

Center for a Sustainable Coast: Georgia Coastal Sentinels Program

Project Description

Georgia's coastal barrier islands are renowned for their maritime forests, natural ocean beaches and dunes, surrounding estuaries and vast tidal marshes, as well as abundant wildlife and sub-tropical vegetation. Among the diverse species are many that are threatened and endangered, such as the painted bunting, piping plover, wood stork, and a number of different types of sea turtles that use the islands' shorelines for nesting. Although only four of the eight major barrier islands have causeway access and are significantly developed, all are subject to outside pressures that can pose threats to their ecological diversity, environmental quality, and natural beauty. It is estimated that nearly two million tourists visit these islands yearly, about a quarter of those going to the less developed islands, including Cumberland Island, a designated National Seashore, most of which is also a federally designated Wilderness Area.

We are proposing to establish a network of carefully chosen individuals who will serve as volunteers performing as "sentinels" on each of the major barrier islands. Several of these people are already members and supporters of our organization, the Center for a Sustainable Coast, a 501(c)3 non-profit established in 1997. Consistent with the Center's mission, the sentinels will help safeguard the public interest in protecting Georgia's barrier islands by making on-site observations, recording data, documenting evidence of relevant issues, and routinely reporting to Center staff about their findings and recommendations. We propose that the sentinels file a written report quarterly (every three months) to the Center and also contact Center board members and/or staff as needed if critical issues arise in the interim. As conceived here, the sentinels would serve as an "early warning system" for the Center, enabling the organization to respond to impending threats and opportunities sooner and more effectively.

Among the types of observations we anticipate being made by the coastal sentinels would be:

1. **Changes in topography, land cover, or species** – this would include any abnormal increase in shoreline erosion, subsidence, die-back of trees, grasses, or other native vegetation, loss of wildlife (as measured in bird-counts or special studies conducted by public agencies), or intrusion of development into previously undisturbed natural areas.
2. **Decline in environmental quality** – Most typically this would be determined by a reduction in the quality of air or water, but it could also be indicated by fish contamination sampling or fisheries management activities done by the Georgia Department of Natural Resources. Other indications would be manifested by certain instabilities revealed under item 1 above: when vegetation dies back, usually there are measurable alterations in soil chemistry, hydrology, and/or biological diversity, including changes in microbial communities in the air, water, and soil. These changes, in turn, ultimately may have implications for the health and diversity of other species and even the entire ecosystem.
3. **Emerging issues about use or management of the island** – Several barrier islands are managed by the State of Georgia but owned privately. Some that are primarily state-owned are used for a combination of university research and public visitation, recreation, and nature watching. From time to time proposals for changing the management plan, conditions of use, or even the ownership may be made. Such proposals could have significant, lasting implications for the protection, conservation, and sustained use of natural resources on the islands. When such proposals are made, or even while they are still being publicly considered, there may be critical opportunities for the Center to intervene, which could be facilitated by coordination with the coastal sentinels.

4. **Enforcement of existing regulations** – There are two basic kinds of problems that can result in the incremental decline of environmental quality related to deficient regulation of natural resources: (1) individuals take actions, knowingly or unintentionally, that violate rules and regulations governing publicly owned natural resources, which may remain undisclosed and unresolved, or (2) state, and/or federal agencies incorrectly review permit applications, issuing permits that allow inadequately controlled activities to occur, which can – over time – degrade the environment. Either way, such errors in regulation can be corrected and related harm reduced if observations are made in a timely way and sufficient analysis is brought to bear on the problem. The sentinels will help prevent environmental damage caused by such activities by making observations of conditions and disturbances in their assigned areas and bringing them to the Center’s attention.

When such observations are reported to the Center, the board and staff will decide what, if any, actions to take. The range of responses might include:

- Proposing special scientific studies of the identified trend or problem;
- Consulting with state or federal agencies to investigate the implication of observations;
- Bringing suspected violations to the attention of regulatory authorities;
- Initiating mediation proceedings in an effort to reach mutually acceptable resolutions;
- Filing legal action as provided in applicable law(s) to prevent damage of public resources;
- Proposing changes in rules, regulations, or policies of local, state, or federal government;
- Designing and implementing procedures for enhanced observations and/or reporting.

Based on intermittent communication with sentinels and quarterly reports from them, Center staff will prepare an annual summary of the findings and recommendations, supported by appropriate analysis of conditions, trends, issues, and events related to Georgia’s barrier islands during the preceding year. Additional interim reports will be prepared by the staff as needed to help resolve identified problems when intervention is considered urgent. All sentinel activities will be reported to the Center’s board on a routine basis, but no less than quarterly. The board will consider reports of the sentinels and related staff analysis in making timely decisions to help resolve issues as needed.

Budget

We propose an initial program budget of \$20,000 for the first year. Following is the proposed with line itemization showing sources of support.

Item	Total
Travel and supplies (paper, printer toner, field consumables)	\$2,000
Communication & printing (service contracts, internet access)	4,000
Equipment, such as sampling devices, cell-phones, cameras	5,000
Coordination, documentation, analysis, meetings/conferencing	7,000
Meeting space, information archiving, and contingencies	2,000
TOTAL	\$20,000