities to include sea level rise and other climate information in coastal hazard mitigation plans developed using both Coastal Incentive Grants and a NOAA Regional Coastal Resilience Grant.

As described above in the Community and Stakeholder Engagement section, the Georgia Climate Conference sponsored by the Coastal Management Program attracted many local officials and concerned citizens.

**Accomplishment:** The Georgia Coastal Management Program has been successful in collaborating with a number of federal and state partners to increase tools available for community-based coastal resource management.

## Target Area 3: Enhancing Shoreline Resilience

Local governments are at the frontlines of responding to coastal storms and longer-term hazards associated with sea level rise and climate change. The Georgia Coastal Management Program has developed several approaches to help local communities become more resilient.

### *Examples of Key Efforts*

Beginning in 2014, the Georgia Coastal Management Program developed “Post Disaster Recovery and Redevelopment Planning: A Guide for Georgia Communities” in cooperation with the Georgia Emergency Management Homeland Security Agency. This guide provides direct, actionable steps that communities could take to plan for and recover from disasters.

Using this guide, the coastal management program has worked with all of 11 coastal counties to develop customized disaster recovery and redevelopment plans tailored to the needs of each community. These recovery and redevelopment plans outline strategies intended to fulfill the purpose of re-creating the community after a disaster, which must align with the community’s values and vision. These plans build from existing comprehensive plans and involve a great deal of stakeholder engagement and outreach, encouraging participation from all sectors of the community. Each county was asked to envision the best possible way to reconstruct their community not just as it is today, but as a more sustainable and disaster-resilient community.

**Accomplishment:** The Georgia Coastal Management Program has succeeded in making coastal communities more aware of their vulnerabilities from coastal hazards and supported them in the development of plans to promote resilient redevelopment by providing guidance tools and direct technical assistance.

The Georgia Coastal Management Program has supported innovative coastal management techniques by providing funding to the Coastal Research Council to pursue research on thin layer deposition. This effort was crucial to the development of a pilot dredging and beneficial use of spoil material project at Jekyll Island. The coastal management program also helped to design the monitoring and research plan for the project, which will help to define parameters for future projects of this type.

The creation of living shorelines has also been supported by the coastal management program. Working with the St. Simons Land Trust, the program approved a living shoreline at the Cannon’s Point Preserve on St. Simon’s Island. The installation of gabions containing oyster shells has provided protection in a highly erosive area and serves as a demonstration site for others to learn about living shorelines.

**Accomplishment:** The Georgia Coastal Management Program has used innovative techniques and supported pilot projects to work with partners at the local level to make shorelines more resilient.

The City of Tybee Island suffered shoreline erosion and flooding from Hurricane Matthew in 2016 and Hurricane Irma in 2017. In 2018 and 2019, the town undertook the building of a new frontal dune to protect the community. The Georgia Coastal Management Program worked closely with the community to ensure that the project could be permitted. The second phase of dune construction on the southern end of the island provides an opportunity to develop monitoring plans for the project as well as incorporate sea level rise into the design criteria.

**Recommendation:** The NOAA Office for Coastal Management recommends that the Georgia Coastal Management Program work with the City of Tybee Island to record the methodology they followed in the reconstruction of the dune system to provide information for future efforts of a similar type both in Tybee Island and in other communities.

## Implementation of General Requirements

### *Nonpoint Source Pollution Control*

On November 1, 2018, the National Oceanic and Atmospheric Administration and the Environmental Protection Agency notified the State of Georgia that the Coastal Nonpoint Pollution Control Program met all of the necessary requirements for program approval.

**Accomplishment:** The Georgia Coastal Management Program received approval of the Georgia Coastal Nonpoint Pollution Control Program and began implementation of that program.

### *Permitting*

A new permitting authorization called Letters of Permission was codified into both coastal marshland and shore protection laws to allow certain projects to be authorized without going through a full permitting process. This effort at permit streamlining was limited to activities within the physical perimeter of an existing, serviceable project or that involve the construction and removal of a project or other temporary activity that concludes within 6 months. This expedited process has proven useful for repair of existing permitted projects, and short-term impacts from movie sets or small-scale restorations that will be fully recovered or repaired within 6 months. This new process has been incorporated into the federally approved Georgia Coastal Management Program.

Permits for restoration projects currently require the same level of review as development permits. Stakeholders expressed concern that, because applications for development projects are voluminous and the review is lengthy, projects that could be beneficial to coastal ecosystems may not be feasible because of timeliness concerns.

**Recommendation:** The NOAA Office for Coastal Management recommends that the Georgia Department of Natural Resources examine the permit approval process for habitat restoration and nature based shoreline protection projects to determine possible options for streamlining the process.

The Georgia Coastal Management Program currently has only one monitoring and enforcement officer in the field for more than 100 miles of oceanfront and 6,800 miles of tidal shoreline. Stakeholders expressed concern that, while the current enforcement staff member is experienced and effective, the Georgia coastline would benefit from having additional enforcement capacity. Plans are in place to add an additional officer in the near future, which may provide the additional capacity necessary.

**Recommendation:** The NOAA Office for Coastal Management recommends that the Georgia Coastal Management Program conduct an analysis of techniques available to maintain effective enforcement, including technology, partnerships, and additional staffing.

### ***Recovery from Hurricanes Matthew and Irma***

In 2018, Georgia Department of Natural Resources was awarded a grant from the NOAA Marine Debris Program to support post-storm assessments, removal, and disposal of marine debris from Hurricane Irma. The coastal management program staff conducted aerial assessments using helicopters and unmanned aerial vehicles to document areas of significant concentration of materials such as abandoned and derelict vessels, construction materials, and floating docks. The Federal Emergency Management Agency provided additional funding to increase the breadth of the project to include impacts from Hurricane Matthew from 2016. Working under a tight deadline to get contracts in place, the staff worked to ensure that the debris was removed as quickly as possible. The contracts were completed successfully and on time, and more than 16 million pounds of debris was removed from coastal wetlands and waterways. Additionally, the State of Georgia dedicated \$650,000 to post Irma and Matthew marine debris cleanup. The coastal management program used this opportunity to establish procedures for marine debris cleanup that may be included in each county's disaster recovery and redevelopment plan. These procedures may also be used in other coastal states.

**Accomplishment:** The Georgia Coastal Management Program effectively coordinated the cleanup of marine debris following Hurricanes Matthew and Irma by using available technology to locate debris and plan for its removal, by developing best management practices for contractors, and by executing contracts under tight deadlines.

## Evaluation Metrics

Beginning in 2012, state coastal management programs began tracking their success by addressing three metrics specific to their programs. These evaluation metrics include a five-year target and provide a quantitative reference for each program about how well it is meeting the goals and objectives it has identified as important to the program.

### ***Metric 1: Public Access***

**Goal:** Promote public access to coastal natural resources or open spaces throughout the 11-county coastal zone for the purposes of recreation and enjoyment.

**Source:** A 10-year Strategic Plan for the Georgia Department of Natural Resources; Metrics developed by the Georgia Coastal Management Program specifically for this project.

**Strategy:** The Georgia Coastal Management Program works with coastal communities and state and federal resource agencies to identify and pursue funding opportunities to acquire new coastal lands for public access, create new access features (docks and piers, boat ramps, nature trails, etc.) on existing public lands, and enhance or expand facilities at existing access points. Toward this goal, the coastal program will make available, through the Coastal Incentive Grant Program, a portion of its federal Coastal Zone Management Program funds to support a variety of public access acquisition, creation, or enhancement projects. The coastal program is also the state's lead agency for the national Coastal and Estuarine Land Conservation Program to acquire sensitive coastal lands for conservation and public access. To the greatest extent possible, the coastal program will prepare Coastal and Estuarine Land Conservation Program applications for public access lands in support of this goal. Finally, the program works with state and federal partners to promote the benefits of public access and provide technical assistance to communities in planning for improved access. The coastal program will dedicate a staff person to address the issues of public access and land conservation across the coastal region.

Specific approaches for meeting this goal can be found in the following: Georgia Coastal Management Program Final Environmental Impact Statement, December 1997 (Program Document), Part II-32; and Georgia Coastal and Estuarine Land Conservation Program Plan, Revised September 2011.

**Objective:** Acquire, create, or enhance public access to coastal land and water resources.

**Performance Measure:** The number of projects to improve public access in the coastal zone through the acquisition of lands for public access, creation of new facilities on existing public lands, or the enhancement of current access sites resulting from Georgia Coastal Management Program technical or financial assistance over the five-year reporting period.

**Target:** 10 public access sites acquired, created, or enhanced and open to the public as a result of Georgia Coastal Management Program technical or financial assistance over the five-year reporting period.

Reporting Period	Sites Acquired	Sites Created	Sites Enhanced	Total
Year 1 Results		3	3	6
Year 2 Results		1	3	4
Year 3 Results	1	3	3	7
Year 4 Results		1	2	3
Year 5 Results			4	4
<b>Total</b>	<b>1</b>	<b>8</b>	<b>15</b>	<b>24</b>

**Discussion:** The Georgia Coastal Management Program, working with its partners, far exceeded the target for the reporting period.

### ***Metric 2: Marina Water Quality***

**Goal:** Minimize water quality impacts from recreational boating.

**Source:** Georgia Coastal Nonpoint Source Pollution Management Plan; Metrics developed specifically by the Coastal Resources Division (CRD) on this topic.

**Strategy:** Previously, CRD was the applicant on U.S. Fish and Wildlife Service grants awarded under the Clean Vessel Act to help fund education and installation of pumpout facilities at marinas. Since the early 2000s, CRD did not participate in the Clean Vessel Act program; however, during that time, many new marinas were built and many older marinas added boat slips and amenities to attract transient boaters. Recognizing that the Clean Vessel Act program was a good strategy for helping to manage nonpoint source pollution in Georgia's coastal waterways, the Georgia Coastal Management Program's and CRD's Marine Fisheries Section applied for and received funding to add or improve pumpout capacity at up to seven marinas throughout the coast. The coastal program staff provides technical assistance to marinas to encourage them to join the program and to understand the need to protect water quality. Also, to further understand the need for additional pumpout capacity, CRD hired a part-time employee to conduct a needs assessment of local marinas and boaters. The information derived from this assessment will help guide the Georgia Coastal Management Program and CRD in future Clean Vessel Act projects to achieve maximum capacity within 10 years.

**Objective:** Increase pumpout capacity of marinas in the coastal zone.

**Performance Measure:** The number of marinas in the coastal zone that develop or expand their waste pumpout capacity for recreational vessels as a result of Georgia Coastal Management Program technical or financial assistance over the five-year reporting period.

**Target:** 10 marinas in the coastal zone will develop or expand their waste pumpout capacity for recreational vessels because of Georgia Coastal Management Program technical or financial assistance over the five-year reporting period.

Reporting Period	Funded Pumpout Projects
Year 1	4
Year 2	2
Year 3	3
Year 4	4
Year 5	2
<b>Total</b>	<b>15</b>

**Discussion:** The number of marinas that received funding for developing or expanding pumpout facilities exceeded the goal set by the Georgia Coastal Management Program.

### ***Metric 3: Planning and Management***

**Goal:** Support solutions for local government priorities that fit within the stated priorities of the Coastal Incentive Grant Program.

**Source:** Georgia Coastal Management Program Final Environmental Impact Statement (FEIS), December 1997 (Program Document), Part I-9.

**Strategy:** The committee tasked with development of Georgia’s Coastal Management Program intentionally included the Coastal Incentive Grant (CIG) Program as a means to further the goals of the program. Through a competitive grant process in which Georgia Coastal Management Program goals are identified in the CIG Request for Proposals, the coastal program supports locally defined initiatives designed by local governments. (FEIS Part I-9 Section B(5)).

**Objective:** Provide financial assistance to support projects that address planning and natural resource management issues.

**Performance Measure:** The number of planning and natural resource management projects that address Georgia Coastal Management Program priorities completed by CIG grant recipients using financial assistance from the coastal program over the five-year reporting period.

**Target:** 50 planning or natural resource management projects that address Georgia Coastal Management Program priorities completed by CIG grant recipients using financial assistance from the coastal program over the five-year reporting period.

Reporting Period	Funded Projects
Year 1	9
Year 2	5
Year 3	5
Year 4	6
Year 5	8
Total	33

**Discussion:** The target was not met for this metric. The intended objective cannot be measured definitively by this metric, as the number of local grants given has a number of determinants out of the control of the program. Some of these factors include uncertainty related to funding levels and the ability of local governments to provide local funds to match state and federal funds.

## Conclusion

For the reasons stated herein, I find that the State of Georgia is adhering to the programmatic requirements of the Coastal Zone Management Act and its implementing regulations in the operation of its approved Georgia Coastal Management Program.

These evaluation findings contain three recommendations. The recommendations must be considered before the next regularly scheduled program evaluation, but they are not mandatory at this time. Program recommendations that must be repeated in subsequent evaluations may be elevated to necessary actions.

This is a programmatic evaluation of the Georgia Coastal Management Program that may have implications regarding the state's financial assistance awards. However, it does not make any judgment about or replace any financial audits.

signed by Keelin S. Kuipers  
Keelin S. Kuipers  
Deputy Director  
NOAA Office for Coastal Management

dated January 13, 2020  
Date

## **Appendix A: Response to Written Comments**

No written comments were received.