

FINAL Evaluation Findings
Apalachicola National Estuarine Research Reserve

December 2000 – April 2006

February 2007



Office of Ocean and Coastal Resource Management
National Ocean Service
National Oceanic and Atmospheric Administration



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I. EXECUTIVE SUMMARY

The Coastal Zone Management Act (CZMA) of 1972, as amended, established the National Estuarine Research Reserve System (NERRS). Sections 312 and 315 of the CZMA require the National Oceanic and Atmospheric Administration (NOAA) to conduct periodic performance reviews or evaluations of all federally approved National Estuarine Research Reserves (NERRs). The review described in this document examined the operation and management of the Apalachicola National Estuarine Research Reserve (ANERR) during the period of December 2000 through May 2006. The Apalachicola National Estuarine Research Reserve is administered by the Florida Department of Environmental Protection (DEP) Coastal and Aquatic Managed Areas Division (CAMA).

This document describes the evaluation findings of the Director of NOAA's Office of Ocean and Coastal Resource Management (OCRM) with respect to ANERR during the review period. These evaluation findings include discussions of major accomplishments as well as recommendations for program improvement. The fundamental conclusion of the findings is that DEP is successfully implementing and enforcing its federally approved NERR.

The evaluation team documented a number of ANERR accomplishments during this review period. The Reserve continues to provide the local and regional resource management community with strong science-based information for coastal decision-making and planning. Productive collaborations with coastal managers and researchers in northwest Florida help make ANERR's programs more effective. Notable Reserve efforts during this evaluation period included: increasing ANERR communication with local government and community partners; providing science-based information and technical support in the Apalachicola-Chattahoochee-Flint water allocation negotiations; the development of a new estuarine education program, 'Living in Florida's Environment'; the implementation of the Coastal Training Program; and forming a collaboration to address invasive species management in the region. ANERR has also redesigned their biannual newsletter and completed the design of a new office and visitor center.

The evaluation team also identified areas where the Reserve and its programming could be strengthened. All but three recommendations for ANERR are in the form of Program Suggestions, and describe actions that NOAA believes DEP should take to improve the program but that are not currently mandatory. The Reserve also has Necessary Actions related to their Management Plan, site profile and Coastal Training Program (CTP). As mentioned above, ANERR has achieved many program enhancements during this review period--including the implementation of new Reserve programming and the design of a new facility. This program development motivated evaluation recommendations that address Reserve capacity, which will be understandably challenged by such growth. Program suggestions thus include: improving coordination among Reserve sectors; identifying and supporting professional development opportunities; conducting a needs assessment associated with the impending facilities expansion; and considering additional staff needs such as a facilities manager and volunteer coordinator. The Reserve must also develop a timeline for their Management Plan revision, complete their site profile, and provide NOAA with an updated CTP audience needs assessment.

II. PROGRAM REVIEW PROCEDURES

A. OVERVIEW

NOAA began its review of ANERR in April 2005. The §312 evaluation process involves four distinct components:

1. An initial document review and identification of specific issues of particular concern;
2. A site visit to Florida including interviews and a public meeting;
3. Development of draft evaluation findings; and
4. Preparation of the final evaluation findings, partly based on comments from the state regarding the content and timetables of recommendations specified in the draft document.

B. DOCUMENT REVIEW AND ISSUE DEVELOPMENT

The evaluation team reviewed a wide variety of documents prior to the site visit, including: (1) federally approved Environmental Impact Statement and program documents; (2) financial assistance awards and work products; (3) semi-annual performance reports; (4) official correspondence; (5) previous evaluation findings; and (6) relevant publications on natural resource management issues in Florida.

Based on this review and on discussions with OCRM's Estuarine Reserves Division, the evaluation team identified the following priority issues:

- Status of ANERR's management plan revision and compatibility of existing and planned uses;
- Major accomplishments during the review period;
- Status of the reserve's general administration, including grants, fiscal management and staffing;
- Status and visibility of research, education and stewardship programs, including local and system-wide initiatives such as the System-wide Monitoring Program (SWMP) and the Coastal Training Program (CTP);
- The manner in which ANERR coordinates with other federal, state, and local agencies and programs;
- Status of ANERR facilities, land acquisition projects and resource management;

- The status and effectiveness of ANERR staffing and programs, and participation in national research, monitoring and education programs;
- ANERR's role at the local level, and its integration with partners; and
- The manner in which ANERR has addressed the recommendations contained in the §312 evaluation findings released in 2001.

C. SITE VISIT TO FLORIDA

Notification of the scheduled evaluation was sent to DEP, ANERR, relevant federal environmental agencies, Florida's congressional delegation and regional newspapers. In addition, a notice of NOAA's "Intent to Evaluate" was published in the *Federal Register* on February 21, 2006.

The site visit to Florida was conducted on May 1-3, 2006. Kimberly Penn, Evaluation Team Leader, and Katarina Trojnar, both of OCRM National Policy and Evaluation Division; Erica Seiden, ANERR Program Specialist, OCRM Estuarine Reserves Division; and David Ruple, Reserve Manager, Grand Bay National Estuarine Research Reserve, Mississippi, formed the evaluation team.

During the site visit, the evaluation team interviewed ANERR staff, senior DEP and other state officials, federal agency representatives, coastal researchers, educators, nongovernmental representatives and private citizens. Appendix B lists persons and institutions contacted during this review.

As required by the CZMA, NOAA held an advertised public meeting during the evaluation on May 3, 2006, at 6:30 p.m., at the Apalachicola Community Center, 1 Bay Avenue, Apalachicola, Florida. The public meeting gave members of the general public the opportunity to express their opinions about the overall operation and management of ANERR. Appendix C lists individuals who registered at the meeting.

The excellent support of ANERR staff with the site visit's planning and logistics is gratefully acknowledged.

III. RESERVE PROGRAM DESCRIPTION

NOAA's Office of Ocean and Coastal Resource Management approved the Apalachicola National Estuarine Research Reserve in 1979. The lead agency is the Florida Department of Environmental Protection, Office of Coastal and Aquatic Managed Areas.

The Apalachicola National Estuarine Research Reserve is located in Franklin and Gulf counties of the Florida panhandle, one of the least populated areas in the state. The reserve encompasses approximately 246,000 acres of land and water and includes two barrier islands and a portion of a third, the lower 52 miles of the Apalachicola River and its associated floodplain, portions of adjoining uplands, and the Apalachicola Bay system. The Apalachicola River basin is only part of the larger Apalachicola – Chattahoochee-Flint River system. The ACF basin covers the north-central and southwestern part of Georgia, the southeastern part of Alabama, and the central part of the Florida panhandle. It drains an area covering approximately 19,600 square miles. Through geological, chemical, physical and biological interactions, the Apalachicola River and Bay drainage basin has evolved a river with the largest flow, the most extensive forested floodplain, and the most productive estuary in Florida.

A majority of the land within the reserve boundary is public and includes the St. Vincent National Wildlife Refuge, St. George Island State Park, Apalachicola River Wildlife and Environmental Area, Apalachicola River Water Management Area, and Cape St. George Island. The St. Vincent NWR is owned and managed by the U.S. Fish and Wildlife Service and encompasses 12,358 acres beach, marsh, hammocks and flatwoods. The St. George Island State Park occupies 1,883 acres at the end of St. George Island and contains more than 9 miles of undeveloped beaches and dunes as well as a similar area of bayshore habitat. The Apalachicola River Wildlife and Environmental Area consists of 55,652 acres in Franklin and Gulf counties and is owned by the state of FL and co-managed by three entities: the FL Game and Freshwater Fish Commission, the FL Division of Forestry, and the FL Division of Historical Resources. The major habitat of this area is floodplain swamp dominated by Tupelo and Cypress. The Apalachicola River Water Management Area contains 35,487 acres of mostly flood plain forest as well and is managed by the Northwest FL Water Management District. The Cape St. George Island is owned by the state and consists of approximately 2,300 acres at mean high tide with an additional 400 acres of perimeter tidal marshlands and lower beach areas, which are inundated by high tidal waters. This area boasts the Marshall House, built by former owners, which is now used for research and education field trips sponsored by the reserve.

IV. REVIEW FINDINGS, ACCOMPLISHMENTS AND RECOMMENDATIONS

A. OPERATIONS AND MANAGEMENT

Overall, NOAA finds that Florida's management of Apalachicola National Estuarine Research Reserve (ANERR) operations is satisfactory. The Reserve has expanded and enhanced programming since the previous evaluation. Research staff have been actively involved with local freshwater allocation negotiations; education staff have developed and implemented new programs, including the Coastal Training Program; and stewardship staff have initiated an important collaboration to address invasive species. Given this programmatic growth, the Reserve would greatly benefit from capacity building such as increased coordination among sectors and the support of professional development opportunities. ANERR has also completed the design of a new visitors' center and office building, and so the Reserve should proactively consider the needs associated with impending and programmatic facilities growth.

1. Reserve Administration

Initiatives at ANERR are guided by the Reserve Manager and a team of experienced and dedicated program coordinators. A clear understanding of the region's coastal resources is evident in the Reserve's approach to its research, education and stewardship programs. The Reserve's staff identify coastal management issues and are successful in creating opportunities for ANERR programs. Staff network well both regionally and nationally within the Reserve System. The evaluation team noted numerous program accomplishments directly attributable to the staff's knowledge and enthusiasm. These will be discussed further throughout this document. OCRM finds, however, that while each sector successfully operates within its unique programmatic niche, there could be more information sharing and coordination among sectors. Sector-specific efforts, such as Coastal Training Program workshops and resource management activities, could only be enhanced by increasing communication and collaboration between programs.

Program Suggestion: ANERR should consider how to improve coordination among program sectors. Inter-sector communication and collaboration should be discussed as part of the Management Plan revision.

ANERR has greatly enhanced program operations during this evaluation period. Staff have strengthened partnerships, identified and addressed new coastal management issues, and developed new programming. The evaluation team noted, however, that staff has had difficulty taking advantage of various professional development opportunities that would further increase capacity at the Reserve. Workshops, trainings and regional collaborative efforts are often forfeited due to affordability or out-of-state travel constraints. The ability to make the most of such opportunities would provide the Reserve with more possibilities for programmatic growth.

Program Suggestion: OCRM encourages DEP to identify and support professional development opportunities, regardless of location, that would serve to increase capacity at ANERR.

One way that ANERR has been able to expand Reserve initiatives is through productive and creative partnerships. The Reserve continues to maintain strong relationships with program partners to further goals in research, education and stewardship, addressing important regional issues such as freshwater flow allocation, land use change and invasive species management. The evaluation team noted various successful initiatives (i.e. monitoring data analyses, community outreach, land acquisition, prescribed burns) achieved via partnerships such as those with the Northwest Florida Water Management District, The Nature Conservancy, Apalachicola RiverKeepers and the Franklin County Sea Grant Extension Program. These collaborations help ANERR to accomplish much more than possible on their own; specific examples will be elaborated on later in this document.

Accomplishment: ANERR has thoughtfully expanded the Reserve's capacity and programming opportunities through integrated work with regional and community partners.

The ANERR Manager and staff also make a concerted effort to keep open lines of communication with local elected officials, Franklin County staff, and the Apalachicola community as a whole. Though sometimes difficult (i.e. in the case of sensitive issues such as hunting restrictions on the Reserve and red wolf introduction on St. Vincent Island), this involvement has helped the Reserve gain visibility and support in the community. For example, the Reserve Manager regularly attends Franklin County Commission meetings to answer questions regarding Department of Environmental Protection (DEP) rules and regulations, and to report on ANERR programs and current projects. OCRM commends the Reserve on these efforts.

Accomplishment: ANERR is committed to keeping the local and regional community informed and involved in Reserve (and DEP) issues and initiatives. This open communication has increased ANERR's visibility and support across the region.

2. Management Plan

Reserves are required by Federal regulation to have a current NOAA-approved management plan (15 C.F.R. Part 921.13). The plan should describe the reserve's goals, objectives and management issues, as well as strategies for research, education and interpretation, public access, construction, acquisition and resource preservation, and, if applicable, restoration and habitat manipulation. A management plan so written has four valuable functions: (1) to provide a vision and framework to guide reserve activities during a five year period; (2) to enable the reserves and NOAA to track progress and realize opportunities for growth; (3) to present reserve goals, objectives, and strategies for meeting the goals to constituents; and (4) to guide program evaluations. Regulations also require that a reserve's plan must be updated every five years.

ANERR has begun the process of updating their current management plan (which covers 1998-2003). The revised plan will reflect the Reserve's vision and strategy for the years 2007 to 2011. DEP's Coastal and Aquatic Managed Area Program (CAMA, in which ANERR is housed) has been working to develop a common plan outline to integrate 'management programs,' such as ANERR, CAMA-wide. The Reserve should work with the Estuarine Reserves Division (ERD), DEP and Reserve partners to produce a draft plan that addresses both CAMA's and OCRM's requirements. This plan should be submitted to ERD within 12 months of receipt of these findings.

Necessary Action: ANERR must develop a timeline for their Management Plan revision, including dates for when the outline, draft document and final plan will be submitted to the Estuarine Reserves Division within two months after receipt of the final findings.

3. Reserve Advisory Management Board

A Reserve Advisory Management Board (RAMB) composed of diverse and dedicated individuals can significantly assist a reserve in furthering its mission and increasing its visibility. ANERR's Advisory Board is composed of five members appointed by the Franklin County Board of Commissioners (such as representatives of the Commercial Seafood Industry and Franklin County School System) and five state and federal representatives (such as representatives from the Northwest Florida Water Management District and the US Fish and Wildlife Service). Currently, ANERR only uses their RAMB for discussions related to the Reserve's Management Plan revision. The evaluation team noted, however, that ANERR would like to expand the Board's role, and also to include more local stakeholders and working level state and federal agency representatives. (Some version of this suggestion has also been included in the last two evaluation findings.) In order to effectively expand their role, and make the RAMB more beneficial to Reserve operations and management, ANERR should carefully consider program needs and align the Committee's function accordingly.

Program suggestion: OCRM encourages ANERR to work with the current Reserve Advisory Management Board, during the management plan revision process, to determine how to best align the role and composition of the Board with the Reserve's future needs.

4. Facilities

Between 2004 and 2005, two Category 3 storms, Hurricanes Ivan and Dennis, made landfall in the Apalachicola region. Both significantly affected the region, but due to specific water level and storm path conditions, Hurricane Dennis had the greatest impact on both the Apalachicola Bay ecosystem and Reserve operations. Due to the storm surge associated with Dennis, Reserve staff were forced to abandon the Eastpoint office which was inundated by flooding. This has strained ANERR resources in Apalachicola, where Eastpoint-based staff have been relocated. Though there is obviously a lack of adequate space, staff made the most of the situation, and were positive about the benefits of all working together in the same location. OCRM commends Reserve staff on their desire and ability to use the intimate quarters to their advantage, increasing

the communication among sectors, and not letting the circumstances affect their programs. The Eastpoint facility is currently being repaired, with its completion estimated for early 2007.

A significant accomplishment of ANERR during this evaluation period was completion of the design of a new office and visitors' center to be located on the water in Eastpoint. The state-of-the-art facility will be LEED certified at the Silver level, incorporating sustainable features such as: pervious parking and walkways, the use of native vegetation for landscaping, cisterns to collect drainage from the roof, zero and minimum flow toilets, and the use of recycled materials. The building itself will include: interpretive areas with interactive displays and live exhibits; a 130-seat auditorium that can be divided into 3 classrooms; an outdoor amphitheater, and offices and laboratories for the Reserve programs. Construction of the facility is due to begin in the coming year. The old Eastpoint office will be sold upon completion of the new facility.

Accomplishment: OCRM commends ANERR on incorporating sustainable design features in the new facility that take into account the sensitivity of its coastal location, while not compromising the current and future needs of the Reserve.

The new facility will not only increase the ANERR's visibility and programming opportunities, but will also greatly alter current Reserve operations and management. Planning in advance for these changes will be essential for a smooth transition to the new building. ANERR needs to think critically about the operational needs of the new facility, including expected public use, and the changes these will bring to current staff roles and Reserve programming. For example, there will inevitably be an increase in the level of effort required to manage Reserve grounds, equipment and buildings with the addition of a large, new facility. In order for program-specific staff to not have to expand their current duties to include tasks related to facilities maintenance, OCRM strongly encourages ANERR to develop a staff position dedicated to equipment and facilities management.

Program Suggestion: ANERR should consider the operation and management needs of the new facility and the associated staffing requirements as part of their Management Plan revision. In addition, the Reserve should work to identify funding for a staff position dedicated to coordinating and conducting equipment and facilities management.

5. The Gulf of Mexico Alliance

The Gulf of Mexico Alliance was formed in 2004 as a regional partnership to improve collaboration among states bordering the Gulf on issues of ecosystem health. The Alliance identified five priorities as a starting point for action: reducing pollution and nutrient loading; improving and protecting water quality; restoring coastal wetlands and estuarine ecosystems; identifying and characterizing Gulf habitats to support coastal management; and expanding environmental education to improve stewardship. A series of Community Workshops were held in Gulf Coast states in order to get citizen input on priority issues and to build support for future initiatives. In August 2005, ANERR successfully hosted one of the workshops, and continues to be committed to the partnership. OCRM commends the Reserve's involvement in the Alliance, and encourages the State to support Reserve activities related to this important effort.

B. RESEARCH AND MONITORING PROGRAM

The primary goal of ANERR's research program is to promote, engage in, and coordinate research and monitoring to provide information that promotes understanding, protection and enhancement of the natural resources of the Apalachicola River and Bay system, as well as other estuaries nationwide. Program objectives thus include (but are not limited to): developing and maintaining an on-site library of scientific reference materials relevant to the Apalachicola system; developing field and laboratory facilities and equipment necessary to attract and support research and monitoring; promoting research and monitoring efforts within the Reserve; establishing priority topics for research and actively soliciting researchers to develop projects addressing these topics; and, providing science-based information necessary for sound natural resource management to federal, state and local decision-makers. In order to implement this plan, the research coordinator fosters relationships with resource management, academic and research communities.

1. Reserve Research

Overall, the evaluation team found ANERR's research and monitoring program efforts to be excellent. ANERR is conducting essential and applicable research that will benefit resource management in the Reserve and throughout the region.

For example, the Reserve continues to be very active in the Apalachicola-Chattahoochee-Flint (ACF) water allocation deliberations. Freshwater flow from this system is critical to the health of the Apalachicola estuary. Staff provide technical support and monitoring data for use in the legal negotiations between the states of Florida, Georgia, and Alabama, and the US Army Corps of Engineers. OCRM commends ANERR on their involvement in addressing this important coastal management issue, the resolution of which is likely to significantly impact the Apalachicola Bay system. ANERR must also be commended for their rapid response to other regional coastal management issues, such as water quality in the wake of the serious 2004 and 2005 hurricane seasons. Staff helped to assess environmental damage resulting from the storms, and is currently working with Weeks Bay and Grand Bay NERRs on a publication highlighting their findings.

Accomplishment: ANERR staff are quick to identify and respond to current local and regional coastal issues, such as the Apalachicola-Chattahoochee-Flint freshwater allocation. The Reserve successfully uses information collected via research and monitoring programs to inform and improve coastal management in northwest Florida.

Because of the applicability of much of ANERR's research, OCRM suggests that research program staff should increase their coordination with both the stewardship and Coastal Training Program teams in order to enhance the Reserve's science-to-management objectives. Greater collaboration amongst these sectors will allow information gained via Reserve research and monitoring to be applied more broadly to coastal management. For example, research and

stewardship teams could coordinate on invasive species or fire ecology research via a Graduate Research Fellow's project. As mentioned previously, OCRM encourages ANERR to consider how to improve inter-sector communication and collaboration for the Management Plan.

Research program staff continue to foster productive collaborations with many governmental and nonprofit resource management entities in the region. Because the Reserve has no formal research advisory committee, staff rely on these strong partnerships (e.g. Northwest Florida Water Management District (NFWFMD), The Nature Conservancy, Apalachicola Bay and River Keeper) for assistance in activities such as the development of current priority issues, GRF application review, and increasing program visibility. Among their most successful partnerships is that with NFWFMD, with whom they coordinate on ACF water allocation research. ANERR has also worked closely with the Apalachicola Bay and River Keeper this evaluation period. They collaborated on restoration planning for submerged aquatic vegetation (SAV), with the Reserve providing technical support that included water quality monitoring and GIS mapping of SAV restoration sites.

There is also much research occurring in the Reserve that is not conducted by ANERR. Research staff continue to informally update their reference library, which contains scientific publications resulting from Apalachicola and other estuarine research. References are now cataloged in ProCite, and hard copies are kept at the Reserve. Unfortunately, about 25% of these documents were destroyed in the flooding from Hurricane Dennis, but staff are currently trying to replace what they can. Such a reference library is a valuable resource for visiting researchers and students, who in turn complement the Reserve's own research program and increases ANERR visibility. The research coordinator regularly gives seminars at universities and colleges to attract new researchers to, and promote new research and monitoring efforts in, the Reserve. ANERR staff, however, have some difficulty tracking new research conducted within the Reserve. OCRM commends ANERR on their reference library, and suggests that staff consider how to best track visiting investigators and new research conducted in the Reserve.

2. Monitoring Programs

ANERR conducts a suite of monitoring efforts in the Apalachicola River, Bay and watershed. Variables range from abiotic water quality parameters, mandated by the NERR System-Wide Monitoring Program, to biological monitoring of indicator species specific to the Apalachicola system. Monitoring this breadth of variables is integral to resource management and research programs in and around Apalachicola Bay, as well as to the NERR system as a whole. ANERR uses their extensive monitoring data to address many relevant coastal management issues. As discussed previously, a current focus of the program is looking at different freshwater (Apalachicola-Chattahoochee-Flint) flow regimes and their effect on estuarine communities (i.e. fisheries, SAV) in the Apalachicola Bay. OCRM commends ANERR for developing strong monitoring programs that address issues specific to the Apalachicola region.

The goal of the NERR System-wide Monitoring Program (SWMP) is to identify and track short-term variability and long-term changes in estuarine water quality, habitat and land use in each reserve. The data gathered through SWMP provides standardized information about how

estuaries function and change over time, enabling scientists to predict how these systems will respond to anthropogenic changes. ANERR is fully compliant with NERRS SWMP requirements, monitoring four water quality stations for submission to the Centralized Data Management Office. ANERR has been collecting data at the two original SWMP sites since 1995. ANERR expanded their SWMP efforts this evaluation period by adding two new stations in 2002. Both of these sites are located on oyster bars in the Bay, and have actually been monitored continuously since 1992. The Reserve began nutrient and chlorophyll monitoring at the data logger sites in 2002 as well, and currently collects such data at an additional eleven sites around the Bay. Monthly samples for this phase of SWMP are analyzed by the Department of Oceanography at Florida State University. ANERR also continues to maintain their weather station in accordance with SWMP protocol.

ANERR research staff are involved in several successful biological monitoring projects as well. Monitoring key estuarine biota is especially important at ANERR given the potential for decreased freshwater flow in the Apalachicola River in the coming years. The Reserve has thus been monitoring characteristics (e.g. population size, growth) of certain species, as well as water quality parameters, to better understand the potential effect different flow regimes could have on their overall health. For example, ANERR has just finished a fifth year of their fisheries monitoring program which includes twice monthly trawling at 12 stations throughout Apalachicola Bay. This project revisits some sampling sites that were monitored in the 1970s and 1980s. The primary purpose is to determine if changes in fish and flow regimes (associated with the ACF water allocation plan) affect benthic and epibenthic community assemblages in Apalachicola Bay. All data has been digitized and QA/QC'ed; the Reserve is currently analyzing the data and plans to publish the results.

Staff have also begun collecting data characterizing oyster growth rate and overall health on two oyster bars in Apalachicola Bay. Oyster production in the Bay amounts to 10% of total nationwide production, and therefore is important not only ecologically, but also economically. These locations are also SWMP data logger sites, so continuous information on physical water parameters is available as well. Data from this study will be used by modelers to determine the health of the Bay's oyster population correlated with varying environmental conditions. ANERR is also working with the US Geological Survey to get detailed maps of Bay oyster reefs to have as a baseline if there is a significant change to freshwater flow in the future.

Of significant note this evaluation period, ANERR has opted to continue their NERRS pilot submerged aquatic vegetation (SAV) monitoring project (initiated in 2004) without any supplemental NOAA funding. The primary goal of the project, which builds upon the Reserve's previous SAV monitoring efforts, is to specify effective monitoring methods for the identification and long-term monitoring of fresh/brackish SAV within the Reserve. Using the techniques identified for the continued monitoring, ANERR hopes to ascertain habitat requirements of SAV (e.g. light attenuation, salinity, temperature) in East Bay and possible relationships to changes in river flow. OCRM commends the Reserve on their initiative to continue this important monitoring effort.

Accomplishment: ANERR will continue to conduct their expanded SAV monitoring program (initially a pilot project supported via the NERRS bio-monitoring effort) despite the end of NOAA funding.

Various researchers and resource managers currently rely on data collected through the Reserve's monitoring programs. Individuals use the data for efforts such as the identification of trends in species abundance or water quality, and the prioritization of management goals. The evaluation team discussed with ANERR how partners might more easily access the wealth of monitoring data available. One option identified is the inclusion of Reserve data on the University of South Florida's (USF) Water Atlas. USF, in partnership with local, state and federal government agencies, developed this website (wateratlas.org) to provide a comprehensive source for information on Florida's water resources. Though there are obviously costs associated with this option, OCRM believes the benefits to both the Reserve and the state of Florida are significant. For example, from the Water Atlas website, ANERR partners could efficiently access not only monitoring data and metadata, but potentially graphing and reference tools as well. OCRM thus encourages DEP to consider this opportunity to optimize the management and use of monitoring data collected by ANERR. In addition, while acknowledging the confidentiality issues associated with the data used for ACF negotiations, OCRM encourages ANERR to prioritize analyzing the monitoring data they collect as they are able.

3. Geographic Information Systems

The Florida Panhandle has been in a strong pattern of development over the past 15 years. Many counties are now beginning to develop 'marginal' lands in order to keep up with real estate demand. This trend will have a serious impact on Franklin County, historically a sparsely populated rural county, whose economy is highly dependent on the commercial seafood industry. The County's planning staff currently lacks the capacity to assess the impacts associated with new development (e.g., stormwater runoff, septic tank and wastewater effluent) that could degrade water quality in the Apalachicola estuarine system.

ANERR is thus working with NOAA's Coastal Services Center on a two-year project (2005-2007) to develop and implement a geographic information system (GIS) for Franklin County. This will provide the County with the capacity to use GIS in its planning and regulatory activities, to track permits, to understand the cumulative impacts of planning decisions, and develop a more comprehensive approach to planning future growth. ANERR has also coordinated with several state agencies to share data layers and identify additional GIS needs of the County. Staff from the Reserve have been working to digitize new data layers, geo-reference aerial photography, customize shape files, and create and update metadata. To date, over 1,200 data layers have been procured from state and federal agencies, and Florida universities, including those with ecological, economic and flood zone information. New shape files include those identifying docks, seawalls and septic tanks within Franklin County.

ANERR will ultimately provide Franklin County Planning Department with digital data, equipment, GIS software, and training to use GIS. Though the Reserve plans to work closely with County to implement the GIS product initially, they have identified the challenge of helping

County staff to maintain their capacity to use and update data layers. This maintenance of skills and data is critical to the continued utility of the GIS products. OCRM commends ANERR for identifying and responding to this important local need, and encourages the Reserve to identify how the GIS capacity can be maintained long-term.

Accomplishment: ANERR is working with CSC and Franklin County to develop and implement a geographic information system. This new capability will be a valuable tool for the County's use in its planning and permitting activities. OCRM encourages the Reserve to also consider how this capacity will be maintained in the future.

4. Site Profile

NERRS implementing regulations require each reserve to develop a comprehensive site profile. A site profile is designed to: (1) compile scientific datasets relating to the reserve, (2) characterize the physical and biotic components of the environment, (3) synthesize the known ecological relationships within the reserve and its watershed, (4) trace the impact of natural and human disturbances, and (5) explore the need for future research, education and management initiatives.

ANERR has been working on its site profile since 1994, and its completion was a necessary action in both the 1997 and 2000 evaluation findings. In 2000, OCRM approved an extension for the grant funding this work through 2002. Though ANERR did not make this deadline, and the site profile was not complete at the time of this evaluation, ERD and the Reserve are in agreement on a timeline for its completion. ERD recently received a final draft of the document, and both parties are confident that the finished product is possible in the coming year.

Necessary Action: ANERR must complete its site profile. A final product should be provided to ERD no later than six months from the receipt of these findings.

5. Environmental Cooperative Science Center

ANERR has continued to work on their partnership with Florida A&M University's (FAMU) Environmental Cooperative Science Center (ECSC, funded via NOAA). FAMU receives federal dollars to participate in the ECSC, through which researchers and students work with nearby Reserves to develop tools for coastal resource managers and decision makers. The evaluation team saw little in the way of results from this partnership thus far. ANERR has not been provided all of the annual reports or products produced via the ECSC, and feels that communication between the partners could be improved. Given that the ECSC will be funded for at least five more years, OCRM encourages ANERR to identify ways in which this collaboration can be strengthened to the benefit of the Reserve, faculty and students involved.

C. EDUCATION, INTERPRETATION AND OUTREACH

National Estuarine Research Reserves are federally designated "to enhance public awareness and understanding of estuarine areas, and provide suitable opportunities for public education and interpretation." The reserve system provides a range of educational programming to key audiences depending on watershed and community needs and the specific capacity of each reserve. ANERR offers a variety of education programs for school groups, coastal decision makers and the general public. In 2006, over 10,700 people visited Reserve facilities or participated in education programming. During this evaluation period, ANERR enhanced their education program in notable ways including: the development of the Learning in Florida's Environment (LIFE) program and the implementation of their Coastal Training Program (CTP).

ANERR's goals for their education program include: developing public understanding of estuarine, wetland and terrestrial habitats; developing a sense of public responsibility for environmental conditions, instilling an ethic of resource protection and conservation; and motivating the public to alter personal activities that affect their natural resources. In order to achieve these goals, the Reserve provides 1) on-site educational programming for kindergarten thru 12th grade students, 2) workshops for adult professional audiences, and 3) interpretation for, and outreach to, the general public. Education program staff at ANERR collaborate with many of the Reserve's partners to implement educational programming. Partners, including the Franklin County school district, Florida Coastal Management Program, and the Friends of the Reserve, work with ANERR on aspects such as curriculum development, topic identification for workshops, public event coordination, and funding. The Reserve reaches additional audiences through collaborations with the USFWS Soar Program, local ecotour providers, the Apalachicola Chamber of Commerce and the SeaGrant extension. OCRM finds that ANERR is successfully implementing its education program to address their goals related to public awareness and appreciation and public action.

1. K-12 Education Program

Currently, over eighty percent of ANERR's K-12 education occurs onsite at the Reserve. In order to sustain school field trips to the Reserve, the ANERR citizens' group, Friends of the Reserve, reimburses schools for busing costs, which tends to be the limiting factor in rural Franklin County.

One of the education program's major accomplishments during this evaluation period reflects their commitment to providing quality environmental education opportunities in their rural community. ANERR is currently working in concert with the DEP Office of Environmental Education and the local school district to develop a field-based environmental program called Learning in Florida's Environment (LIFE). LIFE is an initiative to establish a series of field-based, environmental science education programs at DEP-managed sites around the state. Goals of the program include improving student achievement, supporting teacher professional development, and enhancing stewardship of the regions' natural resources. ANERR was chosen as the pilot program for LIFE implementation, a selection based on the capabilities of staff and the rural nature of Franklin County. The content and delivery of LIFE will be site-specific, so

staff at the Reserve have been working with teachers to draft activities and integrate the project throughout the science, language arts, and math curricula. All 7th graders in the county participate in the LIFE Program, which includes four field trips.

LIFE is now in its second year, and ANERR has begun to help train other sites interested in the program. In the coming year, the Reserve will focus on teacher trainings, and also include student evaluations pre- and post- exercises. ANERR has assumed most of the cost related to implementing the LIFE Program thus far. CAMA has provided funding for teacher stipends, and the Reserve partnered with the St. Joe Foundation to supports student transportation and substitute teachers. OCRM commends ANERR on its active participation in the LIFE Program, and encourages the Reserve to continue to support expansion of the Program statewide.

Accomplishment: ANERR has taken a leadership role in the development and implementation of DEP's new education initiative, Learning in Florida's Environment.

ANERR has also begun to consider how to organize their education efforts and curriculum into the new NERRS K-12 Environmental Education Program (KEEP). The Reserve sees this as a good opportunity to share K-12 curricula with other Reserves in the Gulf region.

2. Coastal Training Program

An important aspect of a reserve's education program is the Coastal Training Program (CTP). The CTP is designed to inform coastal decision-making, improve coastal stewardship at local and regional levels through the application of science-based knowledge, and increase dialogue and collaboration among decision-makers. Planning for the program includes establishing a training advisory committee, conducting a market survey of training providers and an audience needs assessment, developing a program strategy that outlines priority coastal issues to be addressed, prioritizing target audiences, and creating a marketing plan.

ANERR's Coastal Training Program was formally implemented during this evaluation period, starting with the hire of a full-time CTP Coordinator in 2003. The Reserve currently receives full CTP implementation funding. Working with their CTP Advisory Committee, the Reserve submitted their planning documents to the CTP Oversight Committee in January 2005, four of which were rated "acceptable". The Committee found that ANERR's Needs Assessment lacked the required specificity. The Committee requested an updated assessment for one of the audiences targeted in the program strategy. At the time of these findings, ANERR had not yet provided this information.

Necessary Action: ANERR must submit the results of an updated needs assessment to the Estuarine Reserves Division, no later than six months from receipt of these findings, in order to complete commitments for CTP planning documents. Failure to submit the assessment could result in reduced operations funding for CTP implementation.

The strategic focus for ANERR's CTP is on land use planning and growth related issues, as they relate to water quantity and quality. Specifically, the CTP Advisory Committee has prioritized

sustainable development, measuring indicators, water quality basics, NEMP outreach, wastewater alternatives, recreation and tourism impacts and highlighting research. ANERR's target audiences include developers, permitting staff and environmental professionals. Workshops have been well received and have included NEMO workshops and Florida Master Naturalist Courses, as well as trainings on topics such as stormwater planning and habitat conservation.

ANERR's CTP has successfully networked with local and regional environmental/planning organizations and agencies, local government officials, and community groups to provide high quality science-based information for decision-making. Regional partners include the Florida Coastal Management Program, the Apalachee Regional Planning Council, the City of Carrabelle, Franklin County Sea Grant Marine Extension Program, the St. Joseph Bay State Buffer Preserve, and the Friends of the Reserve (Citizen Support Group).

ANERR's CTP is implemented primarily via 1-2 day workshops that include a field component. Programs have been developed for various audiences on a diverse suite of topics. Examples of recent Coastal Training Programs include:

- Florida Master Naturalist Course; Partners: Florida State University, Apalachicola Estuary Tours, Florida Department of Environmental Protection, St. Joseph Bay State Buffer Preserve
- NEMO Scoping Workshop; Partners: National NEMO Network, Bay County Sea Grant, Bay County Planning staff
- Habitat Conservation, Land Use and Transportation Planning in "Black Bear Country"; Partners: Florida Fish and Wildlife Conservation Commission, Defenders of Wildlife, and Florida Department of Transportation
- Growth Readiness Workshop; Partners: Southeast Watershed Forum, Apalachee Regional Planning Council, Apalachicola RiverKeepers, Franklin and Gulf Counties, and the City of Apalachicola
- Stormwater, Erosion and Sediment Control Inspector Training and Certification; Partner: Florida Department of Environmental Protection
- Red Tide: Ecology, Impacts and Response

Though describing all of ANERR's workshops is beyond the scope of this report, a couple of them merit special mention. In particular, ANERR has successfully implemented Florida Master Naturalist Program courses at the Reserve, and is coordinating Nonpoint Education for Municipal Officials (NEMO) programs in the region.

The Florida Master Naturalist Program (FMNP) is an adult education extension program developed by the University of Florida and provided by participating organizations such as ANERR. The FMNP includes courses in 3 subject areas: freshwater wetlands, coastal systems, and upland habitats. Students receive 40 educational contact hours including classroom learning, field trips, and practical experience in interpretation. The mission of the FMNP is "to promote awareness, understanding, and respect of Florida's natural world among Florida's citizens and visitors." ANERR also sees these courses as an opportunity to train individuals interested in

volunteering at the Reserve. The Reserve has offered two well attended FMNP courses thus far. OCRM commends ANERR on providing these opportunities in the panhandle.

ANERR's collaboration with the City of Carabelle has been a notable CTP effort this evaluation period. Following one of the Reserve's NEMO workshops that she attended, the Mayor of Carabelle requested that ANERR staff provide additional NEMO training to City land use planners. The CTP coordinator also gave a NEMO presentation to the City Commission at their public meeting on the City's comprehensive plan revision. As a result, the City of Carabelle included additional stormwater management measures in their new plan. The evaluation team had the pleasure of meeting with the Mayor of Carabelle, who praised ANERR and the CTP.

The Coastal Training Program coordinator also provides 'informal' trainings and information sessions for local and regional groups. Often these are of her own initiative, such as presentations to the local Rotary Club, the City of Apalachicola's planning and zoning board, and at coastal-related events in the region, but sometimes they are requested, such as by the City of Carrabelle. The CTP coordinator is also involved in local efforts such as working with Apalachicola's Chamber of Commerce and Waterfronts Florida Apalachicola Steering Committee. This proactive approach public outreach and education has generated much positive visibility for ANERR's CTP both within DEP and throughout the region. OCRM commends ANERR on taking advantage of these opportunities to educate not only CTP target audiences but also the community as a whole. By providing customized trainings to local governments such as the City of Carabelle, ANERR is directly improving planning and resource management in the coastal zone.

Accomplishment: ANERR has developed and implemented a successful Coastal Training Program. Workshop content is diverse and utilized by a range of audiences in northwest Florida.

Florida NERR CTP coordinators have also been working together on efforts to enhance the Program statewide, such as developing a Florida CTP website and sharing resources for common issues and topics. Currently the Florida NERRs are collaborating on a statewide needs assessment for elected officials, funded by a grant from the Florida Coastal Management Program (FCMP). This information will be used to identify best methods for involving this audience in the CTP and for designing programs to meet their interests and needs. OCRM commends ANERR on these statewide collaborative efforts, and encourages the Reserve to include the FCMP in identifying additional statewide coastal management needs.

3. Outreach

Community outreach is another priority for the education team. Reserve staff provide a variety of educational opportunities for the public. Activities conducted during this evaluation period included: guest lectures, Reserve tours, Seagrass Awareness Day, the Antique Boat Show, the Panhandle Birding and Wildflower Festival, and Estuaries Day.

A significant ANERR outreach accomplishment this evaluation period was the return and redesign of the *Oystercatcher*. After a time of inactivity earlier this review period (due to loss of a staff member), the Reserve hired a contractor to design and publish the new *Oystercatcher*. The newsletter, which will be published biannually, has the potential to be a valuable and effective outreach tool. It will provide information on Reserve activities and programs, as well as current resource management issues. ANERR has already successfully used this media to publish the Reserve's annual report.

Accomplishment: ANERR reinstated and redesigned its newsletter, the *Oystercatcher*.

Another, often invaluable, outreach tool employed by reserves is their website. The evaluation team was pleased to learn that ANERR has plans to invest in the development of a Reserve-specific website (currently their internet presence is only on the DEP's website) in the near future. ANERR's Friends of the Reserve has plans to pay for a domain name, and the Reserve requested funds in a new grant application to use the same contractor who did redesign the *Oystercatcher* to also design and develop their website.

Another outreach opportunity discussed during the site visit was the arrival of a new public television station in Apalachicola. ANERR has provided much quality programming for the St. George Island public broadcasting, and OCRM encourages the Reserve to take advantage of any opportunities that arise through the Apalachicola station as well.

In addition, completion of the new visitors' center will allow for enhanced exposure and outreach to community members and tourists, partners, and elected officials. Though it will certainly be challenging to expand the education program to cover such outreach, the new opportunities will be invaluable to increasing the Reserve's visibility. Given the impending increase in outreach needs and opportunities, ANERR should begin to plan how this expansion will affect current education programming.

D. STEWARDSHIP PROGRAM

Over the past few years, the NERRS has focused on developing a stewardship component to complement its existing research and education programs. At most reserves, stewardship staff participate in activities including research, monitoring, education, and implementation of resource management actions. ANERR stewardship staff are involved in all aspects of Reserve resource and facilities management. The stewardship program focuses on upland land management, through efforts such as prescribed burning to sustain native biodiversity, the eradication and control of invasive plants, and land acquisition. Staff also assist partner agencies with hands-on land management activities, GIS and mapping services, management plan review and site assessments pertaining to acquisition, development or restoration efforts.

Currently ANERR has three staff dedicated to stewardship and land management activities, and four who work across Reserve programs and conduct facilities maintenance. As mentioned previously, the stewardship staff also are primarily responsible for maintaining and repairing

program facilities and equipment. These tasks will certainly increase when the new office and visitors' center is complete, which will likely affect the stewardship program's ability to enhance or expand the Reserve's other land management activities. OCRM again encourages ANERR to consider how to staff a new position dedicated to facilities management.

An interesting cultural resources stewardship project that the Reserve has taken on during this evaluation period is the recovery of the Cape St. George lighthouse. The lighthouse, originally located on Little St. George Island which is an important nesting area for sea turtles and shorebirds, collapsed in the fall of 2005. The collapse was a result of years of beach erosion and, most likely, the severe 2005 hurricane season. ANERR, in collaboration with other DEP divisions, local volunteers and contractors, recovered and removed the lighthouse remains from the Reserve-managed gulf-front beach to a holding location in Eastpoint. The lighthouse recovery was funded in part by DEP using FEMA money for hurricane debris removal. A local citizens' organization is hoping to have the lighthouse reconstructed at a publicly accessible site on St. George Island.

1. Prescribed Burning

Prescribed burning continues to be one of ANERR's primary stewardship and land management activities, as many natural communities within the Reserve are dependent on fire to maintain species composition and diversity. The stewardship coordinator serves as the regional burn coordinator, training staff and helping to assess other CAMA managed lands' burn needs. ANERR also makes recommendations regarding prescribed fire planning for public lands, and coordinates with partners, such as the Northwest Florida Water Management District and Florida State Parks, on prescribed burns. ANERR staff also maintain fire lines and conduct fire ecology research.

New during this evaluation period is Florida DEP's (and Department of Agriculture and Consumer Services' Division of Forestry's) mandatory Red Card Qualification. The state has directed that all personnel conducting prescribed fires must obtain this certification (carry a "red card") by October of 2006. Staff could thus be trained and certified through the state's Center for Wildfire and Forest Resource Management Training. At the time of the evaluation, it was unclear whether any ANERR staff would have the opportunity to obtain this qualification by the deadline. OCRM encourages DEP to prioritize this training for ANERR stewardship staff.

2. Invasive Species Management

The stewardship team continues to actively control invasive species in the Reserve. Routine maintenance is necessary to keep exotics from re-invading habitat restored through prescribed burns. ANERR maintains a strong partnership with The Nature Conservancy (TNC) to address invasive species management in the Apalachicola River basin. Recently, the Reserve and TNC have agreed to co-fund a state contractual position that is tasked with 1) developing basin-wide invasive species maps, and 2) coordinating invasive species management and control on a watershed-wide scale. This initiative includes working with more than 20 public and private partners in the region. OCRM supports ANERR's commitment to invasive species management,

and encourages the Reserve to continue working with program partners such as TNC to maintain these efforts.

Accomplishment: OCRM commends ANERR on their commitment to address invasive species in the Apalachicola River basin, and encourages the Reserve to continue to support the position responsible for coordinating invasive species management efforts.

3. Land Acquisition

One of ANERR's goals, as outlined in their management plan, is to protect the natural resources of the Apalachicola Bay system through the acquisition of environmentally important lands and the expansion of the Reserve boundary. ANERR currently encompasses approximately 246,000 acres of land and water, including two barrier islands and a portion of a third, the lower 52 miles of the Apalachicola River and its associated floodplain, portions of adjoining uplands, and the Apalachicola Bay system. Reserve staff work with partners, including the DEP Division of State Lands and The Nature Conservancy, to identify and acquire environmentally sensitive tracts of privately owned land that is within and/or adjacent to Reserve boundaries. ANERR and state partners then determine who will directly manage the land acquired.

During this evaluation period, ANERR and Reserve partners acquired properties including the remaining parcel along the Nick's Hole embayment, 3000 acres adjacent to East Bay (managed as part of Tate's Hell State Forest), and 3556 acres on the Depot Creek drainage (managed at part of St. Joseph Bay State Buffer Preserve). ANERR has also recently partnered with The Nature Conservancy and other state agencies to sponsor a new land acquisition project totaling 49,000 acres in the local Apalachicola River watershed, adjacent to ANERR. 8,000 acres of this project were acquired in 2005; it is under management authority of the Florida Fish and Wildlife Conservation Commission. This acquisition will help to preserve and protect not only estuarine resources, but also a number of rare upland species. OCRM commends ANERR on their proactive and collaborative approach to land acquisition.

E. VOLUNTEER PROGRAM

Fundamental to inspiring a sense of resource stewardship within the coastal community is providing opportunities for the public to experience, to understand, and thus to care for, Apalachicola Bay. One way that the community can be active stewards of the resource is by joining a reserve's citizen support organization and/or volunteering.

ANERR's citizen support organization, Friends of the Reserve (FOR), provides the Reserve primarily with financial support. Though FOR has a relatively small local membership (only about 10%), the large overall membership provides an invaluable supplemental funding source for Reserve activities. The FOR Board of Trustees, which is very active and well organized, expends FOR funds to support Reserve activities such as busing for student field trips, CTP workshop supplies, and scholarships for local high school graduates. During this evaluation period, FOR also purchased a trailer to distribute environmental educational materials and

curricula to area schools. The evaluation team was highly impressed by the dedication and thoughtfulness with which the Board addresses Reserve needs.

Accomplishment: The Board of Trustees for ANERR's Friends of the Reserve is a well-organized and active group that thoughtfully considers and responds to Reserve needs.

In addition to the financial support provided by groups such as ANERR's FOR, many reserves benefit from the support of an active volunteer program. For example, ANERR will likely find that meeting the increased public relation needs of a new visitors' center will be a challenge. One way that ANERR could address the increased public relation requirements is to build capacity through a volunteer program. An active volunteer program will allow the Reserve to take advantage of the opportunities associated with a visitors' center without further encumbering staff. ANERR could model successful programs developed by the other two Florida NERRs, Rookery Bay and Guana-Tolomato-Matanzas (GTM). A strong volunteer base, trained by ANERR staff, could also support and enhance the Reserve's programs by participating in education, stewardship and research program activities. The evaluation team believes that the Reserve should assess the operational needs of the new Visitors' Center, as well as the volunteer assets in the community, and think strategically about how to build a volunteer program. The successful recruitment of new volunteers depends upon dedicated staff support of such a program and targeted outreach strategies. Therefore, OCRM also encourages the Reserve to consider creating a permanent volunteer coordinator position, as Rookery Bay and GTM NERRs have done.

Program Suggestion: OCRM encourages ANERR to assess the needs of the new Visitors Center, and consider developing a volunteer program to support Center operations as well as Reserve programs. DEP should consider creating a volunteer coordinator position for this work.

V. CONCLUSIONS

For the reasons stated herein, I find that the State of Florida is adhering to the programmatic requirements of the National Estuarine Research Reserve System in the operation of its approved Apalachicola National Estuarine Research Reserve (ANERR).

ANERR has made notable progress in the following areas: reserve administration; facilities; research and monitoring; education initiatives; and stewardship.

The findings contain three Necessary Actions which must be address according to the timelines provided. These evaluation findings also contain five recommendations in the form of Program Suggestions. The Program Suggestions should be addressed before the next regularly scheduled program evaluation, but they are not mandatory at this time. Summary tables of program accomplishments and recommendations are provided in the Appendix E.

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

signed David M. Kennedy
David M. Kennedy
Director, Office of Ocean and Coastal
Resource Management

2/2/2007
Date

VII. APPENDICES

APPENDIX A. ANERR'S RESPONSE TO 2000 EVALUATION FINDINGS

1. Program Suggestion: The Reserve should pursue making specific rules using rulemaking authority for uplands and other means to make provisions of its management plan enforceable. DEP should provide updates on the implementation of the rule-making authority and of other means to make the management plan enforceable to OCRM in its semi-annual progress reports.

ANERR Response: Since the 312 evaluation in 2000, the Florida Department of Environmental Protection's (FDEP) Office of Coastal and Aquatic Managed Areas (CAMA) has availed itself of its rulemaking authority to govern the management and use of state owned uplands assigned to it for management (see Florida Statute 253.86). On July 1st, 2003, Florida Administrative Code, Chapter 18-23 was enacted. In this rule are listed prohibited activities and a means of enforcing violations. The rule is know as the buffer preserve rule, but includes states lands managed by CAMA that are part of the state three NERRs. Many of the Reserve's management plan goals are complemented by this rule (e.g. restrictions on carrying firearms, hunting, unleashed animals, etc.).

In April of 2006, Franklin County (the county in which ANERR is situated) challenged the prohibition on hunting and possession of firearms on the Little St. George Island parcel of the Reserve. The Reserve manager attended a meeting of the board of commissioners and detailed the provisions of Chapter 18-23 and pointed out that authority for prohibitions in the rule my be sought through a written request to CAMA's central office in Tallahassee. That has occurred and a decision is pending.

2. Necessary Action: The Reserve must address the issue of the Reserve Advisory Management Board (RAMB), examining its existing and potential role, composition, and operation. This effort should be coordinated with current RAMB members and other key stakeholders. The results of this review should be incorporated into the 2004-1009 management plan revision.

ANERR Response: Since this finding the RAMB has remained largely dormant and attendance by the board continued to be sparse, and issues raised by members were often well beyond the scope of the Reserve.

The most recent 312 evaluation, in May of 2006, addressed the RAMB, and it was determined that the Reserve would use the revision of its management plan to reconstitute the membership and functional duties of the RAMB. The socioeconomic changes in Franklin County since the RAMB was fully functional are sufficient to ensure that membership will be diverse, representative of varied view points, and responsive to the mission of the Reserve.

3. Program Suggestion: The DEP should develop a formal process to: (1) notify the ANERR staff about permit activities that may impact the ANERR, and (2) receive ANERR staff input and develop recommendations.

ANERR Response: Coordination between DEP's permitting arm (and other permitting agencies ACOE, FWC, USFWS) has improved greatly since the evaluation in 2000. Reserve staff are often solicited for permit review comments by our regulatory colleagues. Reserve staff will take regulators on site and impart knowledge of local ecology or the permitting history of a particular site. Further, regulators will, from time to time, use Reserve staff as a resource on permit applications that do not stand to directly impact the Reserve.

4. Necessary Action: The ANERR should assign high priority to the site profile to ensure its completion by the June 30, 2002 deadline.

ANERR Response: The second necessary action of the 2000 evaluation was to have the site profile completed by June 30, 2002. This has not happened, but the research sections has given assurances to ERD that it will be submitted no later than December, 31, 2006. Staff are currently working towards the completion of this document and will satisfy the current deadline.

5. Program Suggestion: The Reserve should continue to build its volunteer program for Reserve operations, education, research, monitoring and resource management. To accomplish this, it is strongly encouraged that the Reserve add a volunteer coordinator to its full-time staff.

ANERR Response: The Reserve continues to be unable to staff a full time volunteer coordinator. As a result, there is a very limited volunteer base that works with the Reserve. The Reserve continues to see this position as a priority, especially as it plans to construct a new facility that will certainly see an increase in visitation. It should be noted that even absent a volunteer coordinator visitors to the Reserve are always engaged by staff and are able to have all the questions addressed.

6. Program Suggestion: The ANERR should work to fill vacancies in the education program. It should undertake an internal program evaluation to assist in prioritizing its educational activities. The ANERR is also encouraged to strengthen the linkages between the education and the research, monitoring and resource management programs. These priorities and linkages should be articulated in the 2004-2009 management plan revision.

ANERR Response: Since 2003 the education program has lost the position that was responsible for the newsletter. However, that service has been contracted and has reduced work load on staff for that particular function. In 2003, a CTP coordinator was hired, and since then that program has enjoyed a very complementary relationship with the education program; each enhancing the other. Moreover, the Reserve has been able to hire a new staff position that splits its time evenly between education and CTP. The education program continues to run at capacity,

but satisfy the expectations of the grant and meet many of the needs of visitors and the community.

APPENDIX B. PERSONS AND INSTITUTIONS CONTACTED

Apalachicola National Estuarine Research Reserve

Name	Title
Linda Allen	Secretary
Lisa Bailey	Environmental Specialist
Seth Blitch	Manager
William Coatney	Custodial Worker
Gail Cox	Staff Assistant
Lee Edmiston	Research Coordinator
Stephanie Fahmy	Environmental Specialist
Pallas Gandy	Information Specialist
Rosalyn Kilcollins	CTP Coordinator
Alan Knothe	Environmental Specialist
Megan Lamb	Environmental Specialist
Lauren Levi	Environmental Specialist
Erik Lovestrand	Education Coordinator
Patrick Millender	Park Service Specialist
Jimmy Moses	Park Service Specialist
Roy Ogles	Resource Management Coordinator
Rick Peterson	GRF, Florida State University
Jessica Stewart	Environmental Specialist
Steve Travis	Operations & Management Consultant
Jennifer Wanat	Environmental Specialist
Carla Watkins	Administrative Assistant
Kimberly Wren	Environmental Specialist

State of Florida

Name	Title
Stephanie Bailenson	FDEP, CAMA Director
Danny Clayton	FDEP, Florida Coastal Management Program
Artie Jacobson	FDEP, Coastal and Aquatic Managed Areas
Joe Shields	Florida Department of Agriculture and Consumer Services

Program Partners

Name	Affiliation
John Blanchard	The Nature Conservancy
Monica Harris	St. Vincent National Wildlife Refuge, US FWS
Faye Johnson	Apalachicola Riverkeepers
Graham Lewis	Northwest Florida Water Management District
Bill Mahan	SeaGrant – Franklin County Extension Agent
Dan Tonsmeire	Apalachicola Riverkeepers

Community Representatives

Name	Office
Russell Crofton	Franklin County Commissioner
Anita Gregory	Franklin County Chamber of Commerce
Mel Kelly	City of Carrabelle, Mayor
Alan Pierce	Franklin County - Director of Services, County Planner

APPENDIX C: PERSONS ATTENDING THE PUBLIC MEETING

Name	Affiliation
David Adlerstein	Apalachicola Times
Patricia Hale	Assistant Scout Master, Boy Scout Troop 22 SGI, FL

APPENDIX D: NOAA'S RESPONSE TO WRITTEN COMMENTS

NOAA did not receive any public comments regarding the Apalachicola National Estuarine Research Reserve.

APPENDIX E: SUMMARY OF ACCOMPLISHMENTS AND RECOMMENDATIONS

Accomplishments

Issue Area	Accomplishment
Reserve Administration	ANERR has thoughtfully expanded the Reserve's capacity and programming opportunities through integrated work with regional and community partners.
Reserve Administration	ANERR is committed to keeping the local and regional community informed and involved in Reserve (and DEP) issues and initiatives. This open communication has increased ANERR's visibility and support across the region.
Facilities	OCRM commends ANERR on incorporating sustainable design features in the new facility that take into account the sensitivity of its coastal location, while not compromising the current and future needs of the Reserve.
Reserve Research	ANERR staff are quick to identify and respond to current local and regional coastal issues, such as the Apalachicola-Chattahoochee-Flint freshwater allocation. The Reserve successfully uses information collected via research and monitoring programs to inform and improve coastal management in northwest Florida.
Monitoring Programs	ANERR will continue to conduct their expanded SAV monitoring program (initially a pilot project supported via the NERRS bio-monitoring effort) despite the end of NOAA funding.
Geographic Information Systems	ANERR is working with CSC and Franklin County to develop and implement a geographic information system. This new capability will be a valuable tool for the County's use in its planning and permitting activities. OCRM encourages the Reserve to also consider how this capacity will be maintained in the future.
K-12 Education	ANERR has taken a leadership role in the development and implementation of DEP's new education initiative, Learning in Florida's Environment.
Coastal Training Program	ANERR has developed and implemented a successful Coastal Training Program. Workshop content is diverse and utilized by a range of audiences in northwest Florida.
Outreach	ANERR reinstated and redesigned its newsletter, the <i>Oystercatcher</i> .
Invasive Species Management	OCRM commends ANERR on their commitment to address invasive species in the Apalachicola River basin, and encourages the Reserve to continue to support the position responsible for coordinating invasive species management efforts.
Friends of the Reserve	The Board of Trustees for ANERR's Friends of the Reserve is a well-organized and active group that thoughtfully considers and responds to Reserve needs.

Recommendations

Recommendations are in the form of Necessary Actions (NA) or Program Suggestions (PS).

Issue Area	Recommendation
Reserve Administration	PS: ANERR should consider how to improve coordination among program sectors. Inter-sector communication and collaboration should be discussed as part of the Management Plan revision.
Reserve Administration	PS: OCRM encourages DEP to identify and support professional development opportunities, regardless of location, that would serve to increase capacity at ANERR.
Management Plan	NA: ANERR must develop a timeline for their Management Plan revision, including dates for when the outline, draft document and final plan will be submitted to the Estuarine Reserves Division within two months after receipt of the final findings.
Reserve Advisory Management Board	PS: OCRM encourages ANERR to work with the current Reserve Advisory Management Board, during the management plan revision process, to determine how to best align the role and composition of the Board with the Reserve's future needs.
Facilities	PS: ANERR should consider the operation and management needs of the new facility and the associated staffing requirements as part of their Management Plan revision. In addition, the Reserve should work to identify funding for a staff position dedicated to coordinating and conducting equipment and facilities management.
Site Profile	NA: ANERR must complete its site profile. A final product should be provided to ERD no later than six months from the receipt of these findings.
Coastal Training Program	NA: ANERR must submit the results of an updated needs assessment to the Estuarine Reserves Division, no later than six months from receipt of these findings, in order to complete commitments for CTP planning documents. Failure to submit the assessment could result in reduced operations funding for CTP implementation.
Volunteer Program	PS: OCRM encourages ANERR to assess the needs of the new Visitors Center, and consider developing a volunteer program to support Center operations as well as Reserve programs. DEP should consider creating a volunteer coordinator position for this work.