

NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

Date 07/05/2017

Department of Commerce
National Oceanic and Atmospheric Administration

FOR CERTIFYING OFFICIAL: Rod Turk
FOR CLEARANCE OFFICER: Jennifer Jessup

In accordance with the Paperwork Reduction Act, OMB has taken action on your request received 03/28/2017

ACTION REQUESTED: Extension without change of a currently approved collection

TYPE OF REVIEW REQUESTED: Regular

ICR REFERENCE NUMBER: 201703-0648-008

AGENCY ICR TRACKING NUMBER:

TITLE: Management and Oversight of the National Estuarine Research Reserve System

LIST OF INFORMATION COLLECTIONS: See next page

OMB ACTION: Approved without change

OMB CONTROL NUMBER: 0648-0121

The agency is required to display the OMB Control Number and inform respondents of its legal significance in accordance with 5 CFR 1320.5(b).

EXPIRATION DATE: 07/31/2020

DISCONTINUE DATE:

BURDEN:	RESPONSES	HOURS	COSTS
Previous	151	8,909	0
New	151	8,909	0
Difference			
Change due to New Statute	0	0	0
Change due to Agency Discretion	0	0	0
Change due to Agency Adjustment	0	0	0
Change due to PRA Violation	0	0	0

TERMS OF CLEARANCE:

OMB Authorizing Official: Dominic J. Mancini
Deputy and Acting Administrator,
Office Of Information And Regulatory Affairs

List of ICs

IC Title	Form No.	Form Name	CFR Citation
NERRS applications plus NEPA and SHPO documentation			15 CFR 921.11
NERRS management plans			16 CFR 921.13
NERRS site nomination documents			16 CFR 921.11
NERRS site profiles			16 CFR 921.60
Grant progress reporting			
Grant progress report - final			

PAPERWORK REDUCTION ACT SUBMISSION

Please read the instructions before completing this form. For additional forms or assistance in completing this form, contact your agency's Paperwork Clearance Officer. Send two copies of this form, the collection instrument to be reviewed, the supporting statement, and any additional documentation to: Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW, Washington, DC 20503.

1. Agency/Subagency originating request	2. OMB control number b. <input type="checkbox"/> None a. _____ - _____
3. Type of information collection (<i>check one</i>) a. <input type="checkbox"/> New Collection b. <input type="checkbox"/> Revision of a currently approved collection c. <input type="checkbox"/> Extension of a currently approved collection d. <input type="checkbox"/> Reinstatement, without change, of a previously approved collection for which approval has expired e. <input type="checkbox"/> Reinstatement, with change, of a previously approved collection for which approval has expired f. <input type="checkbox"/> Existing collection in use without an OMB control number For b-f, note Item A2 of Supporting Statement instructions	4. Type of review requested (<i>check one</i>) a. <input type="checkbox"/> Regular submission b. <input type="checkbox"/> Emergency - Approval requested by _____ / _____ / _____ c. <input type="checkbox"/> Delegated
7. Title	5. Small entities Will this information collection have a significant economic impact on a substantial number of small entities? <input type="checkbox"/> Yes <input type="checkbox"/> No
8. Agency form number(s) (<i>if applicable</i>)	6. Requested expiration date a. <input type="checkbox"/> Three years from approval date b. <input type="checkbox"/> Other Specify: _____ / _____
9. Keywords	
10. Abstract	
11. Affected public (<i>Mark primary with "P" and all others that apply with "x"</i>) a. ___ Individuals or households d. ___ Farms b. ___ Business or other for-profit e. ___ Federal Government c. ___ Not-for-profit institutions f. ___ State, Local or Tribal Government	12. Obligation to respond (<i>check one</i>) a. <input type="checkbox"/> Voluntary b. <input type="checkbox"/> Required to obtain or retain benefits c. <input type="checkbox"/> Mandatory
13. Annual recordkeeping and reporting burden a. Number of respondents _____ b. Total annual responses _____ 1. Percentage of these responses collected electronically _____ % c. Total annual hours requested _____ d. Current OMB inventory _____ e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____	14. Annual reporting and recordkeeping cost burden (<i>in thousands of dollars</i>) a. Total annualized capital/startup costs _____ b. Total annual costs (O&M) _____ c. Total annualized cost requested _____ d. Current OMB inventory _____ e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____
15. Purpose of information collection (<i>Mark primary with "P" and all others that apply with "X"</i>) a. ___ Application for benefits e. ___ Program planning or management b. ___ Program evaluation f. ___ Research c. ___ General purpose statistics g. ___ Regulatory or compliance d. ___ Audit	16. Frequency of recordkeeping or reporting (<i>check all that apply</i>) a. <input type="checkbox"/> Recordkeeping b. <input type="checkbox"/> Third party disclosure c. <input type="checkbox"/> Reporting 1. <input type="checkbox"/> On occasion 2. <input type="checkbox"/> Weekly 3. <input type="checkbox"/> Monthly 4. <input type="checkbox"/> Quarterly 5. <input type="checkbox"/> Semi-annually 6. <input type="checkbox"/> Annually 7. <input type="checkbox"/> Biennially 8. <input type="checkbox"/> Other (describe) _____
17. Statistical methods Does this information collection employ statistical methods <input type="checkbox"/> Yes <input type="checkbox"/> No	18. Agency Contact (person who can best answer questions regarding the content of this submission) Name: _____ Phone: _____

19. Certification for Paperwork Reduction Act Submissions

On behalf of this Federal Agency, I certify that the collection of information encompassed by this request complies with 5 CFR 1320.9

NOTE: The text of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3), appear at the end of the instructions. *The certification is to be made with reference to those regulatory provisions as set forth in the instructions.*

The following is a summary of the topics, regarding the proposed collection of information, that the certification covers:

- (a) It is necessary for the proper performance of agency functions;
- (b) It avoids unnecessary duplication;
- (c) It reduces burden on small entities;
- (d) It used plain, coherent, and unambiguous terminology that is understandable to respondents;
- (e) Its implementation will be consistent and compatible with current reporting and recordkeeping practices;
- (f) It indicates the retention period for recordkeeping requirements;
- (g) It informs respondents of the information called for under 5 CFR 1320.8(b)(3):
 - (i) Why the information is being collected;
 - (ii) Use of information;
 - (iii) Burden estimate;
 - (iv) Nature of response (voluntary, required for a benefit, mandatory);
 - (v) Nature and extent of confidentiality; and
 - (vi) Need to display currently valid OMB control number;
- (h) It was developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected (see note in Item 19 of instructions);
- (i) It uses effective and efficient statistical survey methodology; and
- (j) It makes appropriate use of information technology.

If you are unable to certify compliance with any of the provisions, identify the item below and explain the reason in Item 18 of the Supporting Statement.

Signature of Senior Official or designee

Date

Agency Certification (signature of Assistant Administrator, Deputy Assistant Administrator, Line Office Chief Information Officer, head of MB staff for L.O.s, or of the Director of a Program or StaffOffice)

Signature

Date

Signature of NOAA Clearance Officer

Signature

Date

**SUPPORTING STATEMENT
MANAGEMENT AND OVERSIGHT OF THE NATIONAL
ESTUARINE RESEARCH RESERVE SYSTEM
OMB CONTROL NO. 0648-0121**

A. JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary.

This request is for an extension of this information collection.

The National Estuarine Research Reserve System (NERRS) is a partnership between the National Oceanic and Atmospheric Administration (NOAA) and 22 states and Puerto Rico that protects more than 1.3 million coastal and estuarine acres in 28 reserves for long-term research, monitoring, education, and stewardship, established under Section 315 of the Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. 1451), 16 U.S.C. 1461. The NERRS consists of carefully selected estuarine areas of the United States that are designated, preserved, and managed for research and educational purposes. The Reserves are chosen to reflect regional differences and to include a variety of ecosystem types according to the classification scheme of the national program as presented in 15 CFR Part 921. As part of a national system, the Reserves collectively provide a unique opportunity to address research questions and estuarine management issues of national significance. The reserves also serve to enhance public awareness and understanding of estuarine areas and provide suitable opportunities for public education and interpretation. Regulations provide guidance for delineating reserve boundaries and additional guidance for arriving at the most effective and least costly approach to establishing adequate state control of key land and water areas. Any qualified public or private persons, organizations or institutions may compete for research funding to work in research Reserves. In fact, applicants are almost always states.

Subsection 315(e)(1)(B) of the CZMA authorizes the National Ocean Service (NOS) to make grants to, or cooperative agreements with, any coastal state or public or private institution or person for purposes of supporting research within the NERRS. This program is listed in the Catalog of Federal Domestic Assistance under "Coastal Zone Management Estuarine Research Reserve, Number 11.420". Applications for such grants follow the provisions of 2 CFR 200.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

There are several types of reporting requirements relating to this program. Those documents submitted include: 1) site designation (nomination) materials including associated National Environmental Policy Act (NEPA) requirements, 2) management plans, 3) site profiles which are ecological characterizations of the reserve, and 4) supporting materials for funding applications.

1) **Site Designation:** Requests by states to approve proposed sites must contain the information detailed at 15 CFR 921.11. The information is necessary to ensure that the site meets national

standards and requirements for a reserve, to obtain a complete description of the area being proposed, to ensure that the best available site was chosen, and to ensure proper participation by the public and state's Governor.

A coastal state may apply for financial assistance for the purpose of site selection, preparation of a management plan and environmental impact statement, and for conducting limited characterization studies. The requirements are described at 15 CFR 921.13. The management plan is a detailed document outlining goals, objectives and strategies for the reserve and serves as a framework for establishing and managing a reserve. The plan must contain sub-plans for administration, research, education, public access, construction, land acquisition and resource protection to ensure the appropriate use and protection of reserve resources. This information is needed to ensure that the reserve will meet the objectives the law established for reserves.

The state must also submit the data necessary for NOAA to prepare an Environmental Impact Statement. Since the state has to gather much of this information or similar information for other purposes, it can obtain it efficiently. The state also receives Federal funds to provide this information.

2) **Management Plan:** It is required that management plans be revised every five years 921.33(c). As stated above, management plans outline the major goals, objectives and strategies that the reserve will undertake in a five year period and contains plans for administration, research, education, public access, construction, land acquisition and resource protection. The management plan provides a vision and framework to guide reserve activities during the five year period, enables the reserves and NOAA to track progress and realize opportunities for growth, guides program evaluations under Section 312 of the Coastal Zone Management Act, and enables the reserves to acquire facilities construction and land acquisition funds.

3) **Site Profile:** According to the 15 CFR Subpart I, section 921.60 (1) and (2), monitoring funds are used to support major phases of a monitoring program: (1) studies necessary to collect data for a comprehensive site description/characterization; and (2) development of a site profile. The site profile is a synthesis of information gathered during Phase I, the Environmental Characterization Phase, which is conducted as a combination of literature and field (optional) research that provides an overall picture of the Reserve in terms of its resources, issues, management constraints, and research needs. The site profile will help Reserve management find important information gaps in the resources and identify the aspects of monitoring to be initiated during a later monitoring phase (resource monitoring).

4) **Funding Application:** States apply for Federal funds to assist the state in operation and management of the reserve including the management of research, monitoring, education and interpretive programs (15 CFR 921.32) Applications (SF 424s and supporting documentation required by 2 CFR 200 are required by NOAA to determine if the proposal for funding meets the standards of the Act and implementing regulations, and applicable laws and regulations.

Applications for acquisition and development awards must include a categorical exclusion check list, Certification of Federal Consistency, and State Historical Preservation Office (SHPO) comments. Before the funds for construction are expended, the categorical exclusion checklist, which is a part of the grant application package for construction and development projects, is submitted to NOS for

approval. The National Historic Preservation Act requires that NOAA obtain the state comments to ensure the Federal government is not funding a project that will harm a site of historical significance.

NOAA will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Although the information collected is not expected to be disseminated directly to the public, results may be used in scientific, management, technical or general informational publications. Should NOAA decide to disseminate the information, it will be subject to the quality control measures and pre-dissemination review pursuant to Section 515 of Public Law 106-554.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.

Extensive effort has been made to establish an electronic system for grant applications. The federal government now uses grants.gov to obtain competitive and non-competitive award applications. Within NOAA's National Ocean Service, an electronic system called Coastal and Marine Management Program (CAMMP) assists NERRS and other applicant in creating the narrative and associated budget portions of the award application. CAMMP serves to facilitate the collection, access, analysis, and dissemination of coastal grant operations data and information at a national level and alleviates the need for paper copies or other programs to create award applications. CAMMP streamlines the application process, improves state and federal data collection and analysis capabilities, serves as a national database for related information on NERR programs and improves accessibility to coastal resource information. All NERRs are using the CAMMP Grant Application and Reporting System. Upon receipt of an award, NOAA recipients use the NOAA Grants Online System to submit progress reports, financial reports and post-award actions deleting the need for paper submissions. The entire grant award process is accomplished electronically.

4. Describe efforts to identify duplication.

The CZMA creates the only state-federal partnership program that establishes a national system of coastal protected areas dedicated to long-term stewardship, research and monitoring, and education. There are no similar programs or duplication.

5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

The information collection primarily involves state agencies, with a few (if any) small entities involved each year for research grants. We do provide technical assistance in preparing responses as requested, and this reduces the burden.

6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

If this information were not collected, there would not be a national estuarine reserve system, supported by management and awards by the Federal Government.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

NA.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A Federal Register Notice published on January 9, 2017 (82 FR 2324) solicited public comment on this collection. No comments were received.

Following the 2016 grant cycle, NOAA solicited comments from a number of grant recipients. The questions asked included:

1. Do estimated annual reporting burdens accurately reflect the reporting efforts?
2. Are the methods of data collection appropriate? (i.e., paper vs. electronic)
3. Are there ways to enhance the quality, utility, and clarity of the information collected?
4. Are there ways to minimize the burden of the collection of information?

Responses were received from three recipients. They indicated that the burden estimates are accurate. Respondents overwhelmingly felt that the methods of data collection are appropriate. While they had no specific recommendations, one commenter indicated, and cc'd the others, that site profiles are one-time only documents, and provide a single "snap-shot" of the reserve that may become out of date. Because of the larger burden required to develop full management plans every five years, she did recommend that the program consider moving to a ten-year management plan with minimal updates after five years. The other two commenters agreed with her suggestions. NOAA has begun looking at options for streamlining the management plan update process, including reducing the types of information that will be required to be included, especially if the information is readily available in other media. NOAA will consult with general counsel to ensure that any proposed changes are in conformance with the statute and implementing regulations.

Suggestions on ways to improve reporting through the Coastal and Marine Management Program (CAMMP) were recommended for the last renewal. Suggestions included improvements to user interface and the development of queries or summary reports. NOAA is still in the process of updating CAMMP to include several of the recommendations provided.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

No payments or gifts to respondents are made.

10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.

No assurance of confidentiality is provided.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

No sensitive questions are asked.

12. Provide an estimate in hours of the burden of the collection of information.

It is anticipated that one new site will be considered for designation within the next five years, bringing the total respondent number to 30 (one was added in the past 3 years), however this is still the preliminary stages, and it is unlikely that this site will affect the estimates. States may have more than one site, and sites may have more than one grant at a time.

Estimated burden is calculated from the following:

Table 1.

Activity Type	# of Respondents	Time per activity (hours)	Frequency	Total Responses per year	Annual Hours	Change
Management Plans	29	1,800	About every five years	4	7,200	No Change
Site Profile	1	1,800	Once	1/3* (1)	600	No Change
Site designation	1	2,500	About every five years	1/5* (1)	500	No Change
Grant Progress Reporting - comprehensive	29	5	Twice a year	58	290	No Change
Grant Progress Report – Final non-comprehensive	29	2	Once a year	29	58	No Change
Grant Application	29	8	Once a year	29	232	No Change
NEPA and SHPO	29	1	Once a year	29	29	No Change
Total				151	8,909	No Change

*Rounded up to 1 so would not be zero in ROCIS

Reserves submit a revised management plan every five years. Given the number of reserves with updated plans and the time schedule to accommodate future plan updates, the number of plans reviewed per year has been set at four. Site profiles had already been reduced to one, as all except a

newly-designated reserve have completed this task. There are no changes being recommended at this time.

Respondent labor costs total \$267,270, based on estimated burden hours and a pay rate of \$30/hour.

13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).

Electronic copies are encouraged for management plan and site profile submission. Printed hard copies are no longer required (although some respondents may choose to submit a hard copy).

Total annual recordkeeping/reporting costs are \$0. This represents a reduction in cost burden from \$1,215. Printing requirements have been eliminated. Completed documents are now made available in electronic format and a large number of printed documents are not necessary. The other items (grant applications, grant reports) can be submitted electronically and/or copies are made by the federal government.

14. Provide estimates of annualized cost to the Federal government.

The annual Federal cost associated with collecting, processing, and analyzing the information is about \$59,042, based on an average federal salary and fringe of federal employees at \$65/hour.

Table 2.

Activity Type	Respondents	Time (hours)	Times per year	Annualized Federal Cost
Management Plan Review and Approval	4	60	1	\$15,600
Site Profile Review and Approval	1	40	Once in three years	\$867
Site designation	1	520	Once in five years	\$6,760
Grant Progress Report review and approval - comprehensive	29	4	2	\$15,080
Grant Progress Report review and approval – Final non-comprehensive	29	1	1	\$1,885
Grant Application review	29	6	1	\$11,310
NEPA and SHPO	29	4	1	\$7,540
Total				\$59,042

15. Explain the reasons for any program changes or adjustments.

There are no changes being proposed for this request. The adjustments made during the previous revision in 2014 appear to be a more accurate representation of the paperwork burden for implementing the NERRS, including preparation of management plans, site profiles, and grant applications.

16. For collections whose results will be published, outline the plans for tabulation and publication.

The results will not be published.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.

NA.

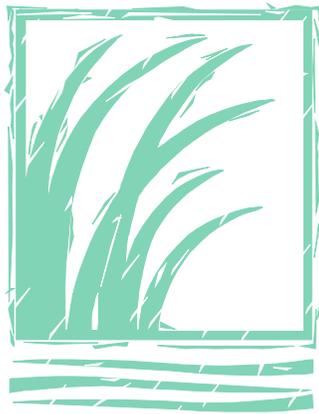
18. Explain each exception to the certification statement.

NA.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

This collection does not employ statistical methods.

**NATIONAL ESTUARINE RESEARCH RESERVE
DESIGNATION, SITE SELECTION AND NOMINATION**



**N A T I O N A L
E S T U A R I N E
R E S E A R C H
R E S E R V E
S Y S T E M**

May 2006

Table of Contents

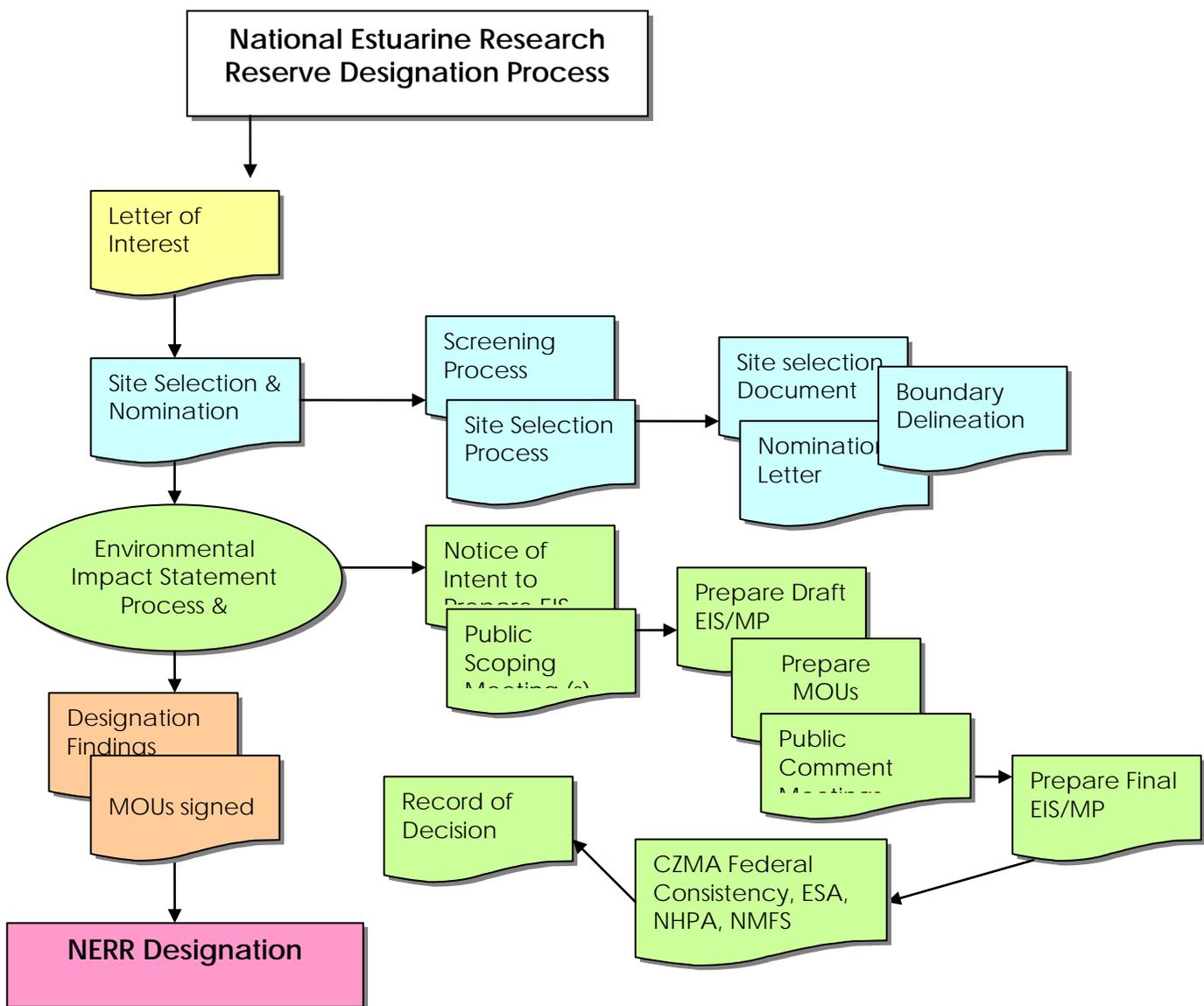
I. Designation Process Overview	3
A. List of Key State Document	3
B. Designation Process	3
Step 1. Letter of Interest in nominating a Reserve	
Step 2. Site Selection and Nomination	
Step 3. Draft EIS and Draft Management Plan	
Step 4. Final EIS and Final Management Plan	
Step 5. Final Requirements, Findings and Certificate; Record of Decision, Signing of MOU	
Step 6. Designation Ceremony	
C. Reserve Funding and Implementation	6
II. Site Selection Criteria and Process	7
A. Introduction	7
B. Preliminary Screening Process	8
C. Site Selection Criteria and Process for their application to screened sites	9
<i>Site Selection Criteria</i>	
1. Environmental Representativeness: Ecosystem/Ecological Characteristics	10
2. Value of the Site for Research, Monitoring, and Resource Protection	15
3. Suitability of the Site for Training, Education, and Interpretation	17
4. Acquisition and Management Considerations	17
III. Site Nomination Review Checklist	22
IV. Boundary Delineation	25
A. Introduction	25
B. Basic Scientific Principles in Establishing Reserve Boundaries	25
C. General Principles	26
D. Recommended General Procedure for Proposed Boundary Delineation	27
V. Multi-Component Reserves	28
VI. Developing an Environmental Impact Statement & Management Plan	29
VII. Guidelines for Memorandums of Agreement	30
A. Introduction	29
B. Choosing the Correct Authority and Type of Agreement	29
C. MOA Clearance Process	30
Appendices	33
Appendix A – MOA Examples	34

I. Designation Process Overview

A. Key State Documents

- Letter expressing interest in nominating a National Estuarine Research Reserve (reserve)
- Site selection document and official nomination letter
- Draft Environmental Impact Statement/Draft Management Plan (DEIS/DMP)
- Final Environmental Impact Statement/Final Management Plan (FEIS/FMP)
- MOU between state partners (if applicable)
- Applications for financial assistance

B. Designation Process



Funding:

A state is eligible for a total of \$100,000 in federal funds for pre-designation activities. Activities appropriate for these funds are developing site selection, developing and applying a site selection process, preparation of the DEIS/DMP and FEIS/FMP, and limited basic characterization studies of the physical, chemical and biological attributes of the site.

Step 1. Letter of Interest

The Governor sends a letter to the NOAA Administrator identifying:

- interest in developing a reserve program and nominating a site (do not indicate a specific site)
- need for funds for site selection (if applicable)
- lead agency or agencies for contact

NOAA will respond to the state with a determination of whether it can consider a nomination and provide funds.

Step 2. Site Selection and Nomination

Once NOAA determines that it can accept a new nomination, the lead state agency may submit an application to NOAA for pre-designation assistance (70/30 match requirement). It is recommended that the preliminary application for the site selection phase request \$25-40K, to leave sufficient funds for subsequent steps.

While a reserve designation usually requires many partners, the lead state agency should be determined as early in the process as possible. While not imperative that the lead state agency manage pre-designation funds, it is encouraged that the lead state agency be prepared to accept and manage funds once the designation occurs. Any applications for pre-designation funds must identify who will be conducting the work and supplying match for the award.

The site selection process should be collaborative and involve a diverse array of stakeholders. In past designations, the lead state agency has sought various experts and the public to inform the process including tribes, industry, public officials, farmers, ranchers, community organizations and issue groups, among others. Efforts to identify and involve stakeholders early in the process will contribute to a successful reserve designation.

The site selection process should start by covering the entire biogeographic sub-region within the state. Options for sites can then be narrowed. A site must contribute to the biogeographic and typological balance of the Reserve System, and be adequately protected for long-term research, education, and stewardship.

Key elements of site selection:

- Development of a process for selecting a site, including development of site selection

criteria. It is recommended that the state establish a site selection committee comprised of key individuals with relevant expertise (e.g. scientists, educators, resource managers). Identification of significant cultural and historic areas when developing site selection criteria is important.

- Identification of potential sites that are representative of the biogeography, suitable for long-term research and education, compatible with existing uses, and contain key land and waters to approximate an ecological unit.
- Involve and seek the views of affected landowners, resource users, local governments, state and federal agencies, as well as others interested in the process.
- Development of a strategy for incorporating public participation into the process. The state, in conjunction with NOAA, holds a public meeting in the vicinity of the site or sites being considered to discuss the criteria and application of those criteria. Notice should be made in the local newspaper and Federal Register at least 15 days prior to the meeting.
- Development of a site nomination which includes a description and analysis of sites considered, why a site was not preferred, and rationale for the site selected. The Governor formally submits the site nomination to the NOAA Administrator for approval. NOAA may request additional information or suggest changes to the nomination.

Step 3. Draft Environmental Impact Statement/Draft Management Plan

After NOAA approves the site nomination, the lead agency may submit an application to NOAA, limited to the unallocated portion of the \$100,000, for development of the Draft Environmental Impact Statement/Draft Management Plan (DEIS/DMP), Final Environmental Impact Statement/Final Management Plan (FEIS/FMP), and basic characterization studies. The state application for post site selection funding must include:

- A draft management plan outline, including milestones and timeline
- An outline of a draft memorandum of understanding (MOU) between the lead state agency and NOAA detailing the federal and state roles in reserve management (as well as additional MOU's with land owning/leasing or managing partners, if applicable)

Prior to preparation of the DEIS/DMP, NOAA publishes an intent to prepare an EIS in the Federal Register. The state, with assistance by NOAA, holds a scoping meeting(s) to solicit the views of the public regarding the proposed project before the DEIS/DMP is prepared. The meeting must be publicized at least 15 days prior to being held in both the Federal Register and local media. Comments are accepted and addressed in the DEIS.

The state, with assistance by NOAA, prepares a preliminary and final DEIS/DMP, including a MOU identifying the state and NOAA roles in managing the reserve. The state submits the preliminary and final documents to NOAA for review.

After NOAA approval, NOAA, or in some cases the state partner, prints the document and distributes it to interested parties including federal, state, and local agencies.

NOAA, through the U.S. Environmental Protection Agency, announces the availability of the DEIS/DMP in the Federal Register. The date of publication begins the 45-day comment period on the DEIS/DMP. The state and NOAA hold a public hearing(s) 30-45 days after the announcement. NOAA also publishes a notice of the public hearing(s) in the Federal Register 15 days prior to the hearing. Concurrently, the state publishes a notice of the public hearing (s) in the local media.

If, during the comment period, NOAA determines that critical information was omitted in the DEIS that would have a bearing on the decision, a supplement to the DEIS may need to be published to incorporate this new information.

Step 4. Final Environmental Impact Statement/Final Management Plan

The state, with assistance by NOAA, prepares the FEIS/FMP as follows:

- NOAA works with the state to respond to comments on the DEIS/DMP.
- The state makes necessary changes to the DEIS/DMP and submits preliminary and final documents to NOAA for review. The FEIS/FMP includes:
 - Proposed MOU between NOAA and the state (not signed)
 - Draft or final MOU(s) among reserve partners establishing roles and responsibilities (these must be finalized prior to designation but should not be signed in the FEIS/FMP)
- Upon approval, NOAA, or in some cases the state partner, prints the FEIS/FMP and distributes it to those who provided comments, to other interested parties, and to the NEPA distribution list posted on the Council on Environmental Quality web site and available from the NOAA Office of Public and Constituent Affairs.
- NOAA, through the U.S. EPA, publishes a Federal Register notice announcing the availability of the FEIS/FMP. The date of publication begins the 30-day “cooling-off” period. During this time, NOAA may receive comments but is not obligated to respond to them. This is essentially a time to address any minor issues or major litigious issues.

Step 5. Final requirements, Designation Findings and Certificate; Record of Decision, Signing of the MOU

- After the 30-day cooling-off period is completed and all issues have been addressed, the following steps need to be finalized:
 - NOAA and the state sign the MOU. If revisions to the MOU have been made to address site-specific issues, NOAA will clear the MOU through the Department of Commerce (DOC). After DOC has approved the MOU, five original copies will be signed by the Director of the Office of Ocean and Coastal Resource Management (OCRM), and sent to the appropriate official in the state for signature. Three original copies should be returned to OCRM.
 - MOU(s) among reserve partners establishing roles and responsibilities are signed.
 - NOAA will make a CZMA federal consistency determination for the designation of a reserve in a state with a federally approved coastal management program.
 - Endangered Species Act Section 7 consultations with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be completed.
 - National Historic Preservation Act Section 106 consultations with the State Historic Preservation Officer should be completed.
- NOAA prepares designation findings for signature by the NOAA Administrator. Once the designation findings are signed, the designation is official.
- NOAA prepares a certificate of designation for signature by state and NOAA Administrators.
- NOAA prepares a record of decision for signature by the NOAA or NOS Administrator.
- NOAA publishes a Federal Register notice announcing the reserve designation, the consistency determination, and the NEPA record of decision. An announcement of designation should also be published in the local media.

Step 6. Designation Ceremony

- The state normally organizes a designation ceremony with Congressional and state participation.
- NOAA can provide an invitation list of NOAA personnel, arrange for speakers from NOAA, and assist with publicity.
- NOAA presents the certificate of designation to state officials and Congressional

representatives.

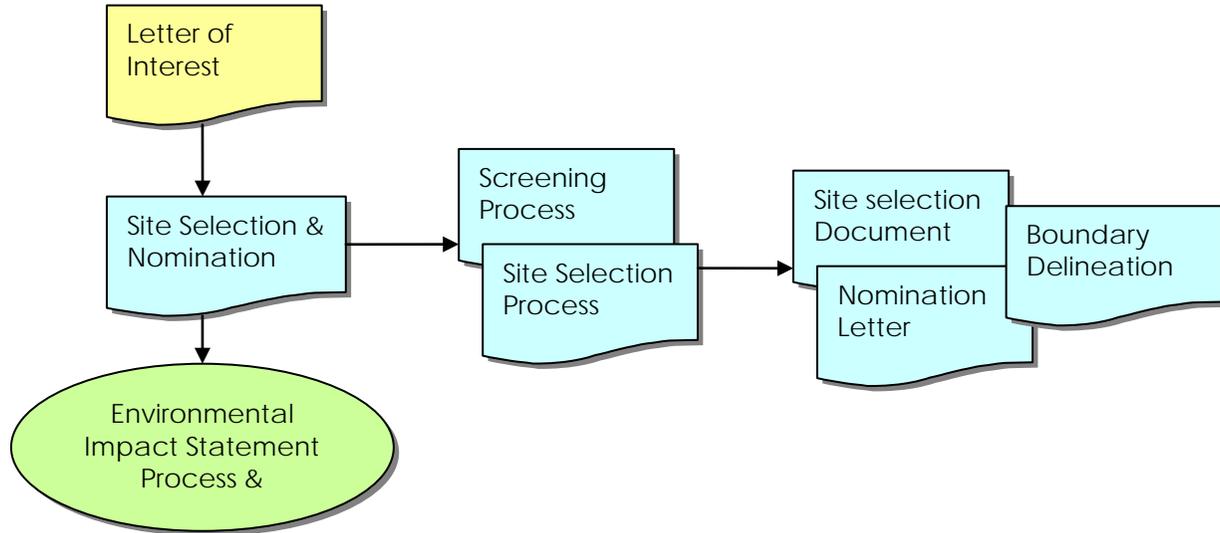
C. Reserve Funding and Implementation

Upon publication of the FEIS/FMP, the reserve is eligible for implementation funding as follows:

Type	Match Requirements	
	Federal Share	State Share
NERR Operations Funds	70%	30%
Construction Awards	70%	30%
Land Acquisition Awards	50%	50%
Graduate Research Fellowships	70%	30%
Other NOAA funds	Variable	Variable

NOTE: This is an overview of the designation process. Situations may vary within a state or NOAA, resulting in slight modifications to some of the designation steps. More detailed information on the designation process is available from ERD. Prior to undertaking any step, please contact ERD staff to discuss logistics and timelines.

II. Site Selection Criteria and Process



A. Introduction

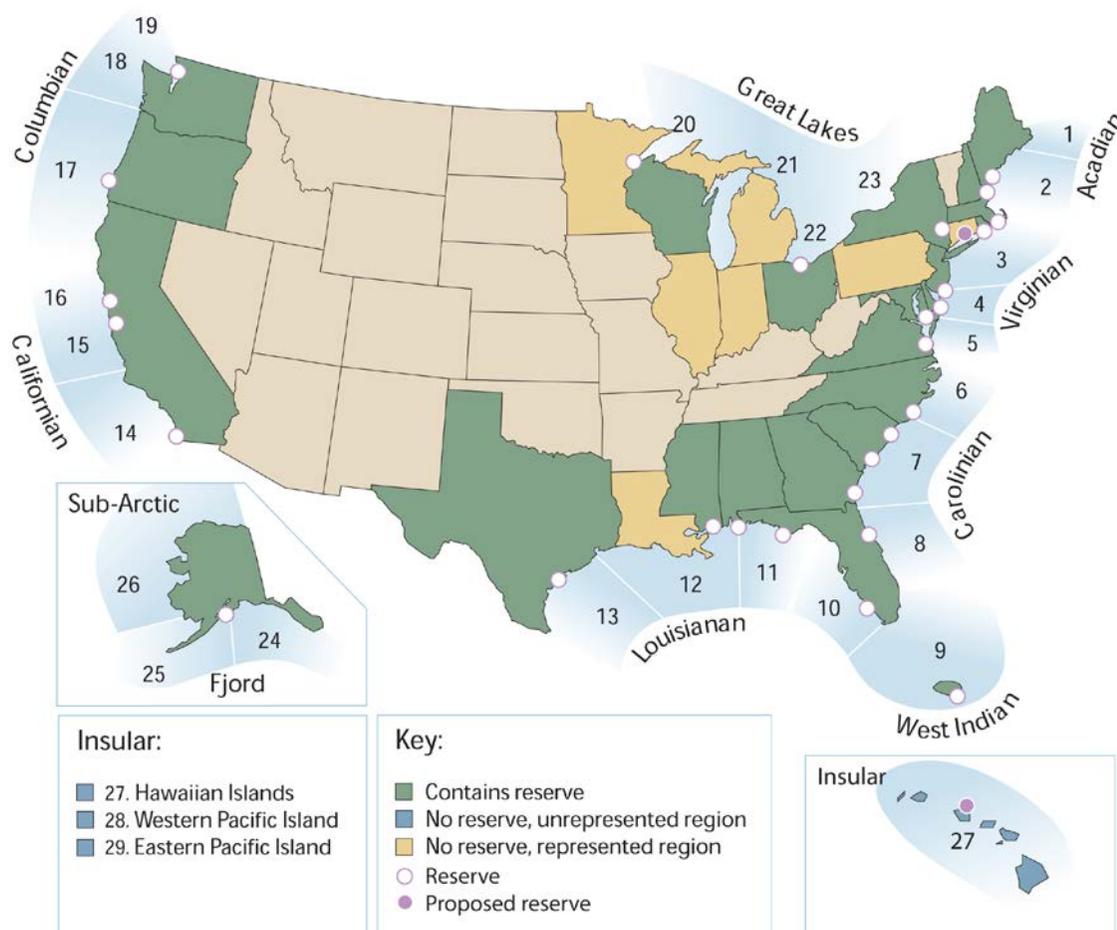
The following set of site selection criteria are designed as a model for states that plan to propose new sites for the National Estuarine Research Reserve System (NERRS) and based on site selection and feasibility guidance provided in 15 CFR 921.11. It can be modified in consultation with ERD to reflect regional differences in the ecological characteristics of the habitats to be considered. The relative "values" placed upon the criteria can also be modified as appropriate.

The criteria fall into the four major categories:

- I. Environmental Representativeness
- II. Value of the Site for Research, Monitoring, and Resource Protection
- III. Suitability of the Site for Education and Interpretation
- IV. Acquisition and Management Considerations.

These categories reflect the major considerations associated with addressing the goals of the NERRS program. The format used in presenting each selection criterion includes a (1) brief description and/or definition of the criterion with underlying assumptions about its use and (2) scoring levels.

An extremely important site selection criterion, at the very outset of the site selection and site nomination process, is whether there is an existing site located in the particular biogeographic subregion and typologic classification scheme under consideration (15 CFR 921.3). A site proposal for a biogeographic region that is not represented is automatically of high value to the NERRS Program. The map of existing and proposed sites and the biogeographic regions indicates which regions and subregions still require site representation.



B. Preliminary Site Screening Process

Prior to the application of the full suite of site selection criteria detailed above, it may be appropriate for the state, in consultation with ERD, to utilize a simplified procedure to screen the proposed sites to eliminate those areas that are clearly not suitable candidates. A preliminary screening should reduce the amount of time and effort that is required to apply the full suite of criteria to all sites. A candidate site which does not appear to meet each of the following criteria should be eliminated from the site selection process.

- The candidate site is a representative estuary in the biogeographic region or subregion.
- The proposed boundaries of the candidate site include sufficient land and water area to maintain the integrity of the ecosystem.
- The candidate site consists of publicly owned lands and/or demonstrates sufficient potential for land acquisition and adequate land use control to meet NERRS objectives.
- The candidate site is accessible by normal modes of transportation.

- The candidate site is suitable for research, monitoring, and resource protection activities.
- The candidate site is suitable for education, training, and interpretation activities.
- The candidate site is suitable to address key local, state, and regional coastal management issues.

C. Site Selection Criteria and Process for their application to screened sites

There are a variety of ways that the application of the full set of site selection criteria to the screened sites can be undertaken. An initial step is to identify who will be responsible for this phase of the site selection process. Normally, these individuals become members of a site selection committee. Once the site selection committee has been identified, it is recommended that each member preliminarily assess and score each of the candidate sites individually. If necessary, the scoring within each criterion may be crafted to help better evaluate the proposed sites.

Field visits to each site will allow the committee members an opportunity to gain first hand knowledge of the characteristics of each site. They should also give everyone a better understanding of the factors to be considered under each selection criterion and how these factors should be taken into account. Field trips may be appropriate before scoring the sites. However, the committee members should be familiar with the site selection criteria prior to visiting the candidate sites.

After site selection committee members have assessed the candidate sites individually, the site selection committee should convene to assess the sites collectively and determine one site for nomination to the Governor. Several options exist for this collective decision making. Three options are described below:

Option 1. Strict Averaging of the Individual Scores

All committee member scores for each criterion would be averaged, then totaled and weighted to arrive at one site to recommend to the Governor for nomination.

Option 2. Working Group Discussions

The site selection committee would be divided into two to three small working groups to assess all of the candidate sites, taking their individual assessments and scores into account. Each working group would then reach consensus as a group on an appropriate score for each criterion.

Thereafter, the working groups would reconvene in full committee and compare their collective decision making with the goal of overall consensus on the scoring for each candidate site. One site would be recommended to the Governor for nomination.

Option 3. Committee Discussion

The committee as a whole would assess each site, taking individual assessments and scores into account. Members would reach consensus as a group on each criterion and ultimately select the site to be recommended to the Governor for nomination.

Site Selection Criteria

1. Environmental Representativeness: Ecosystem/Ecological Characteristics

In order to determine the representativeness of a candidate site relative to ecosystem type (as defined in Appendix 2 of NERRS Program Regulations (15 CFR Part 921)), the site will be evaluated using the following suite of ecological, biological, physical, and chemical characteristics that fall under the general category of "Ecosystem/Ecological Characteristics." The first five criteria for ecological and biological characteristics focus primarily on factors concerning a site's diversity and balance in regard to the types of ecosystems and habitats present, as well as any significant and/or unique biotic trait. The remaining criteria for physical/chemical characteristics focus on a site's position within the watershed to which it belongs, geological and salinity characteristics, water quality, and the degree to which it is developed.

A. Ecosystem Composition. This is a measure of the diversity of ecosystem types present within the boundaries of the site. This criterion is based on the assumption that sites that have a high diversity of major ecosystem types are of higher relative "value" for protection and management than those with low ecosystem diversity (unless the ecosystem in consideration is rare or unique: see "Biotic Uniqueness of the Site"). Use the following ecosystem type designations (Appendix 2 of NERRS Program Regulations (15 CFR Part 921)). Modify as appropriate.

Group I - Shorelands

- A. Maritime Forest-Woodland
- B. Coastal Shrublands
- C. Coastal Grasslands
- D. Coastal Tundra
- E. Coastal Cliffs

Group II - Transition Areas

- A. Coastal Marshes
- B. Coastal Swamps
- C. Coastal Mangroves
- D. Intertidal Beaches
- E. Intertidal Mud and Sand Flats
- F. Intertidal Algal Beds

Group III - Submerged Bottoms

A. Subtidal Hard Bottoms

B. Subtidal Soft Bottoms

C. Subtidal Plants

- 3 Points The site has a high diversity of ecosystem composition, i.e., it contains at least one representative habitat from each of the three main ecosystem groups listed above (e.g., maritime forest, coastal marsh, and oyster reef).
- 2 Points The site has a moderate diversity of ecosystem composition, i.e., it contains at least one representative habitat from two of the three main ecosystem groups listed above (e.g., maritime forest and coastal marsh).
- 1 Point The site has a low diversity of ecosystem composition, i.e., it contains at least two representative habitats from only one of the three main ecosystem groups listed above (e.g., coastal marsh and mud flat).
- 0 Points The site has a very low diversity of ecosystem composition, i.e., it contains only a single habitat type within any one of the three main ecosystem groups listed above (e.g., maritime forest).

B. Balanced Ecosystem Composition. This is a measure of the relative composition of ecosystem types within the boundaries of a site. This criterion is based on the assumption that sites with a balanced proportion of ecosystem types are of higher relative "value" for protection and management. High, moderate, and low values are assigned to sites that contain variations in the proportions of all three ecosystem types. A value of zero is assigned to a site that is dominated by one ecosystem type or contains less than three ecosystem types.

- 3 Points The site contains representative upland, intertidal, and subtidal habitats in relatively equal proportions (i.e., areal cover of any one ecosystem type not less than 25% of the total area).
- 2 Points The site contains representative upland, intertidal, and subtidal habitats, with the areal cover of any one type not less than 10% of the total area.
- 1 Point The site contains representative upland, intertidal, and subtidal habitats, with the areal cover of any one type less than 10% of the total area.
- 0 Points The site contains representative upland, intertidal, and subtidal habitats, with the areal cover of two types being less than 10% of the total area or the site consists of habitats from only one or two of the three major ecosystem types.

C. Habitat Composition/Complexity. This is a measure of the diversity of habitat types present within the major ecosystem type found within the boundaries of the site. This criterion is based on the assumption that sites that have a high diversity of habitat types are of higher relative "value" for protection and management than those with a low diversity of habitat types. Major

ecosystem type is defined here as that type that comprises approximately 40% of the site. Use the habitat type designations listed above for "ecosystem composition."

- 3 Points The candidate site has a high diversity of habitat composition within its major ecosystem type, i.e., it contains three or more habitat types or subtypes within its major ecosystem type (e.g., site consists of a combination of swamps, coastal marshes, and mud flats) or has a combination of multiple coastal marsh types (e.g., high, mid, and low marsh zones).
- 2 Points The site has a moderate diversity of habitat composition within its major ecosystem type, i.e., it contains only two habitat types or subtypes within its major ecosystem type (e.g., consists of a combination of swamps and a single coastal marsh type).
- 1 Point The site has a low diversity of habitat composition within its major ecosystem type, i.e., its major ecosystem type consist of a single habitat type (e.g., maritime forest or *Juncus* marsh).

D. Habitat Uniqueness of the Site. This criterion is a measure of the presence of rare or unique habitat types within a candidate site. This criterion recognizes the importance of emphasizing unique areas in the selection process, in addition to the representativeness of the candidate site in terms of ecosystem and habitat diversity. Unique habitat is defined here as a habitat type of "limited" known occurrence within the biogeographic region/subregion. This criterion can be a simple "yes/no" question.

3 Points The site contains one or more "unique" habitat types within its boundaries.

0 Points The site contains no "unique" habitat types within its boundaries.

E. Significant Faunal and Floral Support. This is a measure of the degree to which a site supports significant faunal and/or floral components. This criterion focuses on a site's contribution (i.e., function) toward supporting the activities (e.g., feeding, nesting) of the following suite of significant faunal and/or floral components. The list of components includes groups or organisms that are known to be dependent upon estuarine habitats for the entire or a crucial part of their life cycle.

- Fish and Shellfish Spawning and Nursery Grounds (includes use by either freshwater, estuarine, or estuarine-dependent marine species)
- Migratory Bird and/or Waterfowl Use
- Bird Nesting and/or Roosting Area
- Critical Mammal Habitat
- Non-Game Animals (amphibians, reptiles, etc.)
- State or Federally Listed Species (animal or plant - including candidate species)

- 3 Points The candidate site supports or serves as an important site for a wide range of the faunal and floral components listed above (4 of 6) and/or is an extremely important site for any threatened or endangered species.
- 2 Points The site supports or serves as an important site for a moderate range and diversity of the significant faunal and floral components listed above (3 of 6).
- 1 Point The site supports or serves as an important site for one or two of the significant faunal and floral components listed above.
- 0 Points The site does not support significant faunal and floral components.

F. Site's Relationship to Its Tidally Influenced Drainage Basin. This is a measure of relative proportion and/or juxtaposition of a site relative to the greater tidally-influenced drainage basin to which it belongs. This factor assumes that, except for the deltaic portions of major river systems, most coastal drainage basins are relatively small, tidally-influenced, coastal plain drainages, and that a site's "value" increases as a function of how much of the overall drainage basin is encompassed within its boundaries. Aerial photos and detailed topographic maps should be used for judging this criterion.

- 3 Points The site encompasses a relatively large percentage (> 75%) of the tidally influenced portion of the drainage basin to which it belongs.
- 2 Points The site is not large relative to the overall drainage basin (<75 but >25%), but is situated either near the mouth or headwaters of the drainage basin.
- 1 Point The site is small relative to the overall drainage basin (<25%), but is situated either near the mouth or headwaters of the drainage basin.
- 0 Points The site is small relative to the overall drainage basin (<25%) and does not encompass either the mouth or headwaters of the drainage basin.

G. Geologic Representativeness/Diversity/Uniqueness of the Site. This is a measure of the representativeness/diversity/uniqueness of the geologic characteristics that define part or the whole of a candidate site. This criterion attempts to consider both the surface and subsurface geologic formations that may be representative or unique within a site, particularly as they affect and/or define associated biotic habitats. Included in these considerations are the ways that local geology affects surface hydrology, such as drainage systems, and subsurface hydrology, such as shallow-water aquifers. Geologic and hydrologic maps should be used to evaluate this criterion.

- 3 Points The site has numerous representative geologic characteristics, two or more unique geologic characteristics and contains a high diversity of formation types or strata within its boundaries.
- 2 Points The site has a moderate number of representative geologic characteristics and at least one unique geologic characteristic, and contains a moderate diversity of

formation types or strata within its boundaries.

- 1 Point The site has a moderate number of geologic characteristics, no unique geologic characteristics, or contains a moderate diversity of formation types or strata within its boundaries.
- 0 Points The site has few or only one representative geologic characteristics, no unique geologic characteristics, or contains few or only one formation type or strata within its boundaries.

H. Salinity Gradient. This is a measure of the range of salinity within a candidate site's boundaries. This criterion recognizes the effect of salinity on the biotic structure of estuarine habitats (including the plants communities and faunal components that inhabit them). It makes the assumption that a site with a greater range of salinity will support a broader range of habitat types and organisms.

- 3 Points The site encompasses a 25 ppt or greater range of salinity within its boundaries (e.g., 0-25 ppt, 5-30 ppt).
- 2 Points The site encompasses a 15-24 ppt range of salinity within its boundaries (e.g., 0-15 ppt, 5-25 ppt, 10-30 ppt).
- 1 Point The site encompasses a 6-14 ppt range of salinity within its boundaries (e.g., 0-8 ppt, 10-22 ppt, 25-32 ppt).
- 0 Points The site encompasses a 5 ppt or less range of salinity within its boundaries (e.g., 0-5 ppt, 8-10 ppt, 20-25 ppt).

I. Degree Developed and Potential Impacts to Water Quality. This is a measure of the degree to which the site and its surrounding area are developed and the relative impacts to surface waters from human activities. This criterion is based on the assumption that human impacts to a site are directly proportional to the degree of development. Exceptions to this assumption may need to be considered where development at a site and its surrounding area have been subject to high levels of control. Data on land use and water quality measurements from local, county, and state government agencies should be used to judge this criterion.

- 3 Points The site is relatively undisturbed and the watershed contains low intensity development (e.g., few residences, minimal agricultural or silvicultural activity) and/or the land is in protected status.
- 2 Points The site is relatively undisturbed and the watershed contains moderate development (e.g., relatively few residences, moderate agricultural or silvicultural activity, minimal commercial development).
- 1 Point The site has been moderately disturbed and the watershed contains relatively intensive development (e.g., moderate density of residences, and/or the presence of industrial activity).

0 Points The site has been extremely disturbed and the watershed contains very intensive development (e.g., high density residential, and/or commercial or industrial activity).

2. Value of the Site for Research, Monitoring, and Resource Protection

A. Value of Site for Research: This is a measure of the opportunities offered by characteristics of the site for research, such as a high diversity of ecosystems/habitat types, a balanced habitat composition, a wide salinity range, biotic or geologic representativeness of the site, known historic uses or archaeological sites, and unique opportunities to conduct applied research regarding important local, state, and regional coastal management issues (including past and potential management activities). The assumption is that a site with representative, unique, and highly diverse characteristics will provide greater research, monitoring, and resource protection opportunities than one lacking these characteristics. Ratings generated for these factors under previous selection criteria can be used as a guide for rating this overall factor.

3 Points The site has (1) a high diversity of ecosystem/habitat types, (2) moderate salinity range, (3) representative biotic and geologic sites or characteristics, (4) state and federally listed species, (5) historic and archaeological significance, and (6) opportunities to address important habitat or resource management issues.

2 Points The site has four or five of the six above.

1 Point The site has two or three of the six above.

0 Points The site has one or none of the six above.

B. Previous Research and Monitoring Efforts: This is a measure of the degree to which the site has been used for past research and monitoring, including considerations of the diversity of inquiry (fields of research), and the availability of data (the form and availability of documentation, e.g., peer reviewed papers, grey literature, inventory reports). The assumption is that an area with previously established research and monitoring interest offers greater opportunity for future projects than an area that has not sparked such an interest in the past.

3 Points The site has a long history of well documented research and monitoring projects in a wide variety of topics. Data is readily available.

2 Points The site has had major and well documented research and monitoring efforts, generating data that is readily available. It has not had a long history of research and monitoring.

1 Point The site has had only minor research and monitoring projects generating limited data (e.g., inventories) that may be difficult to obtain.

0 Points The site has no known history of research and monitoring.

C. Suitability of Site for Environmental Baseline Monitoring: This is a measure of the suitability of the site as a reference area for assessing long-term resource trends and/or ecological characteristics, based on the degree to which the site has been altered by land use practices on or near the site. The assumption is that a site that has relatively pristine land areas and waters will be a more valuable reference area to generate baseline monitoring information than a site that has been extensively altered.

- | | |
|----------|---|
| 3 Points | The site has outstanding areas to generate environmental baseline data to assess long-term resource trends or ecological characteristics for a wide range of needs. |
| 2 Points | The site has adequate areas to generate environmental baseline data to assess long-term resource trends or ecological characteristics for many needs. |
| 1 Point | The site has marginal areas to generate environmental baseline data to assess long-term resource trends or ecological characteristics. |
| 0 Points | The site has been so extensively altered by past activities that it is unsuitable for generating environmental baseline data. |

D. Ability to Address Key Local, State, and Regional Coastal Management Issues: This is a measure of the degree to which the site is appropriate for investigating issues relevant to coastal management at the local, state, and regional levels. Solutions to these issues may require either the application of land management practices or habitat manipulations in order to perform meaningful research and assessment. As such, the site should offer both adequate control areas plus areas where demonstration projects and habitat manipulations can be accommodated in order to study many of the issues of concern. The assumption is that a site where coastal management issues arise and can be addressed will be of greater value from a resource protection standpoint than sites where these issues do not arise. The significant issues should be identified for each region and may include:

- wetlands development
- wetlands mitigation/restoration/creation
- dredging and spoil disposal
- beneficial uses of dredged materials
- shoreline erosion
- commercial and/or recreational fisheries
- waterfowl and other wildlife management
- best management practices for habitat protection and/or management (e.g., fire management)
- best management practices to limit impacts from agricultural, silvicultural, or development activities
- best methods to control pestiferous insects or undesirable vegetation
- effects of pollutants on water quality and living resources

- impacts of sea-level rise
- prehistoric and early historic settlement and land use

3 Points The site is highly appropriate for investigating coastal zone management issues.

2 Points The site is appropriate for investigating coastal zone management issues.

1 Point The site is minimally appropriate for investigating coastal zone management issues.

0 Points The site is not appropriate for investigating coastal zone management issues.

3. Suitability of the Site for Training, Education, and Interpretation

A. Diversity and Quality of Training, Education, and Interpretation Opportunities: This is a measure of the variety and quality of training, education, and interpretation opportunities (i.e., ecological, archeological, cultural, historical, etc.) provided by the site for the different target audiences. The assumption is that a candidate site with a diversity of such opportunities of high quality will be utilized to a greater extent than one with fewer opportunities.

3 Points The site has numerous different training, education, and interpretation opportunities of high quality.

2 Points The site has several significantly different educational opportunities of good quality.

1 Point The site has few significant educational opportunities.

0 Points The site has insignificant educational opportunities.

B. Diversity and Availability of Target Audiences: This is a measure of the diversity and availability of target audiences (e.g., user groups, resource managers, residents, environmental groups, decision makers, teachers and students, the general public) which may routinely utilize the site for training, education, and interpretation. The assumption is that a candidate site with a variety of available target audiences will be utilized to a greater extent than one with fewer target audiences.

3 Points The site is suitable for a variety of target audiences that are readily available.

2 Points The site is suitable for a moderate number of target audiences that are readily available.

1 Point The site is suitable for few target audiences that are available.

0 Points The site is so remote or inaccessible that it is not suitable for any target audience.

4. Acquisition and Management Considerations

Acquisition, Facilities, and Proximity

A. Land Ownership: This is a measure of the degree to which the property is divided (e.g., divided into only a few parcels or owned by many individuals). The assumption is that a candidate site with fewer property owners will be easier to acquire or control.

3 Points The property is relatively undivided.

2 Points The property is divided with few property owners.

1 Point The property is divided with many property owners.

B. Publicly Owned Lands and Feasibility of Land Acquisition: This is a measure of the degree to which the land within the site is currently owned by the state, federal government or local governments and/or environmental interest groups, and the degree to which there is interest in donating or selling property by its owners. The assumption is that the degree of control needed to maintain the site in relatively pristine conditions increases with publicly owned land and lands controlled by environmental groups, and that the chances of purchasing additional areas increase with private property owners who are willing to sell.

3 Points A large percentage (more than 50%) of the candidate site is currently owned by the state, federal, or local governments and/or environmental groups, and these entities have an interest in participating in a NERR.

2 Points State, federal, or local governments and/or environmental groups own 25-50% of the candidate site with the remainder in the hands of a few owners who have an interest in participating in a NERR.

1 Point State, federal, or local governments and/or environmental groups own less than 25% of the site with the remainder in the hands of a few owners who have an interest in participating in a NERR.

0 Points The site is owned by a large number of owners with little potential interest in sale or donation.

C. Availability of Facilities: The degree to which there are existing facilities or potential sites for future facilities that can be used by staff, researchers, classes and training groups (e.g., administrative building space, dormitories, labs, interpretive centers, trails and boardwalks, boat ramps, etc.). The assumption is that, due to limited NERR construction funds, a candidate site with existing facilities can meet the objectives of the NERRS Program sooner and more completely than a site without existing facilities. The availability of other sources of construction funds should be considered as part of this criterion.

3 Points The site has established structures and facilities that can be used for reserve activities.

- 2 Points The site has limited established structures and/or facilities that can be used for reserve activities.
- 1 Point The site has excellent potential for the development of facilities for reserve activities.
- 0 Points The site has limited potential for the development facilities for reserve activities.

D. Proximity and Accessibility of Site to Researchers, Educators, and Resource Management Decision Makers: This is a measure of (1) the relative proximity of the site to urban centers, K-12 schools, research and education institutions, and resource management agencies which may routinely utilize the site and (2) the adequacy of the roads and/or points for boat access at the site. The underlying assumption is that the proximity and accessibility of the site will enhance its utilization for education, research, monitoring, and resource protection purposes.

- 3 Points The candidate site can be utilized by the above listed entities during a single day trip. There are good roads and/or points for boat access at the site.
- 2 Points The candidate site is relatively isolated and utilization would require an overnight stay from any of the above listed entities, but accommodations are readily available. There are adequate roads and/or points for boat access at the site.
- 1 Point The candidate site is relatively isolated and reasonable accommodations for an overnight stay to utilize the site are limited. There are limited roads and/or points for boat access at the site.
- 0 Points The candidate site is extremely isolated and accommodations to utilize the site are not available. There are inadequate or no roads and/or points for boat access at the site.

Management Considerations

E. Controlled Land and Water Access: This is a measure of the degree to which land and water access to the candidate site can be controlled and limited. It is based on size, geography, proximity to adjacent development, and historical controls. The assumption is that the integrity and security of a potential NERR site can be better maintained with a higher level of controlled land and water access.

- 3 Points The candidate site is relatively isolated and of a size that can be controlled. Historically, access has been controlled, and can easily be controlled in the future due to the presence of limited access points by boat or vehicle.
- 2 Points The candidate site is not very isolated, but has a limited number of access points. Historically, site access has not been controlled, but the site is of a size that it can be controlled in the future.

- 1 Point Site access will be difficult to control due to the large number of access points and/or the size of the area. Historically, site access has not been controlled and it is unclear whether it can be controlled in the future.
- 0 Points Site access cannot be controlled due to the large number of access points, lack of historical controls, the size of the area, and/or dense adjacent development.

F. Compatibility with Existing Management Practices and Consumptive and Non-Consumptive Uses: This is a measure of the degree to which existing management practices (e.g., habitat manipulations, best management practices) and historic and current consumptive and non-consumptive uses might be in conflict with foreseeable management practices implemented under a NERR Program. The assumption is that sites with fewer conflicts are more likely to maintain both public support and the integrity of the site.

NOTE: This factor should be measured in light of special circumstances (such as the presence of unique habitats or of listed species) that might cause the state to limit what is now unlimited use or practices by groups or individuals and, in the process, cause some conflict in regard to designation of a NERR site. It should be measured with an eye toward balancing protection of critical sites or resources against reasonable access to other parts of the site.

- 3 Points Existing management practices and consumptive and non-consumptive uses would not be in conflict with any foreseeable management policy of a NERR.
- 2 Points Due to the presence of proportionately small areas of unique habitat/endangered species or threats to the integrity of the ecosystem, there is the potential for limited restrictions on existing management practices and/or consumptive and non-consumptive uses of a site.
- 1 Point Due to the presence of areas of unique habitat/endangered species and threats to the integrity of the ecosystem, some restrictions on existing management practices and/or consumptive and non-consumptive uses of a site are likely.
- 0 Points Large areas of unique habitat and threats to the integrity of the ecosystem will require restrictions on existing management practices and/or consumptive and non-consumptive uses of a site.

G. Compatibility With Adjacent Land Use: This is a measure of the potential conflicts between management practices on a NERR site with land use practices on adjacent lands. It is also a measure of the adequacy of land use regulations, plans, or other controls to sustain the site's resources for long-term research, education, and resource protection. The assumption is that a candidate site with compatible land use practices on adjacent lands is more likely to maintain the integrity of the reserve.

NOTE: As with the previous factor, this issue should be evaluated with an eye toward the potential for present and/or future conflicts with adjacent lands and the potential to designate buffer zones around a site.

- 3 Points A large percentage of the land adjacent to the site is not currently used for activities that might impact the site (and therefore, may be obtainable as a buffer) and/or the land use practices on adjacent lands would not have any negative impacts on a possible NERR.
- 2 Points A large to moderate percentage of the land adjacent to the site is not currently used for activities that might negatively impact the site, and/or the land-use practices on adjacent lands either could be negotiated or would have only minor impacts a possible NERR.
- 1 Point Some of the land adjacent to the site is currently used for activities that would have negative impacts on a possible NERR and may not be negotiable.
- 0 Points A large percentage of the land adjacent to the site is currently used for activities that would have negative impacts on a possible NERR and would lead to conflicts.

H. Future Development Plans: This is a measure of the potential level of future development in areas on or adjacent to a candidate site which would impact the site. The assumption is that a candidate site with minimal to no development plans on-site and on adjacent lands is more likely to maintain the integrity of the reserve.

NOTE: Even more so than the previous factor, this issue involves the degree to which adjacent lands are currently being used and/or may be attainable as buffer areas for the NERR.

- 3 Points A large percentage (more than 50%) of the land adjacent to the site is currently undeveloped and/or is, for whatever reason, very unlikely to be developed in the near future (e.g., consisting of marginally developable property, such as wetlands, which could be obtained as buffer).
- 2 Points A moderate percentage (between 25-50%) of the land adjacent to the site is currently undeveloped and/or is not likely to be developed in the near future.
- 1 Point A small to moderate percentage (10-25%) of the land adjacent to the site is currently undeveloped and/or is not likely to be developed in the near future, with limited levels of development on other lands.
- 0 Points A large percentage (more than 50%) of the land adjacent to the site is developed and the area is likely to continue to be developed in the future.

III. Site Nomination Review Checklist

Fulfillment of National Estuarine Research Reserve System Program Regulations 15CFR 921.11

The following is a checklist that will be used by ERD to ensure that a site nomination package fulfills the reserve system program regulation requirements.

Contents of the Site Nomination Package in Fulfillment of 15 CFR 921.11 (b) & (d)

- _____ Nomination of the proposed site by the Governor
- _____ Description of the site selection process
- _____ Identification of the site selection agency and potential management agency
- _____ List of all sites considered
- _____ Brief statement of the reasons why a site was not preferred
- _____ Description of the proposed site in relationship to each of the guiding principles (15 CFR 921.11 (c))
- _____ Analysis of the proposed site based on the biogeographic scheme/typology
- _____ Description of the proposed site and its major resources.
 - _____ location
 - _____ proposed boundaries
 - _____ adjacent land uses
 - _____ maps
- _____ Description of the public participation process
- _____ Summary of public comments
- _____ Documentation that Governor(s) of other affected states has been contacted if interstate issues are involved
- _____ Copies of all correspondence, including contact letters to affected landowners

Fulfillment of Procedural Requirements in 15 CFR 921.11 (b) and (d)

- _____ The state sought the views of:

- _____ affected landowners
- _____ local governments
- _____ other state agencies
- _____ federal agencies
- _____ other parties interested in the area

_____ The state held at least one public meeting in the vicinity of the proposed site.

_____ Fifteen days prior to the meeting, notice of the meeting was placed:

- _____ in the area's principle newspaper
- _____ by NOAA in the Federal Register

Conformity of the Proposed Site with Guiding Principles in 15 CFR 921.11(c)

- _____ The site contributes to the biogeographic and typological balance of the NERRS.
- _____ The site is located in a biogeographic region and subregion not represented in the system.
- _____ The site is a representative estuarine ecosystem.
- _____ The site's ecological characteristics will attract a broad range of research interests.
- _____ The site is suitable for long-term estuarine research based on ecological factors and proximity to research facilities and educational institutions.
- _____ The site's ecological characteristics will attract a broad range of educational interests.
- _____ The site is important to education and interpretive efforts.
- _____ The site is, to the maximum extent possible, minimally affected by human activity or influence.
- _____ The site is compatible with existing and potential land and water uses in contiguous areas.
- _____ The site is compatible with approved coastal and estuarine management plans.

- _____ The site boundaries encompass an adequate portion of key land and water areas to approximate an ecological unit.
- _____ The site boundaries encompass an adequate portion of key land and water areas to ensure effective conservation.
- _____ Less than 50% of the proposed reserve is currently federally protected.
- _____ The managing entity has or will establish adequate control over human activities occurring within the area.

Conformity of State's Request for Funds for EIS and Management Plan with 15 CFR 12

- _____ Request for funds for EIS and Management Plan
(Amount: \$_____)
- _____ Request for funds for limited site characterization
(Amount: \$_____)
- _____ Draft management plan outline
- _____ Outline of draft MOU between state and NOAA

IV. Boundary Delineation

A. Introduction

Criteria for setting boundaries are contained in NERRS regulations (Title 15 of the Code of Federal Regulations Part 921, Section 921.11). The main factor in delineating reserve boundaries is a determination that the site's boundaries encompass an adequate portion of the key land and water areas of the natural system to approximate an ecological unit and to assure effective conservation. Boundary size will vary greatly depending on the size of the ecosystem. Reserves may include existing Federal or state lands already in a protected status where mutual benefit can be enhanced. Limits do apply, however, to the extent of Federal lands that can be included in a Reserve. NOAA will not approve a site that is dependent primarily upon the inclusion of Federal lands.

Once a site is selected by a state, the delineation of proposed boundaries is the next important step prior to approval of the site by NOAA. The establishment of final boundaries is a difficult process that requires consideration of many factors, environmental and administrative. The regulations intend that environmental and scientific factors be given primary consideration in the initial delineation of proposed boundaries.

A balance must be sought in determining the overall size of a reserve between encompassing enough area to include an ecosystem large enough to make long-term estuarine research viable yet having a discrete contiguous area that can be effectively managed. The reserve boundary must provide protection for the ecosystem but may not be arbitrary (i.e., based on the availability of property nearby which may be available for purchase). This guidance document is, in part, an effort to ensure that property interests purchased in an effort to establish adequate state control of a reserve are actually required for the integrity of the reserve.

B. Basic Scientific Principles in Establishing Reserve Boundaries

1. Reserve boundaries are proposed by coastal states and approved by NOAA. It is preferable that boundaries include contiguous land and water areas which are essential to the reserve, i.e., to establish a natural field laboratory capable of supporting NERRS long-term research and educational objectives.
2. Boundaries should encompass an entire ecological unit (habitats and communities), including adjacent terrestrial areas, especially watersheds and drainage areas. However, to protect a whole watershed will, in most cases, be extraordinarily difficult and prohibitive in cost. The solution is to establish and protect a core area which incorporates the critical portions of the estuarine ecosystem.
3. Key land and water areas comprise a core area which preserves for research purposes a full range of significant physical, chemical and biological factors contributing to the diversity of fauna, flora, and natural processes occurring within the estuary.
4. The determination of which water and land areas are "key" to a particular reserve must be

made based upon specific scientific knowledge of the area. A basic principle to follow when deciding upon key land and water areas is that they should encompass resources that are representative of the total ecosystem and which if compromised could endanger the research objectives of the reserve.

5. An area adjacent to or surrounding the core and on which the integrity of the core area depends is the buffer zone. Buffer zones protect the core and provide additional protection for estuarine-dependent species. The buffer zone may also include an area best-suited for facilities required for research and interpretation. Additionally, buffers must encompass an area sufficient to accommodate the shift of the core in case of biological, ecological, or geomorphologic change.
6. Buffers are usually of the same biome as the core and may accommodate NOAA-approved manipulative research which should not be carried out in the core. They may encompass wetlands not in the core area, ecotones, and upstream effects where practical, as well as shoreland and contiguous ocean or bay water.
7. Determination of the landward boundary of a reserve is difficult because of transitional zones, the slope of the upland, the size of the estuary and other factors. At a minimum, the landward boundary should encompass wetlands that contribute to estuarine processes. Wetlands may be defined in terms of vegetation, and the upland limit of wetlands can be defined accordingly. There is generally a transitional zone (ecotone) in which vegetative types from two or more ecological groups mix together. Ecotones combine the characteristics of the communities they join and often have an unusually high abundance and diversity of life and serve a unique function to the ecosystem. The emergence of upland vegetation will indicate in general terms where the landward boundary of a reserve should be drawn. However, how much, if any, of the uplands are included in the proposed boundary must be determined on the basis of scientific judgment and not property lines or the availability of land for acquisition.
8. Estuarine resources do not necessarily end at the shoreline, but may include adjacent open water areas.

C. General Principles

Boundaries of reserves connote some degree of control by the managing entity over human activities and the natural resources occurring within the reserve. Generally, reserve boundaries will include two areas: key land and water areas, or a "core" area, and a buffer zone. Control on the landward side may involve direct ownership or jurisdiction of the agency which manages the core area; it may also mean control exercised by administrative action, easements, or by other means. Federal and state lands contiguous with the reserve maybe included within the boundaries only after formal agreements approved by NOAA have been established through proper administrative or legal measures.

D. Recommended General Procedure for Proposed Boundary Delineation

I. Conduct a scientific survey of the proposed site(s)

A. Identify proposed boundary on the landward side

- vegetation types
- landform/physical (natural or man-made)
- land use
- estuarine dependent physical processes, biological components, (flora/fauna) or combination.

B. Identify proposed boundary on the water side

- natural delineation between discrete or separable landforms
- natural delineation between discrete or separable water bodies or portions of the same water body.

II. Identify key land and water areas (Core Area)

A. Within the boundary established on the basis of the scientific survey

(see I. above), identify, and rank in order of their importance, the most important ecological units of the proposed area, i.e., those units most important to the integrity of the area and its resources. (See Nos. 3 and 4 of the Basic Scientific Principles listed in these guidelines.)

- Why are these units important?
- What is the minimum land and water area needed to protect these highest priority ecological units?

III. Identify buffer area

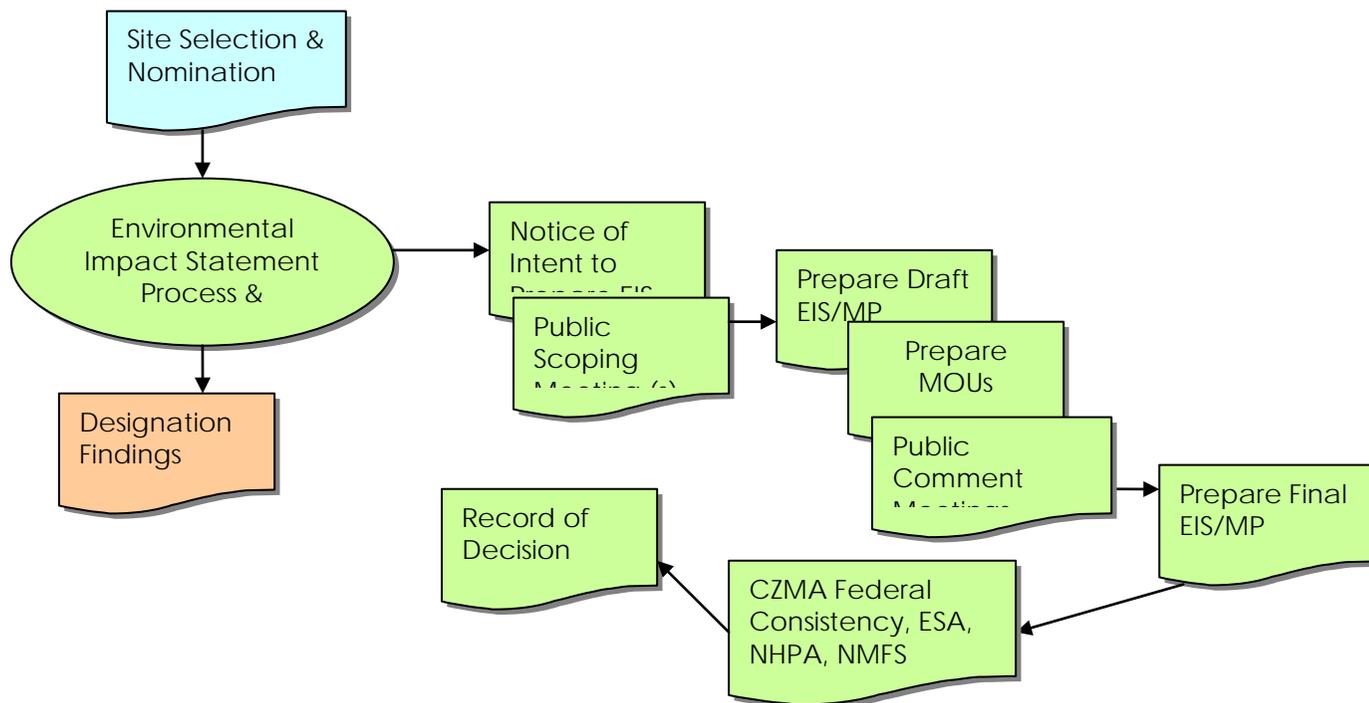
A. Within the boundary established on the basis of the scientific survey (see I. above) and in consideration of the core area identified in II.A., identify the minimum buffer area required to ensure the long-term viability of the core area for research purposes and to provide for required research or interpretive support facilities. (See Nos. 5 and 6 of the Basic Scientific Principles listed in these guidelines.)

V. Multi-Component Reserves

A multi-component reserve has two or more noncontiguous protected areas, or components, that are under the managerial jurisdiction of the reserve. Multiple components are appropriate when a state has a complex coast that makes it impossible for a single component to represent the habitat diversity in a biogeographic region. They should not be considered solely as a means for increasing protected land within a State.

A multi-component reserve is “treated as one reserve in terms of financial assistance and development of an overall management framework and plan” (NERRS regulations, §921.10b). It is subject to the same funding limits as single-component reserves, and it must function as one unit and not as individual "mini" reserves. ERD will look for strong administrative, education, research and monitoring plans that preserve an identity for the reserve and the national system. A state may choose to develop a multi-component reserve at any time during designation or operation of the reserve. The number of components is not limited, but the benefit of additional components must be balanced against increased management responsibility and program dilution. ERD and the state will determine the feasibility of planned components with each reserve on a case-by-case basis.

VI. Developing an Environmental Impact Statement and Reserve Management Plan



A. Introduction

The National Environmental Policy Act of 1969, as amended, requires that Federal agencies consider the environmental impacts of major Federal actions. The designation of a reserve is considered a major Federal action and requires a NEPA review before NOAA can officially designate a reserve. As determined by National Estuarine Research Reserve System regulations (§ 921.13), an environmental impact statement (EIS) and management plan must be developed to assess the possible environmental impacts of the proposed designation and to identify future management strategies if the proposed reserve is designated.

B. Milestones in Environmental Impact Statement and Management Plan Preparation

The process details the steps that NOAA and the state follow in order to prepare an environment impact statement and a reserve management plan. This process should begin immediately following the approval of the Notice of Intent (NOI) to prepare a draft EIS/MP (DEIS). The process can last from 1-2 years and includes several important milestones:

NOAA Milestones

1. Prepare a NOI to assemble a DEIS/MP, with a minimum public comment period of 30 days before the release of the DEIS, to be published in the *Federal Register*.
2. File a completed DEIS/DMP with the U.S. EPA and prepare a notice of availability (NOA) for public comment to be published in the *Federal Register*. The NOA is published no less than 30 days prior to a public meeting(s) on the DEIS/DMP.

3. Prepare a notice announcing a public meeting(s) on the DEIS/DMP to be published in the *Federal Register*.
4. Address all comments received on the DEIS/DMP and file a completed Final Environmental Impact Statement/Final Management Plan (FEIS/FMP) with the U.S. EPA. The NOA for the FEIS/FMP is published in the *Federal Register* no less than 30 days before issuing a Record of Decision.
5. Prepare a notice announcing the designation of the new reserve and the availability of the NEPA Record of Decision to be published in the *Federal Register*. This notice must also contain the federal consistency determination from the state.

State Milestones

1. Conduct a scoping meeting(s) to solicit public comment on the proposed reserve prior to preparing the DEIS/DMP. The state must advertise the meeting(s) in local media at least 15 prior to the meeting(s) being held.
2. Prepare, with assistance from NOAA, a preliminary and final DEIS/DMP to NOAA. The DMP must contain a draft MOA(s) between the State and NOAA (see Appendix A).
3. Publish a notice in local media of the public hearings to review the DEIS/DMP. The hearings should be held 30-45 days after NOAA announces the availability of the DEIS/DMP in the *Federal Register*.
4. Prepare, with assistance from NOAA, a preliminary and a FEIS/FMP and submit to NOAA. The FEIS/FMP must respond to all comments received on the DEIS/DMP, as well as a final MOA between the State and NOAA and any other MOAs developed with local partners (see Appendix A).
5. Submit to NOAA all relevant MOAs signed by the State and all applicable partners. NOAA must receive copies of the signed MOAs prior to the NOAA Administrator signing the designation findings and certificate that officially designate the reserve.
6. Publish a notice in local media announcing the official designation of the new reserve.

C. Draft EIS Process for Reserve Designation

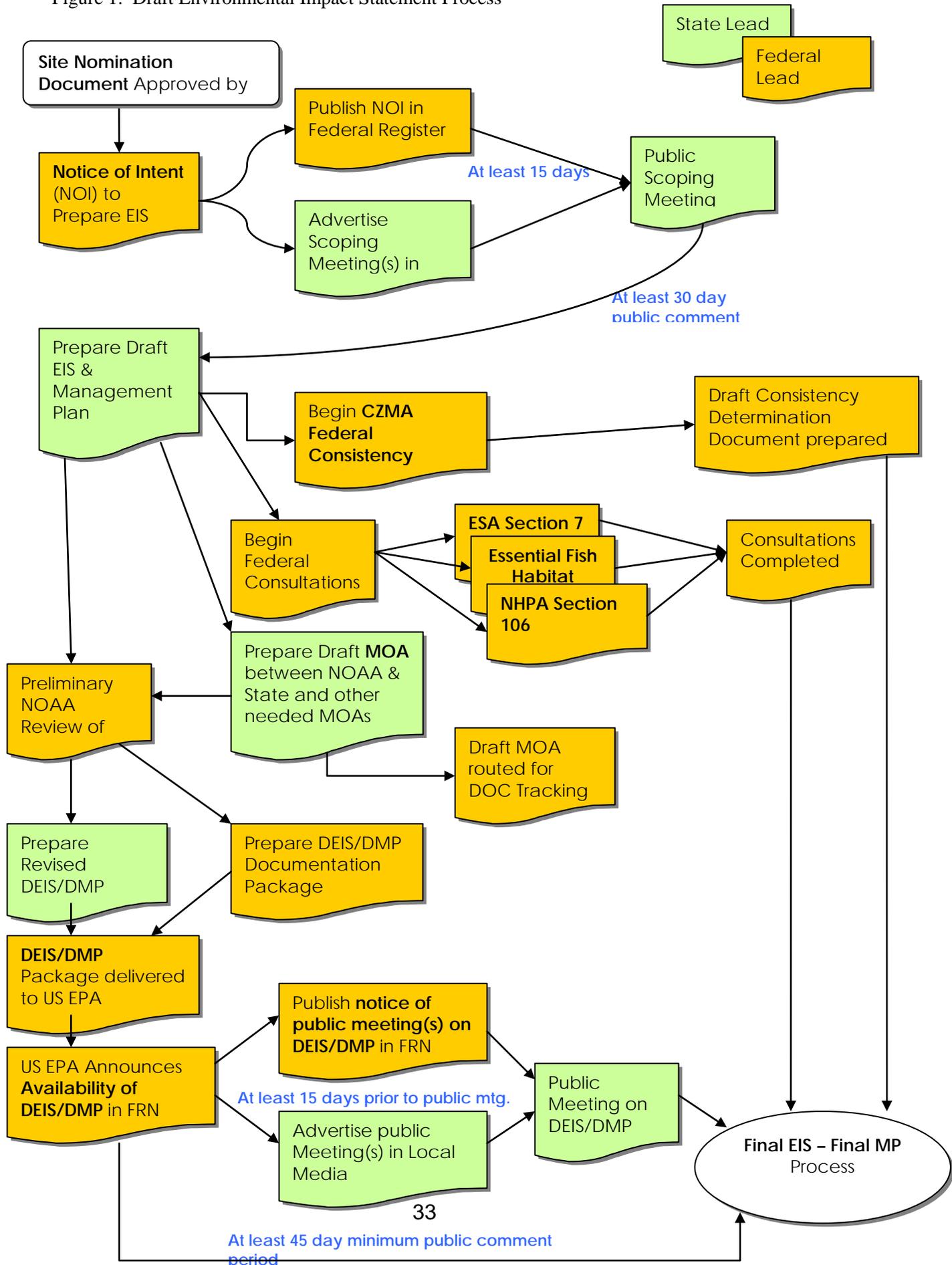
The Draft EIS process for the designation of National Estuarine Research Reserve is based on the requirements of NEPA and NOAA's Administrative Order 216-6. Each step in this process must be completed and in many cases sequentially. The overall process is shown in Figure 1. Each segment of the process denotes the recommended lead, State or NOAA.

1. Notice of Intent

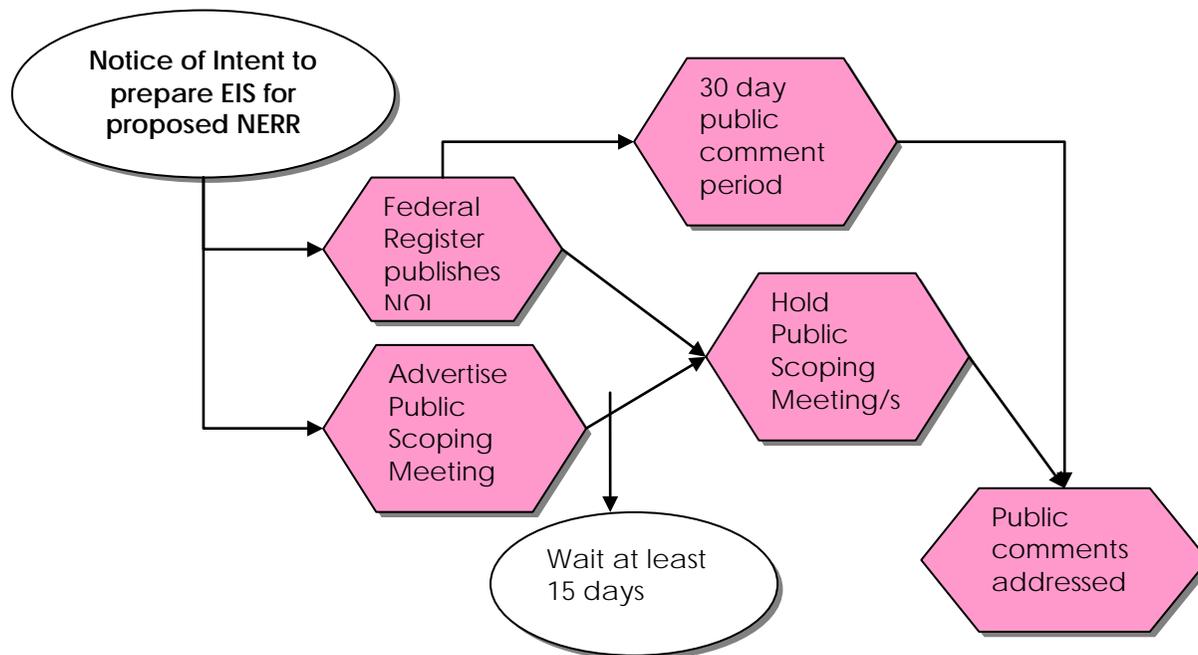
After the site nomination document is approved by NOAA, a Notice of Intent (NOI) to prepare a Draft EIS and Management Plan is created by NOAA with the assistance of the State. The NOI is a concise announcement of NOAA's plan to prepare a DEIS that must:

- describe the proposed action and possible alternatives.
- describe the proposed scoping process and provide information on any planned scoping meetings and/or hearings.
- identify the responsible federal program official to whom questions should be addressed regarding the federal action or the DEIS.

Figure 1. Draft Environmental Impact Statement Process



The NOI must be delivered to the *Federal Register* on Fridays for publication the following Friday. In addition, the NOI must be published in the *Federal Register* at least 15 days prior to any planned scoping meetings or hearings. This allows for sufficient advance public notice of the action. NOAA must consider all public comments during a comment period of at least 30 days after publication of the NOI. Concurrently with the federal action, the state partner will advertise any scoping meetings or hearings in local media outlets. This ensures adequate local public notice of these meetings.



2. Public Scoping Meetings

The formal scoping process begins after the NOI is published in the *Federal Register*, but can in practice begin prior to that notice being published. The purpose of a scoping process is to help the state partner and NOAA determine the range of issues associated with the designation of a National Estuarine Research Reserve.

The scoping process may be conducted in several formats including:

- Internal meetings between NOAA and state level stakeholders
- Formal public hearings where the public provides testimonial that is recorded into the official record
- Informal public meetings with at large or invited individuals to discuss the proposed designation
- Solicitation of public comment through various media (mass mailings, newspapers, internet, phone conversations)

Although a public meeting is not a requirement, NERRS regulations Sec. 921.11 (c) requires NOAA to hold a public scoping meeting with the state partner in the area or areas most affected by the proposed Reserve designation. This meeting must be held no earlier than 15 days after the NOI is published.

The goal of a public scoping meeting is to determine the range of issues regarding the proposed

designation by engaging a broad group of interested private and public parties. The process helps NOAA and the state partner to be responsive to information and concerns that may arise. The process will help determine the relevant stakeholders, identify significant environmental issues, strengthen stakeholder support for NERR designation, and identify information gaps or other actions that may affect designation.

3. Prepare Draft Environmental Impact Statement

Following the 30-day public comment period, the next step in the designation process is to prepare a Draft EIS and Management Plan as per NERRS regulations Sec. 921.12. NERRS regulations clearly define the roles of NOAA and the state partner in this process. NOAA is the primary lead in developing the draft EIS to meet its NEPA obligations. The state partner supports NOAA's preparation of the draft EIS by collecting information relevant to the EIS and providing it to NOAA. Additionally, the state partner is the primary lead for developing a draft management plan, including a NOAA-State MOU and additional MOUs between state partners. NOAA provides guidance to assist in the development of the management plan and MOU(s).

A more detailed description of the requirements for EISs can be found in NOAA's administrative order 216-6 (insert web link).

a. Environmental Impact Statement Components

The NEPA regulations (40 CFR 1502.10) require all EIS documents to contain the following contents.

Required EIS Contents	
Cover Sheet	Executive Summary
Table of Contents	Purpose & Need
Description of Proposed Action	Alternatives to Proposed Action
Affected Environment	Environmental Consequences
Mitigation Methods	List of Preparers
Distribution List	Index & Appendices

b. Cover Sheet

Every EIS must have a one-page cover sheet that includes the following information:

- A list of the responsible agencies including the lead agency and any cooperating agencies. In the case of reserve designation, *U.S. Department of Commerce; National Oceanic and Atmospheric Administration; National Ocean Service; Office of Ocean and Coastal Resource Management; Estuarine Reserves Division; and address*
- The title of the proposed action that is the subject of the statement, together with the state and county(ies) (or other jurisdiction if applicable) where the action is located. Recent examples include:

*Final Programmatic Environmental Impact Statement
Federal Approval of the Texas National Estuarine Research Reserve
and Management Plan: The Mission-Aransas Estuary*

*Final Environmental Impact Statement and Final Management Plan
to establish the San Francisco Bay National Estuarine Research Reserve*

- The name, address, and telephone number of the person at the NOAA who can supply further information.
- A designation of the statement as a draft, final, or draft or final supplement.
- A one paragraph abstract of the statement.

c. Summary

The summary must accurately summarize the substantive parts of the EIS. It may also be called the executive summary and should be no more than a few pages in length. The summary shall include:

- A brief summary of the major conclusions.
- A description of any areas of controversy (including issues raised by agencies and the public).
- The major issues (including the choice among alternatives) that will be discussed in the EIS.

d. Table of Contents

The table of contents provides organization to the EIS and should include a list of tables, figures, and acronyms in addition to the major sections, described below, of the document. Other recommended components referenced in the table of contents include a list of preparers or acknowledgements, list of persons or organizations receiving the document, references, and a list of attachments and appendices.

i. Purpose and Need

An EIS must contain a purpose and need statement. CEQ regulations 40 CFR 1502.13 state, “*The statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.*” This section presents a brief statement explaining why the action (i.e., reserve designation) is being considered. The purpose and need specifies the underlying purpose and need to which NOAA is responding and sets the overall direction of the environmental analysis process. The purpose and need section should answer the question, “Why is NOAA proposing to approve the reserve designation?” An example is that the reserve is “representative of an estuarine ecosystem suitable for long-term research and education”. A proposed reserve should be in a biogeographic region that is currently unrepresented in the national system and/or have a unique ecosystem type(s) or physical characteristics described in Appendix 2 of the Sec. 921, or are from a state currently not represented in the NERRS.

The purpose and need serves as an important screening criterion for determining which alternatives to designation of the proposed reserve are reasonable. All reasonable alternatives examined in detail must meet the defined purpose and need.

The purpose and need statement must:

- Be broadly to address the number of alternatives to be considered.
- Describe the goal or end result of the action not the manner in which to accomplish the end result.
- Be short and concise manner that describes the driving force behind NOAA’s desire to designate the proposed reserve.

ii. Description of Proposed Action and Alternatives

As required by Section 102 (2) (E) of NEPA, every EIS must contain a detailed description of the proposed action and alternatives. Considered the heart of the EIS, this section describes the proposed action and each alternative that will accomplish the purpose and need for reserve designation. Identifying the proposed action will inform reviewers of the reserve designation being considered. The proposed action is also call the preferred alternative of all the alternatives NOAA has identified for the EIS. NOAA selects a preferred alternative based on environmental, economic, technical, and other considerations.

In addition to the proposed action, this section should provide objective descriptions of all reasonable alternatives under consideration by NOAA. It is recommended that NOAA and the state partner include short, concise summaries of the impacts of each alternative, provided in comparative form. Previous reserve designation EIS documents have used a tabular format to depict each alternative and their impacts as shown in Figure 2. A more detailed analysis of the impacts of each alternative should be discussed in the “Environmental Consequences” section of the EIS.

Figure 2. Example tabular format of Alternatives and their Impacts

Table 4. Summary of alternatives. Abbreviations in the table: GIWW=Gulf Intracoastal Water Way, MHT=Mean High Tide, MP=Management Plan.

Alternatives	Action	Alternative Size	Social Impacts	Environmental Impacts	Research, Education
Preferred Alternative	Approve nominated site and implementation of management plan	185,708 acres ¹	Minor impacts to communities and uses adjacent to Reserve	Minor impacts related to sampling studies, construction of associated facilities	Positive new opportunities for conducting research
Boundary Alternative A	Include the GIWW and all transportation corridors	236,641 acres	Additional permit burden for future dredging operations ³	Minor impacts related to sampling studies, construction of associated facilities	Positive new opportunities for conducting research related to dredging activities or best use sites
Boundary Alternative B	Extend the Reserve boundary an additional 1,000 feet to MHT Line	207,043 acres	Additional permit burden for applicants for new piers and docks ³	Minor impacts related to sampling studies, construction of associated facilities	Additional opportunities for research along shorelines, i.e., seagrass habitats

The alternatives identified in this section are those that may be feasibly carried out based on technical, economic, environmental and other factors, and meets the purpose and need for the

proposed action. A no-action alternative must be included as one of the alternatives described in this section.

According to CEQ regulations 40 CFR 1502.14 the Proposed Action and Alternatives section should:

- Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- Include reasonable alternatives such as alternative boundaries, sites, multiple sites or others.
- Include the No Action Alternative. The No Action Alternative is the most likely future that could be expected to occur in the absence of the project.
- Identify NOAA's preferred alternative or alternatives, if one or more exists.
- Include appropriate mitigation measures not already included in the proposed action or alternatives.

Refer to the NOAA, December 16, 2002, *Memorandum for Legal Guidance on Determining Related Actions and Developing Reasonable Alternatives for Inclusion in a Single EIS* at http://www.nepa.noaa.gov/reasonable_alts.pdf for more information on development of alternatives.

Determining the Number of Alternatives to Include

The number of alternatives considered reasonable will vary depending on the nature of the purpose and need for the action. The alternatives described in this section should be representative of all of those possible actions that can be reasonably expected to satisfy the purpose and need.

At a minimum, NOAA must include a description of two alternatives: the proposed action or preferred alternative and the no action alternative. However, in the case of NERR designation, NOAA and the state partner should look at several alternatives including:

- Alternative reserve boundaries
- Alternative reserve sites
- Alternative management options

In many instances there are potentially a very large number of possible alternatives. NOAA should only analyze and compare a reasonable range of alternatives in the EIS to meet the purpose and need for designating a new reserve.

What is the No Action Alternative?

NOAA must include a no action alternative as part of the EIS for reserve designation. The no action alternative is simply the continuation of the status quo and the proposed National Estuarine Research Reserve is not designated. In this alternative, NOAA will not meet the stated

purpose and need of the action. The alternative should accurately describe what would happen if the reserve designation did not take place without being overly speculative. Additionally, this alternative provides a baseline comparison with the proposed action and any alternatives.

Alternatives Considered but Not Analyzed

During the initial stages of the designation process, NOAA and the state partner may consider a number of alternatives that could be considered reasonable but are unlikely to accomplish the goal of designating a new reserve. For example, during the site selection process an alternative site was looked at but was not considered reasonable because the site lacked adequate state control and was dropped from consideration.

Any alternatives considered but rejected for further analysis should be briefly discussed in a subsection of the EIS (i.e., “Alternatives Considered, but not Further Analyzed”). This allows NOAA to identify these alternatives and to explain why they were not reasonable for achieving the purpose and need of designating a proposed reserve.

Summarizing the Environmental Consequences

Within this section, NOAA and the state partner should briefly describe the anticipated environmental consequences of reserve designation and alternatives on the affected environment. A detailed analysis of these environmental consequences will be found in the Environmental Consequences section of the EIS.

Designation of a NERR is typically an administrative function and the environmental consequences are positive as designation brings the development of research, education, and stewardship programs; economic benefits to local communities; and the potential for strengthened environmental protections implemented by the state. Some explanation of the environmental consequences of future reserve infrastructure should be described, if applicable.

iii. The Affected Environment

This section is a description of the environment in which the proposed action and alternatives are considered. Current conditions of the proposed reserve and its vicinity are described in detail and serve as a baseline for comparison of each alternative and their associated impacts.

Federal regulations 40 CFR 1502.15 describe this requirement as follows:

*The environmental impact statement shall **succinctly** describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement.*

This section is typically divided into subsections that address major categories of resources affected by the NERR designation. For example, previous NERR designation EIS's have used subsections describing biological resources (including endangered and threatened species), socioeconomic resources, habitat, cultural resources, and historical resources. Other ideas for subsections include the following as well as other areas of interest specific to the proposed reserve:

<i>Hydrology</i>	<i>Geology</i>
<i>Zoning</i>	<i>Pollution Sources</i>
<i>Existing Infrastructure</i>	<i>Climate</i>

Each resource described in the Affected Environment Chapter must also receive a parallel discussion in the Environmental Consequences Chapter. Additionally, incorporating by reference other EISs and EAs may be used to add information about the affected environment without adding length to the document. This is especially useful if existing infrastructure or land acquisition projects are ongoing during the designation process.

iv. Environmental Consequences

An EIS must have a detailed description of the anticipated environmental consequences of the NERR designation and alternatives (including the No-Action Alternative) on the resources described in the Affected Environment section. In this section, NOAA and the state partner describe the scientific and analytic basis for the comparison of the proposed NERR designation and alternatives. The section must provide a detailed analysis and description of any general or specific environmental impacts or effects resulting from NERR designation or the reasonable alternatives.

Effects can include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

The section should be organized to show the following:

- The overall or general impacts of NERR designation and the significance of these impacts.
- Specific impacts or effects of NERR designation and their significance as related to the sections described in the Affected Environment section.
- Possible conflicts between the NERR designation and applicable federal, regional, state, and local plans, programs, or controls for the proposed reserve site. This includes but is not limited to the:
 - Endangered Species Act
 - Magnuson-Stevens Fishery Conservation & Management Act
 - National Historic Preservation Act
 - Coastal Zone Management Act
- Unavoidable adverse environmental or socioeconomic impacts that may result from NERR designation.

- The cumulative impacts of NERR designation and alternatives on activities occurring in the area/environment affected by the action. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

v. Mitigation Measures

In some examples, alternatives, including the preferred alternative, reference measures that avoid, reduce or minimize the effects of designating a NERR. If identified, these mitigation measures should be included in the analysis of each alternative in the Environmental Consequences section. A table can be used to show mitigation measures as related to each alternative identified in the EIS.

Mitigation measures may include the following actions:

- Avoidance of impacts associated with the preferred action or its alternatives
- Minimizing the degree or magnitude of the NERR designation and its implementation
- Compensating for the impact of NERR designation
- Restoring affected environments or habitats. The resource manipulation/ restoration part of the management plan may address mitigation in detail.

vi. List of Preparers

The EIS must include a list of persons involved or consulted in the preparation of the document. This section should include any person that was primarily responsible for preparing the document, background papers, or provided substantial information. This includes NOAA staff and state partner staff.

vii. Distribution List

The EIS must include a distribution list that includes other agencies, organizations, and individuals who have requested the document. An asterisk or some kind of notation should be included for those organizations or individuals who commented on the draft document.

viii. Index and Appendices

The EIS must contain an index. The index should include an alphabetical list of key words and their associated page numbers that will allow the reader to find information easily within the EIS. The index should focus on subject matter not a simple repeat of the table of contents. Any appendices to support the EIS should also be included. One mandatory appendix or attachment is the Reserve Management Plan. Other materials that are best consolidated into the appendix are:

- Lengthy technical discussions, baseline studies, etc...
- Materials likely to be understood by technically trained individuals
- Comments to the EIS and responses to those comments
- Concurrence letters as per other legal requirements
- Reserve – NOAA Memorandum of Understanding

- Reserve – Local partner Memorandum of Understanding

4. Prepare Reserve Management Plan

Sec. 912.13 (a) of NERRS regulations identifies the various components of the draft management plan. These generally include:

- Reserve goals and objectives
- An administrative plan
- A research plan that includes a monitoring design
- An education and outreach plan
- A public access plan
- An acquisition plan
- A construction plan for future reserve facilities
- A resource protection plan
- Applicable MOU(s)
- And if applicable; a restoration plan and/or a resource manipulation plan

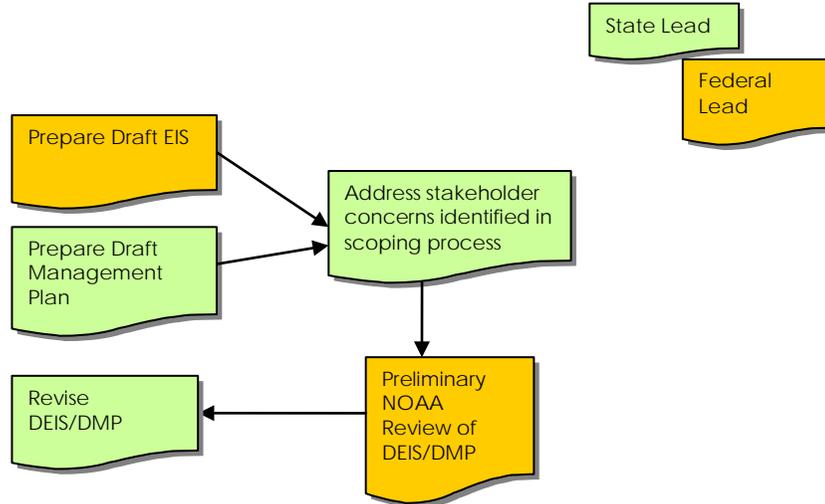
The management plan is part of the draft EIS and is also a stand alone document upon designation of the reserve. Within the EIS, the management plan is incorporated as an attachment or an appendix. Detailed guidance on each of the components of a NERR management plan can be found in “Guidelines for Management Plan Revisions – National Estuarine Research Reserve System” obtained from NOAA’s Estuarine Reserves Division.

5. Environmental Impact Statement Development and Review Process

The development of a draft EIS can typically be a 4-6 month project. The official preparation of the draft document begins immediately after the NOI is published in the *Federal Register*. In reality, the state partner can begin collecting information for the EIS prior to the NOI. However, the preparers must remember to address stakeholder concerns or comments identified during the scoping meetings when developing the draft EIS. Figure 3 describes the initial process NOAA and the State partner follow for preparing a Draft EIS and Management Plan for designating a new NERR.

NOAA and the state partner should be working together throughout this process with NOAA taking the lead in developing the draft EIS and the state partner taking the lead in developing the draft management plan. Each party has important contributions to both documents being developed.

Figure 3. Process for preparing a preliminary Draft EIS and Management Plan



Additionally, the internal NOAA review and clearance process for EISs is incorporated into this review process. The NOAA clearance process for approving a draft EIS for the designation of a Reserve includes both a preliminary review and formal clearance.

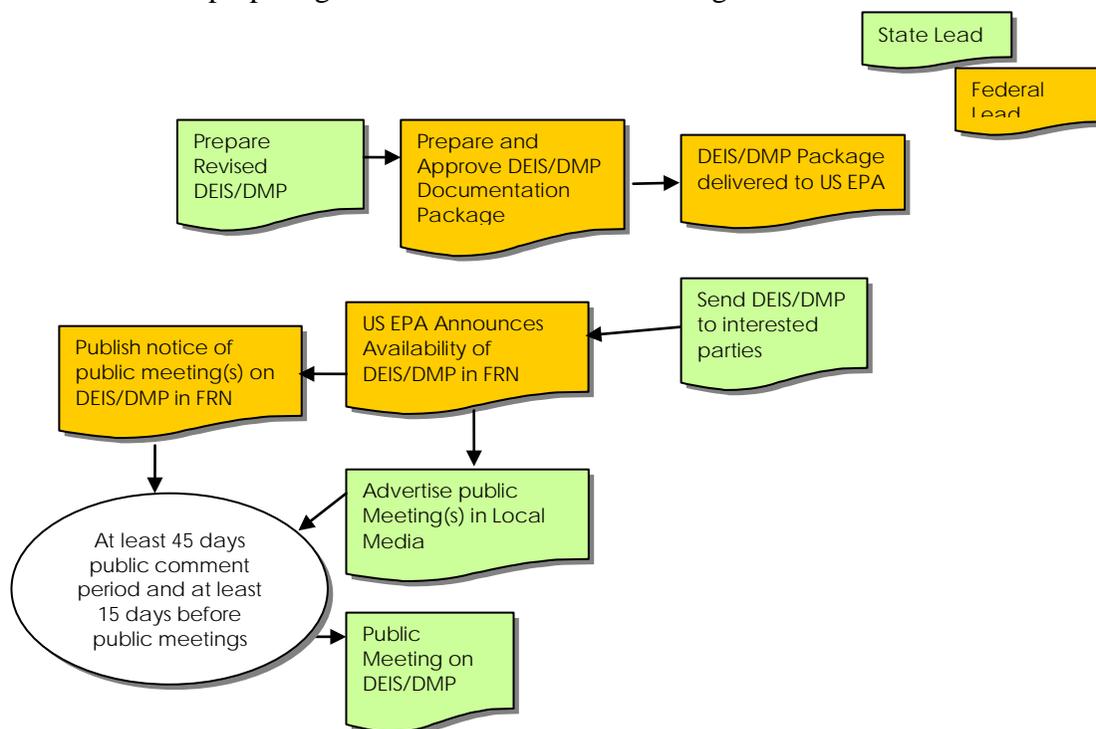
In the preliminary review process, the draft EIS/Management Plan must be reviewed sequentially by:

- ERD responsible program specialist and EIS development team members who are leading the development of the draft EIS/Management Plan
- ERD Research Coordinator
- ERD Education Coordinator
- ERD Chief
- NOS General Counsel
- And finally, NOAA's NEPA Coordinator or designate

Concurrently, NOAA should begin to prepare consultation letters regarding compliance with the Endangered Species Act, the National Historic Preservation Act, and the Magnuson-Stevens Fishery Conservation and Management Act to appropriate federal and state contacts.

Upon receipt of comments obtained during the preliminary review process, NOAA and the state partner will revise the draft EIS/MP in preparation for the formal document review process. The formal review process requires by NOAA, as shown in Figure 4, prepares the document for publishing in the Federal Register and comment by the public.

Figure 4. Process for preparing a formal Draft EIS and Management Plan



In the formal review process, the draft EIS/Management Plan must be reviewed sequentially and tracked by the:

- ERD Chief
- NOS General Counsel
- OCRM Director
- NOS Assistant Administrator
- And finally, NOAA's NEPA Coordinator or designee

Several letters and memos are prepared for the controlled correspondence informing each party in the signature chain about the purpose of the action to designate a new National Estuarine Research Reserve.

In preparation for approval of the draft EIS, NOAA must provide the state partner with:

- The point of contact for receiving public comments. Typically, this contact is the Chief of the Estuarine Reserves Division.
- A list of organizations, agencies, and individuals who will receive the document. This list will include all the appropriate state and federal stakeholders in the designation process and other who during the scoping process or other contacts have expressed an interest in reviewing the document.
- Appropriate federal elected officials from the:
 - Senate Committee on Commerce, Science, and Transportation
 - Senate Ocean and Fisheries Subcommittee
 - House of Representatives Resource Committee
 - House of Representatives Subcommittee on Fisheries and Conservation, Wildlife & Oceans

- House of Representatives Science Committee
- Senate and House members directly affected by NERR designation.

The document is printed by NOAA but in most cases the state partner prints it using non-federal funds or pre-designation assistance funds from NOAA. Due to the large size of a combined a draft EIS/MP, whoever prints the document has the option to create CDs to reduce printing costs. State partners are encouraged to make a pdf version of the draft EIS/MP available to the public through their website. A number of hard copies will still be required for certain individuals or agencies receiving the document for review. NOAA will require a total of 8 hard copies of the document. Of those, 5 are transmitted to U.S. Environmental Protection Agency (EPA) for review.

Upon approval of the draft EIS/MP by NOAA's NEPA Coordinator, NOAA must file the draft EIS with the EPA as per 40 CFR 1506.9. Five copies of the draft EIS/MP, a "Dear Reviewer" letter signed by the NEPA coordinator, and a NEPA compliance memo to EPA are required parts of the package filed with EPA. EISs may be mailed or delivered in-person to EPA at the following addresses:

Deliveries by the US Postal Service	Deliveries in-person or by commercial mail services (Federal Express, UPS, etc...)
US Environmental Protection Agency Office of Federal Activities EIS Filing Section Ariel Rios Building (South Oval Lobby) Mail Code 2252-A 1200 Pennsylvania Ave., NW Washington, DC 20004	US Environmental Protection Agency Office of Federal Activities EIS Filing Section Ariel Rios Building (South Oval Lobby) Rm. 7220 1200 Pennsylvania Ave., NW Washington, DC 20004

Note: The draft EIS/MP must not be made available to the public until a Notice of Availability is published by EPA in the Federal Register.

EPA publishes the draft EIS/MP in the *Federal Register* beginning a 45 day public comment period. Comments mailed to the NOAA point of contact must be considered in developing the Final EIS/MP. Before the Notice of Availability is scheduled to be published in the Federal Register, NOAA and the State partner will mail the document to applicable parties identified on the Distribution List.

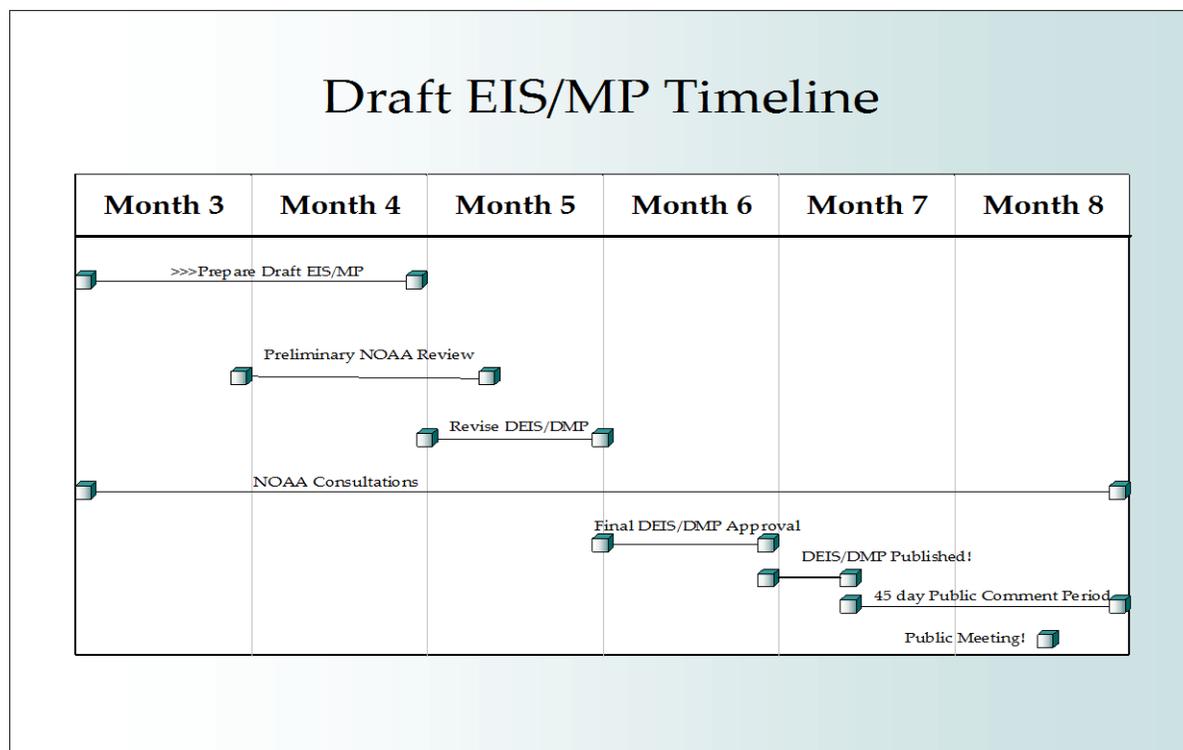
NOAA and the state partner must prepare for at least one public meeting about the Draft EIS/MP for designation of a NERR. NOAA must advertise at least one public meeting about the Draft EIS/MP in the *Federal Register* at least 15 days prior to the date of the meeting(s).

Concurrently, the state partner must advertise the public meeting(s) in local media outlets. In many cases two meetings are required. One meeting may take place in the state capitol and the other is often located in close proximity to the proposed reserve. These meetings provide opportunity for a broad spectrum of the public to learn about and comment on the proposed reserve designation. Figure 5 shows an estimated timeline for the Draft EIS/MP process.

6. Public Meetings:

NOAA and state partner representatives provide public presentations on and receive formal and informal public comments about the proposed NERR. Formal comments are submitted into the record and require NOAA response in the Final EIS/MP.

Figure 5. Draft EIS/MP Process Timeline



7. Other NOAA Draft EIS/MP Actions

During the development of the preliminary Draft EIS/MP, NOAA begins several actions required as part of the NEPA process. These actions include the:

- CZMA Federal Consistency Determination Process
- Federal Consultations pertaining to applicable Federal Laws
- Memorandum of Understanding Review and Tracking

Each action takes place concurrently with the development of both the Draft and the Final EIS/MP.

CZMA Federal Consistency Determination Process

Federal Consultations (ESA, NHPA, etc..)

NOAA must consult with various federal and state agencies

Memorandum of Understanding Review and Tracking Process



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
c/o TAMU-CC, Campus Box 538
6300 Ocean Drive
Corpus Christi, Texas 78412
February 13, 2006

Laurie McGilvray
Chief
Estuarine Reserves Division
National Ocean Service, NOAA
Office of Ocean and Coastal resource Management
Silver Spring, MD 20910

Consultation Number 2-11-06-I-0003

Dear Ms. McGilvray:

We have reviewed your request for concurrence on your determination of effects on endangered and threatened species and their habitats for the designation of the Mission-Aransas Estuarine Research Reserve (NERR) within Nueces, Aransas, San Patricio, Refugio and Calhoun Counties, Texas, as described in your January 4, 2006 letter and subsequent email dated February 10, 2006. Your determination of effects of the proposed designation of the NERR to Federally-listed species and additional information you have provided are to be included in the Final Environmental Impact Statement and Management Plan for this project. The purpose of the proposed NERR is to protect representative natural habitats through joint Federal-State partnerships and utilize the management plan to increase awareness and stewardship of the resources while assuring benefits that can be enjoyed by the public. Based on the project description, purpose, location, and management goals, the Service concurs with your determination that the project may affect, but will not likely adversely affect, Federally-listed species as a result of the proposed action. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination can be reconsidered.

If you have any further questions please contact Dr. Larisa Ford at (361) 994-9005 or by email at Larisa_Ford@fws.gov.

Sincerely


Allan Strand
Field Supervisor

Section VII describes in detail the review and tracking process for NERR MOUs.

30-day public comment period, the next step in the designation process is to begin to prepare a Draft EIS and Management Plan as per NERRS regulations Sec. 921.12. NERRS regulations clearly define the roles of NOAA and the state partner in this process. NOAA is the primary lead in developing the draft EIS to meet its NEPA obligations. The state partner supports NOAA's preparation of the draft EIS by collecting information relevant to the EIS and providing it to NOAA.

Additionally, the State partner is the primary lead for

developing a proposed reserve's draft management plan, including a NOAA-State MOU and a State Partner MOU. NOAA provides guidance to assist in the development of the management plan.

VII. Guidelines for Memorandums of Agreement

A. Introduction

Memorandums of Agreement (MOA) are made to form partnerships and work with other federal agencies, universities, state, local and international governments, tribes, private institutions and other organizations. The process of initiating, extending and/or modifying these agreements involves clearance of the official MOA and required supporting documentation which can often be time consuming. Approval and clearance signatures are obtained during a controlled routing of the MOA package through the program office, NOS senior management, NOAA General Counsel, and if required the Office of the Executive Secretary, and Department of Commerce (DoC) General Counsel. As a general rule, if you are trying to establish a relationship with any party outside of NOAA, and it involves the use of money, property and/or employee time, you should contact the DoC General Law Division (202-482-5391) as early as possible to get some guidance. Information on agreements is also available online at www.ogc.doc.gov/ogc/admin/general.html.

Several steps need to be taken in order to process agreements including:

- advanced planning
- choosing the right type of agreement
- drafting the terms and conditions
- reviewing and clearing the agreement
- executing the agreement
- administering the agreement

B. Choosing the Correct Authority and Type of Agreement

The name Memorandum of Agreement or MOA carries no legal authority, but is simply a way to refer to an agreement with another organization. However, it is important to choose the correct authority and type of agreement for the relationship you are about to establish. Agreements between NOAA and other agencies are important for several management and legal reasons. You may want to keep track of funds, justify program activities, or ensure that a job gets done. There are also legal reasons such as 31 U.S.C. §1301 “only for purpose of appropriation,” 31 U.S.C. § 1501 “obligation only when in writing,” and 31 U.S.C. §1532 “no transfer without authority.” If you feel that drafting an agreement with another agency is needed, you must first determine what type of agreement is necessary.

There are essentially five types of agreements:

- 1) Contracts
- 2) Economy Act Agreements (31 U.S.C. § 1535)
- 3) Joint Projects (15 U.S.C. § 1525)
- 4) Grants and Cooperative Agreements
- 5) **Other Types of MOAs and Agreements**

Other types of MOAs and Agreements

Some relationships are formed because of unique statutory authority or they do not involve expenditure of funds or property. The Office of General Counsel is available to help draft these types of agreements and can offer advice on traps for the unwary.

A template for the afore mentioned agreements can be viewed on the DoC Office of General Counsel Web site at <http://www.ogc.doc.gov/ogc/admin/general.html>. Please consult this Web site before you draft a document. Additionally, the director of this office, Brian DiGiacomo, has a link on this page to his email.

C. MOA Clearance Process (For ERD Use)

You will save time if your agreement is well drafted and contains all necessary supporting documentation. Once you have drafted a document with legal consultation it is ready for review and clearance. **NOTE:** This process takes approximately two months, so please allow enough time for clearance, especially if a timely financial transfer is involved. NOS has created an electronic MOA Tracking System which serves as a database for MOA documents and their status. The NOS MOA point of contact is Martin Freeman. Martin can be reached at (301)713-3070 or at martin.freeman@noaa.gov. His office is located on the 13th floor. Martin ensures that all information has been entered into the tracking system correctly and moves MOAs through the clearance process. Below are the eight steps required to process an original MOA and an amendment or annex to an MOA. **NOTE:** You will want to start with at least three copies of your original document for signature since a signed original copy should reside with Veronica, you and the other party. You may want more copies if there are several partners.

1) A new record must be created in the MOA Tracking System by the program officer

To access this system, you must have Filemaker Pro on your desktop. The file is located on P:\Estuarine Reserves Division\MOA\FMP client. If you do not have Filemaker Pro, please see Erica Seiden for assistance in entering your data into the system. Each division has an MOA specialist. Currently, Debra Persons is serving that role for CPD and Erica Seiden for ERD.

2) The MOA package must be routed through OCRM

After the data is input into the database, the program officer prints a tracking control sheet from the MOA tracking system and attaches this to the folder containing the MOA paperwork and supporting documentation. Within OCRM, MOAs must be routed through ERD Chief, OCRM Director and OCRM Financial Officers if transfer of funds is involved. Once you have sign off dates from these individuals, that data must be entered into the MOA tracking system. Additionally, at this time you must complete the checklist of requirements on the tracking system and forward the electronic record and any other electronic supporting files to the NOS MOA official.

3) A hard copy of the MOA must be submitted to the NOS MOA official -Veronica Harvey

Once all required information and office level signatures are obtained, the package should be delivered to Veronica. Additionally, make sure that you have sent the tracking system record and any electronic copies of supporting documentation to Veronica for review.

4) NOS MOA official accepts or rejects the record

Veronica will review the database record and any supporting material. She will either forward it on for NOS clearance or she will reject the record and ask you for specific items to ensure a complete package. Once you have revised or obtained additional information to complete the package, you will resubmit the record via the tracking system and supply hard copies to Veronica if necessary. A copy of the MOA package should be filed in a central place within ERD.

5) The approved record is transferred to the NOS MOA master system

Veronica will approve the database record and make it a permanent part of the system. It is at this point that it will be assigned an official MOA tracking code.

6) The MOA package is routed through the NOS chain of clearance

When official signatures are obtained, an approval memo is signed and the MOA package is returned to you for signatures from the outside parties involved in the agreement.

7) The final signed and fully executed agreement document is filed with the NOS MOA official and the database record is closed

You should submit a complete copy to Veronica. She will mark the record as “closed”, but remains active during the period of performance. An agreement must be in existence, completed and approved with all necessary signatures before work or transfer of funds can occur. Please keep this in mind if funds will need to be transferred within a specific time frame as the clearance process takes approximately 2 months.

8) Amendments can be added to the system

If you should want to amend an MOA and the official MOA was not logged into the tracking system, you must recreate a record. Once a record is created, the amendment can be forwarded to Veronica to be incorporate into the master system.

Agreements involving no funds

Description	Approval level	Signature authority
general agreements not affecting delegation of Under Secretary’s authority, positions, and operations with other NOAA line offices and other agencies	program/staff office director	program/staff office director

general agreements affecting delegation of Under Secretary's authority, positions, and operations with other NOAA line offices and other agencies	Under Secretary for Oceans and Atmosphere	Under Secretary for Oceans and Atmosphere
---	---	---

Appendices

Appendix A: Examples of MOAs

The 2 MOA examples included in this section are:

1. Generic MOA template
2. MOA between NOAA and San Francisco State University.
3. MOA between San Francisco State University, East Bay Regional Park District, Solano Land Trust, California Department of Parks and Recreation, The Bay Conservation and Development Commission and the California State Lands Commission.

1. *Generic MOA Template*

Memorandum of Agreement
Between the
National Oceanic and Atmospheric Administration
And the
(state agency)
Detailing the state-federal roles in the
Management of the (name of reserve)

This Memorandum of Agreement states the provisions for the cooperative management of (name of reserve) in the state of (said state), between (state partner agency) and the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management.

WHEREAS, the state of (said state) has determined that the waters and related coastal habitats of (state reserve areas) provide unique opportunities for study of natural and human processes occurring within the estuarine ecosystems of the state to contribute to the science of estuarine ecosystem processes, enhance environmental education opportunities, and provide scientific information for effective coastal zone management in state of (said state); and

WHEREAS, the state of (said state) has determined that the resources of the (name of reserve) and the values they represent to the citizens of (said state) and the United States will benefit from the management of these resources as part of the National Estuarine Research Reserve System; and

WHEREAS, the National Oceanic and Atmospheric Administration has concurred with that finding and pursuant to its authority under section 315 of the Coastal Zone Management Act of 1972, as amended (CZMA, 16 U.S.C. 1461) and in accordance with implementing regulations at 15 CFR 921.30 has designated the (name of reserve); and

WHEREAS, the (state agency), as the agency designated by the Governor of (said state) is responsible for managing the (name of reserve) and acknowledges the value of state-federal cooperation for the long-term management of the reserve in a manner consistent with the purpose of their designation; and

WHEREAS, the management plan describes the goals, objectives, strategies/actions, administrative structure, and institutional arrangements for the reserve, including this MOA and others;

NOW THEREFORE, in consideration of the mutual agreements herein, NOAA and (state agency) agree to the following:

ARTICLE I: STATE-FEDERAL ROLES IN RESERVE MANAGEMENT

A. (state agency) Role in Reserve Management

The (state agency) shall:

1. be responsible for compliance with all federal laws and regulations, and ensure that the (name of reserve) management plan is consistent with the provisions of the CZMA and implementing regulations;
2. ensure protection of the natural and cultural resources of the reserve, and ensure enforcement of the provisions of state law, including rules and regulations of the (state coastal management program if applicable);
3. ensure adequate, long-term protection and management of lands included within the reserve boundary;
4. annually apply for, budget, and allocate funds received for reserve operations, research and monitoring, education and stewardship; and as necessary, land acquisition and reserve facility construction;
5. conduct and coordinate research and monitoring programs that encourage scientists from a variety of institutions to work together to understand the ecology of the reserve ecosystem to improve coastal management;
6. conduct and maintain programs that disseminate research results via materials, activities, workshops, and conferences to resource users, state and local agencies, school systems, general public, and other interested parties;
7. provide staff, and endeavor to secure state funding for the manager, education coordinator and research coordinator;
8. secure facilities and equipment required to implement the provisions within the reserve management plan;

9. ensure adequate funding for facilities operation and maintenance;
10. maintain effective liaison with local, regional, state, and federal policy makers, regulators and the general public;
11. serve as principal contact for issues involving proposed boundary changes and/or amendments to the reserve management plan;
12. respond to NOAA's requests for information, particularly cooperative agreement and grant progress reports and evaluation findings, including necessary actions and recommendations, made pursuant to Section 312 of the CZMA; and
13. expend funds in accordance with federal and state laws, the reserve management plan, and annual funding guidance from NOAA.

B. Federal Role in Reserve Management

NOAA's Office of Ocean and Coastal Resource Management shall:

1. administer the provisions of the Sections 315 and 312 of the CZMA to ensure that the reserve operates in accordance with goals of the reserve system and the (name of reserve) reserve management plan;
2. review and process applications for financial assistance from the (state agency), consistent with 15 CFR 921, for management and operation, and as appropriate, land acquisition and facility construction;
3. advise (state agency) of existing and emerging national and regional issues that have bearing on the reserve and reserve system;
4. maintain an information exchange network among reserves, including available research and monitoring data and educational materials developed within the reserve system;
5. to the extent possible, facilitate NOAA resources and capabilities in support of reserve goals and programs.

C. General Provisions

1. Nothing in this agreement or subsequent financial assistance awards shall obligate either party in the expenditure of funds, or for future payments of money, in excess of appropriations authorized by law.
2. Upon termination of this agreement or any subsequent financial assistance awards to (state agency), any equipment purchased for studies to further this agreement will be disposed of in accordance with 15 CFR 24.32.

3. A free exchange of research and assessment data between the parties is encouraged and is necessary to ensure success of cooperative studies.

D. Other Provisions

1. Nothing in this agreement diminishes the independent authority or coordination responsibility of either party in administering its respective statutory obligations. Nothing in this agreement is intended to conflict with current written directives or policies of either party. If the terms of this agreement are inconsistent with existing written directives or policies of either party entering this agreement, then those portions of the agreement which are determined to be inconsistent with such written directives and policies shall be invalid; but the remaining terms not affected by the inconsistency shall remain in full force and effect. At the first opportunity for revision of this agreement, all necessary changes shall be made by either an amendment to this agreement or by entering in a new superseding agreement, which ever is deemed expedient to the interested parties. Should disagreement arise on the interpretation of the provisions and/or amendments of this agreement that cannot be resolved by negotiations at the operating level of each party, the area(s) of disagreement shall be stated in writing by each party and promptly presented to a mutually approved mediator for non-binding mediation. If the parties cannot agree on the choice of a mediator or if the mediation does not resolve the dispute to the mutual approval of the parties, the parties are free to pursue any other legal remedies that are available.

ARTICLE II: REAL PROPERTY ACQUIRED FOR PURPOSE OF THE RESERVE

As well as acknowledging the rest of the requirements set forth at 15 CFR 921, (state agency) specifically acknowledges and will fully comply with conditions set forth at 15 CFR 921.21 (e), which specify the legal documentation requirements concerning the use and disposition of real property acquired for reserve purposes with federal funds under Section 315 of the CZMA.

ARTICLE III: PROGRAM EVALUATION

The Office of Ocean and Coastal Resource Management Division of NOAA will schedule periodic evaluations of (state agency) performance in meeting the terms of this agreement, financial assistance awards, and the reserve management plan. Where findings of deficiency occur, NOAA may initiate action in accordance with the designation withdrawal or interim sanctions procedures established by the CZMA and applicable regulations at 15 CFR 921.40-41.

ARTICLE IV: EFFECTIVE DATE, REVIEW, AMENDMENT AND TERMINATION

- A. This agreement is effective on the date of the last signature on this agreement and shall be in effect until terminated by either party.
- B. This agreement will be reviewed periodically by both parties and may only be amended by the mutual written consent of both parties.

- C. This agreement may be terminated by mutual consent of both parties, or by NOAA if NOAA withdraws designation of the reserve within the reserve system, pursuant to applicable provisions of the CZMA and its implementing regulations as described under 15 CFR 923 Subpart L, or if NOAA finds that (state agency) fails to comply with this MOA. The agreement may be terminated by (state agency) with or without cause. Should this agreement be terminated, reimbursement of unexpended funds from financial assistance awards shall be determined on a pro rata basis according to the amount of work done by the parties at the time of termination. Additionally, reimbursement for land purchased and facilities constructed with NOAA funds shall be consistent with terms and special award conditions of financial assistance awards.

- D. If any clause, sentence or other portion of this MOA shall become illegal, null or void for any reason, the remaining portions of this MOA shall remain in full force and effect.

- E. No waiver of right by either party of any provision of this MOA shall be binding unless expressly confirmed in writing by the party giving the waiver.

IN WITNESS THEREOF, the parties have caused this agreement to be executed.

 Name
 Director
 Office of Ocean and Coastal
 Resource Management
 National Ocean Service
 National Oceanic and
 Atmospheric Administration
 U.S. Department of Commerce

 Name
 Director
 State Agency Department

Date

Date

2. NOAA and San Francisco State University:

Memorandum of Agreement
Between the
National Oceanic and Atmospheric Administration
and the
San Francisco State University
Detailing the State-Federal Roles in the
San Francisco Bay National Estuarine Research Reserve

This Memorandum of Agreement (MOA) serves to establish the framework for coordination, cooperation and communication regarding the San Francisco Bay National Estuarine Research Reserve (SFBNERR). This agreement concerns the Office of Ocean and Coastal Resource Management (OCRM), National Ocean Service, National Oceanic and Atmospheric Administration (NOAA), whose address is 1305 East-West Highway N/ORM, Silver Spring, Maryland, 20910, and the San Francisco State University (SFSU), whose address is 1600 Holloway Avenue, San Francisco, CA 94132.

WHEREAS, the State of California has determined that certain waters and coastal habitats of the San Francisco Bay system provide representative opportunities to study natural estuarine and human processes occurring within an estuarine ecosystem; and

WHEREAS, the State of California finds that the resources of San Francisco Bay and its value to the citizens of California and the United States will benefit from the management of this site as part of the National Estuarine Research Reserve System; and

WHEREAS, NOAA has concurred with that finding, and may designate certain areas of San Francisco Bay as a National Estuarine Research Reserve pursuant to its authority under Section 315 of the Coastal Zone Management Act of 1972, as amended, (CZMA, P.L. 92-583, 16 U.S.C. 1461) and in accordance with implementing regulations at 15 CFR 921.30; and

WHEREAS, SFSU is designated by the State of California and in the San Francisco Bay National Estuarine Research Reserve Management Plan (“Plan”) as the agency responsible for managing the reserve, as defined in the Plan; and

WHEREAS, the Plan describes the goals, objectives, plans, administrative structure, and institutional arrangements for the reserve, including this MOU and others; and

WHEREAS, SFSU acknowledges the need and requirement for continuing State-Federal cooperation in the long term management of the reserve in a manner consistent with the purposes sought through its designation.

NOW THEREFORE, in consideration of the mutual agreements contained herein it is agreed by and between SFSU and NOAA as follows:

ARTICLE 1: STATE-FEDERAL ROLES IN RESERVE MANAGEMENT

The following section describes the roles and responsibilities of the reserve partners. The obligations described for each reserve partner are subject to available funding.

A. State Role in Reserve Management

San Francisco State University, as the principal contact for the State of California in all matters concerning the reserve, will be responsible for ensuring that the reserve complies with management objectives of the Plan, the California Coastal Management Program, other applicable provisions of California law, Section 315 of the Federal Coastal Zone Management Act (CZMA), and the federal regulations of the National Estuarine Research Reserve System (NERRS). San Francisco State University will be the grant receiving office for the SFBNERR under Section 315 of the CZMA. Subject to available and authorized appropriations, SFSU's responsibilities for plan implementation include the following:

1. Annually apply for, budget, and allocate funds received for SFBNERR operations, (e.g., education, research and monitoring programs), as well as for acquisition and facilities;
2. Conduct active research and monitoring programs that draw scientists from various institutions to work together on understanding coastal issues;
3. Conduct and maintain programs that provide materials, activities, workshops, and conferences that translate the research results to the resource users, regulators, and the public;
4. Provide a full-time, state-funded Reserve Manager, and endeavor to secure state-funding for Research and Education Coordinator positions to coordinate research, monitoring, education and translation of research results;
5. Secure facilities that will, among other things, include research laboratory, classroom, library, office, meeting, field equipment storage and interpretive display space;
6. Secure equipment to facilitate research and outreach activities that, among other things, will include boats, laboratory and field equipment, audiovisual, curriculum, reference materials and databases;

7. Maintain effective liaison with local, regional and state policy makers, regulators and the general public;
8. Serve as principal negotiator on issues involving proposed boundary changes and/or amendments to the Plan;
9. Respond to NOAA's requests for information and respond to evaluation findings made pursuant to Section 312 of the CZMA;
10. Expend funds in accordance with federal and state laws, the SFBNERR management plan, and annual appropriations; and
11. Ensure enforcement of the applicable provisions of California law, including the rules and regulations of the California Coastal Management Program, to protect the research reserve.
12. Coordinate and support research, monitoring, education, and management activities with staff at China Camp State Park, Rush Ranch, and Browns Island Regional Shoreline.

B. Federal Role in Reserve Operation

The Office of Ocean and Coastal Resource Management will serve to administer the provisions of Section 315 of the CZMA to ensure that the reserve operates in accordance with the goals of the NERRS and the Plan. These responsibilities are subject to the availability of appropriated funds. In carrying out its responsibilities, OCRM will:

1. Review and process applications for financial assistance to SFSU, consistent with 15 CFR Part 921 for acquisition, development, operations, education, research, and monitoring activities associated with the reserve;
2. This agreement does not create any obligation on the part of OCRM to award financial assistance.
3. Make periodic evaluations in accordance with Section 312 of the CZMA to measure SFSU's performance in Plan implementation;
4. Advise SFSU of existing and emerging national and regional issues; and
5. Establish an information exchange network cataloging all available research data and educational material developed on each reserve included within the reserve system.

C. General Provisions

1. Nothing in this agreement or subsequent financial assistance awards shall obligate any party in the expenditure of funds, or for future payments of money, in excess of appropriations authorized by law.

2. Both parties agree to comply with all applicable federal or State laws regulating ethical conduct of public officers and employees.
3. Each party will comply with all applicable laws, regulations, and executive orders relative to Equal Employment Opportunity.
4. Upon termination of this agreement or any subsequent financial assistance awards, any equipment purchased for studies initiated in furtherance of this agreement will be returned to the agency of initial purchase.
5. A free exchange of research and assessment data among agencies is encouraged and is necessary to insure the success of these cooperative studies.

D. Other Provisions

Nothing in this MOA diminishes the independent authority or coordination responsibility of each agency in administering its statutory obligations. Nothing herein is intended to conflict with current agency directives. If the terms of this MOA are inconsistent with existing directives of any agency entering into this agreement, then those portions which are determined to be inconsistent shall be invalid; but the remaining terms not affected by the inconsistency shall remain in full force and effect. At the first opportunity for review of this agreement, all necessary changes will be made by either an amendment to this MOA or by entering into a new MOA, which ever is deemed expedient to the interest of all Parties. Should disagreement arise on the interpretation of the provisions of this MOA, or amendments and/or revisions thereto, that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each party and presented to the other parties for consideration.

ARTICLE II: REAL PROPERTY ACQUIRED FOR THE PURPOSE OF THE RESERVE

As well as agreeing to adhere to the rest of the provisions set forth at 15 CFR Part 921, SFSU agrees to the conditions set forth at 15 CFR 921.21(e), which specify the legal documentation requirements concerning the use and disposition of real property acquired for reserve purposes with Federal funds under Section 315 of the CZMA.

ARTICLE III. PROGRAM EVALUATION

OCRM will schedule periodic evaluations of the SFSU's performance in meeting the terms of financial assistance awards, in implementing the Management Plan and in meeting the provisions of this MOA. Where findings of deficiency occur, NOAA may initiate action in accordance with the designation withdrawal procedures established by the CZMA and applicable regulations.

ARTICLE IV. EFFECTIVE DATE, REVIEW, AMENDMENT AND TERMINATION

This MOA is effective on the date of designation of the reserve. The MOA will be reviewed periodically. This MOA may be amended by the mutual consent of the parties. This MOA may be terminated by mutual consent of the Parties, or by NOAA if it withdraws designation of the areas as a National Estuarine Research Reserve, pursuant to applicable provisions of the CZMA and its implementing regulations as described under 15 CFR Part 923 Subpart L. Should this MOAU be terminated, reimbursement of unexpended funds shall be determined on a pro rata basis according to the amount of work done by the Parties at the time of termination. This MOA is subject to the availability of appropriated funds.

IN WITNESS THEREOF, the Parties hereto have caused this MOA to be executed.

Charles Ehler
Acting Director
Office of Ocean and Coastal
Resource Management
National Ocean Service
National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

Robert A. Corrigan
President
San Francisco State University

Date

Date

3: MOA between San Francisco State University, East Bay Regional Park District, Solano Land Trust, California Department of Parks and Recreation, The Bay Conservation and Development Commission and the California State Lands Commission.

MEMORANDUM OF AGREEMENT

This Memorandum serves as an expression of intent among six parties-in-interest, to wit: San Francisco State University, the state lead agency; East Bay Regional Parks District; Solano Land Trust; California Department of Parks and Recreation; The Bay Conservation and Development Commission; and the California State Lands Commission.

Witnesseth:

WHEREAS, the State of California has received a grant from the United States Secretary of Commerce for the development and operation of certain portions of the San Francisco Bay Estuary (see Appended List) as the San Francisco Bay National Estuarine Research Reserve (the Reserve), and

WHEREAS, the purpose of this grant is to create new opportunities for coordinated San Francisco Bay estuarine resource management, research, monitoring, stewardship, and public education (the Program), and

WHEREAS, such Program has wide public support, as evidenced by the implementation of the Comprehensive Conservation and Management Plan for the San Francisco Bay Estuary, and the Baylands Ecosystem Habitat Goals Project and

WHEREAS, the parties-in-interest have evidenced support for such a Program through their approval of the 1992 Site Nomination Proposal for the San Francisco Bay National Estuarine Research Reserve,

NOW THEREFORE, in consideration of the mutual benefits to be derived from implementing this Program, the parties-in-interest agree to the following:

1. The lands described in the Appended List are hereby designated as sites belonging to the San Francisco Bay National Estuarine Research Reserve.
2. There shall be a program management plan for the reserve that provides a framework for conducting a specified Program on Reserve sites. Revisions of the program management plan shall be developed by the reserve staff and shall be subject to approval by a management advisory board composed of the parties-in-interest. The program management plan shall be reviewed periodically and revised as specified by NOAA and the management advisory board.

3. A primary purpose of the Program is to provide funding, staff, and other resources and guidance that will assist reserve land managing partners to develop site-specific activities that are consistent with the reserve management plan. This program will focus on identifying and conserving sensitive ecological resources, promoting on-site research and long term monitoring, engaging local communities in stewardship activities that support the conservation of sensitive reserve resources, and acting as a regional educational resource that serves the public of the San Francisco Bay and Delta region.

4. Reserve parties-in-interest agree to support the implementation of the reserve management plan. Issues that arise that may be contrary to the terms or intent of the management plan will be brought to the management advisory board for discussion and resolution by a consensus of its members. Irresolvable disputes will be mediated by State and Federal representatives approved by the management advisory board.

5. Multiple uses of reserve lands are encouraged to the extent that such uses are compatible with the program and its purpose as expressed in the management plan. Uses, and/or levels of use, which are not compatible with the goals of the reserve management plan shall be restricted by the agency having jurisdiction over the reserve site (or sites) in question.

6. Management Structure

a. There shall be a management advisory board, comprised of one member from each of the parties-in-interest, that shall review the recommendations of reserve staff and shall act on behalf of the agencies having jurisdiction over sites comprising the Reserve. The advisory board will be a non-voting advisory body and will be supported by reserve staff. The management advisory board shall review the management plan periodically and shall advise SFSU regarding the adequacy of staff implementation of the management plan. A representative of NOAA shall serve as an ex-officio representative on the management advisory board.

b. SFSU shall implement the program by hiring and directing reserve staff, supervising and coordinating implementation of the provisions of the management plan, and by receiving and acting upon the recommendations of the management advisory board and participating site managers. The reserve staff will be directly responsible for program coordination with agency representatives having jurisdiction over reserve sites.

c. The Bay Conservation and Development Commission will assist in developing an advisory structure that provides the management advisory board with an appropriate linkage to the broader community so that its direction of the reserve reflects the concerns and ideas of this regional constituency.

8. No projects shall be carried out on reserve lands without the approval of the agency having jurisdiction over such lands. Such agency shall maintain all facilities built on its

lands in furtherance of a project, and shall cooperate with reserve staff in carrying out the approved program.

9. The reserve staff, management advisory board and appropriate advisory participants shall confer regularly to ensure coordination between the reserve program and the broader goals and mandates of regional coastal management programs that affect the San Francisco Bay Estuary.

10. This Memorandum shall not be construed to preclude additional transfers of property among the Signatories, nor to preclude additions of appropriate lands to reserve sites.

11. This Memorandum shall continue in perpetuity so long as the reserve program is funded and viable; additional participants may join by unanimous approval of the parties-in-interest, and this Memorandum may be amended or terminated by majority vote of the parties-in-interest at any time. Nothing in this Memorandum shall preclude the unilateral withdrawal of any of the parties-in-interest. In such an eventuality, it is understood that the lands of the withdrawing party would be de-designated from the reserve, and it is further understood that the federal Office of Management and Budget will take appropriate action with respect to repayment of grant funds as may be indicated by its regulations.

12. All Signatories agree that they will cooperate with the reserve program so that it can achieve its mission to serve as a regionally-scaled scientific and educational resource to help promote and recover the ecological health of the San Francisco Estuary and to create a more sustainable regional environment for future generations.

Signed,

San Francisco State University

By: _____

Date: _____

Title: _____

San Francisco State University

By: _____

Date: _____

Title: _____

California Department of Parks and Recreation

By: _____

Date: _____

Title: _____

East Bay Regional Parks District

By: _____

Date: _____

Title: _____

Solano Land Trust

By: _____

Date: _____

Title: _____

San Francisco Bay Conservation and Development Commission

By: _____

Date: _____

Title: _____

California State Lands Commission

By: _____

Date: _____

Title: _____

Properties included in the San Francisco Bay National Estuarine Research Reserve

China Camp State Park – CA Department of Parks & Recreation.

Browns Island Regional Shoreline – CA State Lands Commission (owner) and East Bay Regional Parks District (lessee).

Rush Ranch Open Space Preserve – Solano Land Trust.

Appendix B - NOAA FEIS/FMP Action Checklist

To Do

- Consultation with USF&WS regarding ESA Sec. 7
 - Letter to responsible USF&WS Official
 - Concurrence letter from responsible USF&WS Official
- Consultation with NMFS regarding Essential Fish Habitat
 - Letter to responsible NMFS Official
 - Concurrence letter from responsible USF&WS Official
- Consultation with State Historical Preservation Officer regarding NHPA Sec. 106
 - Letter to responsible State Historical Preservation Officer
 - Concurrence letter from responsible USF&WS Official
- Approval of CZMA Federal Consistency Determination by NOAA & State Coastal Program
 - Draft Consistency Determination
 - Consistency Determination approved by NOAA Consistency Official
 - Concurrence letter from State Coastal Program
- Submit MOU to NOAA MOU tracking database
- Respond to public comments on Draft EIS
- Respond to public comments on Draft MP
- NOAA review of FEIS/FMP
- Prepare Designation Findings Document & Certificate of Designation
- Prepare Record of Decision (ROD)
- Prepare FEIS/FMP Package
 - Incorporate DEIS/DMP comments
 - MOU between NOAA and State Partner (unsigned)
 - MOU(s) between State Partner and other reserve partners (unsigned)
 - Concurrence letters
 - List of persons receiving the FEIS/FMP
 - Point Paper (OCRM)
 - Memo to NEPA Compliance Official (NOS)
 - NEPA Compliance memo to EPA (NEPA Official)

CAMMP USERS MANUAL

Updated
2/20/2009

This manual is an in-depth walkthrough of the CAMMP system. If you are new to CAMMP you should read through it one time. If you are familiar with CAMMP then you can use this document as a reference. All topics are covered in the table of contents.

Even if you are familiar with CAMMP you should read over the five page 2009 CAMMP Tips and Tricks document.

Both documents are available from Dwight.reynolds@noaa.gov

TABLE OF CONTENTS

LOG IN SCREEN 3

NAVIGATING THROUGH THE CAMMP SYSTEM..... 4

I. MENU BAR 4

II. THE AND BUTTONS..... 5

III. GREY BUTTONS 6

IV. TOP OF PAGE LINKS..... 7

USER PROFILE 8

HELP..... 8

LOGOUT..... 8

CREATING A GRANT/COOPERATIVE AGREEMENT APPLICATION..... 9

LIST OF GRANTS 9

GRANT HOME PAGE 10

Grant Status 10

Grant Outline 11

GRANT OVERVIEW 12

Point of Contact Section..... 13

Grant Timeframe Section..... 13

Grant Summary Section..... 13

CREATING A NEW POSITION 14

CREATING THE PERSONNEL WORKSHEET..... 15

COMPLETED PERSONNEL WORKSHEET 16

ADDING A TASK 17

Task Information 17

Task Timeframe 18

Task Description 18

ADDING AN OUTCOME 19

ADDING BUDGET INFORMATION..... 20

ADDING A POSITION TO A TASK 20

ADDING A TRAVEL BUDGET ITEM 21

ADDING A SUPPLY BUDGET ITEM 24

ADDING AN EQUIPMENT BUDGET ITEM 25

ADDING A CONTRACTUAL BUDGET ITEM..... 26

ADDING A CONSTRUCTION BUDGET ITEM 29

ADDING AN INDIRECT BUDGET ITEM..... 31

ADDING AN “OTHER” BUDGET ITEM 32

VIEWING/PRINTING THE AWARD..... 35

SUBMITTING THE AWARD..... 37

LOG IN SCREEN

This is the page you will use to log into CAMMP. You should only bookmark this URL – <https://cammp.nos.noaa.gov/cammp/> Trying to bookmark any pages within CAMMP will lead to an error. The **first gray message box** will contain important information and instructions and will be periodically updated by OCRM.

The second gray message box contains an important security message.

Username: This will be your program name.

Password: This will be your password to get into the system.

NOTE: Unless you have provided OCRM with the public IP address of the computer you are using, for security reasons you will not be allowed the system.

NAVIGATING THROUGH THE CAMMP SYSTEM

The new CAMMP system was redesigned to streamline the navigation and reduce the number of pages that you have to access or buttons you have to press. There are four ways to navigate through the CAMMP system. They are the menu bar at the top of every page, the links at the top of the page, the and buttons, and the grey buttons. Each of these are discussed below.

I. MENU BAR - The menu bar in the top right also allows you to access other functions. This menu bar appears on every page but will only be explained here.



Your user name will appear on the left hand side of the menu bar.

Grants – this takes you to the page containing the list of grants for the program (if you are a program), or all programs you are responsible for (if you are a specialist). It is the default page.

Profile – this takes you to the page where you can change your contact information, or change your password.

Admin – Most people will not see this box as it only appears as an option if you are an administrator. It takes the administrator to a page where he can create new programs, users, add award numbers, and other functions.

Help – this box will take you to the page where you can access this help manual, and access links to other important areas – such as NOAA grants.

Logout – clicking on this will log you out of the CAMMP system

II. THE AND BUTTONS: Navigating through the system can be a little subtle, though once you get the hang of it its not hard. The first rule to learn is to use the and the buttons to open and close submenus. To open up any of the submenus on this page you need to press the box next to each submenu. This opens up the submenu to show the information you have entered there, as shown below, and changes the button to a .

National Ocean Service
Coastal and Marine Management Program

Dwight Reynolds

Grant NA098765432

Grant Status

- This grant application is not yet ready for final submission; areas requiring attention are marked with red status indicators below. For final submission, all status indicators must be green.
- The deadline for this grant application to be submitted in final form is **10/1/2003**

Grant Outline

Overview: Not yet completed Status: ● Incomplete

Department:
 Agency Name:
 Program Title: CZM Test **This button opens up the overview submenu.**
 Point of Contact:
 Address:
 Phone Number:
 Fax Number:
 Email Address:
 Timeframe: -- to --

DUNS Number: **This button will open up the personnel list.**
 Introduction:

Personnel: 0 positions Status: ● Acceptable

Position	Base Salary \$	Fringe Rate	Allotted Federal		Allotted Non-Federal		Total Allotted Salary \$	Allocated
			Salary \$	Fringe \$	Salary \$	Fringe \$		
No personnel have been entered for this grant.								

Tasks: 0 Tasks, \$0 Status: ● Incomplete

Section	App. ID	Task	Federal \$	Non-Federal \$	Total \$
306	--	--	--	--	--
		306 Totals:	--	--	--
306A	--	--	--	--	--
		306A Totals:	--	--	--

This button will open up the task list.

III. GREY BUTTONS: The second part of navigation involves use of the Grey buttons. Pressing the Grey Buttons will take you to another page so you can perform some action. The illustration below shows how to use the grey buttons to View or Print an Application, Submit a Grant in Draft or Final, Add a New Position, or Add a New Task.

Grant NA098765432

The PRINT button

Grant Status

- This grant application is not yet ready for final submission; areas requiring attention are marked with red status indicators below. For final submission, all status indicators must be green.
- The deadline for this grant application to be submitted in final form is **10/1/2003**

The SUBMIT Grant button

Grant Outline

Overview: Not yet completed Status: ● Incomplete

Department:
 Agency Name:
 Program Title: CZM Test
 Point of Contact:
 Address:
 Phone Number:
 Fax Number:
 Email Address:
 Timeframe: -- to --

DUNS Number:
 Introduction:

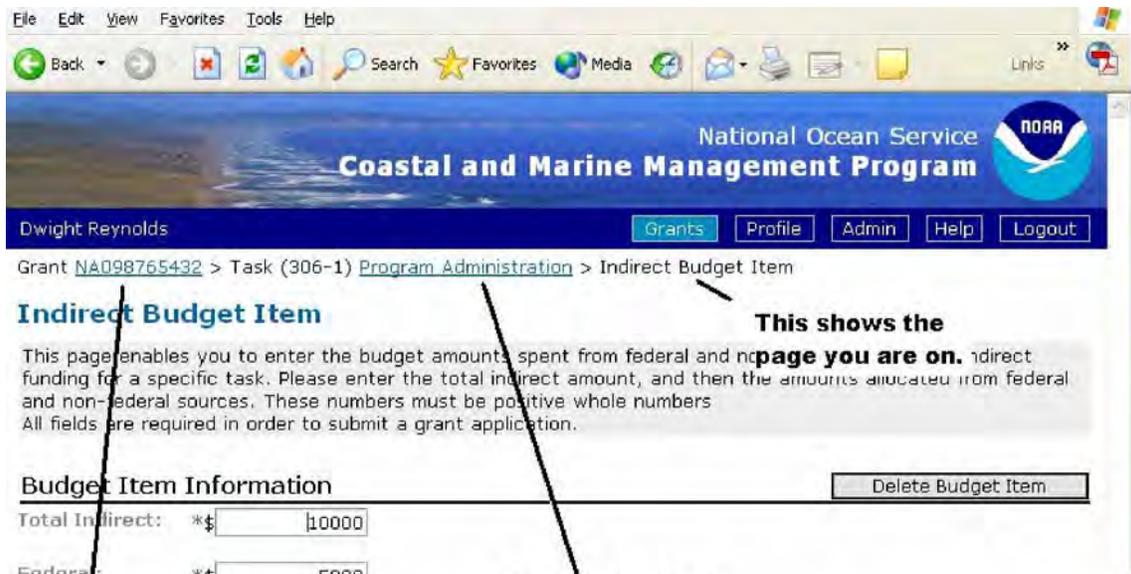
Personnel: 0 positions Status: ● Acceptable

Tasks: 0 Tasks, \$0 Status: ● Incomplete

These two buttons are where you add new positions and new tasks to the application.

Section	App. ID	Task	Federal \$	Non-Federal \$	Total \$
306	--				
		306 Totals:	--	--	--
306A	--				
		306A Totals:	--	--	--

IV. TOP OF PAGE LINKS - Once you start to create a task, you will use the **grant number** and **task title** to navigate in and out of a task, as shown below.



Indirect Budget Item

This page enables you to enter the budget amounts spent from federal and non-federal funding for a specific task. Please enter the total indirect amount, and then the amounts allocated from federal and non-federal sources. These numbers must be positive whole numbers. All fields are required in order to submit a grant application.

Budget Item Information

Delete Budget Item

Total Indirect: *\$

Federal: **#

This shows the page you are on.

Click on the Task Title to go back to the task page

Click on the grant number to go back to the main grant page.

USER PROFILE

National Ocean Service
Coastal and Marine Management Program

tes ter

Grants Profile Help

User Profile

Personal Information

Username: tester

First Name: tes

Last Name: ter

Email: cammposter@noaa.gov

Change Password (optional)

Old Password: *****

New Password: **** (8-15 characters)

Re-enter New Password: (8-15 characters)

Save Cancel

Passwords must:

- Be at least 8 characters long
- At least one of the characters must be from the alphabet (upper or lower case)
- At least one of the characters must be a number (0-9) or a special character (e.g., ~, !, \$, %, ^, and *)
- Not repeat more than two of the characters within the password (e.g., 'AAAAAA1' is not acceptable, but 'A%0mp2g3' and 'A%Ar2q3g' are acceptable)
- Be changed at least every 90 days

This is the web page you go to if you press the Profile button on the top menu bar. This page contains the information about your particular profile, or account.

On this page you can change your first name, last name, email address, and password. When you change your password, please follow the Department of Commerce Password Policies listed on this page to create the new password.

HELP

This is the web page you go to if you press the Help button on the top menu bar. At present this page sends you to a page on the OCRM web site where you can download the help manual and other files.

National Ocean Service
Coastal and Marine Management Program

Deborah Jefferson

Grants Profile Help Logout

Help

[CAMMP User's Manual and Other Guidance](#)

CLICK ON THIS LINK TO ACCESS THE USER'S MANUAL

PRESSING THE HELP BUTTON TAKES YOU TO THIS PAGE.

LOGOUT

Pressing this button takes you back to the CAMMP Log-In Page. Once you press this button you can not go back and will have to relog into CAMMP.

CREATING A GRANT/COOPERATIVE AGREEMENT APPLICATION

Now that you understand how to navigate through the CAMMP system the rest of this users manual will walk through the different web pages that one will use when creating a grant application.

Once you have successfully entered your username and password on the password page you will be taken to the following page which is a list of all the open grants for your program (if you are a state) or all programs you are responsible for (if you are a specialist).

LIST OF GRANTS

CAMMP Grants - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Home Search Favorites Media

Address: https://cammp.nos.noaa.gov/cammp/Grants.aspx

National Ocean Service
Coastal and Marine Management Program

Dwight Reynolds

Grants Profile Admin Help Logout

Open Grants

Show All Grants

This page displays any of your grants that are currently open for preparation and submission, and their status. To view a grant, click its name. To see any past grants the system has on record for your agency, click "Show All Grants" in the upper right.

[OCRM1234567890: CZM Hawaii](#)

Status: ● Incomplete: the grant application requires additional information before it can be submitted.
Deadline: 12/31/2003
Timeframe: January 2004 to February 2005
Tasks: 3 tasks, totalling \$138,000.
Introduction: this is only a test

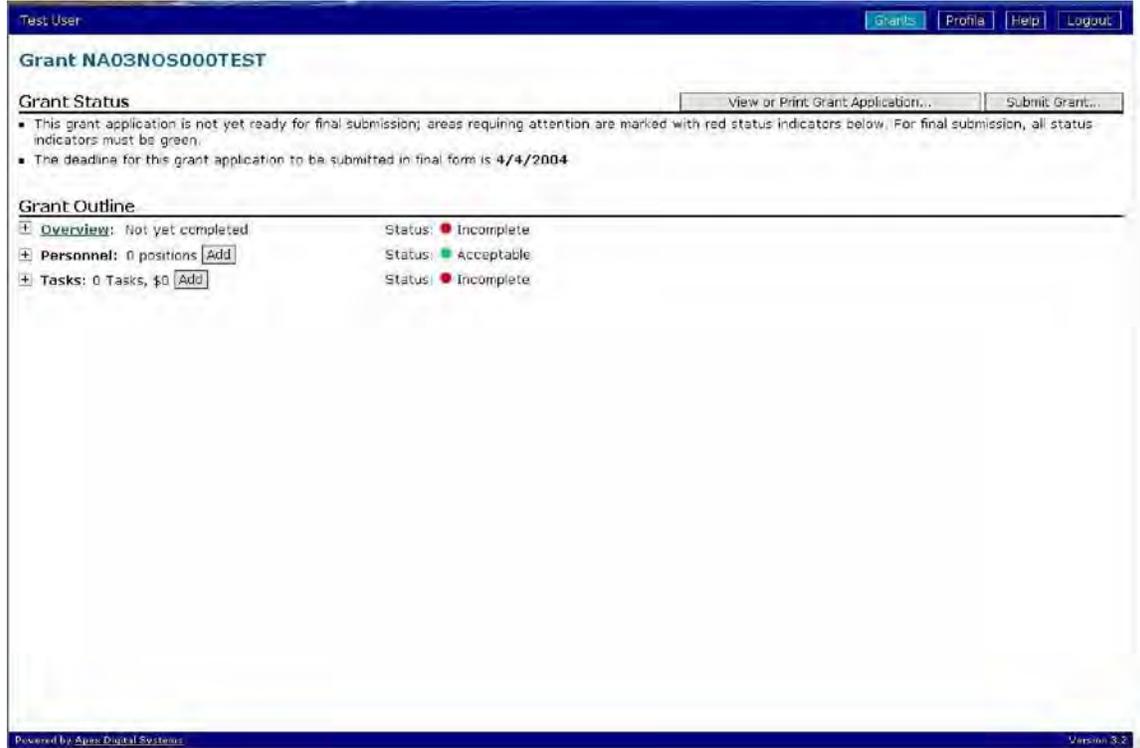
[NA03NOS4190082: CZM Hawaii](#)

Status: ● Incomplete: the grant application requires additional information before it can be submitted.
Deadline: 7/1/2003
Timeframe: July 2003 to December 2004
Tasks: 8 tasks, totalling \$3,431,189.
Introduction: CZM Hawaii - Partnering with Hawaii's communities to promote a sustainable coastal environment by building upon our heritage and inspiring island stewardship. Hawaii's Coastal Zone Management Program (CZM Hawaii) is established by Chapter 205A, Ha...

To actually go to a grant, click on the **blue underlined grant number**.

Show All Grants - If you want to see a list of ALL grants for your program that have been entered into the CAMMP system, click on the **Show All Grants** box in the upper right hand corner. This will give you a list of both active and nonactive grants for your particular program. Active grants are grants that are still being worked on, and which can be edited. Nonactive grants are grants that have been finalized and submitted to NOAA.

GRANT HOME PAGE



This page is the main page of the grant. From this page you can create (or edit) the overview, personnel worksheet, and create and edit the **Tasks** that make up the award. You also Print the grant and Submit the grant to NOAA via this page.

This is how the page looks prior to starting any work on it. Nothing has been completed, no positions have been added, and there are no tasks created.

Grant Status

This is the area where you can read about the status of the grant, and see if it is ready or not to be submitted in final to NOAA. (Also see the [Status Lights](#) discussion below) You also see the deadline for submitting the award to NOAA.

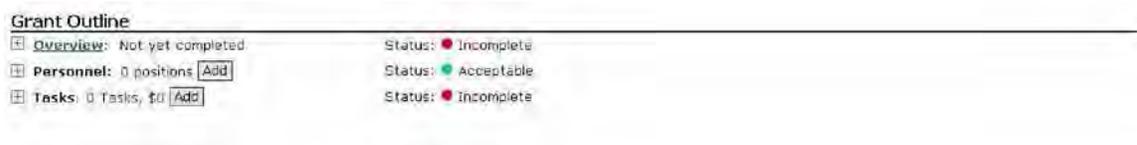
***Status Lights:** The Status lights tell you if a particular section of CAMMP has had all its required fields filled out. This will allow the applicant to quickly hone in on where they still might be missing information. An application can be submitted in FINAL to NOAA only if all status lights are green. If any status lights are red, the application can be submitted to NOAA but only in DRAFT form.*

***NOTE:** The above example shows that when you first get into an award the personnel worksheet is marked as acceptable even though there are no positions yet associated with the award. This is to allow those awards that don't have any personnel costs (mainly CELCP awards) to submit their applications as "final".*

Grant Outline

This is the area where you navigate through the actual award itself as it is created and edited. Here is where you can create (or edit) the overview, personnel worksheet, and the **Tasks** that make up the award.

1. **Overview** - where you access, edit, and review the administrative and introductory information associated with the award.
2. **Personnel** - where you access, edit, and review the personnel worksheet associated with the award.
3. **Tasks** - where you create, edit, and review the tasks that make up the award.



GRANT OVERVIEW

The screenshot shows a Microsoft Internet Explorer browser window displaying the Grant Overview page for grant OCRM987654321. The browser's address bar shows the URL: <https://cammp.nos.noaa.gov/cammp/GrantOverview.aspx?GrantID=66>. The page header features the NOAA logo and the text "National Ocean Service Coastal and Marine Management Program". Below the header, there are navigation buttons for "Grants", "Profile", "Admin", "Help", and "Logout". The user's name, "Dwight Reynolds", is displayed. The main content area is titled "Grant OCRM987654321 Overview" and is divided into three sections: "Grant Point of Contact", "Grant Timeframe", and "Grant Summary".

Grant Point of Contact

Department:	* Department of Coastal Stuff
Agency Name:	* Coastal Environmental Agency
Program Title:	* CZM Hawaii
Point of Contact:	* Mr. Beach Green
Address:	* 1233 Oceanfront Avenue Watertown, Hawaii 00000
Phone Number:	* 555-555-5555
Fax Number:	555-555-5555
Email Address:	555-555-5555

Grant Timeframe

Start:	* September	2002
End:	* August	2003

Grant Summary

DUNS Number:	* 8675309
Grant Introduction (4000 character limit):	* This is a pre-beta test of the new CAMMP system, to check and make sure all errors are fixed and that the calculations are working. This is only a test.

This page is accessed when you press the Grant Overview button on the main page. The Grant Overview page contains all of a program's contact information, as well as its timeframe, DUNS number, and introduction/summary. Note that almost all the information on this page is now REQUIRED, in order to conform with the federal government's e-gov requirements (fax and email information only are optional), also known as the 194 Data Set standards.

Point of Contact Section

Most of the information requested in this section is self-explanatory. Department and Agency Name conform to the 194 Data Set standards. Unfortunately I have found the two fields to be rather short – so you may have to abbreviate the names (i.e. Dept for Department, etc.)

Grant Timeframe Section

Here is where you enter the proposed start and end months and years of the grant. These are the dates that will show up on the title page of the printout. Note that unlike the earlier versions of CAMMP, these dates will not default throughout the rest of the award as you create it.

Grant Summary Section

As of October 1, 2003 any applicant applying for a Federal grants or cooperative agreement is required to provide a DUNS number. (DUNS stands for Dun and Bradstreet (D&B) Data Universal Numbering System). The DUNS number is a unique nine-character identification number. For further information review the NOAA GMD memo regarding DUNS numbers: <http://www.ofa.noaa.gov/%7Egrants/DUNS.pdf>

In order to comply with the 194 data set, the Grant Introduction is now mandatory, unlike the earlier version of CAMMP where it was optional. The introduction should be a concise executive summary of the grant – who is it for and what will it do?

CREATING A NEW POSITION

National Ocean Service
Coastal and Marine Management Program

Dwight Reynolds [Grants](#) [Profile](#) [Admin](#) [Help](#) [Logout](#)

Grant [OCRM987654321](#) > Grant Personnel

New Position

Position Status

- To save this position, it must have a title, base salary, fringe rate, and explanation of fringe rate; these values are used in calculations throughout CAMMP. Base salary must be a positive whole number. Fringe rate may contain up to two decimal places.

Position Information

Title: *

Annual Base Salary: *\$

Fringe Rate: *

Explanation of Fringe Rate: *

* Fields required to save a position

Task Assignments

Section	App. ID	Task	Allotted Federal		Allotted Non-Federal		Allotted Salary \$	Allocated
			Salary \$	Fringe \$	Salary \$	Fringe \$		
--	--	--	--	--	--	--	--	--
Totals:			--	--	--	--	--	--

Powered by [Apex Digital Systems](#) Version 3.01

Note that you get to this page by pressing the ADD button at the end of the Personnel item on the Main Task page.

To Create a New Position, enter the Title of the Position, the Annual Base Salary of the Position, the Fringe Rate of the Position, and provide an explanation of the Fringe Rate. The example below shows a that a Program Manager was added to this task, and that his salary is \$100,000 and his fringe is 25%.

Adding Multiple Positions: To continue adding positions, press the “Save and Add Another” button. When you are finished adding positions, press the “Save” button which will take you back to the Main Menu Page of the Grant.

Task Assignments: As a position is added to tasks, its assignments will show up in this section. Note that since this is a new position it is not yet assigned to any tasks.

CREATING THE PERSONNEL WORKSHEET

Grant OCRM987654321

Grant Status

- This grant application is not yet ready for final submission; areas requiring attention are marked with red status indicators below. For final submission, all status indicators must be green.
- The deadline for this grant application to be submitted in final form is **10/10/2002**

Grant Outline

Overview: All required fields completed Status: ● Acceptable

Personnel: 3 positions Status: ● Acceptable

Position	Base Salary \$	Fringe Rate	Allotted Federal		Allotted Non-Federal		Total Allotted Salary \$		Allocated
			Salary \$	Fringe \$	Salary \$	Fringe \$	Salary \$	Fringe \$	
● Assistant Manager	80,000	25.00%	0	0	0	0	0	0	0.00%
● Coastal Management Specialist	50,000	20.00%	0	0	0	0	0	0	0.00%
● Program Manager	100,000	50.00%	0	0	0	0	0	0	0.00%

Tasks: 1 Task, \$0 Status: ● Incomplete

Note that ABOVE we have added three positions to the grant application so far using the “New Position” function above. Note that all three positions have 0’s next to their allotted federal and non-federal salary and fringe. This is correct as they have not been assigned to any tasks yet. Also notice that the positions are listed alphabetically.

COMPLETED PERSONNEL WORKSHEET

Grant OCRM987654321

Grant Status View or Print Grant Application... Submit Grant...

- This grant application is not yet ready for final submission; areas requiring attention are marked with red status indicators below. For final submission, all status indicators must be green.
- The deadline for this grant application to be submitted in final form is **10/10/2002**

Grant Outline

Overview: All required fields completed Status: ● Acceptable

Personnel: 10 positions Status: ● Acceptable

Position	Base Salary \$	Fringe Rate	Allotted Federal		Allotted Non-Federal		Total Allotted Salary \$	Allocated
			Salary \$	Fringe \$	Salary \$	Fringe \$		
● Assistant Manager Coastal Management Specialist	80,000	25.00%	0	0	0	0	0	0.00%
● Coastal Permit Specialist A	50,000	20.00%	0	0	0	0	0	0.00%
● Coastal Permit Specialist B	50,000	40.00%	0	0	0	0	0	0.00%
● Coastal Permit Specialist B	60,000	50.00%	0	0	0	0	0	0.00%
● Educator	20,000	0.00%	0	0	0	0	0	0.00%
● Local Community Liaison	30,000	0.00%	0	0	0	0	0	0.00%
● Measly Intern	20,000	0.00%	0	0	0	0	0	0.00%
● Program Manager	100,000	50.00%	0	0	0	0	0	0.00%
● Researcher	50,000	100.00%	0	0	0	0	0	0.00%
● Webmaster	40,000	50.00%	0	0	0	0	0	0.00%

Tasks: 1 Task, \$0 Status: ● Incomplete

Powered by Apex Digital Systems Version 3.01

The above example shows ten positions that will be funded wholly or partially through this grant. The total salary and fringe does not appear here because this is a **worksheet** – it is only intended to allow each program to set up the personnel and fringe resources that will be assigned to this grant application. The **personnel worksheet** will NOT appear in the award printout. Instead the personnel will be distributed across the tasks.

It is possible that not every position will be assigned 100% to this grant. It is also possible that not every position will have the same fringe rate. It is quite possible that not every position will have the same percentage split between federal and non-federal.

ADDING A TASK

National Ocean Service
Coastal and Marine Management Program

Dwight Reynolds [Grants](#) [Profile](#) [Admin](#) [Help](#) [Logout](#)

Grant [NA098765432](#) > Add New Task

Add New Task

Task Information

Task Name: *

Applicant ID:

Section: *

Classification: * Other:

Location: *

Task Timeframe

Start: *

End: *

Task Description

Task Description (4000 character limit): *

3806 characters remaining toward maximum of 4000 characters.

* Fields required to save a task
* Fields required to submit a grant application

Powered by Apex Digital Systems Version 3.01

This page appears when you press the add new task button on the main page. It is where you create the task. Much of the information on this page will eventually be used to create queries so one can access and analyze information about the CZM and NERR awards.

Task Information

Task Title – the title of the task, try and name the task something descriptive

Applicant ID – This field is optional. If your agency or state any unique numbering system that your state or agency uses

Section - the section of the CZMA under which this is funded (NERR programs will only see 315, CELCP programs will only see CELCP)

Classification – using the drop down menu, select whatever option is most similar to the type of task that you are creating. If none of the options seem to fit, chose *Other* and type in a new classification.

Location – Describe the geographical location of this task.

Task Timeframe

Using the pull-down menus, select the Start and End months and years of the task. Tasks are assumed to start on the first of the month listed, and end on the last day of the month listed.

Task Description

This is where you provide the detailed description explanation about the task. The description is limited to 4000 characters. There is a counter underneath the text box that keeps you informed about how much space you have left. If you copy and paste too much text into this box, the counter will appear as a negative number. You must get the counter up to zero, as any additional (negative) text will be cut out when you save.

ADDING AN OUTCOME

The screenshot shows a web browser window displaying the NOAA Coastal and Marine Management Program interface. The header includes the NOAA logo and the text 'National Ocean Service Coastal and Marine Management Program'. Below the header, the user's name 'Dwight Reynolds' is displayed, along with navigation buttons for 'Grants', 'Profile', 'Admin', 'Help', and 'Logout'. The main content area shows the breadcrumb path: 'Grant NA098765432 > Task (306-1) Program Administration > Add Outcome'. The title of the page is 'Add Outcome', followed by a brief instruction: 'This page enables you to add, edit, or delete an outcome to a specific task.' Below this is a section titled 'Outcome Information' with three fields: 'Outcome:' with a text input containing 'Successful Administration of the Program'; 'Completion:' with two dropdown menus set to 'December' and '2004'; and 'Description (4000 character limit):' with a large text area containing the text 'The result of this task is the successful administration of the Program.' and a note: 'The outcome description should describe what the result of the task should be. Every task needs to have at least one outcome.' At the bottom of the text area, a character count shows '3796 characters remaining toward maximum of 4000 characters.' Below the text area are 'Save' and 'Cancel' buttons. The browser's status bar at the bottom shows 'Done' and 'Internet'.

In the original CAMMP system this was also known as “Product/Outcome”.

Outcome Information

Outcome – the title of the outcome. Try and be descriptive.

Completion – the month/year when the outcome is due. There is no start date..

Description - This is where you provide the detailed description explanation about the outcome. The description is limited to 4000 characters. There is a counter underneath the text box that keeps you informed about how much space you have left. If you copy and paste too much text into this box, the counter will appear as a negative number. You must get the counter up to zero, as any additional (negative) text will be cut out when you save.

ADDING BUDGET INFORMATION

The next section goes through the various budget items that can make up a task. Every task must have at least one budget item, but can have multiple budget items.

ADDING A POSITION TO A TASK

The screenshot shows a web browser window titled "Personnel Budget Item - Microsoft Internet Explorer". The page header includes the NOAA logo and the text "National Ocean Service Coastal and Marine Management Program". Below the header, there is a navigation menu with buttons for "Grants", "Profile", "Admin", "Help", and "Logout". The main content area displays the breadcrumb "Grant NA098765432 > Task (306-1) Program Administration > Personnel Budget Item" and the title "Personnel Budget Item". A descriptive paragraph explains the page's purpose and provides instructions on how to modify the position. Below this, the "Budget Item Information" section contains a form with the following fields:

Position:	* Coastal Permit Specialist B
Position Salary:	*\$ 60,000
Fringe Rate:	50.00%
Available Salary:	\$ <input type="text" value="60000"/>
Federal:	*\$ <input type="text" value="20000"/>
Non-Federal:	*\$ <input type="text" value="10000"/>
Remaining Available Salary:	\$ <input type="text" value="30000"/>

At the bottom of the form are "Save" and "Cancel" buttons. A note below the buttons states: "* Fields required to save this budget item". The footer of the page includes "Powered by Apex Digital Systems" and "Version 3.01".

The following checklist is used by NOAA to review salary and fringe information. While CAMMP covers most of the mathematical items in this checklist, some of this information should be addressed in a task summary in order to minimize delays in the review and approval of your award application.

Salaries or Wages:

1. Is each position identified?
2. Are time commitments such as hours and percent of time stated for each position?
3. Are the total charges for each position listed along with an explanation of how the costs were calculated?
4. Do the combined charges for any individuals exceed 100% of their time?
5. Do the time commitments and charges appear reasonable?
6. For support or executive personnel, are costs charged to salaries excluded from the indirect cost category?
7. Are all individuals employees of the applicant organization? (If not, explain)
8. Is a cost of living increase built into the budget?
9. Are salary increases justified for the grant period?
10. Are any salary/personnel costs unallowable. (i.e. Federal employee or legislative personnel)

Fringe:

The budget narrative should provide a description of the benefits received by personnel when rates are 25% or higher.

1. Are fringe benefits identified as a separate item?
2. Are the type of fringe benefits indicated?
3. Do the fringe benefits and charges appear reasonable?
4. Are the total charges for each person listed along with an explanation of how the charges were calculated?
5. Are fringe benefits charged to federal and matching categories in the same proportion as salaries?

ADDING A TRAVEL BUDGET ITEM

To create a travel budget item, use the following two worksheets. Note that the first worksheet is for travel for which detailed information is available. In the case of CZM awards, it is sometimes not possible to accurately provide detailed information on each and every trip that might occur in the award, in which case the second worksheet for non-detailed information should be used.

This is an example of a detailed travel page.



Dwight Reynolds

Grants

Profile

Admin

Help

Logout

Grant [NA098765432](#) > Task (306-1) [Program Administration](#) > Travel Budget Item

Travel Budget Item

This page allows you to enter the actual or estimated amounts spent from federal and non-federal sources for a specific travel item on a specific task. If you know the actual costs for the travel item, please select "detailed" for the travel budget item level of information and fill in all travel budget item fields. If you do not have detailed information for the travel item, please select "non-detailed" for the travel budget item and enter estimated costs for the budget item.

All number entries must be positive whole numbers, except for Rate per Mile, which can have precision up to three decimal places. Total values will be calculated automatically as values are entered below.

Budget Item Information

Delete Budget Item

Destination (100 character limit): *

Please select the level of information for this budget item:

* Detailed Non-detailed

Number of Trips: *

Per Diem Expenses

Number of Days: *

Number of People: *

Per Diem: *\$

Total Per Diem: \$

Transportation Expenses

Method of Travel: Air Train Boat Automobile rental/Taxi

State-owned Vehicle? Yes No

Total Transportation: *\$

Personal Vehicle Expenses

Personal Vehicle Used? * Yes No

Total Personal Expense: \$

Other Expenses

Other Trip Costs: *\$

Travel Summary

Travel Location: * In-State Out-of-State

Total Travel: *\$

Federal: *\$

Non-Federal: *\$

Total Allocated: \$

Purpose (500 character limit): *

Save Cancel

* Fields required to save this budget item
* Fields required to submit a grant application

This is an example of a non detailed travel page

Grant [NA098765432](#) > Task (306-1) [Program Administration](#) > Travel Budget Item

Travel Budget Item

This page allows you to enter the actual or estimated amounts spent from federal and non-federal sources for a specific travel item on a specific task. If you know the actual costs for the travel item, please select "detailed" for the travel budget item level of information and fill in all travel budget item fields. If you do not have detailed information for the travel item, please select "non-detailed" for the travel budget item and enter estimated costs for the budget item.

All number entries must be positive whole numbers, except for Rate per Mile, which can have precision up to three decimal places. Total values will be calculated automatically as values are entered below.

Budget Item Information

Destination
(100 character limit): *

Please select the level of information for this budget item:
* Detailed Non-detailed

Travel Summary

Travel Location: * In-State Out-of-State

Total Travel: *\$

Federal: *\$

Non-Federal: *\$

Total Allocated: \$

Basis
(300 character limit): *

Purpose
(500 character limit): *

NOAA Grants Budget Review Checklist for Travel:

1. For foreign, domestic, and local travel, is each trip listed along with the destination, estimated mileage, method of travel, cost per mile and duration, number of travelers, per diem rate for meal and lodging.
2. If actual trip details are unknown, what is the basis for the proposed travel charges?
3. Is the requested travel directly relevant to the successful completion of the project?
4. Are the travel charges reasonable?
5. Contingency or miscellaneous charges must be excluded!

ADDING A SUPPLY BUDGET ITEM

The screenshot shows a web browser window titled "Supplies Budget Item - Microsoft Internet Explorer". The browser's address bar shows the URL "Grant NA098765432 > Task (306-1) Program Administration > Supplies Budget Item". The page header includes the NOAA logo and the text "National Ocean Service Coastal and Marine Management Program". Below the header, there is a navigation bar with buttons for "Grants", "Profile", "Admin", "Help", and "Logout". The main content area is titled "New Supplies Budget Item" and contains the following text: "This page enables you to enter the budget amounts spent from federal and non-federal sources for supplies funding for a specific task. Please enter the total supplies amount, and then the amounts allocated from federal and non-federal sources. These numbers must be positive whole numbers. Please fill in all fields." Below this text is a section titled "Budget Item Information" with the following fields: "Total Supplies: *\$ 5000", "Federal: *\$ 2000", "Non-Federal: *\$ 3000", and "Total Allocated: \$ 5000". There is also a text area for "Basis for Supplies Estimate (300 character limit):" containing the text "based on historic supplies usage". At the bottom of the form are "Save" and "Cancel" buttons, and a note: "* Fields required to submit a grant application".

NOAA Grants Budget Review Checklist for Supplies:

An explanation is necessary only for supplies costing over \$1500 or 5% of an award, whichever is greater.

1. Are supplies itemized by type of material or nature of expense?
2. For general office or business supplies, is the total charge listed along with the basis for the charge (i.e. historical use rates?)
3. For other specific supply categories, is the number of units, cost per unit, and total cost specified?
4. Are the charges necessary for the successful completion of the project?
5. Are the charges reasonable?
6. Are disallowed costs (e.g. liquor, entertainment) excluded?
7. Contingency or miscellaneous charges must be excluded!

ADDING AN EQUIPMENT BUDGET ITEM

The screenshot shows a web browser window titled "Equipment Budget Item - Microsoft Internet Explorer". The browser's address bar shows the URL: "Grant NA098765432 > Task (306-1) Program Administration > Equipment Budget Item". The page header includes the NOAA logo and the text "National Ocean Service Coastal and Marine Management Program". Below the header, there are navigation buttons for "Grants", "Profile", "Admin", "Help", and "Logout". The user's name "Dwight Reynolds" is displayed. The main content area is titled "New Equipment Budget Item" and contains the following information:

This page enables you to enter the budget amounts spent from federal and non-federal sources for a specific equipment item on a specific task. Please fill in all fields. All numeric fields must be positive whole numbers. If the Total Price exceeds \$5000, enter additional data for Item Justification and Lease Buy Analysis. The Total Price will be calculated automatically as values are entered below.

Budget Item Information

Type of Equipment: *Big Red Truck

Unit Price: *\$ 15000

Quantity: * 1

Total Cost: \$ 15000

Federal: *\$ 10000

Non-Federal: *\$ 5000

Total Allocated: \$ 15000

Item Justification (300 character limit): *Truck needed to transport coastal permitters to the sites they are going to inspect.

Have you completed the Lease Buy Analysis?
* Yes No

* Fields required to save this budget item
* Fields required to submit a grant application

NOAA Grants Budget Review Checklist for Equipment:

For any items of equipment whose costs exceed \$5000, a description of the item and associated costs is required.

1. Is each item of equipment listed?
2. If over \$5000 is there a description of how it will be used in the project?

3. If over \$5000 has a lease vs purchase analysis been completed?
4. For each item of equipment, is the number of units, cost per unit and total cost specified?
5. Is each item of equipment necessary for the completion of the project?
6. Are the charges for each item reasonable?
7. Are disallowed costs excluded?
8. Contingency or miscellaneous charges must be excluded!

ADDING A CONTRACTUAL BUDGET ITEM

To create a contractual budget item (also known as a pass-through or subgrant) use one of the following two worksheets. Note that the first worksheet is for a contractual item for which detailed budget information is not available. It is sometimes not possible to accurately provide detailed information on a contract when an award is initially created. The second worksheet is for contracts where detailed information is available.

Non-Detailed Contractual

The screenshot shows the NOAA Coastal and Marine Management Program web interface. At the top, there is a navigation bar with the NOAA logo and the text "National Ocean Service Coastal and Marine Management Program". Below this, the user's name "Dwight Reynolds" is displayed, along with navigation buttons for "Grants", "Profile", "Admin", "Help", and "Logout".

The main content area shows the breadcrumb path: "Grant [NA098765432](#) > Task (306-1) [Program Administration](#) > Contractual Budget Item". Below this is the heading "New Contractual Budget Item".

A text box explains: "This page enables you to enter the budget amounts spent from federal and non-federal sources for a contract on a specific task. Federal and Non-Federal amounts must be positive whole numbers. Enter the federal and non-federal amounts for each sub-item on the contract. The Total funding will be calculated automatically as values are entered below. If this is a sole source contract, please fill in the justification. If a contractor has been selected, a CD-512 must be on file with the recipient."

The "Budget Item Information" section contains the following fields:

- Title: (marked with a red asterisk)
- Please select the level of information for this budget item:
 - Detailed
 - Non-detailed
- Total Contracts: (marked with a red asterisk and a dollar sign)
- Federal: (marked with a red asterisk and a dollar sign)
- Non-Federal: (marked with a red asterisk and a dollar sign)
- Total Allocated: (marked with a dollar sign)

At the bottom of the form are "Save" and "Cancel" buttons. Below the buttons, there are two red asterisks indicating required fields:

- * Fields required to save this budget item
- * Fields required to submit a grant application

Detailed Contractual

National Ocean Service
Coastal and Marine Management Program


Dwight Reynolds Grants Profile Admin Help Logout

Grant [NA098765432](#) > Task (306-1) [Program Administration](#) > Contractual Budget Item

New Contractual Budget Item

This page enables you to enter the budget amounts spent from federal and non-federal sources for a contract on a specific task. Federal and Non-Federal amounts must be positive whole numbers. Enter the federal and non-federal amounts for each sub-item on the contract. The Total funding will be calculated automatically as values are entered below.

If this is a sole source contract, please fill in the justification.
 If a contractor has been selected, a CD-512 must be on file with the recipient.

Budget Item Information

Title: *

Please select the level of information for this budget item:
 * Detailed Non-detailed

Is this a sole source contract? * Yes No

Budget:

* Item	Federal \$	Non-Federal \$	Total \$
Personnel	<input type="text" value="100000"/>	<input type="text" value="100000"/>	<input type="text" value="200000"/>
Fringe	<input type="text" value="50000"/>	<input type="text" value="50000"/>	<input type="text" value="100000"/>
Equipment	<input type="text" value="1000"/>	<input type="text" value="500"/>	<input type="text" value="1500"/>
Travel	<input type="text" value="2500"/>	<input type="text" value="3000"/>	<input type="text" value="5500"/>
Supplies	<input type="text" value="250"/>	<input type="text" value="250"/>	<input type="text" value="500"/>
Subcontract	<input type="text" value="32000"/>	<input type="text" value="23000"/>	<input type="text" value="55000"/>
Construction	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Other	<input type="text" value="6000"/>	<input type="text" value="4000"/>	<input type="text" value="10000"/>
Indirect	<input type="text" value="5000"/>	<input type="text" value="5000"/>	<input type="text" value="10000"/>
Total Funding for Contract	196750	185750	382500

* Fields required to save this budget item
 * Fields required to submit a grant application

Powered by Apex Digital Systems Version 3.01

Done Internet

NOAA Grants Budget Review Checklist for Contractual:

1. Is each contract or subgrant listed as a separate item? Separate budgets are required for subgrants or contracts regardless of the dollar value.
2. Are the products/services to be acquired described along with the applicability of each to the project?
3. Do the costs appear reasonable?
4. Are any sole source contracts contemplated?
5. If yes, is a sole source justification included with the application which describes why the proposed sole source entity is the only source capable of meeting the applicant's project needs?

6. Are disallowed costs excluded?
7. Contingency or miscellaneous charges must be excluded!
8. Are there contracts with non-US organizations?
9. Do you have a CD-512 on file for each of your subgrants or contracts?

ADDING A CONSTRUCTION BUDGET ITEM

Construction – To create a construction budget item, use the following worksheet. This worksheet is taken directly from the construction budget form. Note that this budget category is almost NEVER used by OCRM programs.

Construction Budget Item - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media

Dwight Reynolds Grants Profile Admin Help Logout

Grant [NA098765432](#) > Task (306-1) [Program Administration](#) > Construction Budget Item

New Construction Budget Item

This page enables you to enter total costs and costs not allowed for each construction item on the program budget for a specific task.
 Total Cost and Costs Not Allowable amounts must be positive whole numbers. You must enter the federal percentage, with precision up to two decimal places, which is used to calculate the Federal and Non-Federal amounts.
 The Total Cost must be greater than \$0 in order to submit the grant application.

Budget Item Information

Title: *

Program Budget:

Item	Total Cost \$	Costs Not Allowable For Participation \$	Total Allowable Costs \$
Administrative and Legal	<input type="text" value="500"/>	<input type="text" value="100"/>	<input type="text" value="400"/>
Land, Structures, Rights-of-Way, Appraisals	<input type="text" value="300"/>	<input type="text" value="0"/>	<input type="text" value="300"/>
Relocation Expenses/Payments	<input type="text" value="200"/>	<input type="text" value="150"/>	<input type="text" value="50"/>
Architectural and Engineering Fees	<input type="text" value="100"/>	<input type="text" value="0"/>	<input type="text" value="100"/>
Other Architectural and Engineering Fees	<input type="text" value="200"/>	<input type="text" value="50"/>	<input type="text" value="150"/>
Project Inspection Fees	<input type="text" value="35"/>	<input type="text" value="15"/>	<input type="text" value="20"/>
Site Work	<input type="text" value="2350"/>	<input type="text" value="25"/>	<input type="text" value="2325"/>
Demolition and Removal	<input type="text" value="400"/>	<input type="text" value="100"/>	<input type="text" value="300"/>
Construction	<input type="text" value="555"/>	<input type="text" value="55"/>	<input type="text" value="500"/>
Equipment	<input type="text" value="600"/>	<input type="text" value="300"/>	<input type="text" value="300"/>
Miscellaneous	<input type="text" value="400"/>	<input type="text" value="400"/>	<input type="text" value="0"/>
Contingencies	<input type="text" value="200"/>	<input type="text" value="145"/>	<input type="text" value="55"/>
Project (program) Income	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Total Cost	5840	1340	4500

Federal Percentage: * %

Federal: \$

Non-Federal: \$

NOAA Grants Budget Review Checklist for Construction:

1. Is the construction/renovation authorized for this program?
2. Is the construction/renovation described?
3. Is the method described which was used to calculate costs?
4. Are the proposed costs presented in sufficient detail? Should include the following:
 - a. A listing of work to be performed
 - b. Cost details by task or work order contemplated
 - c. Is the work being done by the applicant or outside contractors?
5. Is there a need for the type of work/costs being proposed?
6. Is there a need for the estimates of cost present? (Is there documentation to support cost estimates?)
7. Are the costs justified, reasonable and allowable? Verify costs proposed to quotes received. (Generally, the presence of more than one bid obviates the need for extensive tests for reasonableness due to the element of competition involved)

ADDING AN INDIRECT BUDGET ITEM

The screenshot shows a web browser window titled "Indirect Budget Item - Microsoft Internet Explorer". The browser's address bar shows the URL: "Grant NA098765432 > Task (306-1) Program Administration > Indirect Budget Item". The page header includes the NOAA logo and the text "National Ocean Service Coastal and Marine Management Program". Below the header, there are navigation buttons for "Grants", "Profile", "Admin", "Help", and "Logout". The main content area is titled "Indirect Budget Item" and contains a brief instruction: "This page enables you to enter the budget amounts spent from federal and non-federal sources for indirect funding for a specific task. Please enter the total indirect amount, and then the amounts allocated from federal and non-federal sources. These numbers must be positive whole numbers. All fields are required in order to submit a grant application." Below this instruction is a section titled "Budget Item Information" with a "Delete Budget Item" button. The form fields are: "Total Indirect: *\$ 10000", "Federal: *\$ 5000", "Non-Federal: *\$ 5000", "Total Allocated: \$ 10000", "Rate (300 character limit): * 23.12%", and "Basis (300 character limit): * Direct salaries and wage benefits.". At the bottom of the form are "Save" and "Cancel" buttons. A note at the bottom of the form states: "* Fields required to submit a grant application". The footer of the browser window shows "Powered by Apex Digital Systems" and "Version 3.01".

Indirect Budget Item

This page enables you to enter the budget amounts spent from federal and non-federal sources for indirect funding for a specific task. Please enter the total indirect amount, and then the amounts allocated from federal and non-federal sources. These numbers must be positive whole numbers. All fields are required in order to submit a grant application.

Budget Item Information Delete Budget Item

Total Indirect: *\$

Federal: *\$

Non-Federal: *\$

Total Allocated: \$

Rate (300 character limit): *

Basis (300 character limit): *

* Fields required to submit a grant application

NOAA Grants Budget Review Checklist for Indirect:

1. Are indirect costs required?
2. Is a copy of the current approved rate from the cognizant agency included?
3. Is the correct rate being used?
4. Is the rate applied to the correct base?
5. Are charges which duplicate direct costs excluded? (If no, explain/revise).

ADDING AN "OTHER" BUDGET ITEM

The screenshot shows a web browser window titled "Equipment Budget Item - Microsoft Internet Explorer". The browser's address bar shows the URL "http://www.noaa.gov/grants/budgetreview/otherbudgetitem.jsp". The page header includes the NOAA logo and the text "National Ocean Service Coastal and Marine Management Program". Below the header, there are navigation buttons for "Grants", "Profile", "Admin", "Help", and "Logout". The main content area is titled "New Other Budget Item" and contains the following text: "This page enables you to enter the budget amounts spent from federal and non-federal sources for an other item on a specific task. All numeric fields must be positive whole numbers. Please fill in all fields. The Total will be calculated automatically as values are entered below." Below this text is a form titled "Budget Item Information" with the following fields: "Title:" (with a red asterisk and the text "This is some item that doesn't fit in any other category"), "Unit Price:" (with a red asterisk and a dollar sign, and the value "100"), "Quantity:" (with a red asterisk and the value "5"), "Total Other:" (with a dollar sign and the value "500"), "Federal:" (with a red asterisk and a dollar sign, and the value "200"), "Non-Federal:" (with a red asterisk and a dollar sign, and the value "300"), and "Total Allocated:" (with a dollar sign and the value "500"). Below the form are "Save" and "Cancel" buttons. At the bottom of the form, there are two asterisks: "* Fields required to save the budget item" and "* Fields required to submit a grant application". The footer of the page includes "Powered by Apex Digital Systems" and "Version 3.01".

Grant [NA098765432](#) > Task (306-1) [Program Administration](#) > Other Budget Item

New Other Budget Item

This page enables you to enter the budget amounts spent from federal and non-federal sources for an other item on a specific task.
All numeric fields must be positive whole numbers. Please fill in all fields.
The Total will be calculated automatically as values are entered below.

Budget Item Information

Title: * This is some item that doesn't fit in any other category

Unit Price: *\$ 100

Quantity: * 5

Total Other: \$ 500

Federal: *\$ 200

Non-Federal: *\$ 300

Total Allocated: \$ 500

* Fields required to save the budget item
* Fields required to submit a grant application

Powered by [Apex Digital Systems](#) Version 3.01

NOAA Grants Budget Review Checklist for Other:

1. Are items listed by type of material or nature of expense?
2. For each charge, is the number of units, cost per unit, and total cost specified?
3. Are the charges necessary for the completion of the project?
4. Are the charges reasonable?
5. Are disallowed costs (e.g. liquor, entertainment) excluded?

6. Are charges which duplicate indirect cost items excluded?
7. Contingency or miscellaneous charges must be excluded!

Following is an example of a task that has been completed. Note that in this example the budget (ONLY) has been opened up to show all the underlying budget items that have been assigned to this task.

Task Outline								
+ Overview: 6 of 6 required items				Status: ● Acceptable				
+ Outcomes: 1 Outcome Add				Status: ● Acceptable				
- Budget: 10 budget items including 1 personnel, \$500,000				Status: ● Acceptable				
Personnel Add	Federal \$	Non-Federal \$	Total \$	Federal		Non-Federal		
				Salary \$	Fringe \$	Salary \$	Fringe \$	
● Measly Intern	423	423	846	423	0	423	0	
Personnel Totals	423	423	846	423	--	423	--	
Item Federal \$ Non-Federal \$ Total \$								
Travel Add								
● Washington DC	850	804	1,654					
● Coastal Permit	2,500	2,500	5,000					
● Inspection Trips								
Travel Totals	3,350	3,304	6,654					
Equipment Add								
● Big Red Truck	10,000	5,000	15,000					
Equipment Totals	10,000	5,000	15,000					
Supplies								
● Supplies Budget Item	2,000	3,000	5,000					
Supplies Totals	2,000	3,000	5,000					
Contracts Add								
● Department of Water Funding	196,750	185,750	382,500					
● Coastal Block Grants	50,000	25,000	75,000					
Contracts Totals	246,750	210,750	457,500					
Construction Add								
● Constructing Something	2,250	2,250	4,500					
Construction Totals	2,250	2,250	4,500					
Indirect								

Grant Home - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Links

National Ocean Service
Coastal and Marine Management Program 

Dwight Reynolds [Grants](#) [Profile](#) [Admin](#) [Help](#) [Logout](#)

Grant NA098765432

Grant Status [View or Print Grant Application...](#) [Submit Grant...](#)

- This grant application is not yet ready for final submission; areas requiring attention are marked with red status indicators below. For final submission, all status indicators must be green.
- The deadline for this grant application to be submitted in final form is **10/1/2003**

Grant Outline

Overview: Not yet completed Status: ● Incomplete

Personnel: 10 positions [Add](#) Status: ● Incomplete

Tasks: 1 Task, \$500,000 [Add](#) Status: ● Acceptable

Section	App. ID	Task	Federal \$	Non-Federal \$	Total \$
● 306	1	1: Program Administration	269,973	230,027	500,000
306 Totals:			269,973	230,027	500,000
<hr/>					
306A	--				
306A Totals:			--	--	--
<hr/>					
308	--				
308 Totals:			--	--	--
<hr/>					
309	--				
309 Totals:			--	--	--
<hr/>					
310	--				
310 Totals:			--	--	--
<hr/>					
Total for All Tasks			269,973	230,027	500,000

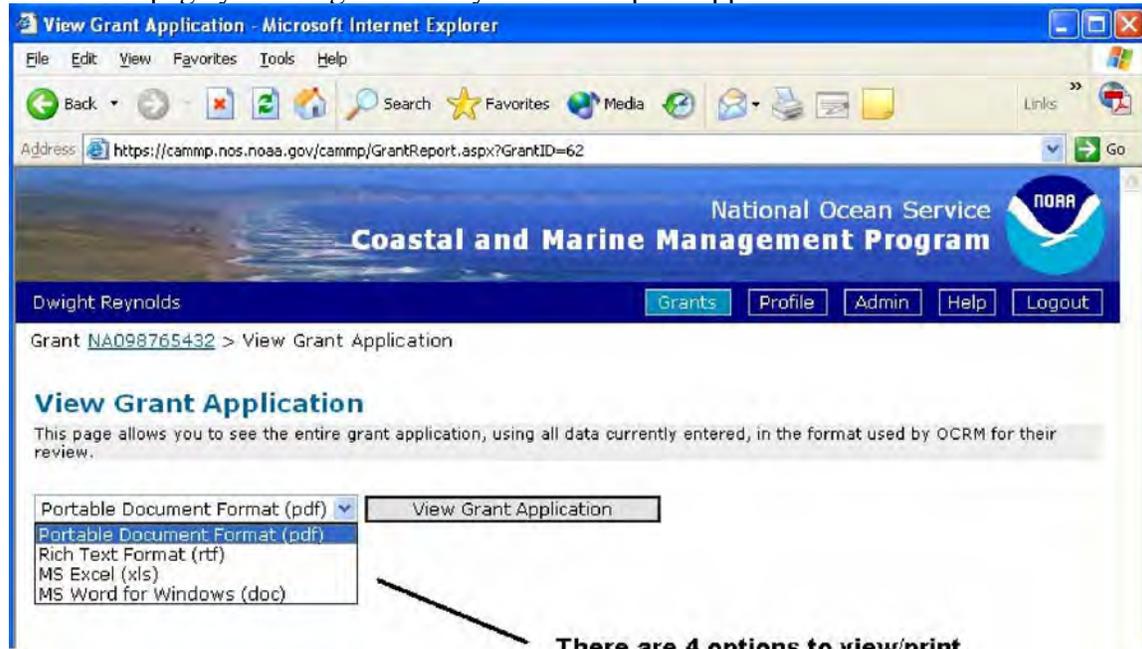
Powered by [Apex Digital Systems](#) Version 3.01

Done Internet

Example of an award in progress – total of \$500,000 has been allocated to this award so far, all in one 306 task.

VIEWING/PRINTING THE AWARD

This is the page you will go to once you view or print application button.



Select one of the output options then press the “View Grant Application” button to create the award. The four output options are:

- Portable Document Format – has a .pdf extension.
- Rich Text Format – has a .rtf extension
- Microsoft Excel – has a .xls extension
- Microsoft Word for Windows – has a .doc extension.

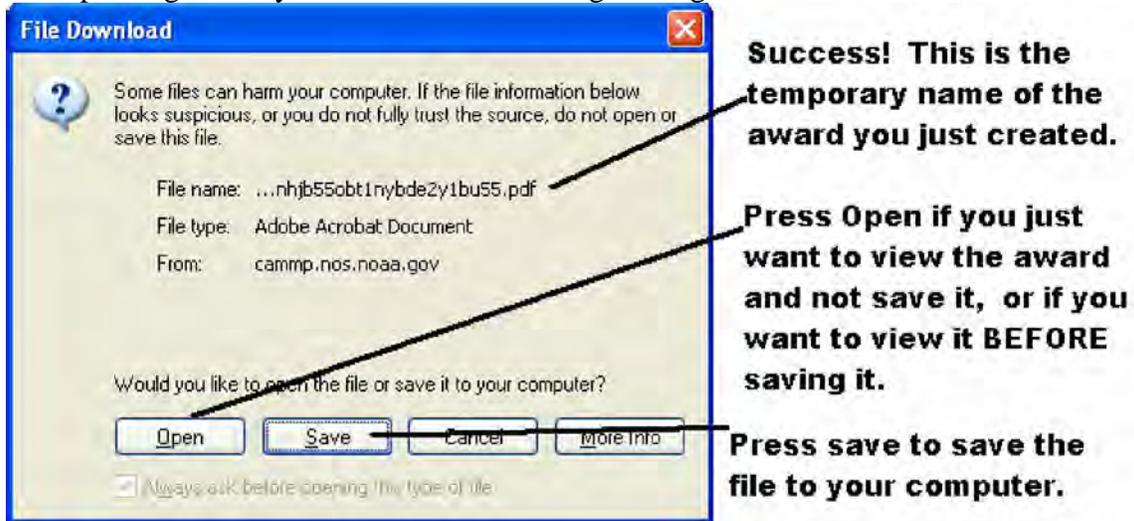
Although there are four options, when you submit your award in final you should submit it as either a PDF or Word Document in order to comply with federal grants.gov requirements.

Note that if you do not have Adobe Acrobat or Reader, Microsoft Excel or Microsoft Word on your machine these options will not work. Rich Text Format is very generic and should be able to be read in most type of word processing software.



At the bottom of the screen you can track the progress of the award creation. Once the field is filled with green lights the award will be created.

Once printing works you will see the following message:



NOTE: The file name that is created is basically gibberish. You need to give it a more intuitive name (i.e. probably the award number). While there is no standard file name, OCRM recommends that you use the award number as the file name.

Do to this, in whatever application you are in, press the SAVE AS button and save the document with a more logical name.

SUBMITTING THE AWARD

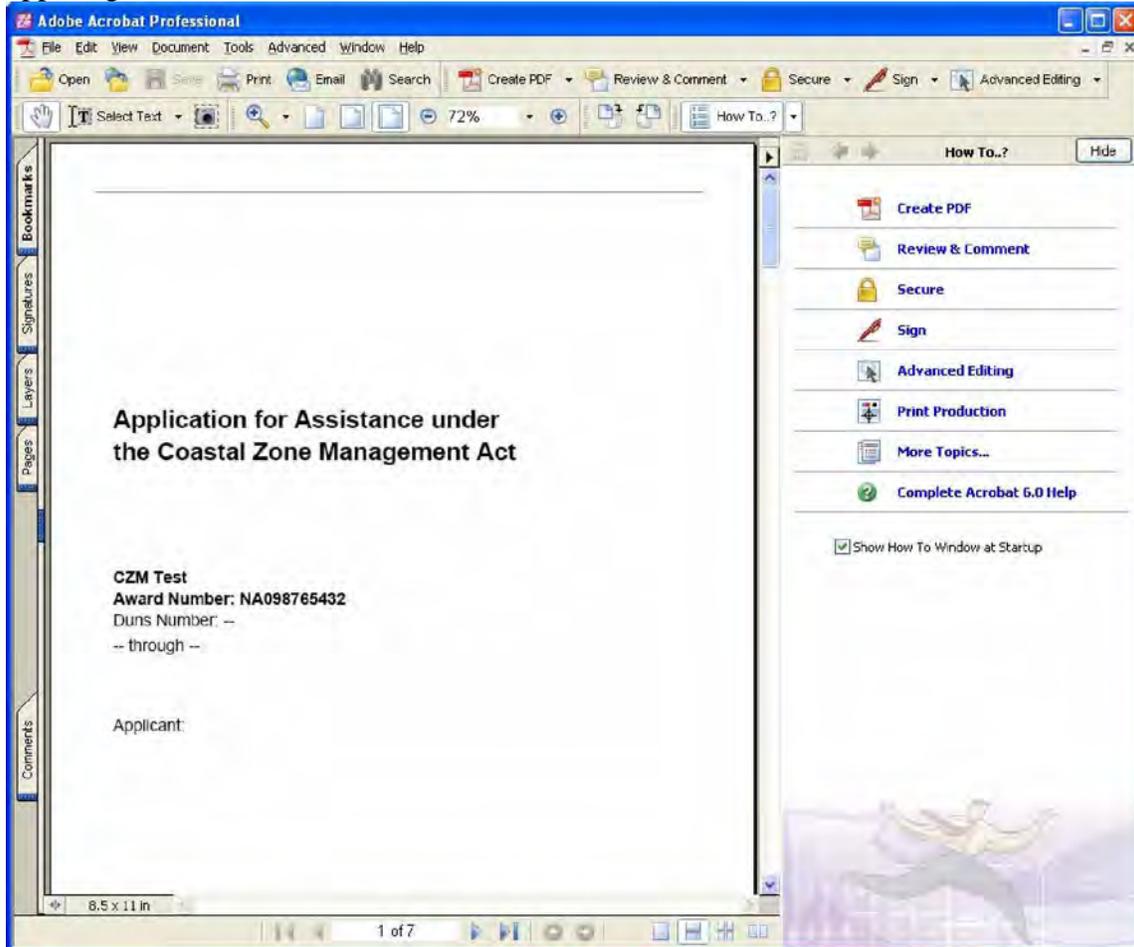
The submit grant application function has changed since CAMMP was first introduced in 2004. This is due to the requirements that federal agencies use Grants.Gov for grant submissions, and the adoption of NOAA Grants Online to handle the flow of grants through NOAA. ***So the submit page you see when you press the submit button on the main page is badly outdated. This page will be corrected in the update scheduled for April 2007.***

At this point you can only create the award as a draft, so you will have a draft watermark on the documents. Once you create the award file (as a pdf), then save this file with an understandable file name to your computer. After that you no longer need to use CAMMP. Instead submit the grant file created in CAMMP through Grants.Gov along with the federal forms that you download from Grants.Gov.

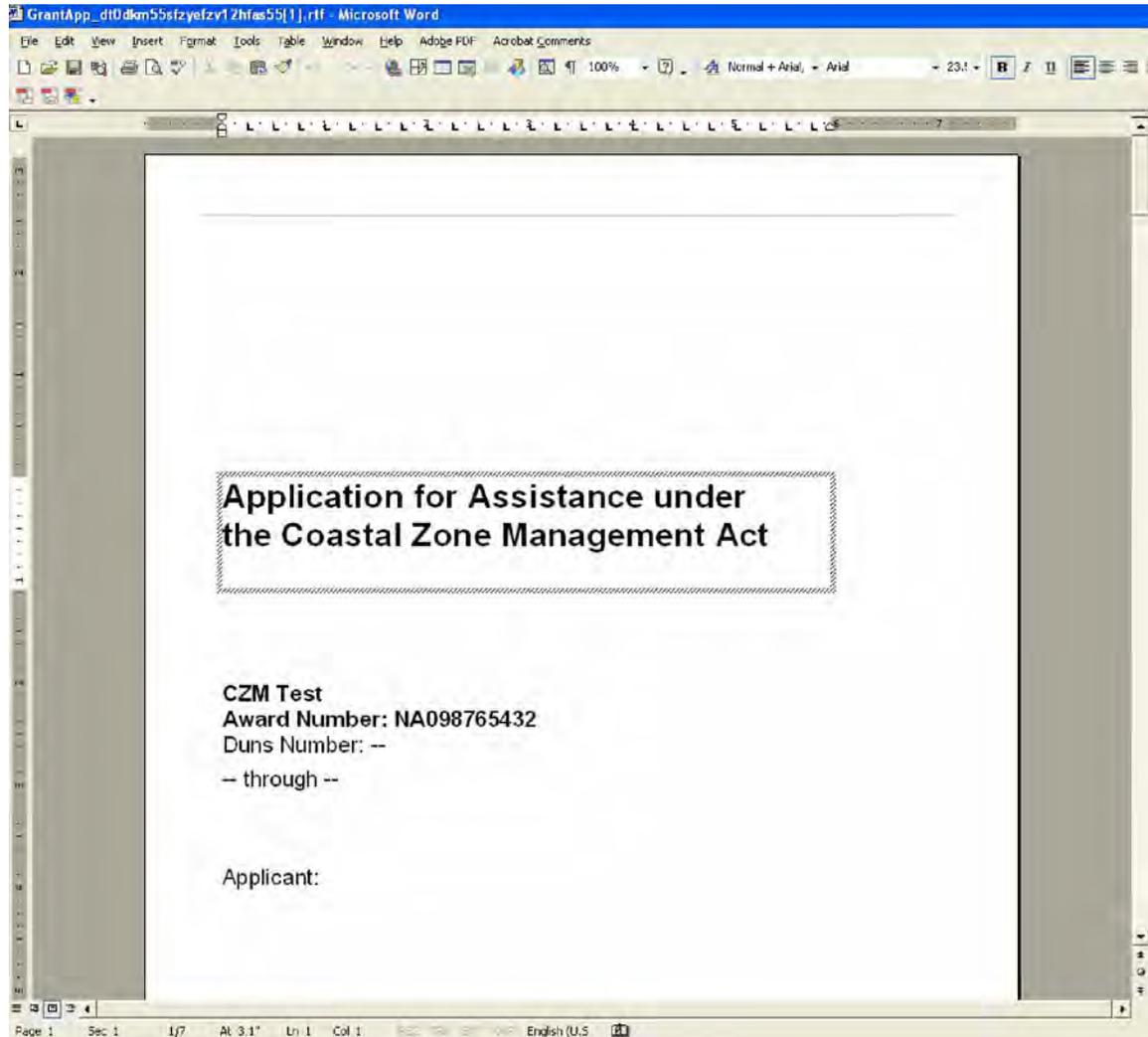
THE PRINTOUT

Adobe example - this shows how the Adobe version will look (this is Adobe Acrobat 6.0 Professional so while the printout should look the same, the column on the right will not appear unless you are using this version of Acrobat.)

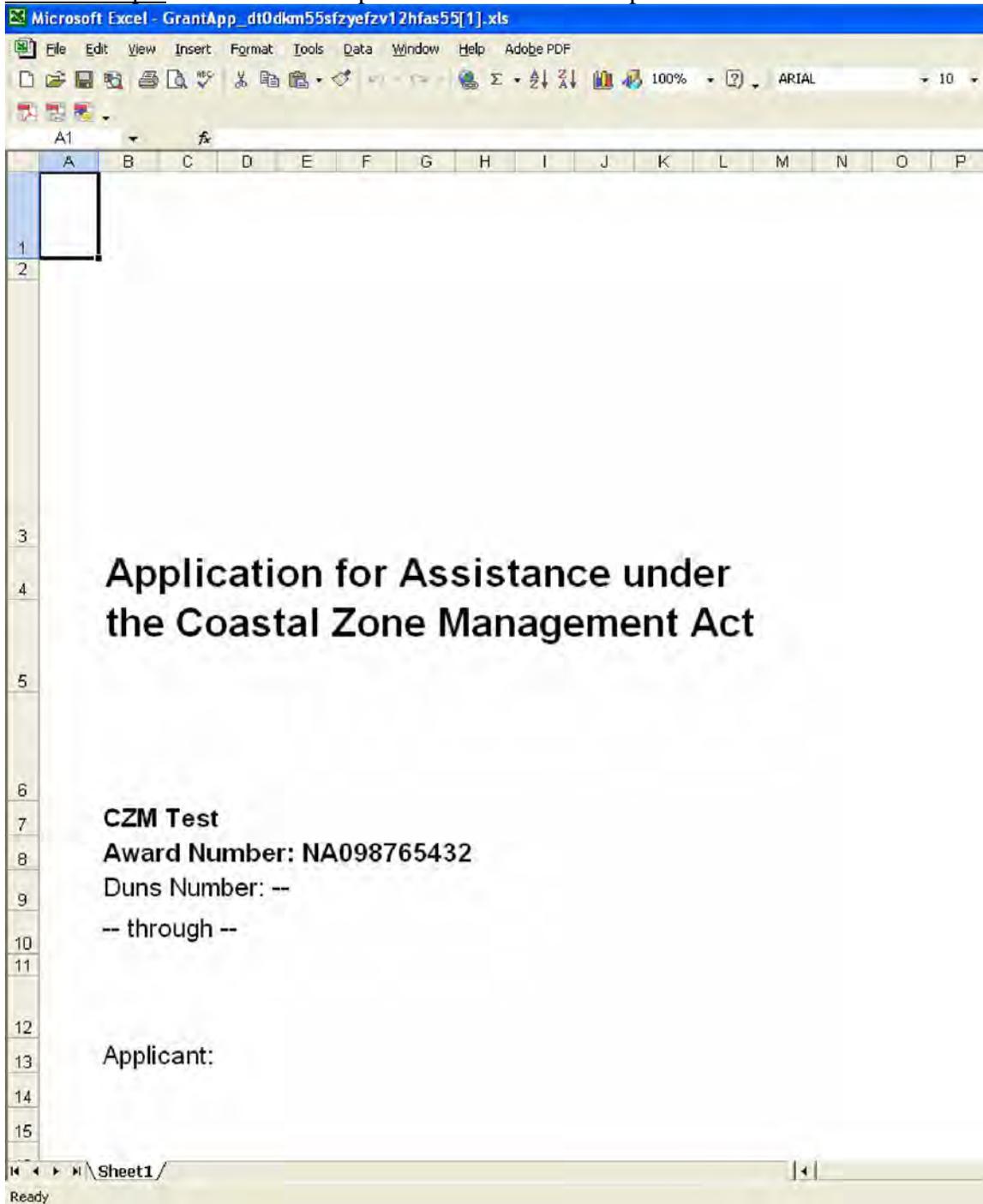
Unfortunately, until the final patch of CAMMP you will see a DRAFT watermark in the upper right hand corner of the document.



Rtf and Word example - This is an example of an rtf version – note that it pops up in Word because Word is the default word processing software on this particular computer. The Word version will look the same.



Excel example - This is an example of a Microsoft Excel printout.





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Office for Coastal Management

FEB 24 2016

MEMORANDUM FOR: Reserve Managers and State Contacts

TO: Chris Cartwright *Chelata*
Chief Financial Officer, National Ocean Service

THROUGH: Joelle Gore *JG*
Division Chief, Stewardship Division, Office for Coastal Management

FROM: Erica Seiden *ES*
Program Manager, Ecosystems Program, Office for Coastal Management

SUBJECT: FY 2016 National Estuarine Research Reserve System
Funding Allocations and Guidance

This funding guidance is based on the funding levels contained in the Fiscal Year (FY) 2016 Consolidated Appropriations Act. This will provide \$22,952,010 for the National Estuarine Research Reserve System (NERRS) operations. This includes a NOAA deduction of \$251,106 as described below in the funding facts table. This also includes additions from FY 2015 Procurement, Acquisition, and Construction (PAC) carryover of \$73,370 and FY 2016 PAC funds of \$129,746 totaling \$203,116. This funding guidance was informed by discussions at the 2015 NERRS Annual Meeting and through a series of budget discussions with reserve managers in February 2016. This memorandum provides guidance on the allocation and use of these funds. Please see the FY 2016 allocation of NERRS funds in Tables 1 and 2.

Funding Facts

	ORF		PAC
FY16 Appropriation	\$23,000,000	FY16 Appropriation	\$1,700,000
Reductions*	(\$251,106)	Reductions*	(\$18,139)
		FY16 Competition	(\$1,552,115)
		FY15 Carryover	\$73,370
<hr/>			
Total Allocation	\$22,748,894		\$203,116

* Total reflects the amount from the FY 2016 Consolidated Appropriations Act less reductions of \$22,865 (ORF) and \$1,690 (PAC) for the NOAA Hollings Scholarship program assessment, \$134,650 (ORF) and \$9,557 (PAC) Congressional de-obligation target, and \$93,591 (ORF) and \$6,892 (PAC) for a NOAA-wide reprogramming.

Overview

The FY 2016 allocation of \$22,952,010 is \$1,639,479 more than the FY 2015 allocation of \$21,312,531. Budget allocations of ORF funds are as follows: \$17,341,016 will be directed for base reserve operations resulting in a \$619,322 allocation for each reserve which is an increase from FY 2015 of \$25,322 per reserve; \$1,018,850 for the Centralized Data Management Office (CDMO) which is an increase of \$633,850 from the FY 2015 allocation; \$4,100,000 for the NERRS Science Collaborative which is \$18,603 more than the FY 2015 allocation; and \$9,028 is allocated for maintenance and shipping of equipment and supplies for the System-wide Monitoring Program which is \$25,772 less than the FY 2015 allocation. Additionally, \$203,116 of PAC funding is being dedicated to support acquisition of materials and infrastructure for the NERR System-wide Monitoring Program (SWMP) Sentinel Site Application Module 1 (SSAM1) which will be distributed to specific reserves based on readiness and expressed needs. This infrastructure will be permanently stationed in the field. Note that the FY16 PAC funds identified in this guidance do not affect the FY 2016 PAC competition.

Of the \$ 4,100,000 allocation to the NERRS Science Collaborative, \$100,000 is dedicated to support a national System-wide Monitoring Program data; \$100,000 is dedicated for a Coastal Training Program Engagement and Impact Analysis which will be administered through the Office for Coastal Management (OCM); and \$50,000 is dedicated for a Sentinel Site Application Module Needs Assessment pilot which will be administered through the Jacques Cousteau, New Jersey Reserve. Finally, \$130,000 is being dedicated to support system-wide education and communications through the National Estuarine Research Reserve Association. As part of this, \$100,000 is dedicated to support an Outcome and Impact Evaluation of NERR Education Programs, including Teachers on the Estuary (TOTE) and Community Based Education. Each of these projects will serve to benefit the Reserve System and will not require match.

Applicable Regulations

Allocations for operations, management, education, monitoring, and research fall under Coastal Zone Management Act (CZMA), Section 315(e), and the applicable regulations at 15 CFR Part 921 Subparts G, H, and I, including the 70:30 (federal:state) match requirement (except for projects that benefit the entire system, which do not require match). Reserves wishing to designate another entity to receive a portion of their allocation must meet the statutory and regulatory requirements regarding the recipient (eligible recipients are state entities for education and operations, and state entities or public or private persons for research and monitoring). Agreements between the lead agency and the designated entity must be in place before submitting an award application. The allocation of funds to each reserve is shown in Table 2. Additionally, please be aware that the new Office of Management and Budget Uniform Grant Guidance will apply to all new NERRS operations awards. For more information, visit https://www.whitehouse.gov/omb/grants_docs.

Application Procedures

Per this memo, the following application procedures are being distributed to eligible state recipients. Please work closely with your program liaison to complete all requirements

associated with award development and submission. Recipients must find and apply for these funds via grants.gov using search term NERR and CFDA number 11.420. Recipients must download the application package and complete all forms including the SF424, SF424A, SF424B and CD511. Recipients must complete their scope of work using CAMMP (Coastal and Marine Management Program) <https://coast.noaa.gov/cammp>. The final CAMMP document must be attached to the grants.gov application. Please submit your application according to the schedule below and apprise your program specialist of any administrative challenges.

Please note that two reserves, Mission-Aransas, Texas, and Padilla Bay, Washington, have agreed to work with the Office for Coastal Management in FY 2016 and FY 2017 to pilot multi-year awards. This two year pilot is designed to test whether multi-year awards result in increased efficiency and effectiveness in award administration, in comparison to administering multiple single-year awards.

Pilot programs should develop two year budgets based on the FY 2016 allocations. The assumption is made that the second year of funding will remain relatively equal to the FY 2016 allocations; however, we are allowing pilot programs to develop initial application budgets with up to a 5% increase in Section 315 base reserve operations funds during the second year of the award in order to accommodate possible between-year budget fluctuations and adjustments. Please note that the FY 2017 NERRS Funding Allocations and Guidance will determine the final funding allocations for the second year of the multi-year awards; OCM will work with pilot programs to implement any multi-year award budget revisions needed for FY 2017.

July awards: draft application due to NOAA – March 4, 2016
 final application due to grants.gov – March 25, 2016

Sept-Nov awards: draft application due to NOAA –March 25, 2016
 final application due to grants.gov - April 15, 2016

Reserve Operations, Research, Monitoring, Training, Education, and Stewardship

Each operations award requires a 30% state match to the 70% federal allocation. Reserve operations awards are cooperative agreements and may be awarded for a period of 18 months. Personnel costs should be limited to 12 months to avoid any overlap with future awards. The core positions - manager, research coordinator, and education coordinator- should be fully funded (with state funds as much as possible) without the need to raise additional salary money from external sources. Please refer to the FY 2016 NERR Operations Award Guidance for information to support development of the application.

The tasks outlined below should be distinct tasks within the award and supported adequately to achieve the stated outcomes. The target amounts have been determined by the sectors responsible for the following programs as a basis for implementation. Individual amounts per program may vary based on needs to achieve the stated outcomes.

1. System-wide Monitoring Program

All reserves should allocate funds to fully implement the current components of the NERR System-wide Monitoring Program (SWMP) including: operation of four water quality monitoring stations, a weather station, and monitoring for estuarine nutrients, and chlorophyll *a*. Each reserve should continue to collect continuous data from a weather station and at least four long-term water quality datalogger stations, which should be calibrated, deployed, retrieved and operated in compliance with NERR SWMP protocols. The monitoring program for nutrients and chlorophyll *a* should consist of (at a minimum) monthly grab samples from the four SWMP datalogger stations and 24 hour automated sampling from a single SWMP datalogger station. Monitoring under this task includes data collection, quality control/quality assurance of all data, and timely data submission to the NERRS Centralized Data Management Office (CDMO). A special award condition will stipulate these SWMP requirements.

On average, it costs \$120,000 to implement this task; however, reserves may allocate more or less, but the requirements for SWMP monitoring must be met. These SWMP funds typically should be used to support full-time and part-time SWMP technicians, pay for collection and processing of nutrient samples, and provide support for equipment upgrades, repairs, and routine maintenance. Reserves should replace and/or upgrade sondes to ensure continuity of operations. Funding decisions regarding on-site operation of SWMP should be made in close consultation with the reserve research coordinator and technician(s). Until additional funds are available, reserves should focus on supporting the core elements of SWMP and only as they are able, continue biological monitoring and/or add components towards building a sentinel site. These efforts should follow the NERRS protocols and details should be included in the task description and outcomes.

2. Coastal Training Program

All reserves should allocate funds to fully implement the Coastal Training Program (CTP). On average it costs \$90,000 to implement; however, reserves may allocate more or less funding, but the performance requirements for CTP must be met. The task description should reflect CTP program strategy direction and include services, products and programs to be implemented. A Special Award Condition will stipulate that reserves implementing CTP will have a CTP Coordinator, comply with the CTP guidance, and submit performance reports on progress, programs, services, products, and performance monitoring data according to the agreed performance metrics.

3. Teachers on the Estuary Program

All reserves should allocate funds to conduct a 'Teachers on the Estuary' (TOTE) Program. On average it costs \$15,000 to implement a TOTE workshop; however, reserves may allocate more or less funding, but the performance requirements for TOTE must be met. Reserves with an approved market analysis/needs assessment will implement one TOTE professional development workshop of at least 15 contact hours that aligns to state or national curriculum framework and includes an evaluation plan.

Table 1. FY 2016 NERRS Budget Overview and Allocation Summary

Category	Allocation	Notes
Reserves Program/Operations	\$17,341,016	\$619,322/reserve
Centralized Data Management Office	\$1,018,850	
NERRS Science Collaborative	\$4,100,000	Includes support for national data synthesis
System-wide Program Support	\$9,028	
Training Program Engagement and Impact Analysis	\$100,000	
SSAM1 Needs Assessment - MidAtlantic	\$50,000	Allocated to Jacques Cousteau Reserve
National Estuarine Research Reserve Association	\$130,000	
Reserves Sentinel Site Infrastructure (PAC funds)	\$203,116	Variable per reserve
Total	\$22,952,010	

Budget Overview	
ORF Appropriation for site operations	\$23,000,000
PAC Appropriation for infrastructure (FY16 PAC and FY15 PAC carryover)	\$203,116
NOAA Deduction	(\$251,106)
Total	\$22,952,010

Table 2. FY 2016 National Estuarine Research Reserve Allocations

Recipient	Reserve	ORF Allocation	PAC Allocation	Total Allocation	Match
SC Dept of Natural Resources	ACE Basin	\$619,322		\$619,322	\$265,424
FL Dept of Environmental Protection	Apalachicola	\$619,322	\$14,000	\$633,322	\$271,424
CA Coastal Conservancy	Elkhorn Slough	\$619,322	\$34,100	\$653,422	\$280,038
MS Dept of Marine Resources	Grand Bay	\$619,322		\$619,322	\$265,424
NH Dept of Fish and Game	Great Bay	\$494,322		\$494,322	\$211,853
University of New Hampshire	Great Bay	\$125,000		\$125,000	\$53,571
FL Dept of Environmental Protection	GTM	\$619,322	\$32,600	\$651,922	\$279,395
NY Dept of Environmental Conservation	Hudson River	\$571,472		\$571,472	\$244,917
Greenway Conservancy	Hudson River	\$47,850		\$47,850	\$20,508
University of Alaska*	Kachemak Bay	\$619,322		\$619,322	\$265,424
University of South Carolina	N Inlet Winyah Bay	\$619,322		\$619,322	\$265,424
NC Dept of Natural and Environ Resources	North Carolina	\$619,322		\$619,322	\$265,424
OH Dept of Natural Resources	Old Woman Creek	\$619,322		\$619,322	\$265,424
WA Dept of Ecology	Padilla Bay	\$619,322	\$20,000	\$639,322	\$273,996
FL Dept of Environmental Protection	Rookery Bay	\$619,322		\$619,322	\$265,424
San Francisco State University	San Francisco Bay	\$619,322	\$20,450	\$639,772	\$274,188
OR Division of State Lands	South Slough	\$619,322	\$18,500	\$637,822	\$273,353
CA Dept of Parks and Recreation	Tijuana River	\$331,438		\$331,438	\$142,045
Southwest Interpretive Association	Tijuana River	\$287,884		\$287,884	\$123,379
MA Dept of Environmental Management	Waquoit Bay	\$619,322		\$619,322	\$265,424
Wells Management Authority	Wells	\$619,322		\$619,322	\$265,424
RI Dept of Environmental Management	Narragansett Bay	\$619,322		\$619,322	\$265,424
VA College of William & Mary	Ches. Bay - VA	\$619,322	\$23,230	\$642,552	\$275,380
University of Texas	Mission Aransas	\$619,322		\$619,322	\$265,424
DE Dept of Natural Resources & Env Control	Delaware	\$619,322		\$619,322	\$265,424
Rutgers University	Jacques Cousteau	\$669,322	\$20,236	\$689,558	\$295,525
PR Dept of Natural and Environmental Resources	Jobos Bay	\$619,322		\$619,322	\$265,424
AL Dept of Conservation and Natural Resources	Weeks Bay	\$619,322		\$619,322	\$265,424
MD Dept of Natural Resources	Ches. Bay - MD	\$619,322	\$20,000	\$639,322	\$273,996
GA Dept of Natural Resources	Sapelo Island	\$619,322		\$619,322	\$265,424
University of Wisconsin	Lake Superior	\$619,322		\$619,322	\$265,424
Total		\$17,391,016	\$203,116	\$17,594,132	\$7,540,352

*Administered through CESU

NOAA National Estuarine Research Reserve FY2015 Performance Progress Report and Post Award Guidelines

Introduction

This document provides guidance for the content and submission of NERR award progress performance reports. These reports are required on a semi-annual basis and provide information to the Office for Coastal Management (OCM) and the Grants Management Division (GMD) to determine if NERR programs are adhering to the terms of financial assistance awards, making appropriate progress toward award tasks, supporting the goals and objectives of the management plan, and addressing CZMA Section 312 Evaluation necessary actions.

New in FY2015 Grant Reports

In previous versions of this reporting guidance, detailed instructions on developing success stories has been provided. Reserves were encouraged to submit at least one success story per year through their grant progress reports. Moving forward, site liaisons will work with Reserve to develop success stories throughout the year. Site liaisons will be working with the OCM Communications Team to promote these stories. It is envisioned that each story can be used and adapted several times (one-pagers, web content, briefing materials, etc.). Note: CTP is required to submit at least one CTP success story in the performance measures database following the CTP Performance Monitoring Guidance.

Reporting Requirements

Award recipients are responsible for upholding the standard terms and conditions for all NOAA awards including timely submission of semi-annual progress reports, financial reports, and post award action requests. Performance progress reports should be submitted every six months from the start of the award via NOAA's Grants Online System <https://grantsonline.rdc.noaa.gov/>. Reports must be submitted no later than **30 days** after the end of the performance period. For example, if the award starts July 1, the reporting period is July 1 through December 31 and the progress report is due by January 30. Final reports are not comprehensive; they cover only the last six month period of the award and are due within **90 days** after the end of the award period. All financial and progress report requirements should be met during this period so that the award can be closed out in a timely manner. Please note that post award action requests will not be processed if progress and financial reports are not up to date. NOAA's Grants Management Division will suspend payment on awards if reports are late.

Progress Report Contents

All recipients should follow the format below for consistency providing valuable, comparable information across the system. Each semi-annual report should include:

A. Report Heading

Reserve name

Report contact name, email and phone number
Grant or cooperative agreement number
Reporting period
Date of submission

B. Progress and Status of Award Tasks

The status of each task should be described following the CAMMP format of the award for the six month reporting period only. The reports should describe the activities that have taken place to achieve the outcomes outlined within each task of the grant. Outcomes, the results and/or products from conducting activities, should be described when appropriate. Given that outcomes are written for each award based on a 12 month scope of work, some outcomes may not be fully realized until the end of the award. While awards are 18 months long, most tasks should be completed and reported on within the 12 month time frame. If anticipated milestones are not being met, the challenges or obstacles should be explained. Post award action request approvals will be made based on this information.

This section should provide a summary of progress on each task. Each entry should include the task title, description of activities, status of milestones (not started, in progress/on schedule, not on schedule, completed) and challenges related to meeting milestones if appropriate, and outcomes gleaned from the tasks when appropriate.

C. Section 312 Evaluation Progress

The evaluation metrics and status of evaluation recommendations progress provide important data for the periodic evaluation of individual programs. A separate guidance document for reporting 312 measures is included.

D. Performance Measures

The activity of collecting performance measures falls in an operations and management task. All performance measures should be reported in the performance measure database. All measures should be reported on for the first two six-month periods of each operations award, except the two research measures which are reported only at the twelve-month report period. The Performance Measure Guidance can be found in Appendix 1. The NERRS Performance Measures Database Guidance Document for Reserve Users can be found in Appendix 2. Reserve personnel can use the NERRS Performance Measures Database throughout the reporting period to keep draft reports before submitting their semi-annual reports.

Managers are expected to ensure that all required elements are submitted for a given time period. A Manager Summary Report has been created to assist you in viewing in one place all the performance measures for a given reporting period and verify that all reports are submitted. Instructions for creating a Manager Summary Report can be found in Appendix 2, pages 28-30. Requirement: Once you have created your Manager Summary Report and verified that all reports have been submitted, select 'Print' and save the summary report as a Word document. Attach this document to your Grants Online Progress Report. This will provide verification that

you have met the Performance Measures Reporting Special Award Condition of your cooperative agreement.

Overview of Performance Measures

Report Name	Requirement	Reporting Frequency	Notes
Volunteer and Research Measures	REQUIRED	Volunteers - every six months Research - once a year at second reporting period	The Research and Monitoring Database must be up-to-date in order for accurate values to be submitted in the performance measures database report.
CTP Training Activities	REQUIRED	Every six months	Every training activity must be submitted.
CTP Outcomes	REQUIRED	One CTP Success Story required for FY2015 grant	
CTP Technical Assistance	OPTIONAL	Submit as they occur	If reserves submit a CTP Success Story associated with a Technical Assistance activity, you will need to submit a CTP Technical Assistance report for that activity.
Education Output Indicators	REQUIRED	Every six months	

E. Optional Addendum

We understand that it often takes more than the NOAA federal and state cost share to operate a reserve. We encourage reserves to describe activities relevant to the mission of the reserve, but may be outside the scope of the operations grant. This information will enable OCM to capitalize on opportunities within and outside of NOAA and share this information with NOAA partners and leadership about innovative projects and challenges at the reserve. It would be advantageous to describe the partners and leveraged funds that support this work.

Annual reports

Annual comprehensive reports are not required per the award reporting guidelines. For those sites that produce an “annual report”, please make them available to the NERR community.

Post award requests

List of Award Action Requests

The actions below may be initiated by the recipient within NOAA's Grants Online System.

*indicates that an amendment is required

Bold indicates most commonly conducted actions. Additional guidance on these actions is provided below.

* No Cost Extension – Prior Approval Required	No Cost Extension - Prior Approval Waived (Research Terms and Conditions)
Reprogram or Rebudget	Satisfied Special Award Conditions
Extension to Close Out	Equipment Purchase
* Change in Scope	Foreign Travel
* Transfer of Award	Sole Source Contract
Change in Principal Investigator	Other
Change in Institution Name	Absence of more than 3 months or 25% by project director or PI
Change in Key Person Specified in the Application	Inclusion of cost that require prior approval based on cost principles
Transfer of funds allotted for training to other categories of expenses	* Sub award, transfer or contracting out of any work under the award if not described in the approved application
Pre-Award Cost	*Termination for Convenience

No-Cost Extension (GMD Approval Required- i.e. Prior Approval Required)

A formal request to extend an award must be submitted by the award recipient authorized representative via the NOAA Grants Online System 30 days prior to the end date of the award. Approval by the Federal Program Office (OCM) and Grants Management Division (GMD) is required. The recipient proceeds at its own risk of incurring costs beyond the award expiration if the request is not submitted to NOAA at least 30 days prior to the expiration.

Any extension request submitted to NOAA after the expiration of the award will be denied. Requests for reconsideration of extreme circumstances that resulted in failure to request an extension before the end of the award period must be submitted in writing and will only be considered by the Grants Officer on a case- by-case basis. Awards which are not in compliance with all terms and conditions of the award, including submission of all required reports, will not be reconsidered.

All no-cost extension requests must clearly justify why the extension is needed and explain what activities are remaining to be accomplished under the award and what funds are still available to support the activity. In addition, the award must be in compliance with all terms and conditions of the award, including submission of all required reports. The justification block within the GOL system must be filled out, and a budget (SF424A) of remaining funds must be attached. See example below.

Key Points

Due to a State Department of Environmental Affairs hiring freeze, we have been unable to hire an education assistant to complete activities within the education and outreach task, specifically production of the estuary literacy concepts brochure, community outreach product and completion of the K-12 Estuary Education Program market analysis and needs assessment. The hiring freeze has been lifted and we will be able to hire the education assistant and complete the project within the next six months. Additionally, the State Department of Environmental Affairs is requiring additional review of equipment purchases and we have not been able to purchase the YSI 6600 instrument, as indicated in the System-wide Monitoring Program task. We have recently gotten preliminary approval for this purchase and will be able to complete the acquisition shortly. Hence, we request a six-month no-cost extension, extending the award from December 31, 2015 to June 30, 2016. The budget of remaining funds is below.

← State reason for request- need to say more than “we need more time to expend funds.”

← State specifically the work that has yet to be achieved. This should be commensurate with what is designated in the award. If a new activity will be performed, a reprogramming request should be made. If there is a departure from original intent, a change of scope may be warranted.

← Indicate the length of extension request and dates.

Object Class Categories	Federal	State	Total
a. Personnel	20,000	15,000	35,000
b. Fringe Benefits	2,000	1,500	3,500
c. Travel			
d. Equipment	7,000		7,000
e. Supplies			
f. Contractual			
g. Construction			
h. Other			
i. Total Direct Charges (sum of a-h)	29,000	16,500	45,500
j. Indirect Charges			
k. TOTALS (sum of 6 and j)	29,000	16,500	45,500

← Provide a budget of remaining funds showing federal and non- federal amounts by object class category that clearly relate to the text above.

Re-Programming or Re-budgeting Request

Creation of a new direct cost line item category within an approved budget for costs allowable under the applicable cost principles will not require prior approval from the Grants Officer unless the new direct cost category exceeds 10% of the total Federal share of the award.

A reprogram request must be submitted for NOAA approval when:

- reprogramming funds to a new, not identified in the original budget, direct cost line item category where the amount exceeds 10% of the total Federal share of the award.
- reprogramming a cumulative amount greater than 10% of the total (Federal and non-Federal shares) budget last approved for awards with a Federal share exceeding \$100,000. If you reprogram 10% or less, you do not need to request GMD approval; however, an account of reprogram activities under 10% needs to be maintained for when you exceed the 10%, you are combining what you have done and what you intend to do over the 10% so the cumulative transfer is transparent.

These requests shall include an SF-424A showing the total budget for the award along with a detailed budget narrative explaining the funds transferred. It is advisable to submit the last approved 424A and the new 424A for a clear comparison of last approved budget and proposed budget. All remaining federal and non-federal shares should be illustrated on the revised 424A as this will serve as the budget for the rest of the award. The supporting text should clearly describe where the funds are moving from and to and the activities that will take place that support the intent of the award. The narrative request needs to describe the reason for these changes and ensure that the original scope of work is not being altered. If the scope of work is changing, then a change of scope request is required.

The reprogramming request is submitted to the Program Officer who forwards the request, along with a recommendation, to the Grants Officer, who will make the final determination.

The approval of a reprogram request does not normally result in an amendment to the award. The recipient's Authorized Representative(s) will be notified by Grants Online of the approval or rejection of the request.

Extension to Close-Out Period

The close-out period starts the day after the award has closed and provides 90 days to submit all reports required by the terms and conditions of the award and liquidate all obligations incurred. Once the award is closed, the only action you can take in Grants Online is to extend the close-out period. You can do this at any point during the 90 day close-out period and the maximum request for extension is 60 days.

An extension to the closeout period should only be requested to complete the preparation of final reports and make final payments. During this time, you can draw down funds from the Department of Treasury ASAP payment system.

An approval of the Extension to Closeout does not result in an amendment to the award. The recipient's Authorized Representative will be notified by Grants Online of the approval or rejection of the request. Additional work on the award project is prohibited during the closeout period.

Satisfied Special Award Conditions

Some awards contain Special Award Conditions that require evidence of completion. Examples are environmental assessments, property deeds and associated documents, and building permits.

The Special Award Conditions are available in a drop-down list on the Award Action Request details page. Once selected, the SAC Description text box will automatically be filled out with the Special Award Condition details. You will need to fill out the justification in the provided text area and attach associated files.

The approval of a Satisfied Special Award Conditions request does not normally result in an amendment to the award. The Recipient Authorized Representative(s) will be notified by Grants Online of the approval or rejection of the request.

No-Cost Extension (GMD approval waived –i.e. Prior Approval Waived)

All recipients covered under 15 CFR Part 14 (e.g., educational institutions/non-profits), with non- construction awards are herein granted authority to initiate a one-time no-cost extension to the award period of up to one year without prior approval as long as the recipient notifies the Grants Officer through Grants Online using the “No-cost Extension Prior Approval Waived (Research Terms and Conditions)” link least 10 days prior to expiration of the award with an explanation of the reason for the extension. Grants Online will prohibit you from requesting an extension any less than 10 days in advance of award expiration. If an additional no-cost extension is required, you must request a no-cost extension GMD approval required. The FPO and GMD review and approve this request.

Only certain organizations, which are conducting research, are eligible for No-cost Extension Prior Approval Waived (Research Terms and Conditions). Grants Online enforces this business rule. If your organization is not an eligible type, the link to create the No Cost Extension – Prior Approval Waived (Research Terms and Conditions) will be disabled. The following organization types are eligible for Research Terms and Conditions:

- Public/State Controlled Institution of Higher Education
- Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)
- Private Institution of Higher Education
- Individual
- For-Profit Organization (Other than Small Business) and Small Business
- Hispanic-serving Institutions, Alaska Native and Native Hawaiian Serving Institutions
- Historically Black Colleges and Universities and Tribally Controlled Colleges and Universities
- Non-domestic (non-US) Entity

The execution of the No Cost Extension - Prior Approval Waived (Research Terms and

Conditions) by the recipient is completely automatic in Grants Online. Once the notification is submitted to NOAA by the recipient's Authorized Representative, the new award end date is immediately reflected in Grants Online and in the ASAP system. Notifications are sent to the Program Officer and the Grants Officer of the new award end date. This action does not result in an amendment to the Award.

Resources

NOAA's Acquisition and Grants Home Page

<http://www.ago.noaa.gov/ago/index/cfm>

The grantee link includes information and links to policies, manuals, Grants.Gov, Grants Online, training, federal forms and the ASAP (Automated Standard Application Program). The Department of Treasury Financial Management Services ASAP allows grantee organizations receiving federal funds to draw from accounts pre-authorized by NOAA and other federal agencies.

NERRS Intranet

<https://www8.nos.noaa.gov/nerrsintranet/>

All guidance documents and reporting tools can be found on the intranet under the Grants and Performance Measurement tab within the 'NERRS Guidance, Policy and Planning Documents' section.

NERRS Research Database

<https://www8.nos.noaa.gov/nerrs/>

The NERRS Research Database houses reserve research and monitoring projects and products. Products should be entered using "add publication" function.

NERRS Performance Measure Database

<https://www8.nos.noaa.gov/ERDPM>

Reserves will submit all performance measures through the NERRS Performance Measures Database. Reports should be submitted in accordance with the Grants Online reporting timeline: reports are due thirty days after the reporting period ends. Reserve personnel can use the NERRS Performance Measures Database throughout the reporting period to before submitting performance measures reports to OCM.

Appendices

1. Performance Measure Guidance
2. NERRS Performance Measures Database Guidance Document for Reserve Users
3. Reporting Guidance for Recommendations and Evaluation Metrics



NATIONAL
ESTUARINE
RESEARCH
RESERVE
SYSTEM

RESERVE SYSTEM MANAGEMENT PLAN GUIDELINES AND RESOURCES

2012



TABLE OF CONTENTS

Introduction	1
Purpose of a Reserve Management Plan.....	1
Key changes from 2006 Reserve Management Plan Guidelines.....	2
Components of a Management Plan.....	3
How to Use these Guidelines.....	5
Part I: Process and Approach for Revising a Reserve Management Plan	6
The Process of Writing a Management Plan	6
Creating a Strategy for Plan Revision.....	7
Review and Approval Process.....	10
Following the Regulations.....	14
Adaptive Management Approach to Strategic Planning	16
What is Adaptive Management?.....	16
Why is Adaptive Management a Good Choice for the Reserve System?.....	17
Key Elements of Adaptive Management.....	17
Linking to Local and National Priorities.....	19
Preparing to Write a Strategic Plan	24
Strategic Planning Process.....	24
Identifying Program Target Audiences.....	25
Assessing Skills and Capacities of Reserve Programs.....	25
Developing Reserve Program Niches.....	30
Developing the Reserve Niche.....	31
Developing Shared Vision and Mission Statement & Goals, Objectives and Strategies.....	31
Part II: Guidance for Reserve Management Plan Components	32
Required and Optional Elements Checklist	33
Executive Summary	35
Introduction to the Reserve System	36
Introduction to the Reserve	40
History and Local Management of the Reserve.....	41
Ecological Attributes and Values.....	41
Social Attributes and Values.....	42

Archeological and Cultural Resources.....	42
Threats and Stressors.....	43
Reserve Boundary.....	45
Strategic Plan.....	52
Reserve Vision.....	52
Reserve Mission.....	52
Reserve Coastal Management Issues.....	52
Creating Relevant Goals.....	53
Creating Meaningful Objectives.....	53
Creating Clear Actions.....	55
Developing Practical Performance Measures.....	55
Reserve System Program Foundations.....	58
Research and Monitoring Program.....	59
Education Program.....	63
Coastal Training Program.....	65
Administrative Plan.....	67
Organization Framework and Management Authorities.....	67
Current Staff and Needs.....	68
Strategic Partnerships.....	68
Advisory Committees.....	69
Objectives and Strategies.....	70
Volunteer Plan (Optional).....	70
Vehicle and Vessel Plan (Optional).....	70
Communication Plan (Optional).....	71
Resource Protection Plan.....	72
State Management and Statutory Authorities.....	72
Allowable and Unallowable Uses.....	72
Surveillance and Enforcement.....	73
Resource Protection Challenges.....	73
Objectives and Strategies.....	73
Monitoring and Evaluation.....	74
Public Access and Visitor Use Plan.....	75
Current Public Access.....	75
Public Access Challenges.....	76
Public Access Opportunities and the Visitor Experience.....	76
Objective and Strategies.....	76
Monitoring and Evaluation.....	76
Facility Development and Improvement Plan.....	78
Purpose of Facilities and Construction Philosophies.....	78
Description of Current Facilities.....	79
Facility Challenges and Gaps.....	79

Planned Facilities.....	80
Facility Upgrades.....	84
Exhibits.....	85
Land Acquisition Plan.....	86
Acquisition Values.....	86
Priority Acquisition Areas.....	86
Priority Acquisition Areas Strategy.....	87
Resource Manipulation Plan.....	97
Current and Proposed Resource Manipulations.....	97
Restoration Plan.....	99
What is Restoration Ecology?.....	99
What is Restoration Science in the Reserve System?.....	99
Priority Restoration Areas.....	101
Priority Restoration Projects.....	102
V. Monitoring and Evaluation.....	102

Appendices

1. Memorandum of Understanding Template
2. Federal Consistency Template
3. Environmental Compliance Placeholder
4. Public Comment Template
5. Federal Register Notice Template
6. Summary of Climate Change Phenomena with Observed and Projected Changes
7. Summary of Observed and Projected Regional Climate-related Changes
8. Placeholder for National Estuarine Research Reserve System Climate Sensitivity Analysis
9. Conducting a Reserve Vulnerability Assessment
10. Planning for Sustainable Facilities
11. Reserve System Code of Federal Regulations
12. 2011-2016 Reserve System Strategic Plan
13. 2011-2016 NOAA Strategic Plan

Figures

1. Relationship of Reserve Management Plan Components.....	4
2. Adaptive Management Approach to Strategic Planning for the Reserve System.....	18
3. Strategic Planning Pyramid.....	24
4. SWOT Chart.....	25
5. Organization Niche.....	31
6. National Estuarine Research Reserve System Map.....	37
7. State of the Coast.....	40
8. North Inlet-Winyah Bay Core and Buffer.....	46
9. Organizational Relationship.....	68

Tables

INTRODUCTION

The National Estuarine Research Reserve System (Reserve System) is a network of 28 areas representing different biogeographic regions and estuarine types within the United States that are protected for long-term research, monitoring, education and coastal stewardship. Established by the Coastal Zone Management Act of 1972, as amended, the Reserve System is a partnership program between the National Oceanic and Atmospheric Administration and the coastal states. As part of this partnership, Federal regulations, [15 C.F.R. Part 921.13](#), require reserves to have a NOAA-approved management plan that is updated every five years. National Estuarine Research Reserve management plans serve as the foundation and guide for reserve activities and collectively they describe the capacities of the Reserve System. These documents can be used as potential source documents for other partner programs, e.g. National Estuary Program and Coastal Zone Management Program, as well as national efforts e.g. National Climate Assessment. NOAA's Estuarine Reserves Division (ERD) works collaboratively with each reserve to support the development and approval of their management plan to ensure compliance with Federal regulations and alignment with national priorities and programs.

PURPOSE OF A RESERVE MANAGEMENT PLAN

Reserves are increasingly confronted with anthropogenic and natural stressors while needing to plan for the continued protection and use of the reserve for research, education and public use. Reserves are also grappling with complex questions regarding new uses in or near reserves that may or may not be compatible with the Reserve System's mission. A thoughtful and comprehensive management plan will provide a foundation for addressing the challenges of protecting and managing a reserve. Hence, the purpose of a reserve management plan is to:

- Provide the vision and framework to guide reserve activities during a five year period;
 - Present opportunities to discuss reserve niche and strategic collaborations with partners;
 - Communicate how the reserve is addressing priority coastal management issues via their goals, objectives and strategies;
 - Highlight reserve priorities, and staff capabilities and needs, to address those priorities;
 - Demonstrate how system-wide programs are locally relevant and nationally significant;
 - Enable reserves and NOAA to track progress and realize opportunities for growth;
 - Prepare the reserves to acquire facilities construction and land acquisition funds.
-

KEY CHANGES FROM 2006 RESERVE MANAGEMENT PLAN GUIDELINES

Within the last six years almost all reserves have revised a management plan, providing significant experience and information to draw from regarding the process and content of management plans. Additionally, the Reserve System has grown and matured in the areas of strategic planning and program development and is addressing new challenges, such as climate change. This guidance aims to apply information gained and support the reserves in creating a management plan to meet today's challenges. Hence, there are several updates of note from "NERR Management Plan Guidelines 2006" including:

- This guidance promotes a **query-based approach** by providing thought-provoking questions to help reserves craft components of the management plan.
 - The Reserve System created the "2011-2016 Reserve System Strategic Plan" which outlines three focus areas: water quality, habitat protection, and climate change. While water quality and habitat protection have been a focus of the Reserve System since its inception, **climate change is a new focus**. A changing climate will have profound impacts on coastal resources, communities, and infrastructure. It will be imperative to understand impacts and consider options for adapting to and mitigating these impacts. Considering climate change in all aspects of planning and programming are emphasized and encouraged.
 - Coastal management within the context of these three focus areas is sufficiently complex and requires an **adaptive management approach**. This approach is emphasized and encouraged. Adaptive management allows for collaborative learning, application of management actions based on current knowledge, and evaluation of actions to lead to improve management and achievement of objectives.
 - Each reserve sector contributes to this adaptive management approach most effectively when expertise and assets are integrated to provide a complete assessment of the issues and solutions to coastal management challenges. The strategic plan, a key component of a management plan, illustrates how staff skills and assets can be collectively applied to meet these challenges. Creating an **integrated strategic plan** that leverages these skills and assets to address local priorities and system-wide goals is emphasized and encouraged.
 - While an integrated approach to planning is encouraged, it is still important to understand the different capacities of programs at the reserve. The **system-wide foundational** programs in research and monitoring, education and outreach, and coastal training help define reserve niche, provide context for why and how the reserve will address their coastal management issues, and support reserve goals by implementing integrated strategies. It is important to discuss these programs from a national and local context.
 - It is important to understand why the objectives within your plan have or have not been achieved during the five year period. This will inform future management choices and focus for revisions to the plan. Reserves are encouraged to **develop performance measures** to track program performance and outcomes. Performance measures should be directly related to reserve objective statements.
-

- Understanding both the **natural and social context of the reserve** is necessary to effectively manage the resources. Improved coastal management starts with educated citizens making informed choices about natural resources; hence, it is essential to understand the dynamics of both natural and human communities. This focus has been built into the “Introduction to the Reserve” section.
- **References and resources** are included in each section of the guidance that provides information, tools, and further guidance for adequately addressing that topic area.

COMPONENTS OF A MANAGEMENT PLAN

Per Federal regulations, [15 C.F.R. Part 921.13](#), management plans must describe the reserve’s most pressing coastal management issues; goals, objectives, and actions for addressing those issues; plans for administration, research, education/interpretation, public access, construction, acquisition, resource protection, and, if applicable, restoration and habitat manipulation; and include a memorandum of understanding between NOAA and the state agency.

Based on these regulations and Reserve System experience in creating and reviewing management plans, required and optional components are listed below. Details regarding required and optional information, as well as options for organizing this information can be found in Part Two: Guidance for Reserve Management Plan Components. A checklist for each required component, including subcomponents, is available at the beginning of Part Two.

Required Components	Optional Components
Executive Summary Introduction to the Reserve System Introduction to the Reserve Reserve Strategic Plan Program Foundations * Research and Monitoring Education Coastal Training Administrative Plan Resource Protection Plan Public Access and Visitor Use Plan Facility Development and Improvement Plan Acquisition Plan Resource Manipulation Plan (If applicable) Restoration Plan (If applicable) Appendices: •NERRS Regulations •Memorandum of Understanding between State Host Agency and NOAA •All Memorandums of Understanding between land managers within the Reserve •Federal Consistency Determination •Public involvement and comments *See Program Foundations Chapter for options regarding organization of this material	Communications Plan Volunteer Plan Vessel and Vehicle Plan Contingency or Hazard Response Plans Special Area Plans Species Lists

Figure 1 illustrates the relationship among reserve management plan components, within the context of the state and Reserve System, and how these components work together to meet reserve target audience needs. The information in the ‘Introduction to the Reserve System’ and ‘Introduction to the Reserve’ provide context for all subsequent components of the plan. The reserve strategic plan – reserve goals, objectives, and actions- is at the heart of the management plan. Reserve people (i.e. administration), infrastructure (i.e. facilities) and the management authorities that protect the reserve serve as foundations for accomplishing goals and objectives meeting the needs of reserve target audiences. Reserve research and monitoring, education, training, and stewardship sectors work together in an integrated fashion to support implementation of the strategic plan. Stewardship functions are captured within the research and monitoring, resource protection, public access, and land acquisition components, as well as optional restoration and resource manipulation components. The program foundations component captures consistent information for each system-wide program including context, capacity, delivery, needs, opportunities. And finally, it should be noted that reserve programs operate within the context of the Reserve System and state agency priorities. Evidence of alignment with these national and local priorities should be apparent throughout the plan.

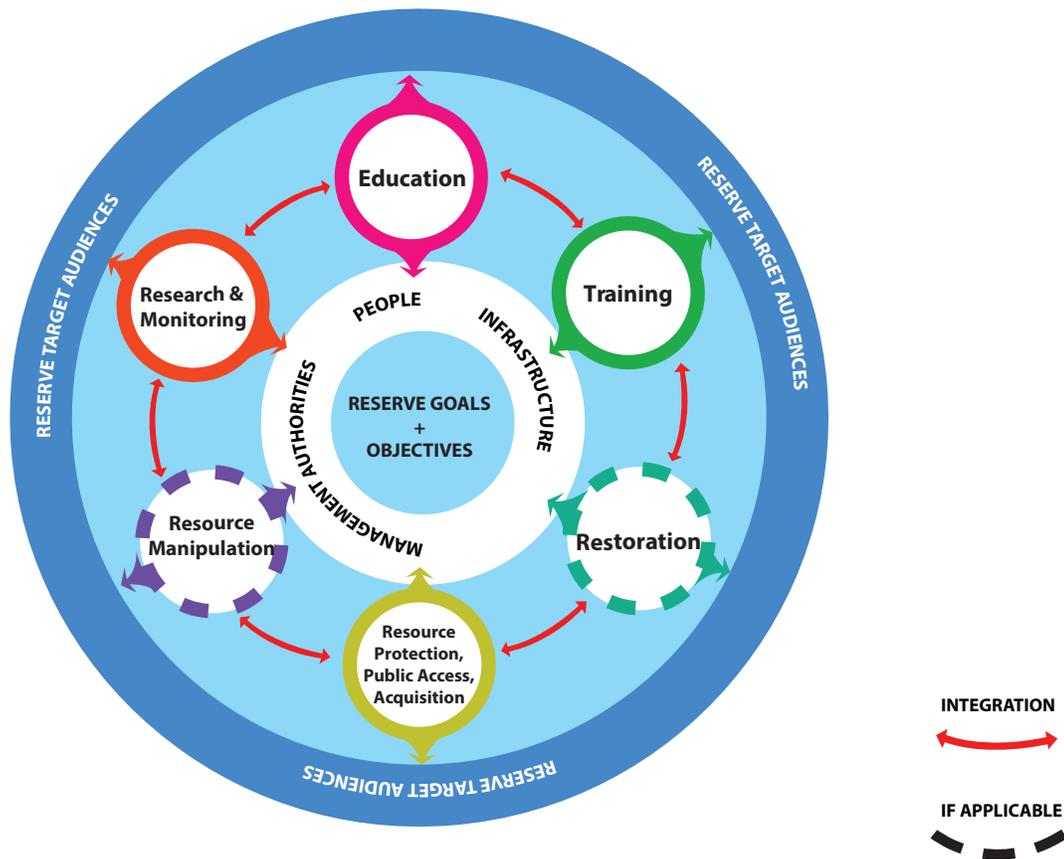


Figure 1. Relationship of Reserve Management Plan Components

HOW TO USE THESE GUIDELINES

These guidelines are broken into two parts. Each part uses a query based-approach to promote thinking about current status and opportunities. Some of these questions may be easy to answer, others challenging. Please address as many as possible in a robust, yet succinct way. ERD will use the questions in Part Two as a guide when reviewing the management plan.

Part One provides information about the process and timeline for writing a management plan, a suggested adaptive management framework for strategic planning, and how to prepare for writing an integrated strategic plan as part of the process for completing the management plan. The process and timeline provide key steps and considerations during development of the plan. The timeline provides required steps, who should undertake them and how long the steps generally take is provided. The adaptive management section provides a suggested way of thinking about the strategic planning process in a framework that supports use of baseline data and stakeholder information for which goals, objectives and actions are devised. It supports monitoring the implementation of objectives via development of targets and measures and using the information from this evaluation as a tool for collaborative learning to determine next steps, appropriate points for stakeholder engagement, and opportunities for communicating results and/or challenges. The section on preparing to write a strategic plan provides a suggested way for reserve staff to work together to understand their skills and capacities, target audiences and niche for programs and the reserve as a whole so that they can write an effective strategic plan.

Part Two provides specific information to support development of each component of the plan including:

■ questions to promote thinking about current status and opportunities ■ required and optional elements ■ case studies ■ references ■ tools and resources

Each management plan revision should be a close collaboration between NOAA and the reserve. The revision process should begin with a discussion between the NOAA ERD program specialist and reserve manager to discuss this guidance, approach to the plan, and timeline for completing the plan.

These guidelines can be found on the NERRS Intranet, under NERRS Guidance, Policy and Planning documents, sub-tab Management Plans. <https://www8.nos.noaa.gov/nerrsintranet/home.aspx>

PART I: PROCESS AND APPROACH FOR REVISING A RESERVE MANAGEMENT PLAN

Part One provides information regarding the process, timeline, and approach for writing a management plan. All of the sections within Part One are meant to provide information to prepare and guide the reserve in developing their management plan. With regard to the process of writing a management plan, key focus areas include creating a strategy for plan revision, managing the process, confirming priorities, planning strategically, achieving integration and engaging stakeholders. A process map and timeline is included that outlines steps and staff involved. Federal requirements are clearly articulated; these include federal consistency, environmental compliance, public involvement, and the approval process.

Part One provides an overview of adaptive management including why it is a good choice for the reserve system, key elements of the approach, and suggestions for linking local and national priorities in the context of an adaptive management planning approach.

And finally, Part One concludes with tips on how to prepare to write the reserve's strategic plan. The strategic plan is a key section within a management plan that outlines the vision, mission, goals, objectives, and actions the reserve will undertake during the five year period of the plan. It is important to prepare and organize information in an integrated way prior to writing the strategic plan. A framework is suggested for how reserve staff can work together to identify program target audiences, assess skills and capacities of reserve programs, and identify reserve program niches. These steps will lead to defining the reserve's niche and creating appropriate goals, objectives and strategies for the reserve. These steps will help ensure the reserve is focusing on their unique contributions, reducing duplication, and working across disciplines to achieve desired results.

THE PROCESS OF WRITING A MANAGEMENT PLAN

I. Creating a strategy for plan revision

As with any project, it will be helpful if reserves have a plan for how to approach the management plan revision. This includes a strategy for how to determine primary coastal management issues, reserve and program niche and impact, how to interact with the public throughout the process, and roles and responsibilities related to completing the plan. The next section on adaptive management provides a list of guiding questions that may be useful to help narrow the coastal management issues relevant to the reserve that also support national priorities. Writing a plan provides the opportunity to identify those issues, the impact the reserve can make in five years, and how the reserve will get there.

A. Managing the Process

Reserves may opt to develop their plans in-house, contract out, or potentially a combination of both may be applied. There are advantages and disadvantages to each approach.

If reserves choose to develop the plan without outside support, they have complete control over the process and the quality. However, it is very time consuming for the entire staff. To ensure a smooth process, reserves should assess whether their staff have the appropriate skills (writing, editing, project management, facilitation) and the time to dedicate to the project. The plan will benefit from a lead that establishes clear expectations, consistent writing assignments, and keeps the group working toward an agreed upon timeline. If chapters are to be written by separate staff, establish a common outline for those chapters before beginning to write and make sure an editor or the plan lead will be making revisions so that the document is consistent in style and voice.

Contracting out part or all of the process means that some of this work will be done by other people, saving reserve staff time. Reserve staff will still have a big time commitment to provide the content and perspectives needed, and if the reserve is unhappy with the contractor, the process can be expensive and unproductive. Interview contractors ahead of time, be clear about what you want help with (is it facilitating the strategic thinking, writing, editing, graphical support, etc.) and make sure they have the expertise to support you. Based on a 2007 survey of managers, over half of reserves employ outside expertise to complete their plans. Additional results of this survey regarding management plan process and content can be found on the NERRS intranet homepage, under NERRS Guidance, Policy and Planning documents, sub-tab Management Plans.

B. Confirming your priorities

Whether the reserve will craft the plan itself or work with a contractor, an important first step is to agree upon priorities that serve the reserve's unique niche and complement other efforts in the area. The next section "The Adaptive Management Approach" offers information and questions to facilitate thinking through the life cycle of the strategic plan and some potential first steps regarding identifying priorities:

1. Review existing state or agency priorities, the 2011-2016 Reserve System Strategic Plan, site-specific needs assessments, program strategies, site profiles, and other planning documents.
2. Use existing advisory groups or set up a Management Plan Advisory Group to ground truth coastal management issues and niche.
3. Use surveys and/or focus groups with thought leaders, surrounding community, key partners, etc. to determine coastal management issues and niche.

Narragansett Bay Reserve: Finding their niche

At the start of their management plan development process, the Narragansett Bay Reserve conducted a survey with the public and ran a series of focus groups with key partners to provide input on the niche of the Reserve in their watershed. For a description of their process and information about the questions they used, see the appendix in their 2010 Management Plan (http://www.nerrs.noaa.gov/Doc/PDF/Reserve/NAR_MgmtPlan.pdf).

C. Planning Strategically

Once the reserve identifies the priority issues and their niche, it is time to articulate the desired impact reserve programs will make during the five year life of the plan. There are many tools available to help organizations think strategically about where they want to be and what they want to change. Examples familiar to reserves include SWOT analysis, Logic Models, Structured Decision Making, issue-based planning, etc. ERD encourages reserves to research different options for approaching strategic planning, and to choose one appropriate for the reserve. Basic steps in the process are included within the “Preparing to Write a Strategic Plan” section of these guidelines. Reserve strategic thinking should lead to goals that speak to how the reserve will influence the most critical coastal management issues of the local area and how to strengthen programs over the next five years to address gaps between current activities and what needs to be done. The strategic plan component of the management plan should not be a list of current reserve activities; reserves should articulate desired impact and how it will get there. This is often a challenging process. It is important to involve staff and key partners, as appropriate, in this process. This phase of plan development may benefit from facilitation expertise.

D. Achieving Integration

If reserve strategic goals are focused on the impact the reserve will have on priority coastal management issues in the next five years, those goals are likely to require the effort of many staff members in a coordinated way. Historically, reserves have developed goal statements specific to foundational programs like research, education, training, stewardship, etc. and integrating across these programs has been difficult to do.

Chesapeake Bay, Virginia Reserve: Program based strategic planning

The Chesapeake Bay Virginia management plan is organized by foundational program chapters. Those chapters are linked to critical coastal management issues identified in the beginning of the plan through the use of symbols. Goals and objectives in each chapter have one or more symbol next to it, indicating which coastal management issue(s) that goal or objective supports. (http://www.nerrs.noaa.gov/Doc/PDF/Reserve/CBV_MgmtPlan.pdf)

While the NOAA regulations require plans for research, monitoring, and education, reserves are encouraged to create an integrated strategic plan whereby an objective is accomplished by multiple sector specific actions/strategies. As long as actions are associated with a sector or multiple sectors, this approach meets the regulations. If reserves start with the goals related to the coastal management issues and then think about how foundational programs and staff support those goals, there is a higher chance of being able to illustrate connections between your coastal management priorities and foundational programs.

San Francisco Bay and GTM Reserves: Issue-based strategic planning

The San Francisco Bay, California and GTM, FL management plans provide information on the programmatic descriptions separate from identification of issue areas with associated integrated goals, objectives and actions. This approach allows for clear leadership of actions to be provided within the context of an issue, goal and objective important to the entire reserve. (http://nerrs.noaa.gov/Doc/PDF/Reserve/SFB_MgmtPlan.pdf and http://nerrs.noaa.gov/Doc/PDF/Reserve/GTM_MgmtPlan.pdf)

E. Engaging Stakeholders

It is important to involve key stakeholders in the management plan revision process. Think about the people that can help the reserve accomplish its goals, close working partners, groups that may be doing similar or related work, and the reserve's biggest supporters or detractors. Try to develop a plan to involve these people at appropriate stages throughout the revision. Involving existing advisory boards or creating new ones specific to helping with this task can assist reserves to refine their local role, engage the public, guide programs, tap expertise in their area, identify duplicative efforts or opportunities to partner and increase effectiveness. Be clear with the advisory board members about what their role will be, what the time commitment will be, and how their input will be used. Keeping the group or groups engaged throughout the entire process or a distinct part of the process with multiple

exchanges will enhance the value of these groups. Strive to make meetings and working sessions interactive and keep the dialogue moving from one meeting to the next.

Engaging staff throughout the management plan process is critical to success; not only in completing the document but in implementing the plan. Be clear about time expectations and deliverables with staff in the beginning of the process, use good facilitation to make sure staff views are heard and incorporated into the plan, and set up regular meetings and/or agreed upon communication avenues to make sure everyone stays on track and is aware of new developments. Understanding the many demands upon staff time and creating incentives for participation will be important.

Public involvement is not only very useful in developing a management plan, but it is also required. Reserves may choose to recruit members of the public for advisory boards or you may choose to develop a separate public involvement strategy. Engaging the public throughout the process (e.g. a kick off public meeting, a meeting to go over a draft, and a final public comment meeting) will ensure that people feel a part of the process and have an opportunity to comment on the direction of the plan as it evolves and becomes more detailed. Consider interactive ways to solicit feedback and insight from the public such as focus groups, Q and A sessions, issue mapping, etc. Many social science and advanced facilitation techniques may be helpful to you in this process. If you anticipate any contentious issues to arise, ERD should be apprised and also recommends that the reserve get a neutral facilitator or mediator involved who has experience with public conflict resolution. Several resources to support the material within this section can be found in Part Two under the Strategic Plan component of the guidelines.

II. Review and Approval Process

A. Timeline

Revising a management plan may take varying amounts of time. Some will assess and modify continually, negating a large time investment when a revision is due. Others may have significant events or changes that require a more substantial time investment. Regardless, plan revisions should take ideally no more than 12-18 months. Revisions are due at the time of the previous plan's expiration date, which is five years after the current plan's notice of approval in the Federal Register. The timeline in Table 1 provides information about the expected tasks that require back and forth correspondence between the site and ERD throughout the process. Reserves are encouraged to develop a timeline for the management plan revision that includes these steps and any other steps you will need to take locally, including state requirements. ERD is a partner in completing a management plan; all correspondence and progress should be documented by both ERD and the reserve to ensure continuity of operations regardless of staff turnover.

Table 1. Reserve Management Plan Development Timeline

Action	Reviewers	Time
Reserve discusses strategy for plan development and creates timeline for project with ERD liaison	Reserve ERD program specialist ERD program specialist team lead	Variable: 12- 18 months before expected completion date
Reserve submits outline to ERD liaison	ERD program specialist ERD program specialist team lead	ERD program specialist will provide consolidated comments within two weeks of receipt of outline
Reserve involves stakeholders/public to inform plan contents	Reserve/stakeholders	Throughout the revision process
Reserve identifies all Memorandums of Understanding (MOU) that require updating and works with partners to update Note: the MOU between the state host agency and NOAA should follow the template provided in Appendix 1.	Reserve Program partners NOAA (if applicable): ERD program specialist will coordinate appropriate reviewers	Variable Note: MOUs can take several months to review due to legal review procedures.
Reserve develops plan	Reserve Stakeholders (optional) ERD program specialist	Variable
Reserve submits drafts of chapters for preliminary ERD feedback (optional)	ERD program specialist ERD program specialist team lead (optional)	ERD program specialist provides comments within two weeks per chapter submission
Reserve submits complete draft of plan to ERD electronically	ERD program specialist ERD program specialist team lead ERD research coordinator ERD education coordinator ERD coastal training program coordinator ERD stewardship coordinator General Counsel for Ocean Service (GCOS)	ERD program specialist will provide consolidated comments within two months of receipt of draft

Action	Reviewers	Time
Reserve submits complete draft to state agency	State agency representatives	Variable
Reserve submits complete draft to Coastal Zone Management Program representative for Federal Consistency certification Note: Please use Federal Consistency template found in Appendix 2.	Coastal Zone Management Program representative	Variable
ERD and Reserve manager/staff discuss comments on plan and resolve outstanding questions/issues based on NOAA, state agency and state CZMP reviews	ERD program specialist Reserve manager/staff	Variable
Reserve submits final plan for approval	ERD program specialist ERD program specialist team lead ERD chief	2-4 weeks
ERD conducts National Environmental Policy Act (NEPA) review of plan and prepares findings. A programmatic Environmental Assessment and guidance for additional topic specific assessments required (in preparation) can be found in Appendix 3.	ERD program specialist OCRM NEPA coordinator	Three months
ERD prepares a Federal Register Notice providing a 30 day public comment period on the plan and NEPA assessment	ERD program specialist ERD chief OCRM director	Two weeks
Reserve simultaneously prepares a similar notice for 30 day public comment period and posts draft plan to Reserve Website	Reserve manager/staff	Same week as above
Reserves are encouraged to hold a public meeting to brief stakeholders on the management plan	Reserve manager/staff	One day

Action	Reviewers	Time
Program specialist brief ERD chief	ERD program specialist ERD chief	One day
After the 30 day comment period, Reserve addresses all comments received and adds appendix to plan that outlines how comments were addressed. ERD amends, as applicable, the site specific environmental assessment. A template for public comment can be found in Appendix 4.	Reserve manager/staff ERD program specialist OCRM NEPA coordinator	Reserve and ERD work together to address comments within one month of receipt of comments
Reserve posts final plan on Reserve Website; ERD posts final plan on NERRS Website; Reserve submits updated boundary map to CDMO; NOAA approves final NEPA documentation.	Reserve manager/staff ERD program specialist ERD web developer OCRM NEPA Coordinator	One day
ERD prepares Federal Register Notice announcing the availability of the plan and sends to Federal Register for publication	ERD program specialist ERD chief OCRM director	Two weeks
ERD prepares and submits letter of approval to state host agency/university director cc: to appropriate state host agency and CMP representatives	ERD program specialist ERD chief OCRM director	One week

After all comments have been addressed, the plan is complete and ready for approval. NOAA will draft a Federal Register Notice announcing the availability of the approved plan. NOAA will send a letter to the state agency (cc: reserve) notifying them of the approval. The approval letter and Federal Register Notice is filed at OCRM. The day that the Federal Register Notice announcing the plan is published is the official management plan approval date. Plans should be made available on the reserve Website and will be posted on nerrs.noaa.gov.

III. Following the Regulations

Specific requirements involved in revising a management plan are referenced above. Details about these requirements including MOUs, NEPA, Federal Consistency, and the public involvement and plan approval processes include:

1. Memorandums of Understanding

A memorandum of understanding between the state and NOAA regarding the federal-state relationship that expresses the long-term commitment by the state to maintain and manage the reserve in accordance with Section 315 of the Coastal Zone Management Act, 16 U.S.C. 1461, and applicable regulations, is required. Additionally, all other necessary MOUs must be included in the plan (15 CFR Part 921.13 (a)(11)). Examples of additional MOUs are those agreements between the state agency and other entities that manage land within the reserve. These agreements should ensure that all lands within the reserve are managed for the purposes by which the reserve was established and are coordinating management activities. The template for the MOU between NOAA and the reserve host agency can be found in Appendix 1.

2. Federal Consistency

If the state has a federally approved coastal management program, the final plan must include a certification that the National Estuarine Research Reserve is consistent to the maximum extent practicable with that program. This is required by our regulations; see Sections 921.13 (a), 921.4(b) and 921.30(b). To satisfy this requirement, a letter that states that the plan is consistent with goals of the state Coastal Zone Management Program must be signed by appropriate state leadership. The process and template is outlined in Appendix 2. For additional information on Federal Consistency, please see <http://coastalmanagement.noaa.gov/consistency/welcome.html>

3. Environmental Compliance

The National Environmental Protection Act (NEPA) is the tool NOAA will use to evaluate environmental compliance with applicable rules and regulations. NEPA requires federal agencies to undertake an assessment of the environmental effects of their proposed actions prior to making decisions. The NEPA review can result in one of three determinations:

- (1) If the action is unlikely to cause any environmental harm, it is qualified as a Categorical Exclusion.
-

- (2) If it is uncertain if there will be environmental effects, an Environmental Assessment (EA) is conducted by NOAA.
- (3) If significant environmental effects may or will occur, an Environmental Impact Statement (EIS) must be prepared.

It has been determined via National Administrative Order 216-6 that management plans cannot be categorically excluded. It has also been determined by NOAA's General Counsel Ocean Service and NOAA's Program, Planning and Integration Division that ERD should develop a programmatic environmental assessment (PEA) to cover all reserve management plan revisions. ERD will work with OCRM's NEPA Coordinator to draft this assessment. Once this assessment is complete, it will be applied to all management plan revisions. It is anticipated the PEA will be completed during Federal Fiscal Year 2013. A boundary expansion will require an additional assessment before the plan can be approved. Plan components potentially requiring additional assessment, if and when funded by NOAA, include all construction activities (including trail development), land manipulation activities, invasive species control activities, restoration activities, and boundary changes. Each operations, construction, and land acquisition award will be assessed for environmental compliance and may require additional topic specific environmental assessments. Additional resources on NEPA can be found at <http://www.epa.gov/compliance/basics/nepa.html> and <http://www.nepa.noaa.gov/>.

4. Public Involvement

Community members are important constituents and partners to reserves. Developing a public involvement strategy for developing your management plan is important to engage the community in your work, seek their advice and expertise in your programming, and ensure that you are aware of any potential conflicts. Ideally, public input would be sought at several points in the process of developing a management plan and responses to those comments would be easily accessible to the public during the process. Management plan revisions will be published in the Federal Register Notice for a 30-day public review and comment period. The reserve is responsible for publishing an equivalent notice in the local media to provide a 30 day public comment period when the draft is done. If comments are submitted during the public review comment period, they should be addressed, as reasonable, and incorporated into the plan. These comments and a description of the entire public process should be included as an appendix of the final plan. An example can be found in Appendix 4.

5. Approval Process and Compliance

After all comments have been addressed, the plan is complete and ready for approval. NOAA will draft a Federal Register Notice announcing the availability of the approved plan. NOAA will send a letter to the state agency (cc: reserve) notifying them of the approval date. The day that the Federal Register Notice announcing the plan is released is the official management plan approval date. The plan is valid for five years from that date. The next draft plan should be submitted to NOAA's Estuarine Reserves Division prior to that expiration date. The approval letter and Federal Register Notice is filed at OCRM.

ADAPTIVE MANAGEMENT APPROACH TO STRATEGIC PLANNING

About this Section

The Reserve System addresses complex coastal management issues by integrating and applying research, education, training and stewardship expertise within the current network of 28 protected areas. The Reserve System is focusing investment and expertise to address climate change, water quality and habitat protection challenges. These nationally significant issues require specific and strategic local response best achieved through adaptive management whereby improved understanding of resources leads to improved management choices and ultimately improved protection of the resources. (Williams, et.al. 2009) This section provides a suggested adaptive management framework to help reserves row in the same direction as part of a partnership program and create meaningful management plans to strategically address national and local priorities. This section briefly explains what adaptive management is, why it is a good fit for the Reserve System, and describes the key elements of adaptive management.

I. What is adaptive management?

As defined by the National Research Council, adaptive management is “a decision process that promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood.” It is a structured approach for improving resource management by learning from these outcomes. (Sexton, et. al., 1999) This approach provides a practical path to linking learning with policy and implementation. (Stankey, 2005) While the concept of learning from experience and subsequently modifying behavior has been around for some time, the specific idea of adaptive management as an approach to natural resource management can be linked to the seminal work of Holling, Walters and Lee. (Holling, 1978; Walters, 1986; and Lee, 1993)

Adaptive management is much more than tracking actions and making management changes after failed policies or actions. (MacDonald, et.al., 1999) It involves exploring a number of potential actions to achieve management objectives based on current science, predicting the outcomes of those actions, implementing one or more of the actions, monitoring the success or lack thereof, and then applying the results or using that information to modify future actions. (Murray and Marmorek, 2004) Careful monitoring of outcomes both advances scientific understanding and helps adjust policies or operations as part of an iterative learning process. The iterative and collaborative learning process that emphasizes learning while doing is a key factor for success and requires partnerships of managers, scientists, educators and



“Ecosystems are not only more complex than we think; they’re more complex than we can think.”

–Egler

key stakeholders who learn together to create sustainable resource systems. (Bormann, et. al., 2006) Adaptive management seeks insights into the behavior of ecosystems, and it draws upon theories from ecosystem sciences, economics and social sciences, engineering, and other disciplines. Its true measure is in how well it helps meet environmental, social, and economic goals, increases scientific knowledge, and reduces tensions among stakeholders. (Water Science and Technology Board, et.al. 2004)

II. Why is adaptive management a good choice for the Reserve System?

The Reserve System has a mandate to protect and preserve estuarine environments for specific purposes and is well suited and designed to monitor and apply knowledge in a long-term capacity to improve coastal management. The Reserve System's place-based network provides an ideal platform for iterative decision-making whereby clear objectives can be identified, monitored, and adapted. Furthermore, reserves are well suited to undertake this approach given

the criteria and key elements discussed in the next section. We have a mandate, mission and institutional capacity to address many of the pressing coastal issues, such as climate change, that create implicit uncertainty in environmental conditions and hence a flexible approach to dealing with them.



“Knowledge has to be improved, challenged, and increased constantly, or it vanishes.”

–Drucker

III. Key elements of adaptive management

When applying an adaptive management approach, two key conditions should be met: 1) there must be a necessary mandate to take action in the face of uncertainty and the problem must be important enough to require action of some kind and 2) there must be institutional capacity and commitment to sustain an adaptive program, providing long-term measurement and evaluation of outcomes. (Lee, 1993; Wilhere, 2002) In addition to these two overarching conditions, there are additional elements or conditions for adaptive management to be successful. (Williams et.al. 2009) These are referenced in Figure 2 and include:

- 1) **Adequate baseline understanding and assumptions about the system** being managed as a foundation for learning. From this understanding, appropriate management objectives and actions can be determined.
- 2) **Clear and measureable management objectives** should be identified to measure progress and understand when it is appropriate to re-evaluate actions.
- 3) **Opportunities are present to select from a range of management actions** to meet objectives. The value of using current information based on prediction rather than assumption to make these determinations is important in an uncertain environment. Actions should be multi-disciplinary, participatory and should be evaluated for impacts and consequences. Additionally, where feasible, it is important to explain uncertainty using testable models- conceptual, qualitative and/or quantitative depending on capacity.

- 4) **Mechanisms for incorporating learning to inform future actions** should be used throughout the process. This assumes that the process, institutions and actions themselves are flexible enough to account for learning and the application of that knowledge. It is ideal when responses to management actions can be assessed before a decision about the next management action is made. Organizations must monitor, assess and re-evaluate.
- 5) **Monitoring can be established and maintained** to evaluate outcomes of actions. Adaptive management requires measuring the response to actions taken to determine if the program is on track to meet objectives or needs to re-evaluate actions.

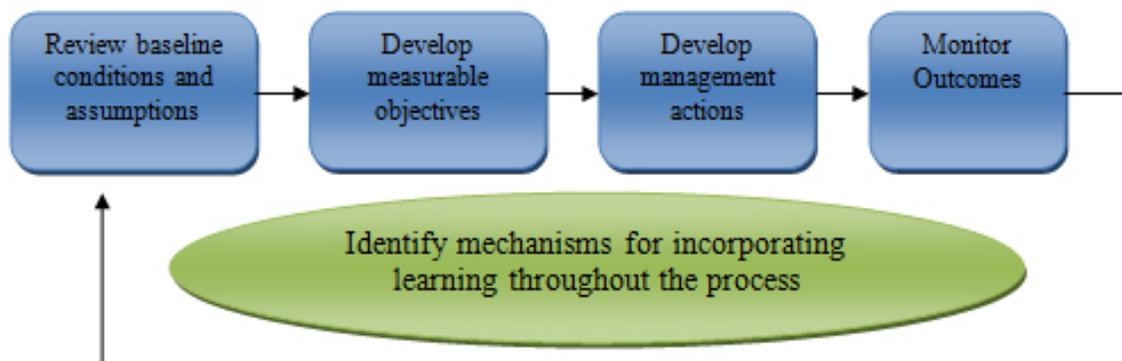


Figure 2. Adaptive Management Approach to Strategic Planning for the Reserve System

In order to create informed objectives, it is important to understand the baseline conditions and actions that have brought the system to its current state. Reserves have resources, such as ecological characterizations, SWMP data and syntheses, and stakeholder information from Education and Coastal Training Program activities, which provide a baseline of information to create measurable objectives, implement management strategies, monitor and assess their efficacy, communicate success and/or challenges and re-evaluate to determine subsequent management actions. It is important for practitioners and stakeholders to bring concepts from different disciplines during all phases of the adaptive management process to facilitate mutual learning and commitment to sustaining the resources being managed. This promotes the ability of all parties to gain scientific, social and economic knowledge and understanding, reduce potential tensions, and provide for an iterative and collaborative learning process to improve understanding and management over time. Flexibility is important in the decision-making process to revisit management actions in response to measured outcomes. (Doremus et.al. 2001) Figure 2 above shows how adaptive management is applied to the Reserve System strategic planning framework.

IV. Linking local and national priorities in the context of adaptive management planning

Using management plans and the concept of adaptive management is contingent on knowing what you want to achieve within the appropriate context. It is important to both understand the local reserve priorities, but also how these relate and contribute to the priorities of the state agency and the Reserve System. These priorities provide the context for reserve planning and opportunity to use the management plan to revisit the reserve niche every five years. This niche should result in work that is complementary, not duplicative, of other state and local programs. More information about defining niche within the context of local, state and national priorities is identified in the next section 'Preparing to Write a Strategic Plan'.

The questions below, as well as the information above on adaptive management, are good starting places to help the reserve conceptualize the scope and scale of the management plan and begin thinking strategically, preparing the reserve to identify niche, goals, and objectives.

Waquoit Bay Reserve: Aligning national and local priorities

The 2011-2016 Reserve System Strategic Plan lays out three areas for strategic focus and investment; one of these is water quality. For Waquoit Bay, this national priority is also a local priority; specifically nitrogen pollution. The communities surrounding Waquoit Bay are facing difficult decisions as they grow. Current septic systems are not doing a good enough job keeping nitrogen out of Cape Cod's waters; and this is leading to water pollution that threatens the environment, quality of life and the livelihood of this tourist destination. Over the past twenty years, the Waquoit Bay Reserve has attracted researchers from around the world to study the sources and impacts of nitrogen in the bay. CICEET and GRF projects have concentrated on this topic, reserve led monitoring is linked to this topic, and reserve led research and synthesis of research has contributed to a wealth of information and new questions. Reserve K-12 education programs, community education programs, and CTP have focused on bringing the science of nitrogen pollution to the public and are focusing on what people can do as citizens or as decision makers to be a part of (or find) the solution. Integrated work by staff at the reserve is addressing a locally important coastal management issue that contributes directly to the national priorities of the system. To learn more visit: www.waquoitbayreserve.org/index.aspx

- What are the expectations, mandates, and important goals of the state partner?
- What are the critical ongoing/existing estuarine environmental issues locally that are not covered by the partner goals?
- What are the local emerging issues or threats that are likely to become increasingly important in the next five years?
- What science, education, training, stewardship, or leadership is needed to address the most pressing local issues relevant to the reserve?
- Who else is working on these issues near the reserve?
- What are the working relationships with key state programs on these issues, such as the Coastal Management Program?
- What topics and functions are appropriate for reserve to work on given staff strengths, limitations or constraints, infrastructure, resources, and state partner priorities?

Because of the state-federal partnership inherent to the Reserve System, this means that management plans must articulate both how reserves address local coastal management issues and how local work also contributes to the national system. The 2011-2016 Reserve System Strategic Plan focuses its core strengths of research, stewardship, education, and training on three national priorities – climate change, habitat protection, and water quality.

Nationally, we are working toward all of the objectives stated in that plan. Some will be achieved through coordinated national programs, like the System-wide Monitoring Program. Others represent a collective vision for the work individual reserves do, such as implementing research projects that use reserves as sentinel sites for detecting and understanding the effects of climate on estuaries. It is unlikely that an individual reserve will address all of the objectives in the Reserve System Strategic Plan, but it is expected that a significant portion of the reserve's work contributes to the system wide goals and objectives. The following questions will help reserves begin thinking about how to align their plan to address goals and objectives within the Reserve System Strategic Plan:

- Which Reserve System Strategic Plan objectives and strategies can the reserve address well?
- How is the reserve addressing climate change, water quality and habitat issues? How are national programs like SWMP, CTP, GRFs, NSC and KEEP contributing to the gaps, stressors, and needs identified by the reserve? Could they better support local needs?
- What are the critical stressors, information needs or gaps, etc. related to habitat, water quality, and climate at your reserve? What is your role in addressing those gaps, both as a reserve and within your programs (research, education, training, etc.)?

References

- Bormann, B.T., D.C. Lee, A.R. Kiester, D.E. Busch, J.R. Martin, and R.W. Haynes. (2006) Adaptive Management and Regional Monitoring. Chapter 10 in: R.W. Haynes, B.T. Bormann, and J.R. Martin (Eds.). Northwest Forest Plan—the First Ten Years (1994-2003): Synthesis of Monitoring and Research Results. PNW GTR 651, USDA Forest Service, Pacific Northwest Research Station, Portland, OR.
- Doremus, H. (2001) Adaptive management, the Endangered Species Act, and the institutional challenges of “new age” environmental protection. *Washburn Law Journal* 41:50-89.
- Elliott, G., M. Chase, G. Geupel, and E. Cohen. (2004) Developing and Implementing an Adaptive Conservation Strategy: A Guide for Improving Adaptive Management and Sharing the Learning Among Conservation Practitioners. PRBO Conservation Science, CA.
- Hennessey, T.M. (1994) “Governance and Adaptive Management for Estuarine Ecosystems: the Case of Chesapeake Bay.” *Coastal Management*. Volume 22. Pgs. 119-145.
- Holling, C.S. (1978) *Adaptive Environmental Assessment and Management*. John Wiley and Sons, New York, NY.
- Kessler, W., Salwasser, H., Cartwright, C. and Kaplan, J. (1992) New Perspectives for Sustainable Natural Resources Management. *Ecological Applications*, 2(3), ppg. 221-225. Retrieved from <http://www.jstor.org/stable/1941856>.
- Lee, K.N. (1993) *Compass and Gyroscope: Integrating Science and Politics for the Environment*. Island Press, Washington, DC.
- MacDonald, G. B., J. Fraser, and P. Gray (editors) (1999) *Adaptive Management Forum: Linking Management and Science to Achieve Ecological Sustainability*. Ontario Ministry of Natural Resources, Peterborough, Ontario, Canada.
- Murray, C. and D.R. Marmorek (2004) Adaptive management: A science-based approach to managing ecosystems in the face of uncertainty. In: N.W.P. Munro, T.B. Herman, K. Beazley and P. Dearden (Eds.). *Making Ecosystem-based Management Work: Proceedings of the Fifth International Conference on Science and Management of Protected Areas*, Victoria, BC, May, 2003. Science and Management of Protected Areas Association, Wolfville, Nova Scotia. Available at: <http://www.essa.com>
- Stankey, G.H., R.N. Clark, and B.T. Bormann (2005) Adaptive management of natural resources: theory, concepts, and management institutions. PNW-GTR-654, USDA Forest Service, Pacific Northwest Research Station, Portland, OR.
-

Sexton, W.T., A. Malk, R.C. Szaro, and N. Johnson (editors) (1999) *Ecological Stewardship: A Common Reference for Ecosystem Management, Volume 3: Values, Social Dimensions, Economic Dimensions, Information Tools*. Elsevier Science, Oxford, UK.

Walters, C.J. (1986) *Adaptive Management of Renewable Resources*. Blackburn Press, Caldwell, NJ.

Water Science and Technology Board, Ocean Studies Board, Earth and Life Studies (2004) *Adaptive Management for Water Resources Project Planning*. National Research Council of the National Academies, The National Academies Press. Washington, D.C. Retrieved from the National Academies Press Website: <http://books.nap.edu>

Wilhere, G.F. (2002) Adaptive management in habitat conservation plans. *Conservation Biology* 16:20-29.

Williams, B.K, Szaro, R.C, and Shapiro, C.D. (2009) Department of Interior Adaptive Management Technical Guide. Adaptive Management Working Group. Retrieved from: <http://www.doi.gov/initiatives/AdaptiveManagement/>

Resources

[U.S. Fish and Wildlife Service Training at National Conservation Training Center](#)

[Introduction to Structured Decision-making](#): Training that provides an introduction to structured decision-making in the context of natural resource management challenges. The training also provides hands-on experience with decision tools, decision trees, multiple objective ranking techniques and expert panels covering critical thinking, logic, and reasoning strategies.

[Adaptive Management: Structured Decision Making for Recurrent Decisions](#): Training where adaptive management is framed within the context of structured decision making, with an emphasis on information and tools to address uncertainty regarding responses to management actions and the value of reducing uncertainty to improve management.

[Ecosystem-based Management Tools Network](#) provides focus questions, suggested reading, case studies, approaches, tools, and links to other core elements of ecosystem-based management tools network.

[Adaptive Management: A Tool for Conservation Practitioners](#) provides steps in the process and principles of adaptive management

[Adaptive Management Technical Guide](#) provides a scoping key and focus questions for successful implementation.

[Learning for Sustainability: Adaptive Management -Learning While Doing](#) provides information, guides and selected readings on the use and application of adaptive management with uncertainty – including selections on adaptive management increasing resiliency to climate change.

PREPARING TO WRITE A STRATEGIC PLAN

I. Strategic Planning Process

Strategic planning is a systematic process to assess an organization's direction and priorities. A good strategic planning process requires time and effort to gather and analyze data and trends to set a baseline of understanding; assess target audiences related to all program areas; identify organization niche and priority goals, objectives, and actions; implement actions to work towards meeting objectives; and monitor and evaluate progress towards them.

In order to do this effectively in the field of coastal management, reserves must understand and operate within the context of the social environment. This includes understanding the social, economic, political and cultural dynamics of the community in which the organization operates. Working with an understanding of these forces and engaging stakeholders from all realms throughout all stages is highly encouraged. This will be important for recognizing how the opportunities and challenges presented by the environment influence the reserve's ability to achieve its goals and objectives for its target audiences.

The strategic planning pyramid below identifies the elements of strategic planning from the initial step of assessing the target population to the final step of implementing and evaluating progress. All staff should participate in each step of this process to ensure ownership of the plan which ultimately leads to successful implementation.

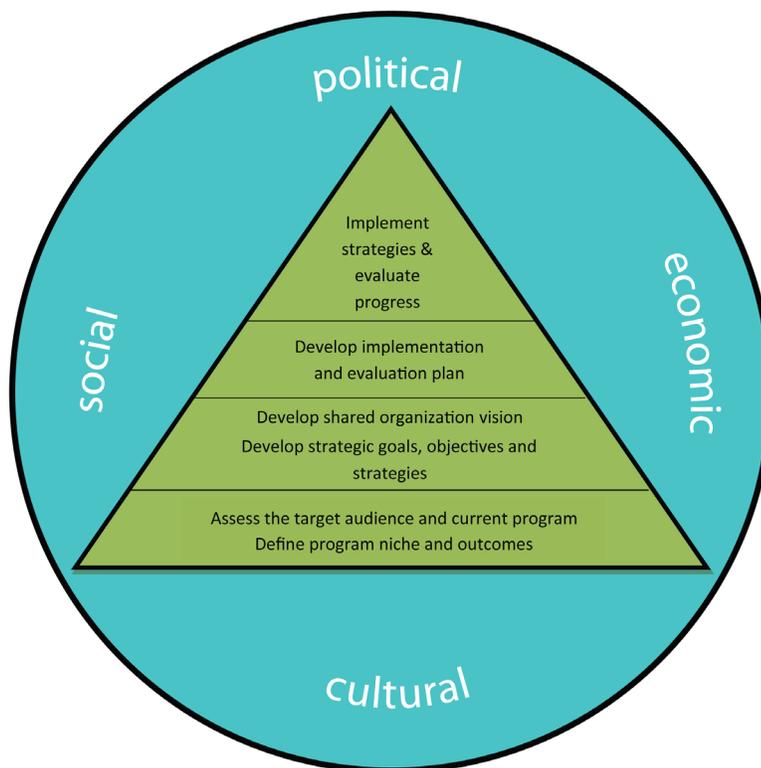


Figure 3. Strategic Planning Pyramid

II. Identifying Program Target Audiences

It is important to first identify the target audiences for a program's efforts. Target audiences may be within or outside the host agency and comprised of individuals who have the ability to influence and support the reserves' major resource issues. Each program at the reserve should assess their target audiences by understanding their skills and needs, as well as the activities and products currently employed to serve that audience. It is important to understand emerging issues and needs that these audience may need to address and/or influence. This step can be accomplished via formal needs assessments, focus groups, surveys, etc. Note: the state Coastal Management Program is a key partner in identifying audiences and an audience themselves.

III. Assessing Skills and Capacities of Reserve Programs

The next step should be to assess reserve programs skills and capacities as this will affect what can be realistically accomplished. One way to approach this step is via a SWOT (strengths, weaknesses, opportunities, and threats) analysis. Programs can answer certain questions to provide important information about program expertise, contributions to target audiences, trends, and skills the program may need in the future to be successful. (Mind Tools, 2009) Questions to inform this analysis include:

Strengths: What are the reserve program's unique skills and resources? What does the target audience view as the program's expertise? What trends can the program build on?

Weaknesses: What does the program lack that the target audience needs? What skills or resources do reserve programs need?

Opportunities: What can the reserve program offer that meets the needs of the target audience to effectively manage coastal resources? How are other programs addressing target audience needs?

Threats: Because of program weaknesses, what threatens reserve programs? What expertise do reserve programs lack to meet future target audience needs?



Figure 4. SWOT Chart

To complement this approach, ERD has developed questions for each system-wide program to help identify strengths, weaknesses, and opportunities to then identify the niche for each specific program relevant to reserve locales. The questions for each program are binned similarly and contain many of the same questions for consistency in approach; however, there are nuances between the programs based on the nature of the program. Additionally, suggested key documents are included as reference for each program when considering these questions.

A. Research and Monitoring Program

Priority Issues – What are the priority issues for your reserve that your research program can address? How did you determine them? Do they align with the broader issues being identified at your reserve for this plan? Do they align with the NERRS Strategic Plan, SWMP plan, and other System-wide documents?

Priority Audiences – How does the research program currently support reserve, coastal management program, local community, and regional science priorities? Who are the target audiences that interact with and benefit from the research program? How were these audiences identified? What do you know about the skills, abilities, and current level of knowledge of the target audiences?

Program Alignment and Delivery – How have you or do you plan to adopt and adapt system-wide programs (e.g. biological monitoring and sentinel sites)? How does the research program support and align with system-wide plans and efforts (e.g. Climate Change Initiative Implementation Plan, System-wide Monitoring Program Plan, Research and Monitoring Plan, Community Education efforts)? What major activities will the research program implement that will address the priority issues identified above within the next 5 years? How does the research program work with and build upon other programs/initiatives at the reserve and within the Reserve System (i.e. provide information for education products or programs)?

Program Needs and Gaps - What are the major program needs and gaps that may or may not be able to be addressed during the period of this management plan? How will these needs and gaps affect research programming and subsequent impacts to the research program?

Program Impacts – What are the major impacts and outcomes you envision as a result of research activities? What will human and natural communities gain from these activities?
Current and Anticipated Partnerships - Who are your partners and why do you partner with them? Who do you hope to partner with in the future? Do you partner with NOAA offices, other than ERD? If so, please describe. If not, are there opportunities to build partnerships?

Program Monitoring and Evaluation – How do you evaluate the success of your research program? What are your expected outcomes?

Dissemination of Program Results – How do you plan to communicate program impacts and results? Please be reminded that the current Reserve System Research Database provides you a method by which you can aggregate research projects to share. In this section, we are also interested in knowing what other mechanisms you have to disseminate program results and information beyond the audience immediately involved in the activities of the project, e.g. conferences, journal publications, newsletters, social media, etc.

Supporting Documents:

We recommend consultation of the following documents: 2011-2016 Reserve System Strategic Plan, Climate Change Implementation Plan, Research and Monitoring Plan, System-wide

Monitoring Program Plan, and Reserve System Sentinel Sites Program Guidance, Coastal Management Program Section 309 Assessment and Strategies.

B. Education Program

Priority Issues – What are the priority issues for your reserve that your education program can address? How did you determine them? Do they align with the broader issues identified within the management plan and 2011-2016 Reserve System Strategic Plan? What recommendations from your MA and NA will you implement that will further your goals to grow, strengthen and/or expand a K-12 program in your area (district, county, coastal area, state, region, etc.)?

Program Context – What have you learned since the last management plan that has affected this plan? What have you learned, after completing a market analysis and needs assessment, which has affected this plan? Information on current and projected population data is also important in setting programmatic context. What is your program's geographic scope? What is the total population of the audience you plan to target? What percentage of that population do you plan to target within the next 5 years? What do you know in terms of (1) your current reach (number of counties, districts, and in-land areas), (2) the areas you plan to target with your distinct programs and (3) why?

Priority Audiences – Who are the target audiences that interact with and benefit from the education program? How were these audiences identified? What do you know about the skills, abilities, and current level of knowledge of the target audiences? Are underserved and underrepresented populations a target audience for your programs? Most reserves can lump their education programs into one or several of the following program categories, serving different target audiences: professional development programs, students programs, public outreach programs, and/or community education programs. Please consider how best to distinguish these target audiences and the differences in how you plan to serve them in this section of the management plan.

Program Alignment and Delivery – How have you or do you plan to adopt and adapt system-wide programs, for example, K-12 Estuary Education Program, and incorporate it as part of your educational programming? How does the education program support and align with system-wide plans and efforts (e.g. Climate Change Implementation Plan, SWMP Plan, Research and Monitoring Plan)? What major activities will you implement that will address the priority issues you identified above within the next 5 years? What methodologies do you plan to employ in your program? How do you work with and build upon other programs/initiatives at the reserve and within the Reserve System (i.e. specific reserve research products that are used)?

Program Needs and Gaps – What are the major program needs and gaps that may or may not be able to be addressed during the period of this management plan? How will these needs and gaps affect potential programming and subsequent impacts?

Program Impacts – What are the major impacts and outcomes you envision as a result of education activities? What will human and natural communities gain from these activities? What is the desired change in the target audience's behavior?

Current and Anticipated Partnerships - Who are your partners and why do you partner with them? Who do you hope to partner with in the future? Do you partner with NOAA offices? If so, please describe. If not, are there opportunities to build partnerships? We highly recommend outlining project partners such as curriculum coordinators, school principals, state science teacher associations, teachers, supervisors, department chairs, state science supervisors, among other key education administrators.

Program Monitoring and Evaluation – How do you evaluate your success? Have you developed a logic model for your program? Do you have an evaluation plan in place? What are your expected outcomes within the next 5 years?

Dissemination of Program Results – How do you plan to communicate program impacts and results? Please be reminded that the current Reserve System Performance Measure Database provides you a method by which you can share your success stories and program results with other reserves. In this section, we are also interested in knowing what other mechanisms you have to disseminate your stories beyond the audience immediately involved in the activities of the project. Are you planning to present at local, regional or national education conferences? If so, which ones? Do you have a newsletter? Do you use social media to communicate? Will you publish your results in a journal, if so, which one(s)?

Other Considerations:

Guiding principles used in the design and implementation of reserve education programs:

- Educate about estuaries holistically to include ecological, cultural, historical, and scientific related facts and concepts
- Promote a sense of stewardship and individual responsibility
- Address coastal issues from a local, state, regional, national, and global perspective
- Approach estuary education through a perspective that includes watersheds, and biogeographic regions
- Increase understanding and appreciation of the Reserve System, research conducted at reserves and the use of System-wide Monitoring Program data

Supporting Documents:

We recommend consultation of the following documents: 2011-2016 Reserve System Strategic Plan; K-12 Estuary Education Program (KEEP) Framework document; Teachers on the Estuary Program Description Community Education Framework Document; Education Sector Performance Measurement Guidance; and the NOAA Education Strategic Plan 2009-2029. For your reference, all approved Education Program Descriptions can be found on the Reserve System Intranet. Additional reserve system guiding documents that may be appropriate references in this section include the Climate Change Implementation Plan, System-wide Monitoring Program Plan, Reserve System Sentinel Sites Program Guidance. Coastal Management reference documents include the Coastal Management Program Section 309 Assessment and Strategies.

C. Coastal Training Program

The CTP Program Strategy should provide much of the substance of this section, especially if the Program Strategy was developed in an integrated manner with other reserve programs and assets.

Priority Issues – What are the priority issues for your reserve that your coastal training program can address? How did you determine them? Do they align with the broader issues identified within the management plan and 2011-2016 Reserve System Strategic Plan?

Program Context – What have you learned since the last management plan that has affected your ideas for this plan? What have you learned, after completing a market analysis and needs assessment, which has affected your ideas for this plan? What is the geographic scope for the program and why?

Priority Audiences – Who are the target audiences that interact with and benefit from the CTP? How were these audiences identified? What do you know about the skills, abilities, and current level of knowledge of the target audiences?

Program Alignment and Delivery – How have you or do you plan to adopt and adapt system-wide programs (e.g. CTP)? How does the coastal training program support and align with system-wide plans and efforts (e.g. Climate Change Implementation Plan, SWMP Plan, Research and Monitoring Plan, Community Education) What major activities will you implement that will address the priority issues you've identified within the next 5 years? What methodologies do you plan to employ in your training? How do you work with and build upon other programs/initiatives at the reserve and within the Reserve System (i.e. specific reserve research products that are used)?

Program Impacts - What are the major impacts and outcomes you envision as a result of training activities? What will human and natural communities gain from these activities? What is the desired change in the target audience's behavior?

Program Needs and Gaps - What are the major program needs and gaps that may or may not be able to be addressed during the period of this management plan? How will these needs and gaps affect potential programming and subsequent impacts? What training gaps are identified and required to address issues in the next 5 years?

Current and Anticipated Partnerships - Who are your partners and why do you partner with them? Who do you hope to partner with in the future? Do you partner with NOAA offices? If not, how might you build better partnerships in the future?

Program Monitoring and Evaluation – How do you evaluate the success of your CTP? Have you developed a logic model for your program? What are your expected outcomes?

Dissemination of Program Results – How do you plan to communicate program impacts and results? Please be reminded that the current Reserve System Performance Measure

Database provides you a method by which you can share your success stories and program results with other reserves. In this section, we are also interested in knowing what other mechanisms you have to disseminate your stories beyond the audience immediately involved in the activities of the project. Are you planning to present at local, regional or national conferences? If so, which ones? Do you have a newsletter? Do you use social media to communicate? Will you publish results in a journal? If so, which ones?

Supporting Documents:

We recommend consultation of the following documents: 2011-2016 Reserve System Strategic Plan, Climate Change Implementation Plan, System-wide Monitoring Program Plan, and Reserve System Sentinel Sites Program Guidance, and Coastal Management Program Section 309 Assessment and Strategies. For your reference, all approved CTP Program Strategies can be found on the Reserve System Intranet.

IV. Developing Reserve Program Niches

Assessing the information above allows **each program to develop their niche**, the intersection where the capabilities and activities of the program are uniquely suited to meet the needs of the target audience (Figure 5). This information should be shared with all reserve staff, ideally in a meeting where all programs are present and can explain the information and discuss how they can work together collectively.

Reserve Niche

The unique suite of functions the reserve provides to meet target audience needs that are not met by others.

Where's stewardship?

Due to the complexity and variability of how stewardship programs are focused and operated at each reserve, this program has not been identified as system-wide program with specific program niche questions as was done for research, education and coastal training. Stewardship functions are captured within the research and monitoring, resource protection, public access, and land acquisition components, as well as optional restoration and resource manipulation components of a management plan. The skills and assets of the stewardship staff are applicable and inter-related to all other components of reserve management. Figure 1, Relationship of Reserve Management Plan Components, illustrates how the functions of stewardship are manifested in the planning paradigm. Reserves should answer questions for the stewardship program similar to those for research and monitoring, education, and training.

What about other programs?

This guidance is only focusing on the system-wide programs for the reserve system. While there are several other programs at the reserve that will contribute to this strategic planning process, ERD is only providing thought questions for those programs with consistent

processes, protocols and evaluation mechanisms. It is highly advised that additional programs come together and ask similar questions to determine program niche. The approach should be appropriate and flexible for each reserve's structure.

V. Developing the Reserve Niche

When each program understands their niche, the reserve can synthesize these niches to **develop the niche of the reserve**. The program's combined efforts meet the needs of a wider, complete target audience. It is important to understand the unique role the reserve will play in meeting target audience needs as there may be several providers offering similar products and services. It is beneficial to either partner with other organizations or focus unique skills and services of the reserve to meet specific target audience needs.

Questions to inform niche development include:

What will the target audiences needs be in the future? Which target audience needs can be filled by other organizations? Based on program

strengths, which needs can the programs best meet? What are the unique products and services the reserve offers that the target audiences cannot get elsewhere?

VI. Developing Shared Vision and Mission Statements & Goals, Objectives and Actions

Once a shared organizational niche is determined, the reserve will develop a shared vision, mission, goals, objectives and actions, culminating into the strategic plan. This is further discussed in Part II in the Strategic Plan element.

Figure 5. Organization Niche



PART II: GUIDANCE FOR RESERVE MANAGEMENT PLAN COMPONENTS

Part Two provides information for developing each component of a reserve management plan. Each section provides guidance and supporting references, resources, and case studies to help illustrate the content required for that component. Each section contains a checklist of required and optional elements, questions to inform those elements, as well as resources and references to support crafting the elements. An overall elements checklist is provided where optional elements are indicated by ♦. This checklist is not meant to serve as a table of contents for the plan, but may be used as such.

Organization of required components, and elements within components, may be ordered to suit the reserve's needs. All required elements must be included in the plan and follow a logical progression so that they can be easily identified and understood. The questions provided in each section are meant to be thought provoking. Some may be easy to answer within the plan, others may prove more challenging. Reserves should address these questions to the best of their ability and use them as a guide.

With regard to the program foundations component, elements within this component can be organized in one chapter or within separate chapters for Research and Monitoring, Education, and Training depending on how the reserve decides to organize the plan. With regard to the strategic plan, it should be clear which sector is leading an action. It is suggested that each objective be lead by a sector to coordinate multi-sector actions and evaluate progress. Reserves may choose how they would like to organize information within the strategic plan and program foundations element.

Required and Optional Elements Checklist

◆ indicates an optional element

<p>Executive Summary</p> <ul style="list-style-type: none"> _ Plan purpose and scope _ Reserve context <ul style="list-style-type: none"> _ Acreage _ Location of reserve _ Boundary modification (if applicable) _ Priority coastal management issues _ Reserve niche and goals _ Reserve program descriptions <p>Introduction to Reserve System</p> <ul style="list-style-type: none"> _ Mandatory Text <p>Introduction to the Reserve</p> <ul style="list-style-type: none"> _ History and local management _ Ecological attributes <ul style="list-style-type: none"> _ Geomorphology _ Hydrology _ Climate and weather _ Key habitats and species _ Social attributes and values <ul style="list-style-type: none"> _ Population demographics _ Jobs and employment trends _ Ecosystem service valuation ◆ _ Archaeological and cultural resources <ul style="list-style-type: none"> _ Archaeological sites _ Cultural sites or resources _ Value of resources _ Threats and Stressors <ul style="list-style-type: none"> _ Natural and anthropogenic stressors _ Climate phenomena and impacts _ Reserve sensitivity to impacts _ Reserve vulnerability ◆ _ Boundary description <ul style="list-style-type: none"> _ Core and buffer rationale _ Boundary maps _ Core and buffer _ Land ownership _ Habitat types _ Land use type 	<ul style="list-style-type: none"> _ Targeted watershed map including land use and land cover <ul style="list-style-type: none"> _ Boundary expansion rationale and GIS layers (if applicable) <p>Reserve Strategic Plan</p> <ul style="list-style-type: none"> _ Vision _ Mission _ Priority coastal management issues _ Goals, objectives, and actions _ Performance measures for each objective ◆ <p>Program Foundations</p> <p>Research and Monitoring</p> <ul style="list-style-type: none"> _ Mandatory system-wide text _ Program Context _ Program Capacities _ Program Delivery _ Needs and Opportunities _ Research related objectives and actions ◆ _ Monitoring and evaluation strategies ◆ <p>Education</p> <ul style="list-style-type: none"> _ Mandatory system-wide text _ Program Context _ Program Capacities _ Program Delivery _ Needs and Opportunities _ Education related objectives and actions ◆ _ Monitoring and evaluation strategies ◆ <p>Training</p> <ul style="list-style-type: none"> _ Mandatory system-wide text _ Program Context _ Program Capacities _ Program Delivery _ Needs and Opportunities _ Training related objectives and actions ◆ _ Monitoring and evaluation strategies ◆
---	---

<p>Administrative Plan</p> <ul style="list-style-type: none"> _ Organizational framework _ Current staffing and needs _ Strategic partnerships _ Advisory committees _ Administrative objectives and actions _ Volunteer plan ♦ _ Vessel and vehicle plan ♦ _ Communication plan ♦ <p>Resource Protection Plan</p> <ul style="list-style-type: none"> _ Management Authorities _ Allowable and unallowable uses _ Map of allowable uses _ Surveillance and enforcement capacities _ Resource protection challenges _ Resource protection objectives and actions ♦ _ Monitoring and evaluation strategies ♦ <p>Public Access and Visitor Use Plan</p> <ul style="list-style-type: none"> _ Current public access _ Map of public access points _ Public access challenges _ Public access and visitor experience opportunities _ Public access objectives and actions ♦ _ Monitoring and evaluation strategies ♦ <p>Facility Development and Improvement Plan</p> <ul style="list-style-type: none"> _ Purpose of facilities _ Current facilities _ Map of facility locations _ Facility challenges and gaps _ Planned facilities, facility upgrades, and exhibits _ Climate and non-climate stressors _ Facility descriptions _ Operations and maintenance manual as appendix ♦ _ Long-term facility plan as appendix ♦ 	<p>Land Acquisition Plan</p> <ul style="list-style-type: none"> _ Reserve Acquisition Values _ Priority Acquisition Areas _ Description of acquisition areas _ Map of acquisition areas _ Prioritization process _ Climate and non-climate stressors _ Map of non-ecological acquisition values within priority areas ♦ _ Priority Areas Acquisition Strategy _ Tract acquisition strategy _ Tract ecological and/or programmatic values _ Preferred methods for establishing state control _ Fair market value estimates _ Potential acquisition partners _ Funding sources _ Estimated acquisition timeline _ Map detailing land uses on public and private tracts outside the reserve boundaries ♦ _ Management and/or stewardship considerations for acquisition priorities ♦ _ Description of collaborative process used in joint acquisition projects ♦ <p>Resource Manipulation Plan (if applicable)</p> <ul style="list-style-type: none"> _ Current and proposed resource manipulation activities _ Map of manipulation activities _ Permitting/approval requirements _ Climate and non-climate stressors _ Current and potential partners _ Impacts of activities _ Monitoring and evaluation strategies ♦ <p>Restoration Plan (if applicable)</p> <ul style="list-style-type: none"> _ Priority restoration areas _ Description of restoration areas/habitats _ Map of restoration areas _ Climate and non-climate stressors _ Prioritization process and criteria _ Priority restoration projects _ Acres and outcomes _ Partners _ Monitoring and evaluation strategies ♦
---	---

EXECUTIVE SUMMARY

About this Section

The executive summary should provide an overview of what readers will find in the plan, identifying all elements per Federal Code of Regulations 15 CFR 921.13. It should define the purpose and scope of the plan, describe reserve context, identify priority coastal zone management issues the reserve will address, and provide an overview of the goals and objectives, as well as indicate the programs employed to address the goals and objectives.

Plan Contents

I. Plan Purpose and Scope

This section should illustrate the purpose and scope of the plan and provide the national and local context for the plan. This section should outline:

- The lifespan and geographic scope of the plan
- The priorities, general approach and how the reserve will measure progress
- The intersection with state, regional and local partner goals, plans and programs

II. Reserve Context

This section should describe reserve location and administrative structure to provide a sense of place and context for reserve work. This section should outline:

- Reserve designation date, acreage, general location, and lead state agency
- Primary influences on the reserve (see Figure 3)
- Reserve's role in addressing coastal management issues and context within system
- Expansion, if applicable, including acres added, where it will be added, value of the addition, and the total acreage of the reserve after the boundary expansion

III. Coastal Management Issues and Reserve Goals

This section should outline the priority coastal management issues the reserve is addressing, as well as identify the reserve's niche, and goals.

IV. Reserve Programs

This section should provide a brief overview of reserve programs and how they will broadly contribute and coordinate to achieve the goals. (See Figure 1, page 4)

Executive Summary

- _Purpose and Scope
- _Reserve Context
 - _Designation date and acreage
 - _State agency
 - _Location of reserve
 - _Boundary modification (if applicable)
- _Priority coastal management issues
- _Reserve Niche
- _Reserve Goals and Objectives
- _Reserve Programs

INTRODUCTION TO THE NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM

About this Section

The following text should be included verbatim in the management plan to ensure that all reserves are consistently describing the framework for the Reserve System. This section includes information about the goals of the Reserve System, how reserves are designated and described, and how they work administratively as single units and as a system.

Plan Contents

This section contains mandatory text which must be used verbatim in the plan to ensure a level of consistency when discussing the Reserve System.

(Mandatory text begin)

Introduction to the National Estuarine Research Reserve System

The National Estuarine Reserve System was created by the Coastal Zone Management Act of 1972, as amended, to augment the National Coastal Zone Management Program which is dedicated to comprehensive, sustainable management of the nation's coasts.

The Reserve System is a network of protected areas representative of the various biogeographic regions and estuarine types in the United States. Reserves are established for long-term research, education and interpretation to promote informed management of the Nation's estuaries and coastal habitats. (15 C.F.R. Part 921.1(a)) The Reserve System currently consists of 28 reserves in 23 states and territories, protecting over one million acres of estuarine lands and waters. (Figure 6) The Reserve System is a partnership program between the National Oceanic and Atmospheric Administration (NOAA) and the coastal states. NOAA provides funding, national guidance and technical assistance. The state partner manages reserve resources on daily basis working collaboratively with local and regional partners.

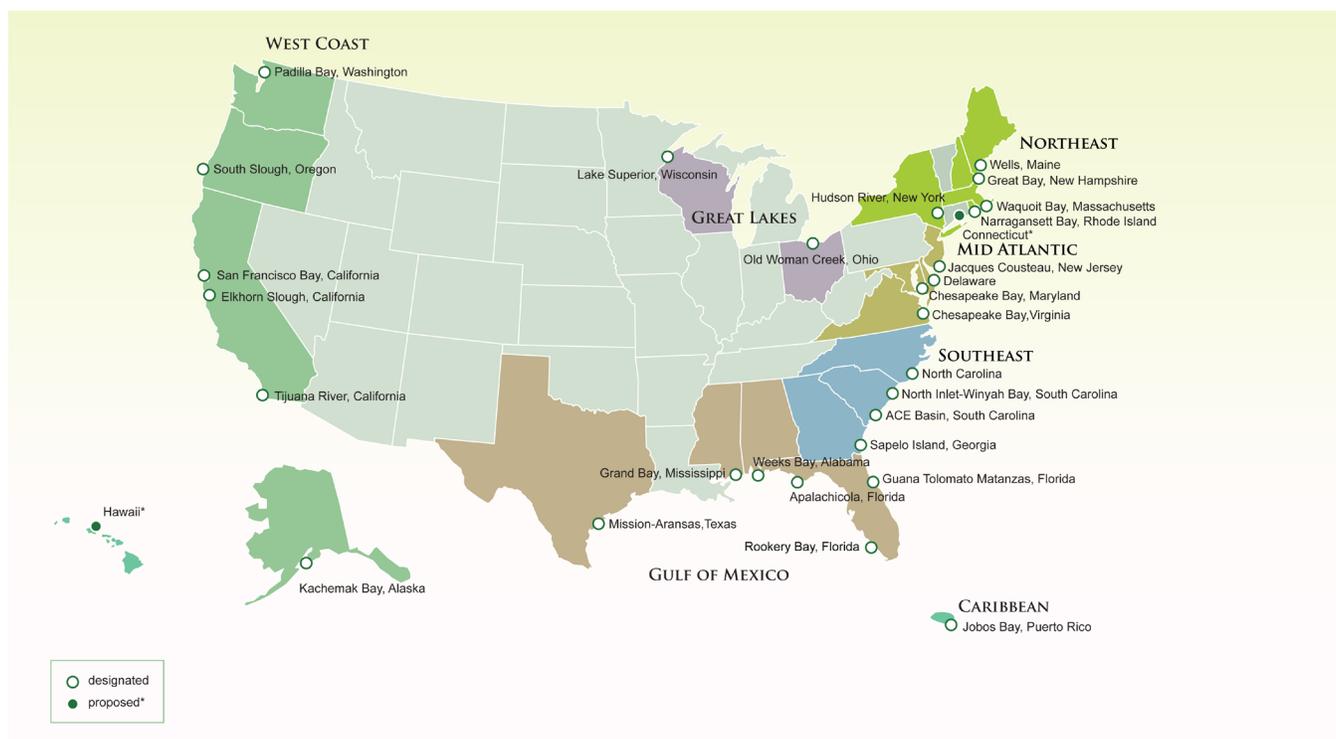


Figure 6. National Estuarine Research Reserve System Map

National Estuarine Research Reserve System Strategic Goals

Estuaries are biologically rich, economically valuable, and highly vulnerable ecosystems. The vision and mission of the Reserve System reflect the importance of these systems within our communities.

Vision: Resilient estuaries and coastal watersheds where human and natural communities thrive.

Mission: To practice and promote stewardship of coasts and estuaries through innovative research, education, and training using a place-based system of protected areas.

The program goals, per Federal regulations 15 C.F.R. Part 921.1(b), outline five specific goals for the Reserve System:

1. Ensure a stable environment for research through long-term protection of National Estuarine Research Reserve resources;
2. Address coastal management issues identified as significant through coordinated estuarine research within the System;
3. Enhance public awareness and understanding of estuarine areas and provide suitable opportunities for public education and interpretation;
4. Promote Federal, state, public and private use of one or more Reserves within the System when such entities conduct estuarine research; and

5. Conduct and coordinate estuarine research within the System, gathering and making available information necessary for improved understanding and management of estuarine areas.

These foundational goals are complemented by those that are systematically set by the program every five years. Strategic planning has been an integral part of the National Estuarine Research Reserve System for nearly twenty years. The planning process is designed to bridge national program direction with local coastal management needs through a representative and participatory process that supports NOAA's mission of science, service, and stewardship. The 2011-2016 Reserve System Strategic Plan focuses reserve core strengths of research, education, and training on three core issues: climate change, habitat protection, and water quality. The Reserve System Strategic Plan Goals are:

- 1. Protected Places:** Estuaries and coastal watersheds are better protected and managed by implementing place-based approaches at reserves.
- 2. Science:** National Estuarine Research Reserve System scientific investigations improve understanding and inform decisions affecting estuaries and coastal watersheds.
- 3. People:** National Estuarine Research Reserve System education and training increases participants' environmental literacy and ability to make science-based decisions related to estuaries and coastal watersheds.

Biogeographic Regions and Boundaries of the National Estuarine Research Reserve System

NOAA has identified eleven distinct biogeographic regions and 29 subregions in the United States, each of which contains several types of estuarine ecosystems (15 C.F.R. Part 921, Appendix I and II). When complete, the Reserve System will contain examples of estuarine hydrologic and biological types characteristic of each biogeographic region. As of 2012, the Reserve System includes 28 reserves and two states in the process of designating a reserve.

Reserve boundary size will vary greatly depending on the nature of the ecosystem. Boundaries must include an adequate portion of the key land and water areas of the natural system to approximate an ecological unit and to ensure effective conservation. Reserve boundaries encompass areas for which adequate state control has or will be established by the managing entity over human activities occurring within the reserve. Reserve boundaries include a "core" area which is comprised of key land and water encompassing resources representative of the total ecosystem, which if compromised could endanger the research objectives of the reserve, as well as a "buffer" area designed to protect the core area and provide additional protection for estuarine-dependent species, including those that are rare or endangered. Buffer areas may also include areas necessary for facilities required for research and interpretation. Additionally, buffer areas are identified to accommodate a shift of the core area as a result of biological, ecological or geo-morphological change which reasonably could be expected to occur. (15 C.F.R. Part 921.11 (c)(3))

National Estuarine Research Reserve Administrative Framework

The process for federal designation of a National Estuarine Research Reserve has many steps and involves many individuals and organizations. While each reserve is a partnership program between NOAA and a coastal state, there are many entities that collaborate to support designation of a reserve. Other partners include federal and state agencies, non-profit groups, universities and members of the local community. For more information on the designation process see nerrs.noaa.gov/background.

Upon designation, the reserve implements the approved management plan and is eligible for NOAA financial assistance on a cost-share basis with the state. A reserve may apply to NOAA's Estuarine Reserves Division for funds to help support implementation of the management plan largely funding operations, research, monitoring, education/interpretation, training, stewardship, development projects, facility construction, and land acquisition. Management plans provide a vision and framework to guide reserve activities during a five year period and enable the reserves and NOAA to track progress and realize opportunities for growth. Each management plan contains the reserve goals, objectives, and strategies supported by programs focused on research and monitoring, education and outreach, training, and stewardship. They also outline administration, public access, land acquisition and facility plans and needs, as well as restoration and resource manipulation plans, if applicable. Reserves are increasingly confronted with complex questions regarding new uses in or near reserves that may or may not be compatible with the Reserve System's mission. A thoughtful and comprehensive management plan provides a foundation for addressing these challenges to protect and manage reserve resources wisely and ensure the public and coastal decision-makers value and protect coastal resources.

The Estuarine Reserves Division of the Office of Ocean and Coastal Resource Management (OCRM) administers the Reserve System. The Division establishes standards for designating and operating reserves, provides support for reserve operations and system-wide programming, undertakes projects that benefit the Reserve System, and integrates information from individual reserves and programs to support decision-making at the national level. Additionally, OCRM periodically evaluates reserves for compliance with Federal requirements and with the individual reserve's Federally-approved management plan, as mandated under Section 312 of the Coastal Zone Management Act (15 C.F.R. Part 921.40).

The Estuarine Reserves Division currently provides support for four system-wide programs: the System-Wide Monitoring Program, the K-12 Estuarine Education Program, the Graduate Research Fellowship Program, and the Coastal Training Program. They also provide support for initiatives focused on the Reserve System's priorities: climate change, water quality and habitat protection.

(Mandatory Text End)

INTRODUCTION TO THE RESERVE

About this Section

Estuaries are valuable to our nation's ecosystems, communities and economies. Figure 7 illustrates the three sectors of influence on coastal resources and how their intersections impact the state of the coast. Reserves consider all three of these sectors in their efforts to protect coastal resources. In an effort to provide context for reserve strategic actions, it is important to outline the geographic and administrative context for the reserve, and provide information about reserve ecosystems (ecological attributes) and reserve communities and economies (social attributes and cultural resources). It is important to understand the inextricable link between natural resources and humans as it greatly influences program management and decision making. By understanding the human context, we can better understand relationships between humans and natural resources and in turn use this information to develop appropriate education materials, research questions, decision-making tools, etc. to improve coastal ecosystem management.

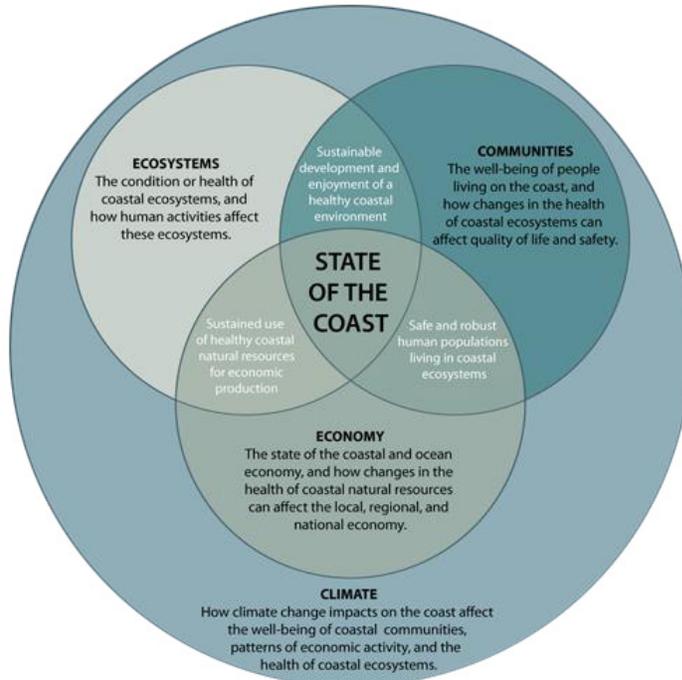


Figure 7. State of the Coast

It will also be important to understand threats and stressors facing the reserves and how these stressors may impact or alter these sectors and hence influence actions and decisions. It is important to understand all of these aspects as they define the landscape of the reserve and the basis for creating a meaningful management plan.

The purpose of this section is to provide:

- Overview of history of reserve designation and general administrative structure;
- General description of the reserve's ecological and social attributes, and ecosystem values;
- Description of climate phenomena, impacts, exposure and adaptive capacities of populations and ecosystems to the extent practicable; and
- Description of the reserve boundary, adjacent impacts, and expansion if applicable.

The description of the social setting should provide a general overview of key demographic attributes including population; ocean and coastal related jobs, employment trends and gross

domestic product; hazards exposure. Other key attributes important to consider could be public health and ethnicity. It will be advantageous to identify social trends and projections and how these social attributes may be affected by climate change. And finally, the boundary description should clearly delineate core and buffer areas, habitats and land types, and ownership. All required elements are detailed within the plan contents section and data sources are provided in the resources section on page 48.

Plan Contents

I. History and Local Management of the Reserve

This section should describe the impetus for and parties involved in the designation, as well as brief overview of process undertaken to designate and rationale for lands included within the reserve. It should also describe the lands identified for protected status and if there were acquisitions made specifically during the designation process. This section should also include the general management structure for the reserve, the state agency and department responsible for management, and land management partners.

II. Ecological Attributes and values

The description of the natural setting should provide a general overview of the location and extent of key physical and environmental attributes of the reserve including geography, geology, hydrology, biological resources, climate, and weather. This information should be a brief snapshot of the reserve's ecological characterization, site profile.

Geography and geology includes general description of the topography and geomorphology that creates the unique reserve ecosystem, as well as general geological setting, in addition to

Introduction to the Reserve

- _History and local management
- _Ecological attributes
 - _Geomorphology
 - _Hydrology
 - _Climate and weather
 - _Key habitats and species
- _Social attributes and ecosystem values
 - _Population demographics
 - _Jobs and employment trends
 - _Value of ecosystem services ♦
- _Archaeological and cultural resources
 - _Archaeological sites
 - _Cultural sites or resources
 - _Value of resources
- _Threats and Stressors
 - _Natural and anthropogenic
 - _Climate phenomena and impacts
 - _Reserve sensitivity to impacts
 - _Reserve vulnerability ♦
- _Boundary description
 - _Core and buffer rationale
 - _Boundary maps
 - _Core and buffer
 - _Land ownership
 - _Habitat types
 - _Land use type
 - _Targeted watershed map including land use and type
 - _Boundary expansion rationale and GIS layers (if applicable)

classification. Hydrology within the watershed should be characterized by describing the average tidal conditions the reserve experiences, the major inputs of fresh and salt water to the estuary, and any water quality or quantity issues potentially affecting the reserve. The reserve's climate and weather should be characterized by describing the climate regime the estuary is situated in, key weather patterns (e.g., El Niño, hurricanes) that may influence the reserve, and weather trends the reserve experiences. Trends can be gathered from reserve SWMP data and may include average annual minimum and maximum air temperature range and average annual rain fall. The reserve's biological resources should be characterized by describing the key habitats, based on the Reserve System habitat classification scheme, within the reserve. A map should be included that identifies the habitats within the reserve boundary, as well as targeted watershed if possible. The most common animal and plant species in the reserve should be identified, as well as key species of importance or concern, including those that may be endangered or threatened, should be identified.

III. Social Attributes and Values

Understanding the social framework within the reserve and in areas adjacent to the reserve will help to inform our ability to manage coastal resources and protect the reserve. A basic understanding of the social framework within the reserve's targeted watershed or defined geographic area of interest should include a brief description of population demographics, jobs and employment trends and social vulnerabilities, such as large populations of aged or low income residents. Understanding that a socially vulnerable population will be vulnerable no matter what the threat is an important factor to consider when framing issues and targeting education materials. Population demographics can be characterized by population density, age, gender, ethnicity, education level and housing information. Ocean and coastal related jobs can be described by reviewing jobs by sector and job trends which are integrally related to gross domestic product for the area.

Reserve natural resources provide a myriad of ecosystem services which have values both market and non-market. Market values are the values of ocean and coastal resources directly observed in the markets –employment in coastal industries. Coastal economies are measured by establishment -place of business, wages, and GDP (National Ocean Economics Program, 2011). As example, we may look at fisheries and tourism as industries we can measure. Non-market values are those values not directly observed in the market (e.g. clean water and healthy fish populations). The only option for assigning dollar values to them is to rely on non-market valuation methods. (King, et.al, 2000) It is important to quantify these ecosystem values where we can. The reserves provide high biodiversity, scenic beauty, and recreational opportunities, all of which contribute tremendous economic value to society and are worthy of protection. Many of the tools to assess non-market values are highly technical. Try to use available resources, like the data provided by the National Ocean Economics Program and state studies, to describe these values relative to your reserve.

IV. Archaeological and Cultural Resources

In addition to biological and social resources, the reserve may contain archaeological, cultural and historical resources that provide information and research opportunities about past settlements. These resources provide a sense of place and historical context and should be identified and

preserved as much as possible. It will be important to collaborate with the state archaeologist or State Historic Preservation Office, and state maritime archaeologist if one exists.

This section should provide a brief overview and description for the archaeological and cultural resources within the reserve, including the value and general location of these resources. If an evaluation of these resources has been done, please include information about priority sites and any efforts to protect them.

V. Threats and Stressors

While reserves were designated under the premise that they are relatively pristine, representative estuarine ecosystems, they are and will likely be increasingly exposed to human and environmental stressors that must be understood in order to manage and adapt to changing conditions. This section should describe the priority stressors on the reserve.

A. Natural and Anthropogenic Stressors

There are natural and anthropogenic threats and stressors affecting all reserve environments. Each reserve is subject to different stressors depending on their geographic location and juxtaposition to urban and rural communities, as well as exposure to weather and climate related hazards. This section should address threats to both biological and social resources within and adjacent to the reserve. Threats such as sedimentation, nonpoint source pollution, invasive species, population growth, episodic storm events, flood exposure, etc. all provide unique challenges and should be described thoroughly to provide background and impetus for the focus of the reserve's strategic plan.

B. Climate Change Phenomena and Impacts

Coastal societies and ecosystems are dependent upon unique resources and subject to unique hazards that inland landscapes may not be exposed to and hence understanding these dependencies and threats is imperative for proper management. Climate change has and will exacerbate existing stressors and create a domino of effects within natural and social systems.

This section should provide an overview of the expected climate change phenomena and impacts the reserve will face, as well as an overview of results from efforts that have been made to understand the current and projected impacts of climate change on the natural and social landscape of the reserve. For general information on climate phenomena and expected changes and impacts, please see *Appendix 6 Summary of Climate Change Phenomena with Observed and Projected Changes* and *Appendix 7 Summary of Observed and Projected Regional Climate-related Changes*.

Reserves should use available data, see Resources section below, to support this section, and are encouraged to mine local data and information sources to further augment this description. Per the resources below, reserves should describe flood exposure and assess impacts to human and ecological communities, as well as infrastructure within the flood zone. Reserves should assess land cover changes, and associated flood exposure, within the floodplain, as well as the risk and impacts of natural disasters on reserve resources.

C. Reserve Sensitivity and Vulnerability to Climate Change

As we try to understand and plan for the impacts of climate change on natural resources and communities, it is important to be aware of the general sensitivity, exposure and adaptive capacity of our natural resources and the communities that depend on them. The Intergovernmental Panel on Climate Change defines vulnerability as a function of the sensitivity of a system to climate changes, its exposure to those changes,

and its capacity to adapt to those changes. (IPCC, 2007) Understanding the risks to populations and ecosystems provides important information for crafting effective conservation strategies to protect coastal resources. By understanding general ecosystem vulnerability, reserves can make better decisions on appropriate adaptation approaches: a) build resistance to stressors, i.e. ecosystems can withstand disturbance b) enhance resilience, i.e. ecosystems can recover from disturbance without significant loss of function or c) anticipate and facilitate ecological transitions.

The Reserve System Climate Change Implementation Plan (CCIP) objective 'NERRS assess community and ecological sensitivity and vulnerability to climate change' sets a course for over half of the reserves in the System to understand vulnerability assessment methods by 2015 and hopefully be able to apply those to assess the ecological and social vulnerabilities of reserve ecosystems and communities. Additionally, a study is currently underway to assess the relative sensitivity of ecological and social attributes to climate change stressors which will serve as a basis for in-depth vulnerability assessments and provide an understanding for how to blend social and ecological data.

1. Ecological and Social Sensitivity

If reserves have not conducted a comprehensive vulnerability assessment of ecosystems and communities, existing data and information that describes natural resource sensitivity and exposure within the reserve should be included. The Reserve System's National Climate Sensitivity Analysis should be a resource for this data. The Climate Sensitivity Analysis project is analyzing existing SWMP and national census data to determine relative reserve ecosystem and social sensitivity to climate change stressors across the Reserve System. A final report will be late fall.

From an ecological perspective, SWMP variables in the climate sensitivity analysis are being analyzed to determine their relative response to climate stressors such as precipitation and sea level rise. SWMP data in this report cover the years 1995-2011 for most reserves and indicate that there is temporal and spatial variability across the country in how different reserves respond to climate stressors such as precipitation. This report can help reserves understand how sensitive their reserve is to climate stressors relative to other reserves in the region and country.

Not considering climate change in management is akin to traveling in unknown territory without a map- one is not likely to arrive at the desired destination. --Scanning the Conservation Horizon

From a social perspective, a modified Social Vulnerability Index (SOVI) will be used to determine relative sensitivity of reserves to climate impacts based on the geographic area of interest defined by each reserve. The University of South Carolina Hazards and Vulnerability Research Institute created a Social Vulnerability Index (SOVI) which finds that social vulnerability to hazards, including climate change, can be explained by approximately nine significant components including socioeconomic status, elderly and children, rural agriculture, housing density, black female-headed households, gender, service industry employment, unemployed Native Americans, and infrastructure employment. (Cutter, 2006) Social attributes linked to hazards can provide an understanding of potential social vulnerabilities. Understanding dependent or at risk populations within and surrounding reserves such as the very young or old, those dependent on marine economies, those dependent on weather-based economies, etc. foster understanding of community sensitivity and ultimately vulnerability. By better understanding these attributes and trends, reserves can develop targeted research and education activities to promote resilient natural resources and communities.

For general information on reserve sensitivity, please refer to Appendix 8 National Estuarine Research Reserve System Climate Sensitivity Analysis. If feasible, provide information on focus areas for the reserve and potential for adaptation.

2. Reserve Vulnerability

For those reserves that have completed and/or will complete a vulnerability assessment prior to the revision of their management plan, include a summary of the assessment. Reserves with the capacity to do so are encouraged to conduct a vulnerability assessment prior to updating the management plan, as it will affect the scope and scale of research, education and stewardship activities. For more information about the general process for conducting a vulnerability assessment, please see Appendix 9 Conducting a Reserve Vulnerability Assessment. If a vulnerability assessment cannot be done prior to revising the management plan, it is advisable to incorporate these efforts into the plan objectives and strategies. These efforts will provide valuable information for applying adaptive management principles.

VI. Reserve Boundary

This section should describe the reserve in the context of the state, region, and watershed. The reserve should identify the type of estuary it is (e.g. coastal plain, bar-built, deltaic system, tectonic, fjord) and the major physical attributes that define the reserve.

A. Core and Buffer

The boundary should be clearly defined and a description of how core and buffer areas were determined should be included. Adequate control, by the managing entity (ies), over human activities occurring within all areas of the reserve boundary must be established. (15 CFR 921.11 (c)(3)) Reserve boundaries will encompass two areas: key land and water or core zone, and a buffer zone. These different areas will likely require differing levels of control.

Core designated areas must be “vital to the functioning of the estuarine ecosystem that it must be under a level of control sufficient to ensure the long-term viability of the reserve

for research on natural processes.” Key land and water areas, which comprise the core area, are those ecological units of a natural estuarine system which preserve, for research purposes, a full range of significant physical, chemical and biological factors contributing to the diversity of fauna, flora and natural processes occurring within the estuary. The determination of which land and water areas are “key” to a particular reserve must be based on specific scientific knowledge of the area. A basic principle to follow when deciding upon key land and water areas is that they should encompass resources representative of the total ecosystem, and which if compromised could endanger the research objectives of the Reserve. Buffer zones protect the core area and provide additional

protection for estuarine-dependent species, including those that are rare or endangered. When determined appropriate by the state and approved by NOAA, the buffer zone may also include an area necessary for facilities required for research and interpretation. Additionally, buffer zones should be established sufficient to accommodate a shift of the core area as a result of biological, ecological or geomorphologic change which reasonably could be expected to occur.

In order to objectively and systematically delineate these areas ‘within’ reserve boundaries, the step-wise review of the data layers was derived by a NERRS workgroup and may help reserves define these areas. These areas may shift over time and should be reviewed and validated as appropriate and when reserves will be adding land to the boundary.

- 1)Habitat types that comprise the “estuarine system” (core) versus “non-estuarine system” (buffer).
- 2)Levels/types of control/protection status. For example, those areas with state and federal protection, preserve or refuge, would provide higher level of protection which should be afforded in core areas.
- 3)Public trust areas.
- 4)Potential areas of impact from climate change to help understand potential shifts of core and subsequently, buffer.

B. Land Ownership and Type

Land ownership and land use type should be described for all areas within the boundary. The number of acres should be attributed to each land owner. Federal lands already in protected status may not comprise a majority of the key land and water areas of a reserve, per 15 CFR 921.1(g). Land use adjacent to the reserve should also be identified with description of potential impacts and challenges. A map should be included that identifies land ownership within and adjacent to the reserve boundary.



Figure 8. North Inlet-Winyah Bay Core and Buffer

C. Boundary Modifications

If a reserve plans to expand the boundary, they should propose to do so at the time of their management plan revision. While a boundary can be expanded outside of this process, it is not recommended unless circumstances necessitate this.

Reserves may expand their boundary to include those lands and/or waters that are necessary to protect the ecological units of the natural estuarine system for research purposes. Areas adjacent to these key land/waters that are essential to maintain the integrity of the ecological unit may also be incorporated into the boundary. An important consideration is the potential for habitat migration due to climate change. The lands/waters identified for inclusion in the boundary must either be contiguous to the original boundary or the plan must demonstrate how these areas are necessary for reserve research and/or education programs. Additions should not be proposed for inclusion until they meet the criteria below:

- 1) Boundary should encompass an adequate portion of the key land and water areas of the natural system to approximate an ecological unit
- 2) Adequate state control of the site(s) must be established
- 3) Site should be suitable for long-term research and be important for education and interpretive efforts.

It is also desirable if climate change factors are assessed and integrated into boundary modification decisions to consider potential habitat and species migrations.

The reserve must include the following if proposing to modify the boundary:

- Describe the proposed lands to be added or deleted by defining the location, acres, habitats, and existing uses. State the total acreage of the new boundary, after explaining why lands and/or waters are proposed for addition or deletion.
- Provide a map depicting original boundary and new (expansion or contraction) boundary
- Provide a brief history of the additional lands (if expanding)
- Provide the rationale for expansion – the benefits these lands and/or waters provide to the reserve from an ecological and/or programmatic perspective.
- Depict core and buffer on the new boundary map
- Identify land ownership and type on the new boundary map
- Identify how lands will be managed and the responsible parties for management
- Identify how lands will be used, e.g. value to program efforts, public access, etc.

Additionally, an MOU must be drafted between the state agency and the with land managing partners if different from the state agency to affirm that the lands will be managed in accordance with Reserve System regulations. The MOU must be included as part of the management plan revision in an appendix.

Please note that GIS layers for boundary additions should be submitted to ERD so that Coastal Change Analysis Program data can be updated.

References

- Cutter, S.L. (2006) Social Vulnerability to Environmental Hazards. Hazards and Vulnerability Research Institute of University of South Carolina. Accessed from <http://webra.cas.sc.edu/hvri/products/sovi.aspx>
- Glick, P., B.A. Stein, and N.A. Edelson, editors (2011) Scanning the Conservation Horizon: A Guide to Climate Change Vulnerability Assessment. National Wildlife Federation, Washington, D.C. Accessed from www.nwf.org/vulnerabilityguide
- Intergovernmental Panel on Climate Change (2007) Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden, and C.E. Hanson (eds.) Cambridge University Press, Cambridge, UK. Accessed from www.ipcc.ch/
- Karl, T.R., J.M. Melillo, and T.C. Peterson, eds. (2009) Global Climate Change Impacts in the United States. A State of the Knowledge Report from the U.S. Global Change Research Program. Cambridge University Press. Accessed from www.globalchange.gov/publications/reports/scientific-assessments/us-impacts
- King, D.M., Mazzotta, M.J., (2000) Ecosystem Valuation, Supported by U.S. Department of Agriculture National Resource Conservation Service and NOAA, Accessed from ecosystemvaluation.org
- National Ocean Economics Program (2011) Market and Non-Market Overview, Accessed from oceanomics.org
- National Center for Coastal Ocean Science (2011) Experts Evaluate “Indicators of Well-being” Needed to Monitor Communities Impacted by the Deepwater Horizon Disaster. Posted on March 18, 2011. <http://coastalscience.noaa.gov/news/?p=1615>
-

Resources

Natural Data Sources

[Benthic Cover Data](#) provides nearshore benthic habitat polygons derived from aerial optic or swath acoustic imagery as part of NOAA's Digital Coast.

[Coastal Change Analysis Program \(C-CAP\)](#) data is a source of coastal land cover and change information, including inventories of intertidal areas, wetlands, and adjacent uplands, for use in GIS. Also see the C-CAP Land Cover Atlas to explore the data on-line and print summary data sheets.

[Coastal LIDAR](#) provides data sets contributed by many different entities and groups, distributed in user-specified formats, resolutions, and datums as part of NOAA's Digital Coast. Also see the Topobathy Data Inventory to see where high-resolution elevation data is available for coastal and marine areas.

[Geospatial One Stop](#) provides geospatial data from several federal agencies applicable to understanding coastal biophysical landscapes.

[National Estuarine Research Reserve Site Profiles](#) characterize the environmental features, habitat types, species distribution, biological communities and current research available as well as research gaps for each reserve.

National Estuarine Research Reserve Climate Sensitivity Analysis Project characterizes the biophysical and social sensitivity of reserves to climate change (TBD November 2012)

Social Data Sources

There are several existing sources of information that provide socio-demographic information for Reserve targeted watersheds. While the targeted watersheds may not include all of the human communities that relate to and/or impact the reserve, they provide a standard database of information for reserves. Additional site specific data is encouraged to complete a picture of the socio-demographic landscape appropriate for each reserve.

[NOAA's Spatial Trends in Coastal Socioeconomics \(STICS\)](#) Web site holds a plethora of information to assist you in describing the social and economic landscape within reserve targeted watersheds. The Web site contains demographic information from the U.S. Census Bureau, personal income and employment from the Bureau of Economic Analysis, demographic projections developed by Woods and Poole Economics, Inc., and marine recreation from the National Survey on Recreation in the Environment. The Quick Report Tool on the STICS Website offers a map-based interface to quickly determine estimates of demographic and economic characteristics, many of which are clipped to the reserve targeted watersheds. STICS offers:

[Census data](#) is available by state coastal zone boundary and includes population, population density, race, sex, age and household information. You can also clip this data by zip code.

[Bureau of Economic Analysis data](#) is available for NERRS targeted watersheds and includes population, personal income, per capital personal income and earnings by industry.

[Woods and Poole Economics, Inc.](#) data is available for NERRS targeted watersheds and includes projections to 2040 for population, population density, race, sex, total employment and earnings, personal income, household income and total food service and retail sales.

[National Ocean Economics Program](#) coastal economy data is available for NERRS targeted watersheds and includes number and types of industries, numbers employed per industry, wages per industry, Gross Domestic product per industry.

[NOAA's Economics: National Ocean Watch](#) describes six economic sectors that depend on the oceans and Great Lakes including living resources, marine construction, marine transportation, offshore mineral resources, ship and boat building, tourism and recreation. Annual time series data are available for 448 coastal counties, 30 coastal states, and the nation, derived from the Bureau of Labor Statistics and the Bureau of Economic Analysis. The economic indicators include establishments, employment, wages, and GDP. Also see the ENOW Explorer for easy on-line exploration of the data.

[NOAA's Coastal County Snapshots](#) turns complex data into easy-to-understand stories and includes charts and graphs to illustrate relationships. The data is organized by coastal state and county and provides information on flood exposure including county demographics, infrastructure, and environment within the flood zone; ocean jobs including economic value of jobs depending on ocean and Great Lakes resources; and wetland benefits such as how they contribute to safer, cleaner, and more productive coastal communities.

[NOAA's State of the Coast Web site](#) provides quick facts and detailed statistics through interactive visualizations that highlight what we know about coastal communities, ecosystems, and economies, as well as how climate change might impact the coast. Information about communities includes populations living in coastal watershed counties from 1970 projected to 2030 and water uses and sources in coastal counties for each state from 1985-2005. Coastal economy data includes coastal gross domestic product from 1999-2010 state recreation fishing data from 1981-2009 and commercial fishing data from 1950-2010, information on the top 150 ports, and energy production estimates from 1960-2009. This site also includes ecosystem statistics on coastal ecosystem health, invasive species, nutrient pollution, contaminants and wetlands, as well as information on climate vulnerability. There is an index for coastal vulnerability to sea-level rise; populations in the 100 year flood zone for 2000-2020, including those at elevated risk such as the aged and impoverished; and 2010 federally insured assets.

[Social Vulnerability Index for the United States](#) was developed by the Hazards and Vulnerability Research Institute at the University of South Carolina and synthesizes 32 socioeconomic variables, which the research literature suggests contribute to reduction in a community's ability to prepare for, respond to, and recover from hazards. The data were culled from national data sources, primarily those from the United States Census Bureau. Scores for variables identify visually those counties most and least vulnerable. The numerical social vulnerability score contends that 9 significant components explain 76% of the variance in the data. Among them

are socioeconomic status, elderly and children, rural agriculture, housing density, black female-headed households, gender, service industry employment, unemployed Native Americans, and infrastructure employment.

National Estuarine Research Reserve Sensitivity Analysis Data (TBD)

Climate Data Sources

[Climate Wizard](#) provides a user friendly way to access leading climate change information and visualize the impacts anywhere on Earth. The user can choose a state or country and can assess how climate has changed over time and project what future changes are predicted to occur in a given area. You can view historic temperature and rainfall maps, view future predictions of temperature and rainfall, and download climate maps.

[Ecoclim](#) is a series of almost 10,000 future climate surfaces downscaled to 10km² resolution for the terrestrial surface of Earth. Ecoclim data are available either globally or clipped to seven major zoogeographic regions –so very broad scale, but perhaps useful for big picture overview. Another tool that does not operate on a GIS platform, but Web interface, is Climate Wizard.

[NOAA's Sea Level Rise and Coastal Flooding Impacts Viewer tool](#) shows how various levels of sea level rise will impact coastal communities. The current project areas include Mississippi, Alabama, and parts of Texas and Florida, with additional coastal counties to be added in the near future. Visuals and the accompanying data and information cover sea level rise inundation, uncertainty, flood frequency, marsh impacts, and socioeconomics.

[PRISM climate mapping system](#) PRISM (Parameter-elevation Regressions on Independent Slopes Model) is a unique knowledge-based system that uses point measurements of precipitation, temperature, and other climatic factors to produce continuous, digital grid estimates of monthly, yearly, and event-based climatic parameters. PRISM data sets are recognized world-wide as the highest-quality spatial climate data sets currently available.

[Sea Level Rise Affecting Marshes Model](#) simulates the dominant processes involved in wetland conversions and shoreline modifications during long-term sea level rise. It is a complex decision tree incorporating geometric and qualitative relationships is used to represent transfers among coastal classes. The process accounts for inundations, erosion, overwash, saturation, and accretion. It is applied to 26 land categories derived from the National Wetlands inventory and covers a span from dry land to open water. Model incorporates IPCC projections as well as fixed rates of sea level rise to create sea level rise scenarios.

[U.S. Global Change Research Program](#) provides regional and sectoral climate change information and data, as well as a resource library for better understanding of climate science and climate impacts.

[WorldClim](#) is a set of global climate layers (climate grids), including past observed data, past modeled data, and future modeled data with a spatial resolution of a square kilometer. They can be used for mapping and spatial modeling in a GIS or other computer programs.

THE STRATEGIC PLAN: ADAPTIVE MANAGEMENT THROUGH ISSUE BASED PLANNING

About this Section

Per the Federal Code of Regulations 15 CFR 921.13 (a)(1), management plans are required to identify management issues, reserve goals and objectives, and actions for meeting the goals and objectives. These items should be embodied in the strategic plan element of the management plan. The strategic plan will provide direction and structure for the reserve to take cohesive action towards meeting objectives over the next five years. This section outlines the elements of the strategic plan; these include vision, mission, coastal management issues, goals, objectives, and actions. There should be a clear link between the issues outlined and the goals and objectives created to address them. The objectives will form the basis for evaluation of progress and success, and the actions will inform how the plan is implemented. Examples, resources, and case studies are provided to support the reserve strategic planning process. Part I of the Management Plan Guidelines provides direction and advice on a process for developing many of the elements within the strategic plan, please refer to Part I prior to crafting the strategic plan.

Plan Contents

I. Reserve Vision

The reserve vision statement is the overarching description of what the reserve would like to achieve or accomplish. Vision statements should be forward looking and reflect how the reserve wants to be distinguished.

Example: Vibrant estuaries cherished by their communities –San Francisco Bay Reserve

II. Reserve Mission

The reserve mission statement should describe the reserve's core purpose and focus, the reserve's reason for existence. This is a short static statement written in the present tense that describes the organizations unique contributions.

Example: To provide a basis for informed stewardship of estuaries in Southwest Florida through research and education – Rookery Bay Reserve

III. Reserve Coastal Management Issues

Part I of this document provides guidance on identifying and selecting reserve priority issues, and Part II provides important information about stressors on the reserve to consider as described in the 'Introduction to the Reserve.' This section should be a succinct culmination and prioritization

Strategic Plan

- _ Vision
- _ Mission
- _ Priority coastal management issues
- _ Reserve goals, objectives, actions
- _ Performance measures for each objective ♦

of issues for the reserve. The most pressing and pertinent coastal management issues facing the reserve need to be identified in order to develop relevant goals and meaningful objectives. Reserve issues should be included that relate to one of the issue areas identified in the 2011-2016 Reserve System Strategic Plan. There are many ways to arrive at determining the primary challenges including research findings, needs assessments, focus groups, surveys, etc. All reserve staff should be involved in the process to engage stakeholders and identify the most pressing issues the reserve will address.

IV. Creating Relevant Goals

A goal is a broad statement of what the organization plans to do and/or enable in the future. Goals should advance the mission of the program. They may be written for a five year time frame or longer, but ultimately, they should be written so that significant progress toward meeting them can be achieved. During a plan revision, it may be common for goals to remain the same, but objectives and actions to change given the amount and type of progress made towards that goal.

Goals should be written to address the most pressing coastal management issues, be based on the reserve niche, and be supported by the program. A manageable number of goals, approximately 3-6, should be written to capture the breadth and depth of the reserve's niche. Part I of this document encourages an integrated strategic planning process whereby multiple programs contribute to the development and achievement of goals. Hence, all reserve programs should contribute their skills and expertise to developing and accomplishing reserve goals.

Tips for Writing Goals

- Goals describe a desired future state that the organization attempts to realize.
- Goals should reflect conditions that can be changed and addressed via programs.
- Goals should be directional and leave room for continual improvement. Use words that identify improvement –increase, improve, reduce, etc.

Example Goal Statements

- Reduce the impact of watershed land use on reserve resources
- Improve natural biodiversity within the reserve
- Reduce the impact of invasive species and habitat loss on reserve biodiversity

V. Creating Meaningful Objectives

An objective is a specific statement of expected results that contribute to the goal(s). Objectives establish the standards of achievement in terms of some measure of improvement in existing condition. Reserves should strive to create SMART objectives: specific, measurable, attainable, relevant and time-bound. They should be results oriented and reflect the desired changes in the target audience, resource, or organization. These statements are the most important statements in strategic planning and focus should be placed first on ensuring they are attainable and measurable within the time period of the plan. Objectives are the measuring stick towards the goals; the reserve should be able to quantitatively measure progress based on these statements

which can then be communicated to stakeholders and leadership. Writing good objectives takes judgment and skill; and devoting the necessary time and effort pays off in better planning, better results, and effective evaluation of progress. Each goal may have several objective statements. While objectives will likely require several skill sets, or sector skills, to accomplish, it is advisable that one sector take leadership for each objective, ensuring the coordination of integrated, multi-sector actions and evaluation of progress. It is at this level, where adaptive management becomes important to implement. Certain actions may not be yielding the desired result and may need to be tweaked. As understanding of an issue increases, more appropriate strategies may need to be employed. It will be important for the objective lead to understand if the actions are effective or alternatives are required. Hence, it is suggested that objectives have a designated sector lead to track progress.

Tips for Writing SMART Objectives

- “Specific” means using strong action verbs to focus on what you want to do. Statements reflect clearly “what” needs to done, “why” it’s important, “who” is doing it, and “when” it will be done.
- “Measurable” means ensuring that there is a quantitative way to measure the change the reserve wants to realize.
- “Attainable” means that they need to stretch the organization, but not so far that people lose motivation. They should be realized within the five year period of plan.
- “Realistic” means having the appropriate resources including the right people with the right skills, money, equipment, and capacity.
- “Time-bound” means they should create motivation and urgency to accomplish them within the five year period of the plan.

Example Objective Statements

Who/What <i>Target</i>	Change <i>Action Verb</i>	<i>In What</i> <i>Expected results</i>	By When <i>Time Frame</i>
Local community planners	improve	their capacity to write climate change adaptation plans	within 1 year
Watershed management	are developed to	coordinated conservation strategies focused on sustainable ecosystems	by 2013
Unauthorized activities	are reduced	on the trail system to promote safe user experiences	by 2014

VI. Creating Clear Actions

Actions should support achievement of the objectives. An action statement explains “how” an objective will be met. Actions may be undertaken by one or multiple sectors, but should be coordinated by the objective lead, so that as new information arises about the impacts of the actions, management decisions can be adjusted or maintained. Sector leads for each action should be indicated. Adaptive management focuses on learning and adapting, through partnerships between reserve staff, resource managers, coastal decision-makers and stakeholders, who learn together how to create and maintain sustainable resource systems. It is more than monitoring activities and changing direction when failure arises. When developing actions, several alternatives should be explored, the outcomes of these alternatives should be predicted based on the current state of knowledge and then using professional judgment, those actions that are predicted to be the most effective should be written into the plan. During the course of the plan, evaluation of results should be ongoing to adapt when necessary.

Tips for Writing Actions

- Actions describe how you work and what you are working on
- Actions describe collaborations and mechanisms for achieving work products

Example Action Statements

- Provide training to community planners on understanding vulnerability and developing adaptation plans focused on protecting resources within the reserve targeted watershed.
- Partner with land owners within the reserve to identify existing conservation strategies, their compatibility with one another, and options for improvement
- Coordinate with county land partners to place signs in high traffic areas of the trail system to increase public awareness of authorized activities

VII. Developing Practical Performance Measures

Performance measures track if and how well a program is meeting its objectives and ultimately its mission. They provide data on trends and can inform future plans, policy and program budgeting. They provide a quantitative means to communicate those trends and progress toward objectives to key audiences. In addition to the Reserve System national performance measures developed to track Reserve System progress, reserves are encouraged to develop site specific performance measures and targets for reserve objectives will help quantify progress and facilitate communicating success to key stakeholders.



“ If you can’t measure it, you can’t manage it.” –Kaplan

At least three measures that relate to high priority management plan objectives should be identified, per guidance from the National Policy and Evaluation Division (NPED). If during a management plan revision, goals and objectives on which the measures and targets are based were deleted or significantly changed; or if it was no longer possible to collect any data at all for some extenuating circumstance, then NPED, ERD, and the reserve will work to identify a new measure and target. During an evaluation, NPED will still look at the original measure and target and also at the status of the new measure and target.

While the above measures are the only ones required, it is advisable that performance measures and associated targets are established for as many objectives as possible. Performance measures should help the reserve understand the key benefits of their activities to specific audiences and should illustrate why the programs matter and to whom. It is important to have a baseline, set targets, and identify the unit of measurement and how it will be counted. If baseline data isn't available, it may be more appropriate to collect data for a baseline than establish measures, so that measures can be created in the future.

Example performance measures:

<p>Objective: Local community planners will improve their capacity to write climate change adaptation plans by 2017.</p>	<p>Strategy: The Reserve's Coastal Training Program will develop targeted workshops promoting the understanding and use of climate change science and monitoring, including information gained from the Reserve sentinel site monitoring, to inform adaptation activities.</p>	<p>Performance Measure: Number of new targeted workshops that build coastal decision-maker capacity and promote the use of recent research results that address climate change impacts and adaptation alternatives. Performance Measure: Number of new targeted workshops that build coastal decision-maker capacity and promote the use of recent research results that address climate change impacts and adaptation alternatives.</p>	<p>Target: Ten workshops focused on building coastal decision-maker capacity to use and apply climate data and information to develop adaptation alternatives.</p>
---	---	--	---

Resources

Program Development and Evaluation: Provides knowledge, skills and tools to design and implement projects that have measurable impacts on a target audience. Tools include models that provide situational analysis, priority setting, program action – the logic model – and evaluation.

<http://www.csc.noaa.gov/training/> and www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html and www.uwex.edu/ces/pdande/progdev/index.html

NOAA's Conducting Needs Assessments Course: Provides an on-line self-guided course offering an introduction to needs assessments and how to conduct one.

NOAA's Meaningful Evaluation Course: Provides an understanding of all elements of program and project evaluation so programs can develop evaluation plans.

NOAA's Focus Groups, Facilitation, and Engagement Publication: Provides information on conducting focus groups, facilitating effective meetings, survey design and delivery, preparing to write your strategic plan, stakeholder engagement, understanding risk behavior, and resiliency planning.

NOAA's Preparing to Write Your Strategic Plan Publication: Provides a multi-step process to systematically assess the direction and priorities of an organization, as well as tools and job aids for assessing target populations, performing SWOT assessments, developing niche, and identifying program outcomes.

All About Strategic Planning: Provides information, guidance, and tools about the benefits and process of strategic planning.

Strategic Planning in the Public Sector: Provides information and examples of process and approaches to strategic planning.

Stakeholder Involvement: Environmental Protection Agency provides information on stakeholder involvement evaluation and research including lessons learned, barriers and innovative approaches to stakeholder involvement.

Perspectives on Strategic Planning in Public Sector: Report on strategic planning approaches, philosophies and processes to achieve desired results.

Mind Tools, Ltd.: Provides information about how to undertake a SWOT analysis, discover new opportunities, as well as manage and/or eliminate threats. Mind Tools also provides information about strategy tools, project management, problem-solving, team management and communication skills.

Structured Decision-making: Provides an organized approach to identifying and evaluating creative options and making choices in complex decision situations.

RESERVE SYSTEM PROGRAM FOUNDATIONS

About this Section

Each reserve contributes to Reserve System-wide programs and priorities, as well as defines local programs and priorities to address site specific needs and issues. It is important to understand the key elements of system-wide program that contributes to national and local efforts. These efforts are captured in the reserve's strategic plan goals and objectives, and these programs support the achievement of the goals and objectives. Because ERD is encouraging an integrated approach to the strategic plan portion of the management plan (i.e. issue-based goals), this means that each program may be leading several objectives to support each goal.

This section provides a standard format for describing the system-wide and local efforts for each system-wide program, including mandatory text covering system-wide efforts and key questions to organize information on program context, capacity, delivery, needs, opportunities as well as the objectives and strategies from the strategic plan led by that program. Part I 'Preparing to Write a Strategic Plan' section two 'Assessing Skills and Capacities of Reserve Programs' discusses how reserves may conduct program SWOT analysis. Information within each program category- context, capacity, delivery, needs and opportunities- should be readily available if the programs undertake a SWOT analysis. Reserves should respond to all of the questions below to the best of their ability given the unique stage and nature of their reserve. This information should provide readers a clear picture of program capacities and focus, as well as how the program is supporting achievement of reserve goals and objectives. Together they create a complete picture for how the system works nationally and locally.

While stewardship is a sector program at many reserves and there are national efforts to support stewardship functions, this section concentrates on those sectors with system-wide programs. Foundational capacities for stewardship vary across sites and will be captured within research and monitoring, as well as the resource protection, land acquisition, public access and visitor use components, and if applicable, the restoration and/or resource manipulation components.

Each program description can be organized in separate chapters or be culminated into a single "Program Foundations" chapter. If reserves choose to create a sector based strategic plan (i.e. sector based goals), each of these descriptions should be included with that sector based goal chapter.

Program Foundations		
Research and Monitoring	Education	Training
_Mandatory system-wide text	_Mandatory system-wide text	_Mandatory system-wide text
_Program Context	_Program Context	_Program Context
_Program Capacities	_Program Capacities	_Program Capacities
_Program Delivery	_Program Delivery	_Program Delivery
_Needs and Opportunities	_Needs and Opportunities	_Needs and Opportunities
_Research related objectives and actions ♦	_Education related objectives and actions ♦	_Training related objectives and actions ♦
_Monitoring and evaluation strategies ♦	_Monitoring and evaluation strategies ♦	_Monitoring and evaluation strategies ♦

Plan Contents

I. Research and Monitoring Program

(Mandatory text begin)

The National Estuarine Research Reserve System's mission provides that reserves are protected and managed to afford opportunities for long-term research. Research at each reserve is designed to fulfill the Reserve System goals as defined in the regulations (15 C.F.R Part 921(b)):

- Address coastal management issues identified as significant through coordinated estuarine research within the System;
- Promote Federal, state, public and private use of one or more reserves within the system when such entities conduct estuarine research;
- Conduct and coordinate estuarine research within the System, gather and making available information necessary for improved understanding and management of estuarine areas.

To sustain these System goals, the 2011-2016 Reserve System Strategic Plan outlines research objectives that support the focus areas of climate change, habitat protection, and water quality:

- Expand capacity to monitor changes in water quality and quantity, habitat, and biological indicators in response to land use and climate change drivers.
- Improve understanding of the effects of climate change and coastal pollution on estuarine and coastal ecology, ecosystem processes, and habitat function.
- Characterize coastal watersheds and estuary ecosystems and quantify ecosystem services to support ecosystem-based management of natural and built communities
- Increase social science research and use of social information to foster coastal stewards that value and protect estuaries.

The Reserve System's research and monitoring programs provide the scientific basis for addressing coastal management challenges. Reserve research and monitoring activities provide valuable information about estuarine resources to increase understanding and awareness of their importance to a variety of audiences including scientists, resource managers, educators, and the general public.

Reserve System Research Programs

Currently, there are two Reserve System-wide efforts to fund estuarine research. The Graduate Research Fellowship Program supports students to produce high quality research in the reserves that directly addresses coastal management challenges. The fellowship provides graduate students with funding for 1-3 years to conduct their research, support reserve programs, and disseminate results to the coastal management community. Projects must address coastal management issues of local and national significance; support the reserve's management plan priorities; and be conducted at least partially within one or more reserves.

Research is also funded through the National Estuarine Research Reserve System Science Collaborative, a partnership between NOAA and the University of New Hampshire. The Reserve System Science Collaborative is a program that focuses on integrating science into the management of coastal natural resources. Currently administered through the University of New Hampshire, the program integrates and applies the principles of collaborative research, information and technology transfer, graduate education, and adaptive management with the goal of developing and applying science-based tools to detect, prevent, and reverse the impacts of coastal pollution and habitat degradation in a time of climate change. The program is designed to enhance the Reserve System's ability to support decisions related to coastal resources through collaborative approaches that engages the people who produce science and technology with those who need it. In so doing, the Science Collaborative seeks to make the process of linking science to coastal management decisions, practices, and policies more efficient, timely, and effective and share best practices and examples for how this can be done.

Reserve System Monitoring Program

The System-wide Monitoring Program provides standardized data on national estuarine environmental trends while allowing the flexibility to assess coastal management issues of regional or local concern and is guided by the Reserve System-wide Monitoring Program Plan. The principal mission of the monitoring program is to develop quantitative measurements of short-term variability and long-term changes in water quality, biological systems, and land use/land cover characteristics of estuaries and estuarine ecosystems for the purposes of informing effective coastal zone management. The program is designed to enhance the value and vision of the reserves as a system of national references sites and focuses on three ecosystem characteristics:

1. **Abiotic Characteristics:** Abiotic measurements are supported by standard protocols, parameters, and approaches that describe the physical environment including weather, water quality, hydrological, and sediment related parameters. The monitoring program currently provides data on water temperature, specific conductivity, percent saturation of dissolved oxygen, pressure, pH, turbidity, salinity, concentration of dissolved oxygen, and pressure corrected water depth. Meteorological data include air temperature, relative humidity, barometric pressure, wind speed, wind direction, rainfall, and photosynthetically active radiation (PAR). In addition, the program collects monthly nutrient and chlorophyll a samples and monthly diel samples at one SWMP data logger station. Data is Federal Geographical Data Committee compliant and available via the *Reserve System Centralized Data Management Office*.
 2. **Biotic Characteristics:** As funds are available, reserves are focusing on monitoring habitats and biodiversity.
 3. **Watershed and Land-use Classifications:** The Reserve System is examining the link between watershed land use and coastal habitat quality by tracking and evaluating changes in coastal habitats and watershed land use/cover. This element is guided by the *Reserve System Habitat Mapping and Change Plan*.
-

Building on these foundational elements, the Reserve System is developing a network of sentinel sites and the capacity to assess the impact of sea level/lake level changes and inundation on the diverse set of coastal vegetative habitats represented in the system. Reserves are implementing a suite of activities, as described in the 2012 Reserve System Sentinel Site Guidance Document, to assess the relationship between vegetative communities (marsh, mangrove and submerged aquatic vegetation) and sea level. Reserves are adding surface elevation tables and monitoring pore water chemistry along vegetation monitoring transects and linking their system-wide monitoring program to a network of specialized spatial infrastructure to allow precise measurement of local sea level and lake level changes and subsequent impacts to key habitats. The Reserve System is working in partnership with NOAA's National Geodetic Survey and the Center for Operational Oceanographic Products and Services to support the development of sentinel sites.

(Mandatory text end)

Research Program Context

- A. What is geographic scope of your program?
- B. What information has been gained by the program since the last management plan?
- C. Who are the target audiences for the research developed at the reserve?
- D. How would the research community surrounding the reserve be characterized?
- E. What are the most pressing research issues and questions that the reserve will address and how do they align with the Reserve System Strategic Plan?

Research Program Capacity

- A. What staff, facilities, infrastructure, etc. support your research program currently?
- B. What partners will you work with to accomplish your research?

Research Program Delivery

- A. How will the reserve locally implement the system-wide programs (e.g. SWMP, GRF) and national programs (e.g. NSC) and priorities (e.g. NERRS Climate Change Initiative)?
- B. How will the reserve implement local and regional monitoring and research?
- C. How will the research program support other functions at the reserve?
- D. How will the research program support or be influenced by other programs at the reserve?
- E. How does the reserve evaluate the research program currently? Will this change in the next five years?
- F. What are the major outcomes the research program wants to achieve? What research and/or monitoring contributions will be made to the scientific or management community?

Research Future Needs and Opportunities

- A. What are the research needs and priorities identified by local stakeholders?
- B. What is the nexus between those needs and projected capacity in the next five years?
- C. What are the limitations of the research program? What are the opportunities?

Research Related Objectives and Strategies

- A. List research objectives from strategic plan
 - B. List research strategies that will advance those objectives from the strategic plan
-

II. Education Program (Mandatory text begin)

The National Estuarine Research Reserve System's mission includes an emphasis on education, interpretation, and outreach. Education at each reserve is designed to fulfill the Reserve System goals as defined in the regulations (15 C.F.R Part 921(b)):

- Enhance public awareness and understanding of estuarine areas and provide suitable opportunities for public education and interpretation;
- Conduct and coordinate estuarine research within the system, gathering and making available information necessary for improved understanding and management of estuarine areas.

To sustain these System goals, the 2011-2016 Reserve System Strategic Plan outlines education objectives that support the focus areas of climate change, habitat protection and water quality:

- Enhance the capacity and skills of teachers and students to understand and use Reserve System data and information for inquiry-based learning; and
- Increase estuary literacy and promote active stewardship among public audiences through the development and delivery of tools and programs addressing climate change, habitat protection, and water quality.

The Reserve System provides a vehicle to increase understanding and awareness of estuarine systems and improve decision-making among key audiences to promote stewardship of the nation's coastal resources. Education and interpretation incorporate science-based content into a range of programs and methodologies that are systematically tailored to key audiences around priority coastal resource issues.

Reserves conduct formal and informal education activities, as well as outreach activities that target culturally diverse audiences of educators and students, environmental professionals, resource users and the general public. Education and public programs, interpretive exhibits and community outreach programs integrate elements of Reserve System science, research and monitoring activities and ensure a systematic, multi-faceted, and locally focused approach to fostering stewardship.

The reserves system is committed to preparing tomorrow's future leaders with the knowledge and understanding of our nation's oceans and coasts to be responsible stewards. To fulfill this commitment, the Reserve System has created the K-12 Estuarine Education Program (KEEP) to increase the estuary literacy of students, teachers and the general public. The KEEP Program helps students and teachers learn about essential coastal and estuarine concepts, develop data literacy skills and strengthen their critical thinking, team building, and problem solving skills. K-12 and professional development programs for teachers include the use of established coastal and estuarine science curricula aligned with state and national science education standards and frequently involves both on-site and in-school follow-up activity.

Community education and outreach is another priority for the Reserve System. Community education programs foster behavioral change to promote resource conservation. These programs work with audiences whose choices directly impact the integrity of our estuaries and their associated watersheds.

(Mandatory text end)

Education Program Context

- A. What is geographic scope of your program?
- B. What information has been gained by the program since the last management plan? (e.g. from market analysis and needs assessments or other assessments)
- C. Who are the target audiences for reserve education programming, identifying population and reach, and why were they selected? Distinguish audiences among professional development programs, students programs, public outreach programs, and/or community education programs.
- D. What are the priority issues for your reserve that your education program can address and how do they align with the Reserve System Strategic Plan?

Education Program Capacity

- A. What staff, facilities, infrastructure, etc. support your education program currently?
- B. What partners will you work with to accomplish your education program?

Education Program Delivery

- A. How will the reserve locally implement and/or align with the system wide programs (e.g. KEEP, SWMP, GRF), national programs (e.g. NSC) and priorities (e.g. NERRS Climate Change Initiative)?
- B. What major activities will the education program implement and what methodologies will it employ?
- C. How will the education program support or be supported by other programs at the reserve?
- D. How will the education program deliver and disseminate results?
- E. How does the reserve evaluate the education program currently? Will this change in the next five years?
- F. What major impacts or outcomes does the education program want to achieve and what behavior change does the reserve wish to influence?

Education Future Needs and Opportunities

- A. What are the education needs identified via assessment or by local stakeholders?
- B. What is the nexus between those needs and projected capacity in the next five years?
- C. What are the limitations of the education program? What are the opportunities?

Education Related Objectives and Strategies

- A. List education objectives from strategic plan
 - B. List education strategies that will advance those objectives from the strategic plan
-

III. Coastal Training Program

(Mandatory text begin)

The National Estuarine Research Reserve System's mission includes an emphasis on education and interpretation. The Reserve System recognizes it has a responsibility to educate coastal decision makers and supports the Reserve System goals, as defined in the regulations (15 C.F.R Part 921(b)), through the Coastal Training Program:

- Enhance public awareness and understanding of estuarine areas and provide suitable opportunities for public education and interpretation;
- Conduct and coordinate estuarine research within the system, gathering and making available information necessary for improved understanding and management of estuarine areas.

To sustain these System goals, the 2011-2016 Reserve System Strategic Plan outlines coastal training objectives that support the focus areas of climate change, habitat protection and water quality:

- Increase estuary literacy and promote active stewardship among public audiences through the development and delivery of tools and programs addressing climate change, habitat protection, and water quality.
- Improve the capacity and skills of coastal decision makers to use and apply science-based information in decisions that affect estuaries and coastal watersheds.

The Coastal Training Program provides up-to-date scientific information and skill-building opportunities to coastal decision-makers responsible for making decisions affecting coastal resources. Through this program, reserves ensure that coastal decision makers have the knowledge and tools they need to address local critical resource management issues.

Coastal decision makers are defined as individuals whose duties include making decisions that affect the coast and its resources. The target decision maker groups vary according to reserve priorities, but generally include groups such as local elected or appointed officials, managers of both public and private lands, natural resource managers, coastal and community planners, and coastal business owners and operators. They may also include groups such as farmers, watershed councils, professional associations, recreation enthusiasts, researchers, and more.

Reserves are uniquely positioned to deliver of pertinent information to local and regional decision-makers given their place-based nature. Coastal Training Program coordinators know the local people, places, and science are able to skillfully convene training participants and experts to address coastal management issues. Coastal Training Programs are built upon solid and strategic program documents, including an analysis of the training market and assessment of audience needs. Coordinators then work with the results to identify how their program can best address local and Reserve System priority issues.

Partnerships are integral to the success of the program. Reserves work closely with state coastal management programs, Sea Grant Programs, NOAA Coastal Services Center and a host of local partners in determining key coastal resource issues, target audiences, and expertise to deliver relevant and accessible programs.

(Mandatory text end)

Training Program Context

- A. What is geographic scope of your program?
- B. What information has been gained by the program since the last management plan? (e.g. from market analysis and needs assessments or other assessments)
- C. Who are the target audiences for reserve coastal training opportunities and why? What do you know about the skills, abilities, and current level of knowledge of the target audiences?
- D. What are the priority issues for your reserve that your education program can address and how do they align with the Reserve System Strategic Plan?

Training Program Capacity

- A. What staff, facilities, infrastructure, etc. support your training program currently?
- B. What partners will you work with to accomplish your training program?

Training Program Delivery

- A. How will the reserve locally implement and/or align with the system wide programs (e.g. KEEP, SWMP, GRF), national programs (e.g. NSC), and priorities (e.g. NERRS Climate Change Initiative)?
- B. What major activities will the training program implement and what methodologies will it employ?
- C. How will the training program support or be supported by other programs at the reserve?
- D. How will the training program deliver and disseminate results?
- E. How does the reserve evaluate the training program currently? Will this change in the next five years?
- F. What major impacts or outcomes does the training program want to achieve and what behavior change does it wish to influence?

Training Future Needs and Opportunities

- A. What are the training needs identified via assessment or by local stakeholders?
- B. What is the nexus between those needs and projected capacity in the next five years?
- C. What are the limitations of the training program? What are the opportunities?

Training Related Objectives and Strategies

- A. List training objectives from strategic plan
 - B. List training strategies that will advance those objectives from the strategic plan
-

ADMINISTRATIVE PLAN

About this Section

The administrative plan is a required element of a management plan and should outline staff roles in administration, research, education, and surveillance and enforcement, per the Federal Code of Regulations 15 CFR 921.13 (a)(2). The administrative plan should outline the means and support necessary to implement the goals and objectives of the reserve. It should provide an overview of the organizational and administrative framework that governs management of the reserve, address the roles and responsibilities of staff, as well as identify strategic partnerships and advisory committees. In effect, the administrative plan supports all other components in the reserve management plan; objectives and actions do not need to be integrated into the strategic plan element given this section will support achieving all reserve goals and objectives.

Specifically the administrative plan should include: an organizational framework; staffing plan; a description of strategic partnerships and advisory committees; and administrative plan objectives and actions. Optional elements could include: volunteer plan; vessel and vehicle plan; communications plan, and additional information about administrative initiatives of the state and reserve that impact the future of reserve operations.

Plan Contents

I. Organization Framework and Management Authorities

This section builds on the ‘Introduction to the Reserve’ component to provide more information about the state agency administrative structure and management authorities. This section should highlight the mission of the agency and why it is an appropriate match to host the reserve. An organizational chart outlining the current location of the reserve within the state agency aligned with NOAA’s management structure should be included; see Figure 9. Additionally, an organizational chart of the reserve should be included.

If applicable, this section should capture any changes in the host agency since designation and the reasons for those changes. It should also include all information about state law, codes, or management authorities that impact the administration of the reserve.

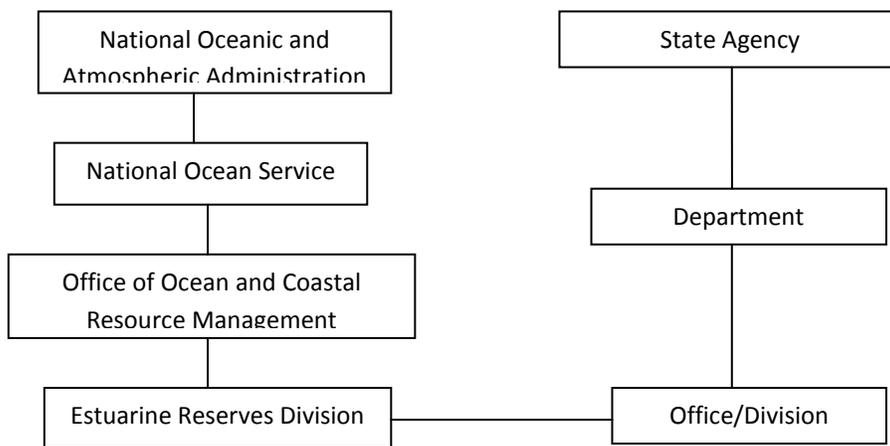
Administrative Plan

- _Organizational framework
 - _Organizational charts
 - _Current staffing and needs
 - _Strategic partnerships
 - _Advisory committees
 - _Administrative objectives and actions
 - _Volunteer plan ♦
 - _Vessel and vehicle plan ♦
 - _Communications plan ♦

II. Current Staff and Needs

This section should clearly outline the number of staff employed to support reserve programs, as well as their roles and responsibilities. Indicate if employees are full-time, part-time or seasonal and the location of their primary office. Include an administrative chart to visually represent the reserve's staff positions, administrative structure and oversight. If applicable, indicate strategies to secure state funding for core staff positions.

Figure 9. Organizational Relationship



Include detailed information about anticipated staffing needs to better support the mission of the reserve and projected program developments. Outline the roles and responsibilities of these anticipated positions, the goal-based justifications, and reference any supporting documents that recommend these staffing needs (i.e. internal reviews and evaluations findings). If available, include information on how these future positions would be funded.

III. Strategic Partnerships

The administration of a reserve occurs through a collaborative process involving a variety of agencies and organizations at various levels of engagement. Strategic partnerships are those that leverage specific resources to carry out core functions of the reserve and are often associated with facilities, enforcement, or staffing. This section should not be an exhaustive list of all reserve partnerships, but instead briefly describe key partnerships. If applicable, this section could include information about the reserve's Friends group, in particular the role and responsibility of the group in supporting the mission of the reserve.

All Memoranda of Understandings should be included in the appendix of the management plan. If there is a need to compile a complete list of all organizations the reserve current partners with, it should also be included as an appendix.

IV. Advisory Committees

Reserve advisory committees are composed of local community stakeholders and assist in guiding the policies and management of the reserve. This section should detail the roles, membership and expectations of the reserve's advisory committee. For example, do committee members provide feedback and recommendations on site management and implementation strategies; assist in seeking support for Reserve programs; represent the interests of users of the Reserve and its' products, expected to discuss relevant issues with the community and so on. If applicable, provide information about sub-committees or task forces.

Optional additional information about the advisory committees could include:

- How are members appointed and how long do they serve
- General meeting structure (i.e. open to the public) and frequency of meetings
- How are decisions made (i.e. consensus)
- Information about the general composition of the committee by
 - A list of the specific organizations/users represented on the advisory committees or
 - A list of members and affiliations from a prior year

V. Objectives and Actions

The objectives and actions developed for the administrative plan should ensure the administrative, operational and financial capacities of the reserve are adequate to effectively implement the goals of the Reserve. Administrative objectives assist in the management of the reserve by addressing the operational needs and plans to maintain and train staff, maintain vessels and facilities, complete administrative processes, as well as work in the community through strategic partnerships and advisory committees. Actions should be designed to effectively and efficiently utilize the existing administrative, infrastructure, fiscal, and human resources.

The objectives and actions developed here likely support and are related to achieving all of the reserve goals and objectives. Hence, they do not need to be integrated into the strategic plan. Reserves should clearly describe why these were crafted and how they move the reserve forward in meeting their goals and objectives. However, reserves may choose to integrate these objectives and actions if administrative issues are a central focus for the next five years. In ERD's experience, we have found that reserves find it difficult to merge these types of objectives with programmatic objectives because they are central to supporting the entire plan.

North Carolina Reserve: Administrative Goal and Objectives

The North Carolina management plan developed a goal and several objectives that support the administration and operations of the Reserve. In their Administrative Plan chapter they outline strong, relevant activities that will help them achieve their objectives. Reserves may choose to develop an administrative goal or they can simply list objectives within this component that directly support objectives within the strategic plan. (http://www.nerrs.noaa.gov/Doc/PDF/Reserve/NOC_MgmtPlan.pdf).

VI. Optional plans that support programs and program management

A. Volunteer Plan

A volunteer plan can provide guidance for how a volunteer program builds connections with the community and supports reserve programs in meeting their goals and objectives. Volunteers are an invaluable resource to reserves. Considerations for creating a volunteer plan include:

Planning for volunteers

Prior to starting a volunteer program, it is important to assess needs that can be filled by volunteers and determine how the reserve will support the program as it does take a budget and expertise to run an effective program. It will be important to create and market clear position descriptions, including qualifications, purpose, timeframe, expected outcomes and evaluation criteria (if applicable). It will also be important to establish policies and procedures for administration and volunteers so that everyone is clear about what needs to happen before a volunteer can begin and while working.

Recruiting and organizing volunteers

Once the reserve establishes why the program should exist and clear functions that can be performed by volunteers, it is time to recruit, screen, interview and place volunteers in appropriate positions aligned with their ability, expertise and interest. It will be important to plan for the number of volunteers that can be adequately monitored and supported. Organizing teams of volunteers for certain areas can be useful to manage volunteers and provides them a network of people with similar interests to maintain engagement and give support to each other. It will be important to consider how the reserve will orient and train volunteers to perform duties and feel safe and productive when doing so. Once trained and performing duties, it will be important to ensure proper supervision, support and evaluation of efforts.

Supervising, evaluating and retaining volunteers

Supervising volunteers takes time and attention to ensure they are effective, safe and happy. It will be important to outline steps for developing an evaluation system to determine whether the complement of volunteers continues to be suited to the reserve. It will also be important to identify ways to recognize the volunteer contributions as this helps to develop a bond with the reserve and ensure continued contribution.

B. Vessel and Vehicle Plan

A reserves fleet of vehicles and vessels can be critical to supporting reserve objectives and activities. A fleet infrastructure plan could help determine when craft need to be repaired and/or replaced, overseeing maintenance and repair work, procuring new craft and associated equipment, training staff in the proper use and safety protocols for each type of craft and associated equipment, and keeping required records for all fleet craft. If applicable, please identify policies for vehicles, including hybrids and additional energy saving plans.

C. Communication Plan

It is critical to communicate the importance and impacts of reserve efforts, as well as deliver key messages to key audiences regarding protecting and valuing the coastal resources reserves protect. See general areas appropriate for a communications plan below. For assistance in crafting a plan, key messages, and/or identifying key communication opportunities, contact the OCRM communications director. Considerations for crafting a communications plan include:

Objectives and target audiences

Developing clear, measurable objectives is critical to the success of your communication plan. Think about what you want your communications activities to accomplish which directly relates to who you need to be communicating about what – for example, do you want to generate excitement, build awareness, educate on priority issues, maintain positive information flow, secure support for specific initiatives or projects? Identify who you want to communicate to will help articulate approach and how they want to receive information. It will be important to prioritize between primary audiences and others to achieve primary objectives.

Approach

It will be important to determine what methods the reserve will employ to reach target audiences. Questions that may help inform approach include: What types of communication media will the reserve use? Will a mix be useful for various objectives? Who will be involved in a successful approach to both internal and external communications? How much time will be focused on various elements?

Key messages, tactics, and costs

Key messages are important to create. Remember to address who, what when, where, why and how to convey key information to influential audiences. Messages should be clear, benefit-oriented, and written so that target audiences will understand and relate. It will be important to develop a plan for how to communicate with target audiences and how often. Consider the types of tactics that will be most effective – print, electronic, in-person. It is important to choose substance over flash. Communication messages must be simple, clear, direct and audience-focused - no matter how slickly they are packaged - or they won't be read, heard or understood. It will be wise to set a budget for developing and employing communications strategies and products.

Timeline and evaluating success

It will be important to identify key times for targeting messages – are there key times when audiences are more receptive and/or seeking information to make decisions, how long will various efforts be pursued, how will you know when you've reached success? In order to understand the last question, it will be helpful if tangible success measures are identified- are you looking for a percentage change in audience behavior, are you hoping for increased financial support, etc.? Whether successful or not, it will be important to engage audiences solicit feedback on how to better engage and communicate with them.

RESOURCE PROTECTION PLAN

About this Section

The resource protection plan is a required element of a management plan, per the Federal Code of Regulations 15 CFR 921.13. The general provisions provided by 15 CFR 921.1 state reserves shall be open to the public to the extent allowed by state and federal law, multiple uses are allowed to the degree compatible with reserve purpose and use levels prescribed in the management plan. Additionally, regulations note that the management plan shall identify uses requiring a state permit, as well as areas where uses are encouraged or prohibited. Protecting the resources of the reserve serves as the foundation for all programmatic efforts and is central to the success of the reserve. It is important for reserves to protect the ecological unit representative of key land and waters within each biogeographic region and maintain it in the face of human and natural stressors that are continually increasing.

This plan should provide a description of the authorities which protect the reserve, allowable and unallowable uses per those authorities, uses requiring a permit, and surveillance and enforcement strategies to ensure appropriate use of the reserve.

Plan Contents

I. State Management and Statutory Authorities

The protection of the reserve relies on state management and regulatory authorities. This section should describe all authorities (federal, state, local and tribal (if applicable)) related to the protection and use of reserve resources. It should include a complete description of rules and regulations that govern access and activities on reserve property. It should also identify key partners in developing and upholding these authorities.

Questions to inform this section include: What are the state, federal, and local regulatory authorities in place to protect the reserve? What rules govern uses and when were these developed? What partners were and/or are involved in maintaining these regulations?

Resource Protection Plan

- _Management Authorities
- _Allowable and unallowable uses
- _Map of allowable uses
- _Surveillance and enforcement capacities
- _Resource protection challenges
- _Resource protection objectives and actions ♦
- _Monitoring and evaluation plan strategies ♦

II. Allowable and Unallowable Uses

This section should describe all allowable and unallowable uses within the reserve, based on the

above authorities, and where they may/may not occur respectively. A map and/or table that provide an overview of these uses are encouraged. Any uses requiring a permit should be identified. A rationale should be provided regarding why there are restrictions in certain areas. Pre-existing uses that occurred prior to designation should be discussed and evaluated if those uses are still occurring to determine compatibility with intent of reserve.

Questions to inform this section include: What are the allowable and unallowable uses in the reserve? Why are these uses allowable and/or unallowable? How were these designations determined? Where do these uses occur? Are there pre-existing uses that are still occurring and are they compatible with the intent of the reserve? If not, how will the reserve resolve these uses? Are there additional policies in development that may limit access in certain areas? When will these be likely to be implemented? Is there a mechanism to communicate allowable uses to users of the reserve?

III. Surveillance and Enforcement

This section should describe the personnel and strategies dedicated to enforcing the management authorities to ensure appropriate uses of the reserve. The plan should clearly outline how violations to specific uses will be addressed via the enforcement network with jurisdiction over these resources. Key partnerships and other land owner protection plans that support the management and protection of the reserve should be described and included within an appendix if directly protecting reserve lands.

Questions to inform this section include: What agencies are responsible for surveillance and enforcement of rules regarding use within the reserve boundary? What is the relationship between the state agency and enforcement officials? Is there a plan in place for surveillance and enforcement? Is there a clear line of communication between applicable reserve staff and enforcement officials? What are the key partnerships important to protecting the reserve? What role do these partners play?

IV. Resource Protection Challenges

Maintaining adequate control of reserve resources can be challenging for a variety of reasons. This section should identify uses outside reserve boundaries that potentially impact reserve resources. It should describe how existing authorities and processes protect the reserve and how the reserve interfaces with these uses, e.g. is the reserve involved in reviewing permits for certain activities that may impact the reserve.

Questions to inform this section include: What activities occurring outside or within the reserve boundary impact or may potentially impact reserve resources? How does the reserve ensure these activities are not detrimental to the reserve? How do staff members interface with local entities to monitor and/or approve activities which may impact the reserve? Will reserve staff members be involved in permit review for activities occurring adjacent to the reserve?

V. Objectives and Actions

Like the administrative plan, this plan provides a foundational capacity to support the overarching goals and objectives within the strategic plan and be supported by other program

efforts. If applicable, the reserve can decide to incorporate specific objectives related to resource protection within the strategic plan or they can stand alone as foundational to all other elements within the strategic plan.

VI. Monitoring and evaluation

In order to effectively monitor whether resources are adequately protected, reserves must consider the following questions: What resource indicators does the reserve use to ensure ecosystem health? How will you monitor allowable and unallowable uses and adjust strategies to ensure protection? What are the frequency, timing and location of those monitoring activities? How does the reserve detect change in both resource and social indicators?

PUBLIC ACCESS AND VISITOR USE PLAN

About this Section

The public access plan is a required element of a management plan, per the Federal Code of Regulations 15 CFR 921.13. Public access can be defined as the ability of all members of the community to pass physically and visually to, from, and along the ocean shore, other waterfronts, and over public lands. The ability to enjoy the oceans, bays and rivers is directly related to the ability to reach them. A public access plan must try to allow for the long-term public use and enjoyment of the water and shoreline while minimizing damage to the resources. Depending on the geographic proximity and current access available to visitors, reserves may want to consider topics such as public transit, bike trails, ADA accessibility for all visitor facilities, and signage to ensure visitors can locate accessible areas and follow necessary rules for using resources wisely.

This plan should discuss public uses, opportunities, and challenges within the reserve. Objectives and actions should support public access and positive visitor experiences while maintaining adequate long-term protection of reserve natural and cultural resources.

Plan Contents

The following are key elements to be included within this section of the management plan. Discussion in response to the elements below should be addressed to the best of the reserve's ability given the unique stage and nature of the reserve.

I. Current Public Access

This section should include general information about where and how visitors, researchers, and other interested parties can access the reserve. This section should also include all relevant information and data that supports acceptable limits for public access or carrying capacity. Carrying capacity is the type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions in the reserve. Visitor experience includes the perceptions, feelings, and reactions a person has while visiting the reserve.

Questions to inform this section include: What are reserve hours of operations and fees? Where are the land and water access points? What is the rationale for current public access structure? What purpose do these access points serve and to whom i.e. target audiences for access? Why are they relevant and important? Which public uses are permitted at these access points? What specific programs support access opportunities? What access is permitted to historical and or cultural areas of significance within the reserve?

Public Access and Visitor Use Plan

- _ Current public access
- _ Map of public access points
- _ Public access challenges
- _ Public access and visitor experience opportunities
- _ Public access objectives and actions ♦
- _ Monitoring and evaluation strategies ♦

If the reserve has conducted carrying capacity studies, the following questions should be addressed: What is the reserve's current carrying capacity? What are the reserve's limits of acceptable change in addressing carrying capacity? Does the reserve have any statistics regarding current attendance records, visitor use impacts and/or results of carrying capacity studies?

II. Public Access Challenges

This section should include an overview of challenges to provide public access and maintain adequate control and protection of natural and cultural resources. Studies on carrying capacity and surveys on visitor use can serve as foundations for future action.

Questions to inform this section include: What and where are the challenges in balancing public access and protection of natural resources? What specific impacts has the reserve seen from these challenges? Does the reserve anticipate exacerbation of these impacts? What changes in demographics do you predict for the future? How do those changes impact planning for the future? Will climate change impacts provide public access challenges? Will these impacts potentially change the nature of access in certain areas? Are there particular species of concern potentially impacted by large groups visiting the reserve at particular times of the year, e.g. breeding season, growing season?

III. Public Access Opportunities and the Visitor Experience

While balancing information from current uses and challenges, this section should describe the future opportunities to increase or decrease access to specific areas of the reserve.

Questions to inform this section include: Who are reserve future target audiences? What has been learned since the last management plan that provides input for this plan? What specific policies will impact education, stewardship, research, and monitoring programs? Is the reserve trying to increase, reduce, limit public access and visitor use, and why? What are the primary themes that communicate the significance of the reserve to visitors? What strategies does the reserve implement to ensure that those interpretative themes are communicated? How does the reserve connect outdoor visitor use experiences to indoor exhibits?

IV. Objectives and Actions

If applicable, this section should provide an overview of the strategic plan objectives and actions that relate to public access and visitor use. It will be important to consider the role of education, interpretation and outreach in managing public access and visitor use.

If applicable, discuss indicators and procedures for monitoring and evaluating these actions to determine if public access should be altered in the future.

V. Monitoring and Evaluation

In order to effectively monitor and evaluate the success of restoration habitats, consider the following questions: Has habitat function and structure been established to meet targets? Has biodiversity been established to meet targets? What are the long-term monitoring plans? Were methods used appropriate for meeting targets? Were new protocols used and if so were they effective in meeting targets?

Resources

[NOAA's Managing Visitor Use in Coastal and Marine Protected Areas Course](#): Provides participants with tools to identify and define unacceptable visitor use impacts to natural resources and visitor experiences. Participants of this course will be able to understand the human dimensions of coastal and marine management, apply recreation and visitor use management planning frameworks, identify visitor use issues, including visitor-resource and visitor-visitor impacts, craft a clear problem statement, develop measurable indicators for monitoring impacts and management and set standards for impact acceptability, and implement visitor use monitoring methods and management strategies and tactics.

[Managing Visitor Impacts in Parks: A Multi-Method Study of the Effectiveness of Alternative Management Practices](#): Provides recommendations for outdoor recreation management within protected areas such as parks.

[Monitoring and Management of Recreation in Protected Areas: the Contributions and Limitations of Science](#): Provides examples of significant contributions of science to visitor monitoring and management. It covers the related scientific purposes of explanation, causation, prediction and assessment.

FACILITY DEVELOPMENT AND IMPROVEMENT PLAN

About this Section

The facilities plan is a required element of a management plan, per the Federal Code of Regulations 15 CFR 921.13. Reserve facilities provide functional space for reserve work and programming, and serve as the face to the public providing venues for learning and serving as a learning tool themselves. Reserve facilities must face all of the pressures that come with working and building in the coastal zone including withstanding storms, surge, erosion, and elements of wind, salt, sand, humidity among others. Additionally, a changing climate will exacerbate these pressures resulting in increased erosion, frequency and intensity of storm events and associated surge, sea-level rise and associated salt water intrusion. These challenges require reserves to build facilities that will withstand these pressures and serve their intended purpose for the life-cycle of the structure. ERD is encouraging reserves to build new and improve existing facilities so that they are sustainable and resilient.

Facility Development and Improvement Plan

- _Purpose of facilities
- _Current facilities
- _Map of facility locations
- _Facility challenges and gaps
- _Planned facilities, facility upgrades, and exhibits
 - _Climate and non-climate stressors
 - _Facility descriptions
- _Operations and maintenance manual as appendix ♦
- _Long-term facility plan as appendix ♦

Supporting material is provided in ***Appendix 10 Planning for Sustainable Facilities*** that expounds on how to assess vulnerability of potential investments, principles for sustainability and resiliency including examples and options, and sustainable building codes and rating systems. Building principles are discussed in detail and considerations, references and resources are provided to help reserves think about how to incorporate sustainable principles into facility planning. Please note that the supporting material for this guidance is more robust than other plan elements because it also supports planning requirements for the NOAA Programmatic Framework for Considering Climate Change Impacts in Coastal Habitat Restoration, Land Acquisition and Facility Development Investments.

This plan should discuss the reserve's philosophy on sustainable building, purpose and description of existing facilities, facility challenges and gaps, and plans for new facilities, facility upgrades, and exhibits. Like the administration plan, facilities support reserve operations and reserve staff ability to meet objectives and actions within the strategic plan. Reserves may either choose to craft specific objectives for this plan that do not need to be incorporated into the strategic plan, or they may simply identify facility priorities. Either approach is acceptable, but there should be a clear link between facility plans and the achievement of reserve goals and objectives.

Plan Contents

I. Purpose of Facilities and Construction Philosophies

This section should describe the overall purpose and vision for what the facilities on the reserve campus will help achieve. Reserves may see themselves as centers for regional excellence in providing services; they may be local experts with a lower profile; and/or they may have facilities that showcase sustainable building approaches and practices. Green or sustainable building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from siting to design, construction, operation, maintenance, renovation and deconstruction. Building in this way reaps not only environmental, but economic and social benefits.

This section should describe the philosophies that the reserve ascribes to, as well as the state laws, regulations and initiatives that support sustainable building.

Questions to inform this section include: What are the values of reserve facilities to the staff and public? What are the general reserve philosophies around construction, operations and maintenance of reserves facilities? What state laws, regulations, and/or initiatives support sustainable building? What elements of sustainability are most important for the reserve to achieve?

II. Description of Current Facilities

This section should describe each facility on the reserve campus. Descriptions of stationary and travelling exhibits should be included.

Questions to inform this section include: What is the purpose of the facility? Where is it located? When was it constructed? What are the components within the facility (if applicable)? How is the facility used and by whom? Is there visitor use and capacity data to support these facilities? How does the facility employ sustainable building principles? Are there plans to upgrade the facility to improve sustainability and operational efficiency? If so, these should be described generally in this section, but more specifically in the “Planned Facilities and Facility Upgrades” section as appropriate.

A map should be included that identifies the location of all current facilities. Additionally, include photos of major facilities.

III. Facility Challenges and Gaps

This section should describe the projected challenges that facilities will face whether that is from age, use, natural or anthropogenic stressors including climate impacts and provide a rationale and basis for new facility siting and upgrade priorities.

Questions to inform this section include: How old are the current facilities? Which ones are in need of repair? How old are the current systems within the building? What can be done to make them more efficient and supportive? What are the major stressors likely to affect facilities? Will increased precipitation, lake or sea level change, or frequency and intensity of storms be likely scenarios? Are facilities prepared for potential impacts?

This section should also describe the current facility gaps and needs as demonstrated through some form of needs assessment. These needs should be grounded in data – capacity, visitor use, functional needs, etc. – that identify the challenges that if overcome support the vision of the program and are consistent with elements of a standard reserve and sustainable reserve guidelines. (Dewberry Design, 2004) Much of this data may come from the needs and gaps information identified in the “Program Foundations” section.

Questions to inform this section include: What are the key programmatic technical and structural needs for reserve operations? What staff, visitor or stakeholder needs are not currently being met? What are the projected needs of those audiences? How can the reserve increase operational efficiency and reduce resources to meet those needs?

IV. Planned Facilities

This section should describe the facility and/or facility upgrades that the reserve wants to undertake during the period of the management plan that meets the identified needs stated above. Detailed explanation of these facilities should include considerations for siting (if applicable), sustainable design principles and climate change impacts. Please refer to information generated from the ‘Introduction to the Reserve’ component to inform development of this section.

A. Climate and non-climate stressors

In order to effectively plan for new facilities and/or the most appropriate facility upgrades, reserves need to consider siting for optimal sustainability, survivability and accessibility while also thinking hard about projected use and utility for staff and partners.

Questions to inform this section include: What are the major stressors likely to affect siting of new facilities? Will increased precipitation, lake or sea level change, or frequency and intensity of storms be likely scenarios? Will temperature ranges be shifting? What type of scenario planning has the reserve done to appropriately site new facilities? What are the results of that work? What are the projected uses and lifespan for the facility?

Hence, part of planning for future facilities, should include the following:

- Identification of the projected climate change impacts that will affect the investment. Stressors and their subsequent impacts that should be addressed include changes in precipitation, air temperature, change in sea level or lake level, and changes in storm frequency and intensity. Please refer to ***Appendix 6 Summary of Observed and Projected Regional Climate-related Changes and Appendix 7 Summary of Climate Change Phenomena with Observed and Projected*** changes, as well as local information relevant to understanding infrastructure sensitivity, exposure and/or vulnerability. Climate data and scenario tools focusing on sea level change can be found in the “Introduction to the Reserve” resources section as well as in ***Appendix 10 Planning for Sustainable Facilities***.
 - Identification of the life span of the project based on these scenarios and projected utility. It is the responsibility of project principals to identify the methods used to determine the life span of the project based on scenarios and expected utility of the structure. However, a 30 year life span is suggested for all major facilities.
 - Gauging the extent to which the projected impacts will affect project objectives and benefits over the life span of the project. By reviewing all of the factors above, determine the risk and appropriate investment for long-term facility projects, as well as potentially shorter-term upgrades and improvements in existing facilities.
 - Making determinations about the extent of the climate impacts over time based on one or more climate change scenarios. We advise applying a multi-scenario analysis based on recommendations outlined by the National Research Council, the US Global Change Research Program, and the Intergovernmental Panel on Climate Change.
-

B. Facility descriptions

Identify each project in order of priority and describe why the project is a priority for the reserve. In order to describe these projects accurately, pre-work and planning will likely be a necessity. If the reserve has already developed a facility master plan, please draw from this document. For each project describe the following:

- Purpose and estimated life of the facility.
- Sustainability goals, targets and evaluation mechanisms.
- Elements of the project that support Reserve System Sustainable Building Principles.
- Cost estimate for each proposed facility which include associated costs for environmental assessment, if applicable. An environmental assessment will need to be prepared if the project occurs on undisturbed land and/or if it is expected to have significant effects on the environment. Each project will be evaluated on a case by case basis.
- Description of associated signage and/or exhibits that describe the sustainable principles and features of the building if open to the public.
- Description of forecasted maintenance costs and state commitment to supporting these costs.

The Reserve System Sustainable Building Principles, adopted from “Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings” set forth in the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006), are discussed in detail along with examples in *Appendix 10 Planning for Sustainable Facilities*. With regard to addressing bullet three above, please refer to Appendix 10 which contains supporting information corresponding directly with the questions below related to each building principle.

Reserve System Sustainable Building Principles

- Integrated design & sustainable siting
- Water efficiency
- Energy efficiency
- Materials and resource conservation
- Indoor environmental quality
- Operational efficiency

1. Integrated design and sustainable siting

All projects should employ a collaborative, integrated planning and design process that starts at the earliest stages of the design process, includes a variety of expertise relevant to each stage, and maintains an integrated project team throughout all stages of the project considering the lifecycle of the project.

Questions to inform integrated design include: Will a collaborative integrated planning and design process be used? Will performance goals for the green principles be established for the project? What are there constraints to sustainable building? Are there local ordinances that will make this challenging?

The coastal zone presents a harsh environment for facilities and climate change will present new and exacerbate existing stressors. Projects should account for climate change impacts, as well as elements such as natural light, habitat preservation, stormwater, and factors affecting accessibility.

Questions to inform siting include: Are potential sites for future facilities at risk to climate impacts and/or natural hazards? Are potential sites for future facilities confined to the reserve buffer areas? What are the state and local considerations for reserve facility siting? Are you considering the full spectrum of lighting needs and impacts? How do you plan to protect existing native habitat or restore a site with native species? How do you plan to address stormwater discharges on the site? Are you considering implementing LID practices for stormwater? Are you considering proximity to community features and transportation issues?

Mission-Aransas Reserve: Building Sustainably on the Texas Coast

In 2011, the Mission-Aransas Reserve celebrated the opening of its new Estuarine Research Center on the UTMSI campus. Several years in the making, the Reserve coordinated a collaborative approach bringing together an interdisciplinary team of engineers, architects and reserve staff to design and construct a headquarters and research facility to withstand harsh coastal conditions (i.e., high winds, salt, torrential rains and storm surges) and meet specific sustainability goals. Their first challenge was working within a culture where facilities development practices and norms did not necessarily incorporate green principles.

To address conditions on the coast, the facility is designed to sacrifice the ground floor housing non-critical building functions, an exterior rated to handle 130mph winds and using concrete additives to prevent chloride penetration to name a few. In addition, the grounds are being irrigated by air conditioning condensate and rainwater captured from the roof to reduce impacts on municipal water systems. During the construction, 83% of the construction waste was recycled and 82% of the materials used originated in Texas. Taken together, the project team incorporated sustainable design and construction practices that qualified for LEED Silver certification.

Throughout the project, the Reserve found that building sustainability with low carbon footprints is difficult to do on the coast. However, commitment from all the partners to sustainable designs and practices was critical to achieving a facility that is durable, versatile and sustainable. For more information, contact the Mission-Aransas Reserve.

2. Water efficiency

Water is a precious commodity and given availability and infrastructure stressors, we must decrease the amount of water used and increase dependence on water that is collected, used, purified, and reused on-site. Try to employ water saving mechanisms as much as feasible.

Questions to inform water efficiency include: How will you incorporate xeriscaping? Are you being strategic in use of turf areas as part of the facility landscaping? How will you incorporate efficient irrigation systems and schedules? What water use reduction practices will you incorporate?

3. Energy efficiency

Buildings in this country use a significant amount of energy most of which is produced from nonrenewable, fossil fuel resources which are contributing to greenhouse gas impacts. It is imperative that reserves reduce their energy demands. It is worth re-emphasizing an integrated project team since reducing energy demand requires a team including a variety of building experts to do this effectively.

Questions to inform energy efficiency include: How will you ensure an integrated planning team and process? How will you set energy efficiency targets and measure them? How will you reduce heating, cooling and lighting loads? How will you employ renewable or high-efficiency energy sources? How will you identify efficient HVAC and lighting systems? How will you reduce non-regulated energy consumption? How will you optimize system controls?

Great Bay Reserve: Stepping out on Geothermal and Solar

The Great Bay Reserve broke new ground for the New Hampshire Public Works Department as the first state facility to install a geothermal system. Due to the NHPWD's lack of experience and the fact that they had to go with the lowest bidder who then subcontracted out various parts, the system was delivered with multiple challenges which required time and money to fix. A key lesson here is to do as much homework as possible to make up for the experience your agency may lack. While states must follow certain contracting rules, at a minimum, try to ensure that there is one company, ideally one with local expertise, to manage the entire project to ensure a seamless product and installation. On the flip side, the solar roof was a great success because they hired a local contractor who designed and installed the system. The bid process was a success as well since they bid for solar with a roof component vs. bidding for a building with a geothermal component. The reserve is already seeing about 20% energy saving. The roof is projected to last about 40 years, almost twice that of an asphalt roof. Beyond energy and materials savings, staff and visitors love coming to a green building. For more information, contact the Great Bay Reserve.

4. Materials and resource conservation

Preventing and recycling waste reduces depletion of natural resources, creates less pollution by reducing manufacturing and transportation-related emissions, uses less energy and water compared to many virgin material product manufacturing processes, and reduces greenhouse gasses by using less energy for manufacturing and transportation. It is important to purchase products and employ processes that do not pollute or unnecessarily contribute to the waste stream, do not adversely affect health, and do not deplete limited natural resources.

Questions to inform material and resource conservation include: Do you have a plan for managing construction waste? Have you evaluated environmental trade-offs for materials and resources? Have you considered recycled materials and deconstruction assemblies as much as possible? Have you considered using renewable, locally produced and low energy materials to the full extent possible?

5. Indoor environmental quality

Indoor environmental quality encompasses indoor air and water quality, aesthetics, ergonomics, acoustics, lighting, and electromagnetic frequency levels. It is important to value decisions about these items and engage building occupants in making these decisions, as well as allow for personal control of these items where practicable.

Questions to inform indoor environmental quality include: How will you achieve a comfortable and healthy air and water quality for occupants? How will you reduce pollutants inside the facility? How will you ensure a productive work environment?

6. Operational efficiency

Operational Efficiency will be a direct result of taking all other sustainable building principles into account for new buildings. A whole building design approach ultimately yields the best returns in reduced impact to the environment, efficient operation, and effective work environment.

Questions to inform operational efficiency include: Have you identified operational efficiency targets, especially for energy and water efficiency? Have you created a schedule for assessing those targets? Have you developed an operations and procedures manual so that systems can be cared for appropriately? Have you identified personnel to monitor and maintain the facility?

V. Facility Upgrades

All reserves should try to evaluate where sustainability can be improved for each facility on the reserve campus. Where possible, audits to assess water and energy inefficiencies should be performed to understand usage and options for minimizing usage. This information should Directly inform efforts to address the Reserve System sustainable building principles.

Questions to inform this section include: What are the most significant energy and water sinks at the reserve? What actions can be implemented to reduce energy and water usage? What actions can be taken to address the other sustainable building principles, including exterior work associated with landscaping/xeriscaping? What are the sustainability goals and targets for these specific upgrades? How will the reserve evaluate the efficacy of the improvements over time? How will the reserve maintain upgrades and ensure systems and improvements remain efficient?

VI. Exhibits

Reserve exhibits provide important passive and active learning opportunities for a variety of visitors about the dynamic processes and benefits of estuaries, as well as the pressures they are under and what the public can do to protect these resources. Exhibits should be theme based, address reserve priority issues, and convey the reserve's key messages. Exhibits should be evaluated periodically to determine how to incorporate new information and best engage audiences.

This section should include a general description and cost estimate for new exhibits and/or exhibit upgrades based on some form of needs assessment. When possible, use sustainable materials, and where applicable discuss sustainable building principles.

Additionally, interpretive materials and signage can be found both inside facilities as well as outside within demonstration sites, land trails, water trails, amphitheaters, etc. Consider the range of experiences available to visitors, and provide description of planned outdoor interpretive materials and/or exhibits. Cost estimates should be included and these activities should also be based on projected visitor use needs and impacts.

References

Dewberry Design Group Incorporated (2004) National Estuarine Research Reserve System Standard Reserve

Dewberry Design Group Incorporated (2004) National Estuarine Research Reserve Sustainable Design Guidelines

Note: A full suite of references, tools, and resources can be found in **Appendix 10** regarding building codes and standards, climate change tools, and sustainable building principles.

LAND ACQUISITION PLAN

About this Section

The land acquisition plan is a required element of a management plan, per the Federal Code of Regulations 15 CFR 921.13. Estuaries, and their associated habitats, offer numerous and diverse benefits to society and natural systems. Some of these benefits include storm buffers to protect property from hurricanes; nurseries for commercially important marine species; areas for to enjoy for recreation and aesthetics. However, human development has significantly eliminated or degraded the habitats that provide those societal values. To address the conservation of coastal habitats, the U.S. Commission on Ocean Policy in 2004 recommended that each state identify priority coastal habitats and develop plans, in partnership with willing landowners, federal agencies and others, for coastal and estuarine land conservation.

NOAA supports this recommendation through several acquisition investment tools under the Coastal Zone Management Act (CZMA) of 1972, as amended, including the Coastal Resource Improvement Program authorized under Section 306A, the Coastal and Estuarine Land Conservation Program under Section 307A, and the Reserve System Land Acquisition and Construction Program under Section 315. Each of these programs provides an opportunity to conserve coastal habitats.

This plan should identify ecologically key land and water areas for acquisition, prioritize these areas according to their relative importance for specific values, and describe strategies for establishing adequate long-term state control over these areas.

Plan Contents

I. Acquisition Values

This section should describe the reserve's acquisition values. These values will form the basis of an acquisition plan. Essentially, the reserve needs to identify those ecological, historical, conservation, cultural, recreational, and other values that are important when considering future acquisitions. These values should be connected to the reserve's management plan goals and objectives.

Questions to inform this section include: What broad acquisition values are important to the reserve? Do the acquisition values match the reserves' management goals and objectives? Has the reserve considered non-ecological values?

II. Priority Acquisition Areas

This section should describe priority areas targeted for potential future acquisitions. To support the identification of these priority areas, the reserve must include a description of the criteria used to prioritize areas, the prioritization process used, and any additional factors that influenced the selection of these areas. These areas do not need to be at the parcel level, but at a level appropriate for the reserve.

A. Descriptions of Priority Acquisition Areas

The description of each priority area should include key habitats, existing ecological value, and proposed value to the reserve's ecological unit and/or programming. A map should be included of all acquisition areas, within the context of the reserve boundary to understand if priorities are contiguous and/or connected to the reserve via water corridor. Each target acquisition area description must be sufficient to reference when developing potential land acquisition grant applications.

Questions to inform this section include: Are the acquisition areas adjacent to existing reserve boundaries (core or buffer)? Is there sufficient existing information available to describe each area? What are the key habitats within each area? How are these areas contributing to protecting and/or enhancing the ecological unit and/or programming at the reserve? Does the reserve have the capability to produce high quality maps of the areas? What key values are supported through the targeted areas?

Optional Elements for Priority Acquisition Areas

The reserve could enhance their priority area descriptions by including maps of important non-ecological acquisition values within priority areas. This supporting visualization could identify important cultural resources; access pathways, consumptive and non-consumptive recreation uses, historic structures, education potential, etc.

B. Prioritization Process and Criteria

The reserve should describe the prioritization process used to identify and rank the acquisition areas. Key to this process is the identification of ranking criteria. The criteria developed by a reserve should incorporate climate and non-climate factors into the prioritization process. These criteria are typically created by the reserve staff with input from partners, the reserve advisory board and are linked tightly to objectives within the reserve strategic plan. Benefits of creating criteria include:

Land Acquisition Plan

- _Reserve Acquisition Values
- _Priority Acquisition Areas
 - _Description of acquisition areas
 - _Map of acquisition areas
 - _Prioritization process
 - _Climate and non-climate stressors
 - _Map of important non-ecological acquisition values within priority areas ♦
- _Priority Areas Acquisition Strategy
 - _Tract acquisition strategy
 - _Tract ecological and/or programmatic values
 - _Preferred methods for establishing state control
 - _Fair market value estimates
 - _Potential acquisition partners
 - _Funding sources
 - _Estimated acquisition timeline
 - _Map detailing land uses on public and private tracts outside the reserve boundaries ♦
 - _Management and/or stewardship considerations for acquisition priorities ♦
 - _Description of collaborative process used in joint acquisition projects ♦

- Help reserve managers, staff and partners visualize the conservation priorities
- Provide a strategic approach to conserving ecosystem functions and services
- Improve ecosystem and community resilience to climate and weather impacts
- Leverage partners in support of reserve priorities
- Improve the management of investment risks

Questions that inform this section include: Has the reserve identified a process or strategy for acquiring new areas? What ranking criteria does the reserve use for prioritizing acquisition areas? Is the prioritization process linked to the reserve management plan or other conservation priorities within the state? Has the reserve sought the input of the Reserve Advisory Board or other stakeholders? Has the reserve developed criteria that account for climate and non-climate factors?

C. Factoring Non-Climate and Climate Stressors into Acquisition Planning

Historically, acquisition planning looked at a variety of anthropogenic and natural stressors to support the prioritization process. Given the limited resources of states and land trusts, this process is useful in identifying targets of future land conservation investments. Some of the types of stressors considered in the past include the threat of development, invasive species, land zoning, etc. Climate related stressors have not been commonly factored into this process.

In 2010, OCRM and the Office of Habitat Conservation jointly developed the NOAA Programmatic Framework for Considering Climate Change Impacts in Coastal Habitat Restoration, Land Acquisition and Facility Development Investments which identifies a framework for considering climate change impacts in planning and decision-making for coastal investments in restoration, facilities development and land acquisition. This framework provides that new or updated acquisitions plans that are part of reserve management plans must integrate climate considerations.

Reserves should create a set of climate considerations or criteria that are reflected in the prioritization of acquisition areas. Climate related criteria developed by the reserve should be applied equally to the prioritization process rather than outweighing other values or factors. When factoring in climate stressors the reserve should also consider short and long-term impacts. Some examples of climate stressors used to develop criteria might include changes in relative sea or lake levels; changes in storm intensity, and changes in precipitation patterns. (CELCP Guide, 2011)

Example Climate Stressor-Impact Links for Acquisition

Stressor	Short-term Impact	Long-term Impact
Sea Level Rise	↑ Inundation, ↑ coastal erosion, Δ salinity, functional Δ in habitats	disappearance of habitats, Δ species diversity, functional Δ in habitats, habitat migration
Storm Intensity	↑ storm surge, ↑ coastal erosion	damage to key habitats, Δ species diversity
Storm Intensity	↑↓ drought, Δ salinity, Δ sediment and pollutant loadings, ↑ flooding	Δ water quality, Δ species diversity, functional Δ in habitats

In addition to impacts, reserves should value any potential ecological benefits derived from climate stressors. Benefits could include creating habitat migration corridors, creating refugia for sensitive species, and buffering for storms.

When identifying and describing climate and non-climate stressors, consider the following questions to inform this section: What climate stressors are most relevant to the reserve? What are the potential short and long-term impacts linked to the stressors? How will already identified acquisition priorities be impacted by climate stressors? How can the reserve maintain the ecological unit with key acquisitions? Are there other climate change planning documents applicable to the reserve acquisition plan? What adaptive benefits or values are important to the reserve when addressing climate impacts? What climate criteria are considered in the prioritization of acquisition areas?

Example prioritization criteria for climate change considerations include:

- Degree of sensitivity of the area to locally relevant climate change impacts
- Impact to area's primary acquisition values
- Resilience of the area to climate impacts that could include:
 - Connectivity of habitats to allow for species migration
 - Protect key ecosystem features that play a significant role in maintaining system functions and natural processes
 - Conserve habitat and species diversity
 - Reduce anthropogenic stressors to existing habitats and conservation values
- Exposure to climate impacts over time. This could mean a 30 year time horizon but ideally a 50 or 100 year time horizon should be considered.
- Elevation, especially important in coastal areas impacted by sea level change

What non-climate stressors are most relevant to the reserve? What are the potential short and long-term impacts linked to the stressors or threats? How will already identified acquisition priorities be impacted by these stressors? What adaptive benefits or values are important to the reserve when addressing non-climate impacts? What non-climate criteria are considered in the prioritization of acquisition areas?

Example prioritization criteria for non-climate considerations include:

- Immediate threats of development
- Impact to area's primary acquisition values
- Resilience of the area to anthropogenic impacts that could include:
 - Connectivity of habitats to allow for species migration
 - Protect key ecosystem features that play a significant role in maintaining system functions and natural processes
 - Conserve habitat and species diversity
- Exposure to invasive species impacts over time.
- Existing zoning practices
- Visitor uses impacts

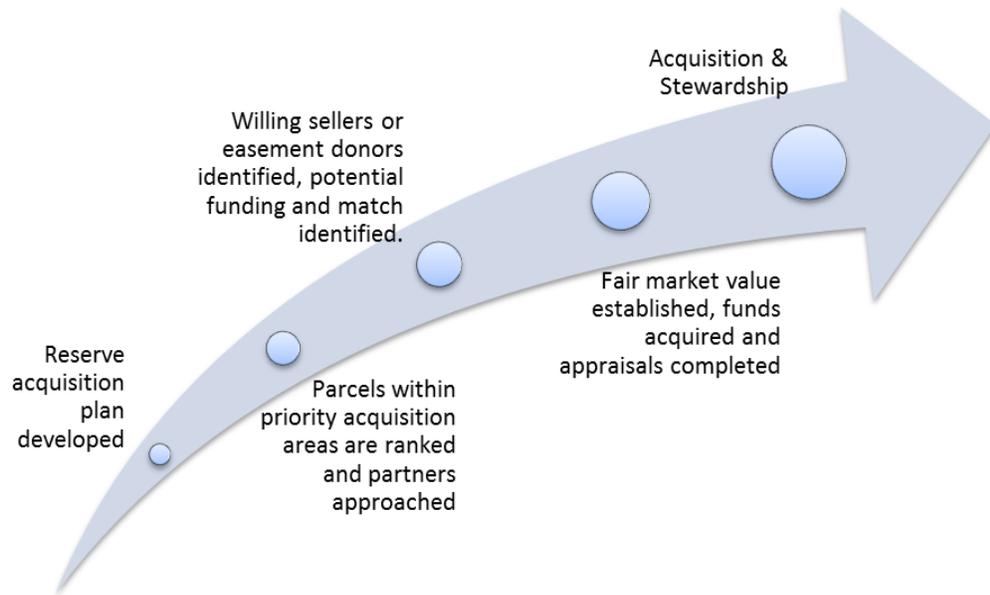
III. Priority Areas Acquisition Strategy

Once priority acquisition areas have been established, the reserve should consider how it will acquire lands and waters within an acquisition area. Tracts within larger areas identified should be identified to the best of the reserve's ability. Ranking priority tracts targeted for acquisition provides reserves the opportunity to efficiently allocate limited acquisition resources to land or waters that best support ecological functions and/or programmatic goals and objectives laid out in the management plan. A table or list of the ranked areas should be included in the plan.

The reserve should describe the strategy or process used for establishing long-term protection to ensure a stable environment for research and education within acquisition areas. These strategies may be stated generally as they may be applied to all acquisition areas; however, if knowledge of a particular strategy is applicable to specific smaller areas or tracts, then that should be identified. If applicable, any required state level acquisition strategies should be described in this section.

It will also be important to understand how these acquisition strategies are consistent with federal and state requirements and processes, as well as if acquisition projects are consistent and complementary to other federal and state acquisition program plans, e.g. Coastal and Estuarine Land Conservation Plans. The coordination with the state CELCP plan should be specifically discussed, as well as coordination with other relevant conservation plans linked to reserve land-owning partners.

Note: The reserve may choose to not identify specific parcels to target for future acquisition under the plan. These parcels can be grouped together into tracts or subareas for the purpose of creating an acquisition strategy. In most cases, reserves choose not to identify targeted parcels due to local considerations.



For each ranked priority area, and if possible, the tracts within the larger area, the following should be identified and described:

- Acquisition strategy
- Ecological and/or programmatic values
- Preferred method for establishing state control should
- Fair market values within acquisition areas
- Potential acquisition partners
- Potential funding sources
- Acquisition timeline; and other supporting information, as applicable

Questions to inform this section include: Has the reserve discussed pros and cons of various processes or strategies for acquiring new tracts/areas? Does reserve staff understand different mechanisms for acquisition? Has the reserve considered the subsequent stewardship of areas and parcels targeted for acquisition? What is the reserve's timeline for acquisition of selected priority areas within a 5-year timeframe? How does "core" verse "buffer" impact acquisition planning? Who are the reserve's potential partners or sources of match for acquisition projects?

A. Tract Acquisition Strategy

The reserve should briefly describe the strategy or process used for establishing long-term protection to ensure a stable environment for research and education. Various strategies may be of value; for example, reserves could focus at a landscape scale (i.e. Green Infrastructure) or use a threat-based approach, using reserve stressors like land conversion or development as a key attribute.

B. Tract Ecological or Programmatic Values

The reserve should describe the ecological or programmatic values for the tracts within each prioritized area, or per area as applicable. Identifying these values for individual tracts will help the reserve rank tracts for future acquisition opportunities.

C. Preferred Methods for Establishing State Control

According to Reserve System regulations, a reserve must establish adequate state control over new areas acquired for inclusion into the reserve boundary. Specifically, per 15 CFR 921.13:

In selecting a preferred method(s) for establishing adequate state control over areas within the proposed boundaries of the reserve, the state shall perform specific steps for each parcel determined to be part of the key land and water areas (control over which is necessary to protect the integrity of the Reserve for research purposes), and for those parcels required for research and interpretive support facilities or buffer purposes.

- (A) Determine, with appropriate justification, the minimum level of control(s) required [e.g., management agreement, regulation, less-than-fee simple property interest (e.g., conservation easement), fee simple property acquisition, or a combination of these approaches]. This does not preclude the future necessity of increasing the level of state control;
- (B) Identify the level of existing state control(s);
- (C) Identify the level of additional state control(s), if any, necessary to meet the minimum requirements identified in paragraph (a)(7)(i)(A) of this section;
- (D) Examine all reasonable alternatives for attaining the level of control identified in paragraph (a)(7)(i)(C) of this section, and perform a cost analysis of each; and,
- (E) Rank, in order of cost, the methods (including acquisition) identified in paragraph (a)(7)(i)(D) of this section. (ii) An assessment of the relative cost-effectiveness of control alternatives shall include a reasonable estimate of both short-term costs (e.g., acquisition of property interests, regulatory program development including associated enforcement costs, negotiation, adjudication, etc.) and long-term costs (e.g., monitoring, enforcement, adjudication, management and coordination). In selecting a preferred method(s) for establishing adequate state control over each parcel examined under the process described above, the state shall give priority consideration to the least costly method(s) of attaining the minimum level of long-term control required.

As a result, the reserve will need to identify the method(s) or mechanism(s) of acquisition which the state proposes to use to establish adequate long-term state control over areas targeted for acquisition. Some of the acquisition mechanisms potentially available to reserves include:

- Fee Simple - absolute title to land, free of any conditions, limitations, restrictions, or other claims against the title, which one can sell or pass to another by will or inheritance. A fee simple title has a virtually indefinite duration.
- Conservation Easement – a legal agreement between a landowner and a land trust or government agency that permanently limits uses of the land in order to protect its conservation values. It allows landowners to continue to own and use their land, and they can also sell it or pass it on to heirs. Examples of acquired easement rights include riparian, subsurface mineral, agricultural, residential development, viewshed, and groundwater.
- Donation - An outright donation of land to a trust or federal, state, or local governments that may provide the donor with a charitable income tax deduction and a reduction in the value of one's taxable estate.

Mission Aransas Reserve: Stewardship Considerations at Fennessey Ranch

As part of the designation of the Mission-Aransas Reserve in 2006, a conservation easement was acquired on a private working ranch that allows multiple uses including hunting, fishing, nature tours, and cattle ranching, among others. Supporting these diverse business ventures, the ranch includes diverse habitats from freshwater wetlands, riparian corridors and coastal prairie. All these habitats support a wide range of fauna and flora, including over 400 species of birds.

The conservation easement provides the legal foundation for the collaborative management of the property between the Reserve and the property owners. A joint management plan was developed that allows for the generation of revenue from compatible uses and ensures that the conservation values of the ranch will continue to support wildlife, biodiversity, as well as, reserve research and education opportunities well into the future. For more information: <http://www.missionaransas.org>

D. Fair Market Value Estimates

Reserves should look at the fair market value of any property interest within the prioritized acquisition areas. Ownership and fair market values of tracts can be stated in general terms within the plan. It is recommended that individual tract ownership not be identified.

E. Potential Acquisition Partners

The reserve should identify potential acquisition partners. These could include a variety of interested local, regional, or national land trusts (e.g., The Conservation Fund, The Nature Conservancy, Weeks Bay Foundation, The Elkhorn Slough Foundation), state land management agencies, municipalities, local governments, and reserve Friends groups. Partners can be valuable assets to a reserve by

providing real estate expertise, conducting property appraisals, contacting willing sellers, offering financial and legal assistance, and monitoring easement properties among others.

Weeks Bay Reserve: Leveraging Partners to Acquire Land

In 2010, a diverse partnership secured the acquisition of 820 contiguous acres of forested wetland habitats adjacent to the Weeks Bay Reserve. A diverse coalition comprised of the Conservation Fund, Weeks Bay Foundation, Baldwin County Commission, Alabama Forever Wild through the Alabama Department of Conservation and Natural Resources (ADCNR), and the National Oceanic & Atmospheric Administration (NOAA) contributed to the success of the project. To acquire the property for conservation purposes, ADCNR brought together funding from different sources including NOAA, Forever Wild, and Coastal Impact Assistance Program. Working with ADCNR, the local and national land trusts became the contracting entity with the willing seller. In that role, they researched the title and completed an appraisal of the property. Without the contributions of the various partners, the Reserve would have not been able to acquire property. The resulting federal, state, local and land trust partnership has made a significant contribution to the conservation of coastal habitats and contributes to improved public access, water quality, and opportunities for research and education. These partnerships were the key factor to implementing the largest addition to the Reserve since its designation in 1986.

F. Funding Sources

The reserve should identify potential sources of acquisition funds. These could include potential sources of matching funds. Funding sources could be federal, state, foundation, or private. Common examples of funding sources are provided in the tools and resources section.

G. Estimated Acquisition Timeline

The plan should include a schedule estimating the time required to complete the process of establishing adequate state control over parcels within priority acquisition areas.

Optional Elements Supporting Priority Area Acquisition Strategy

The Reserve could enhance their priority area descriptions by including optional maps detailing the range of land uses on public and private parcels within the reserve watershed and priority acquisition areas. Looking towards the future, the reserve should detail some of the potential management and stewardship considerations for areas or tracts post-acquisition. These management considerations should link to the reserve's management plan and restoration plan (if applicable). In addition to looking at potential partners, the reserve could also detail the collaborative process it plans to implement with those partners for joint acquisition projects.

References

National Oceanic and Atmospheric Administration (May 2010). [Programmatic Framework for Considering Climate Change Impacts in Coastal Habitat Restoration, Land Acquisition, and Facility Development Investments](#).

U.S. Commission on Ocean Policy (2004) *An Ocean Blueprint for the 21st Century - Final Report*. Washington, DC, 2004. ISBN#0-9759462-0-X

Tools and Resources

[NOAA's Habitat Priority Planner](#): A GIS tool to help identify and prioritize areas for conservation, restoration, and planning.

[NOAA's Sea Level Rise and Coastal Flooding Impacts Viewer](#) shows how various levels of sea level rise will impact coastal communities. The current project areas include Mississippi, Alabama, and parts of Texas and Florida, with additional coastal counties to be added in the near future. Visuals and the accompanying data and information cover sea level rise inundation, uncertainty, flood frequency, marsh impacts, and socioeconomics.

Funding Opportunities

[U.S. Department of Agriculture - Forest Legacy Program](#): Grants available to help landowners, state and local governments, and private land trusts identify and protect environmentally important forest lands that are threatened by present and future conversion to non-forest uses. The Forest Legacy Program is designed to assure that both traditional uses of private lands and the public values of America's forest resources are protected.

[U.S. Fish and Wildlife Service's North American Wetland Conservation Act Program](#): Grants are available to fund conservation of wetlands and wetland-dependent fish and wildlife (waterfowl) through acquisition, restoration and/or enhancement. Grants may be provided directly to state, local governments, and non-profit organizations. This program strongly prefers to fund diverse conservation partnerships.

[U.S. Fish and Wildlife Service's Coastal Wetland Grant Program](#): Grants are awarded to Great Lakes and coastal states and trust territories for projects that restore, acquire, manage, or enhance coastal lands and waters. Projects must provide for the long-term conservation of such lands and waters and the fish and wildlife dependent on them. The Coastal Grants Program gives priority to the restoration of barrier islands associated maritime forest, coastal wetlands ecosystems, endangered species, anadromous fish species and to the building of financial and cooperative, private and governmental partnerships.

[U.S. Fish and Wildlife Service's Endangered Species Recovery Lands Program](#): Grants are provided to states and territories for acquisitions of habitat that support approved recovery plans.

Natural Resources Conservation Service's Grant Programs: The NRCS has a number of cost-share/grant programs that involved acquisition of conservation easements including the Conservation Reserve Program, Wetland Reserve Program, and Conservation Reserve Enhancement Program. The Wetland Reserve Program provides technical and financial assistance to eligible landowners to address wetland, wildlife habitat, soil, water, and related natural resources concerns on private lands in an environmentally beneficial and cost-effective manner. The program provides an opportunity for landowners to receive financial incentives to enhance wetlands in exchange for retiring marginal land from agriculture. This program involves the establishment of permanent or 30-year conservation easements or restoration cost-share funds.

NOAA's Coastal and Estuarine Land Conservation Program: Grants to state and local governments to purchase significant coastal and estuarine lands, or conservation easements on such lands, from willing sellers.

NOAA's National Estuarine Research Reserve System PAC: Grants to state host agencies of reserves to support land acquisition for projects identified in approved reserve management plans.

RESOURCE MANIPULATION PLAN

About this Section

The resource manipulation plan is an optional element of a management plan, per the Federal Code of Regulations 15 CFR 921.13, and should be included when resource manipulation activities are occurring within the buffer areas of the reserve. Resource manipulation can occur only in the reserve buffer and refers to long-term pre-existing (prior to designation) manipulation for reasons not related to research or restoration. Most often resource manipulation is occurring for the benefit of human communities. Examples of resource manipulation activities include regulation of water flow, sediment management, timbering, or aquaculture. These activities should be reviewed to ensure they are not preventing the reserve from serving its designated purpose.

Resource Manipulation Plan (Optional)

- _Current and proposed resource manipulation activities
- _Map of manipulation activities
- _Permitting/approval requirements
- _Climate and non-climate stressors
- _Current and potential partners
- _Impacts of activities

This plan should identify and describe priorities for resource manipulation, influence of stressors on these activities, requirements for conducting them, justification for continuing them, and resources and partners devoted to them.

Plan Contents

I. Current and Proposed Resource Manipulation

This section should describe the reserve's current or planned resource manipulation activities. Each activity, current or planned, should generally support the reserve's management plan goals and objectives and not create any negative impact to resources. In addition, expected outcomes of the resource manipulation activities should be described generally. Outcomes could be ecological, social, or economic in nature and should not be detrimental to the ecology of the reserve. Given that reserves have limited resources, the reserve should prioritize what activities they will implement or continue over the 5-year management planning period.

The reserve should justify why the current and planned resource manipulation activities are useful and/or at minimum, not detrimental to reserve resources. It will be helpful to reference local, state, or federal priorities or plans that support these activities and are important to the reserve. A reserve boundary map should be provided that spatially references the current and planned resource manipulation activities and key resources or habitats important to these manipulations.

Question to inform this section include: What are the reserve's current or proposed resource manipulation activities? How are the activities identified connected the reserve's management

plan goals and objectives? What are the priorities for the reserve and why? What are the potential benefits of conducting resource manipulation activities? At what scale are these manipulations occurring? What local, state, and/or federal authorities or priorities support current and proposed resource manipulation activities?

A. Factoring Non-Climate and Climate Stressors into Resource Manipulation Planning

The reserve should consider stressors that may impact resource manipulation activities, including climate considerations that factor into prioritizing these activities. When available, incorporate downscaled climate model information and other climate trend information to support the prioritization process. Incorporating these considerations into the prioritization process will help the reserve create a matrix of place-based climate related impacts to reserve resources or habitats associated to resource manipulation activities.

Questions to inform this section include: What climate stressors could impact resource manipulation activities? Are these impacts beneficial or harmful to key reserve resources or habitats? Will resource manipulation activities enhance resilience to climate stressors?

B. Current and potential partners

Briefly identify reserve partners that support current or planned resource manipulation activities. Partners may be key players in achieving successful activity outcomes.

C. Permitting or Approval Requirements

The reserve should briefly describe any permits or other regulatory or administrative requirements for resource manipulation activities within reserve boundaries. Permits or regulatory requirements will vary based on each activity. An example of a permit could include an incidental take permit issued by USFWS for certain species.

Questions to inform this section include: Have you contacted regulatory officials within your state or county to inquire about permitting requirements for resource manipulation activities. If the reserve is not the primary party responsible for land stewardship or management, have those entities been included in the development of the proposed activity? What state and federal permitting or regulatory requirements apply to current and proposed manipulation activities?

D. Impacts of Resource Manipulation Activities

Any time resources are manipulated by humans, opportunities exist for ecological disturbance beyond intention. These activities should be closely monitored for intended and unintended consequence to ensure that key reserve resources are protected.

Questions to inform this section include: Do the manipulation activities have the potential to negatively impact key land and water areas or habitats? Are resource manipulation activities occurring in areas considered for core area expansion? How will the reserve monitor these activities and their impacts?

RESTORATION PLAN

About this Section

The restoration plan is an optional element of a management plan, per the Federal Code of Regulations 15 CFR 921.13. Most reserves have habitats that are in less than pristine condition due to land use and/or climate-related impacts. Restoration offers the opportunity for reserves to return habitat to its natural functioning, and in doing so, inform the practice of restoration through a hypothesis-

“Here is the means to end the great extinction spasm. The next century will, I believe, be the era of restoration in ecology.”
E.O.Wilson

driven restoration design. Restoration planning should take advantage of the full suite of reserve programmatic capability to the extent possible and address climate and anthropogenic stressors in considering the resilience, and hence prioritization, of restoration activities. Within the Reserve System, reserves span the spectrum of restoration needs from relative intact systems with no readily apparent need for restoration, to those altered where restoration may be the only way to achieve original function. The level of detail and priorities identified in this plan will depend on where a reserve is along this continuum.

This plan should describe restoration priorities, process for determining those priorities, influence of stressors on the priorities, project details (if available), and a monitoring strategy. Background on restoration ecology and the Reserve System Restoration Science Strategy is provided as context for the plan contents section.

What is Restoration Ecology?

Restoration ecology is the scientific study and practice of renewing and restoring degraded, damaged, or destroyed ecosystems and habitats in the environment by active human intervention and action, within a short time frame site using targeted actions to achieve relatively self-sustaining ecological conditions. The Society for Ecological Restoration defines ecological restoration as an “intentional activity that initiates or accelerates the recovery of an ecosystem with respect to its health, integrity and sustainability.” (Society for Ecological Restoration, 2004) The practice of ecological restoration encompasses a wide scope of projects such as restoration of hydrology, regarding, shoreline erosion control, reforestation, local seed sourcing, removal of non-native species, re-vegetation of disturbed areas, stream bank modifications, reintroduction of native species, as well as habitat and range improvements for targeted areas within reserves.

What is restoration science in the Reserve System?

In 2002, a multi-disciplinary group of Reserve System staff and outside restoration experts developed a Restoration Science Strategy that takes advantage of the unique capabilities of the Reserve System within individual reserves and the System. The goal of the Strategy is to “provide the scientific bases and technical expertise to restore, enhance, and maintain estuarine ecosystems by developing and transferring effective approaches to identify, prioritize, restore, and monitor degraded or lost coastal habitat.”

The Strategy identifies a number of over-arching restoration-related questions that the Reserve System is poised to address through an inquiry-based approach to restoration. Questions posed by the plan include:

Once habitats and functions of value in estuaries are degraded, is this reversible and how? Can these functions be reversed to a pre-existing condition; are all functions restorable? When is rehabilitation to another type of habitat more appropriate than restoration?

What is the importance of topographical complexity to restoration? What is the relationship between topographical complexity and biodiversity? What is the relationship between habitat structure and function?

What do you monitor at an individual reserve that would help measure the cumulative benefit of many restoration projects? How long should projects be monitored to ensure long-term success? What steps should be involved in restoration projects? What level of effort is appropriate? What are the tradeoffs between tremendous effort up front and small efforts over a longer period of time?

Additional considerations include ecosystem services. Considering the value of coastal resources and potential climate impacts and other stressors effects on these values, how can ecosystem services be maintained or enhanced to increase resilience of habitats and communities? What services are most beneficial to the reserve and surrounding natural and human communities? How will climate impacts generally be factored into restoration decisions?

The Strategy promotes collaboration among reserves to address many of these questions and hence, contribute to scientific literature and policy development. The Reserve System can play a national role by developing innovative technology and methods of evaluating restoration performance, serving as local reference sites, translating and transferring restoration information, providing scientific and technical advice to support policy and regulatory decisions, and building support for regional science coordination. A reserve's restoration plan should not only focus on restoring habitat in the reserve, but explore what role(s) the reserve's restoration or other on-site capacity can play in promoting the priorities of the Reserve System Restoration Strategy.

Reserves should follow the guiding principles for restoration set forth within the Strategy:

- Preservation and conservation of existing habitat must occur along with restoration
 - Reserve participation is voluntary and additional funding is required for implementation
 - Reserves will not support habitat manipulation that causes adverse impacts
 - A partnered approach with science and management organizations or professional
 - Integrated application of research, education, and stewardship capacities
 - Science activities will be subject to a peer review process.
-

Plan Contents

I. Priority Restoration Areas

A. *Description of restoration areas*

A description of each priority habitat identified for restoration should be included which indicates why the restoration is needed to protect and maintain the ecological unit of the reserve. Additionally, the ultimate ecological condition, or general outcome, of each area should be described. A map should be included of all areas targeted for restoration. Refer to the Reserve System habitat classification system as appropriate to describe current and project future habitat states.

Restoration Plan

(optional)

- _ Priority restoration areas
- _ Description of restoration areas/habitats
- _ Map of restoration areas
- _ Climate and non-climate stressors
- _ Prioritization process and criteria
- _ Priority restoration projects
- _ Acres and outcomes
- _ Partners
- _ Monitoring and evaluation strategies ♦

Questions to inform this section include: What habitats are most important to restore to ensure the integrity of the reserve's ecological unit? What are regional or national restoration-related science questions that can be informed by an inquiry-approach to restoration projects at the reserve? What restoration projects could inform broader stakeholder and/or partner needs? Is restoration to a pre-existing state obtainable and sustainable, or should manipulation to a new condition more sustainable?

B. *Factoring climate and non-climate stressors into restoration planning*

When prioritizing restoration areas it will be important to develop criteria that help the reserve identify those areas most important to ensuring the integrity of the reserve's ecological unit. As part of this prioritization process, it will be important to factor climate and non-climate stressors into the process to determine timing and challenges for restoration efforts. Reserve understanding of anthropogenic drivers on their reserve habitats and ecosystems varies considerably. In some cases, a reserve may have the ability to control those impacts or stressors. In those instances, the reserve should incorporate controls in project designs. Some potential stressors to consider include land use impacts such as sediment and nutrient loading, as well as physical barriers to habitat migration such as dams, roads, and levees.

Questions to inform this section include: What stressors will impact the success and resilience of reserve habitats identified to be restored? Has the reserve considered climate impacts such as change in local sea level, inundation patterns, temperature changes, soil moisture changes, precipitation patterns, and storm intensity/pattern changes?

C. Prioritizing Restoration Projects

Given limited resources, it will be important to determine what criteria and process are in place to prioritize restoration activities. It is advised that the plan outline the process the reserve will take to develop and apply identified criteria for determining restoration priorities. Criteria can be ecological and logistical in nature.

For example, the reserve may want to consider ecological criteria that address the following questions: Are there threatened and endangered species that need to be protected? Are there needs to buffer resources from storm surge? Are there rare fauna or flora communities that need to be protected? What areas are important for ensuring habitat resiliency in the face of key climate and anthropogenic stressors? Is there any information lacking that would impede restoration success?

The reserve may also want to factor in logistical criteria that address the following questions: Is there available funding to conduct the project and ensure maintenance and monitoring? Can permits be obtained? Are partnerships required to ensure project success? Are those partners committed to the project? Are volunteers integral to the success of the project?

II. Priority Restoration Projects

Where enough detail is available, it is advised that project level information be included to leverage funding opportunities and share ideas with partners. Basic details for each project should include a description of the project, the intended outcome, the affected acreage, partners involved, monitoring strategy, and a site map noting the area to be restored in the context of the reserve boundary. Additionally, please note how local and/or regional policy makers, scientists, and/or restoration practitioners have been or will be involved in the design, and/or implementation of the project. To the extent possible, restoration projects should include a restoration science element that links to the [Reserve System Restoration Science Plan](#). A restoration science element may include reference site data and/or restoration-specific questions that can be examined within the context of the restoration project.

Please describe how reserve programs and assets will support the project; note how System-wide Monitoring Program data will be used, and how CTP and education program staff will be involved in project development, communication of results, and/or resulting best management practices.

Reserves may also be engaged in projects by serving as a reference site and not an active area for restoration. Please note where this is occurring and if restoration practitioners in the area are using SWMP data.

V. Monitoring and Evaluation

In order to effectively monitor and evaluate the success of restoration habitats, consider the following questions: Has habitat function and structure been established to meet targets? Has biodiversity been established to meet targets? What are the long-term monitoring plans? Were methods used appropriate for meeting targets? Were new protocols used and if so were they effective in meeting targets?

South Slough Reserve: Winchester Tidelands Restoration Project (WTRP)

The Winchester Tidelands is an area within the South Slough Reserve representative of converted and degraded tidal wetlands throughout coastal Oregon and northern California. In 1993, South Slough staff assembled an advisory group of specialists from universities, local and federal agencies, NGO's, and consulting firms with expertise in restoration and estuarine ecology, tidal hydrology, fish biology, program development, project engineering, and permitting to help design a multi-phase project to test the effectiveness of a variety of restoration methods. They have published their results, including research on concepts, methods and lessons learned to increase restoration practitioner's knowledge throughout the Pacific Northwest. (<http://www.oregon.gov/DSL/SSNERR/CRMSmain.shtml>)

References

Clewell, Andre; Rieger, John; and Munro, John. (2005) [Society for Ecological Restoration International: Guidelines for Developing and Managing Ecological Restoration Projects](#)

Reserve System Restoration Science Plan and Implementation Strategy (2002) available via [Reserve System Intranet](#) under Restoration.

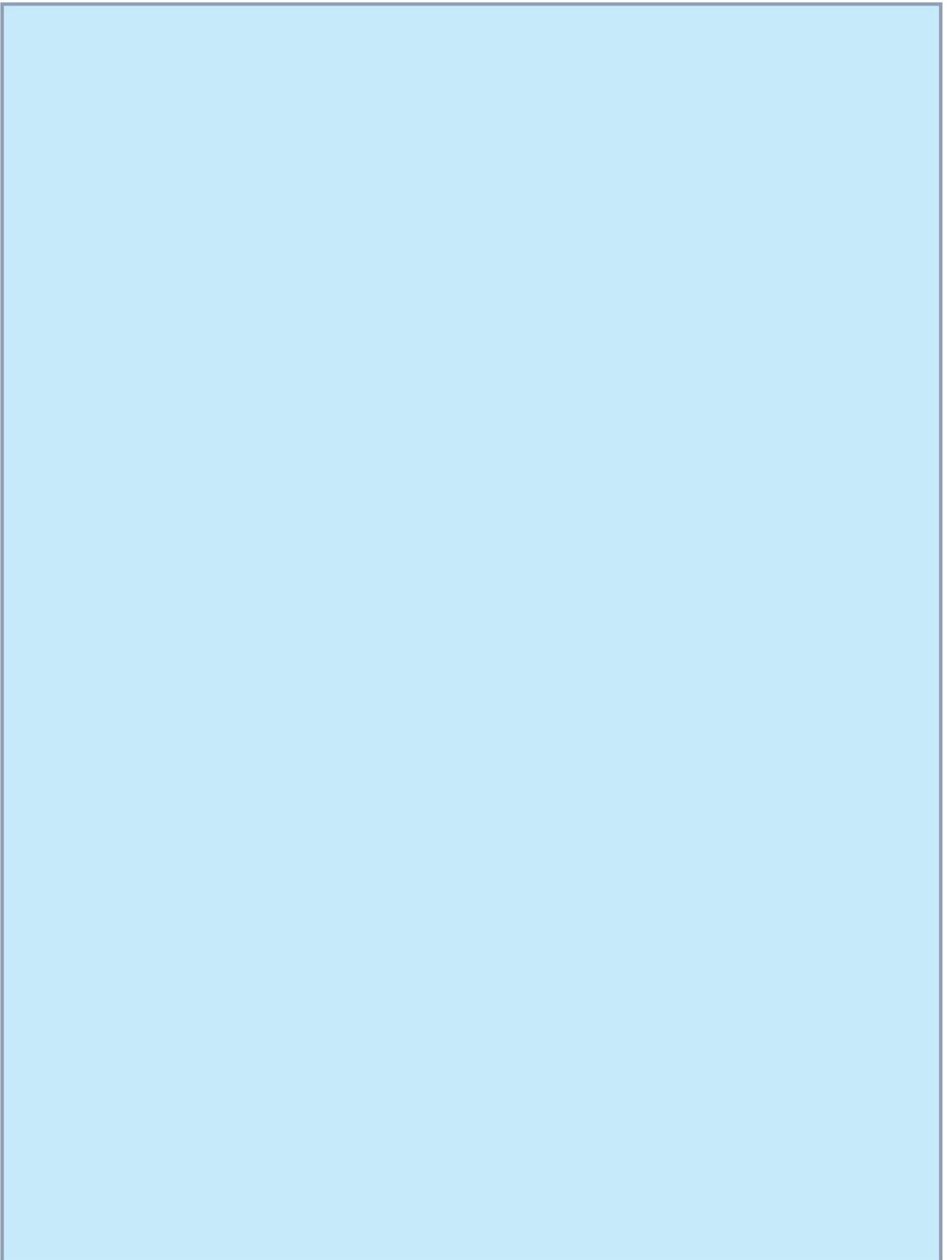
National Marine Fisheries Service (2010) [Guidelines for Incorporating Sea Level Rise into Restoration of Tidal Wetlands in the Northeast](#) Accessed via [Reserve System Intranet](#) under Restoration.

Tools and Resources

[Planning for Sea Level Rise in the Northeast: Considerations for the Implementation of Tidal Wetland Habitat Restoration Projects Workshop Report](#) (2011) NOAA's Restoration Center, Northeast Region.

[NOAA Habitat Blueprint: A framework to improve habitat for fisheries, marine life, and coastal communities](#) (2012) NOAA Office of Habitat Conservation, National Marine Fisheries Service.

[NOAA's Habitat Priority Planner](#): A GIS tool to help identify and prioritize areas for conservation, restoration, and planning.



Information is collected from persons who operate a foreign fishing vessel in U.S. waters to participate in a directed fishery or joint venture operation, transship fish harvested by a U.S. vessel to a location outside the U.S., or process fish in internal waters. Each person operating a foreign fishing vessel under MSA authority may be required to submit information for a permit, mark their vessels and gear, or submit information about their fishing activities. To facilitate observer coverage, foreign fishing vessel operators must provide a quarterly schedule of fishing effort and upon request must also provide observers with copies of any required records. For foreign fishing vessels that process fish in internal waters, the information collected varies somewhat from other foreign fishing vessels that participate in a directed fishery or a joint venture operation. In particular, these vessels may not be required to provide a permit application or mark their vessels. The information submitted in applications is used to determine whether permits should be used to authorize directed foreign fishing, participation in joint ventures with U.S. vessels, or transshipments of fish or fish products within U.S. waters. The display of identifying numbers on vessels and gear aid in fishery law enforcement and allows other fishermen to report suspicious activity. Reporting of fishing activities allows monitoring of fish received by foreign vessels.

II. Method of Collection

Foreign fishing activity reports are made by radio when fishing begins or ceases, to report on transfers of fish, and to file weekly reports on the catch or receipt of fish. Weekly reports may be submitted by fax or email. Recordkeeping requirements for foreign vessels include a communications log, a transfer log, a daily fishing log, a consolidated fishing or joint venture log, and a daily joint venture log. These records must be maintained for three years. Paper forms are used for foreign fishing vessel permit applications. No information is submitted to NMFS for the vessel and gear marking requirements.

III. Data

OMB Control Number: 0648-0075.
Form Number: None.

Type of Review: Regular (extension of a currently approved collection).

Affected Public: Business or other for-profit organizations.

Estimated Number of Respondents: 8.

Estimated Time per Response: For permit applications: One and one half

hours for an application for a directed fishery; two hours for a joint venture application, and 45 minutes for a transshipment permit; for fishing activity reporting: 6 minutes for a joint venture report; 30 minutes per day for joint venture record-keeping; and 7.5 minutes per day for record-keeping by transport vessels; for weekly reports, 30 minutes per response; for foreign vessel and gear identification marking: 15 minutes per marking.

Estimated Total Annual Burden Hours: 82.

Estimated Total Annual Cost to Public: \$3,337 in recordkeeping/reporting costs.

IV. Request for Comments

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: January 4, 2017.

Sarah Brabson,

NOAA PRA Clearance Officer.

[FR Doc. 2017-00150 Filed 1-6-17; 8:45 am]

BILLING CODE 3510-22-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Proposed Information Collection; Comment Request; Management and Oversight of the National Estuarine Research Reserve System

AGENCY: National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to

take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995.

DATES: Written comments must be submitted on or before March 10, 2017.

ADDRESSES: Direct all written comments to Jennifer Jessup, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6616, 14th and Constitution Avenue NW., Washington, DC 20230 (or via the Internet at Jjessup@doc.gov).

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument and instructions should be directed to Erica Seiden, 240-533-0781, Erica.Seiden@noaa.gov.

SUPPLEMENTARY INFORMATION:

I. Abstract

This request is for extension of a current information collection.

The Coastal Zone Management Act of 1972 (CZMA; 16 U.S.C. 1461 *et seq.*) provides for the designation of estuarine research reserves representative of various regions and estuarine types in the United States to provide opportunities for long-term research, education and interpretation. During the site selection and designation process, information is collected from states in order to prepare a management plan and environmental impact statement. Designated reserves apply annually for operations funds by submitting a work plan; subsequently progress reports are required every six months for the duration of the award. Each reserve compiles an ecological characterization or site profile to describe the biological and physical environment of the reserve, research to date and research gaps. Reserves revise their management plans every five years. This information is required to ensure that reserves are adhering to regulations and that the reserves are in keeping with the purpose for which they were designated.

II. Method of Collection

Respondents have a choice of either electronic or paper submissions. Methods of submittal include email of electronic forms, and mail and facsimile transmission of paper forms.

III. Data

OMB Control Number: 0648-0121.

Form Number: None.

Type of Review: Regular submission (extension of a current information collection).

Affected Public: Non-profit institutions; state, local, or tribal government.

Estimated Number of Respondents: 75.

Estimated Time per Response: Management plan, 1,800 hours; site profile, 1,800 hours; award application, 8 hours; award reports, 5 hours; designations, 2,000 hours; NEPA documentation, 40 hours.

Estimated Total Annual Burden Hours: 8,216.

Estimated Total Annual Cost to Public: \$1,000 in recordkeeping/reporting costs.

IV. Request for Comments

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: January 4, 2017.

Sarah Brabson,

NOAA PRA Clearance Officer.

[FR Doc. 2017-00145 Filed 1-6-17; 8:45 am]

BILLING CODE 3510-08-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XF089

Fisheries of the South Atlantic; Southeast Data, Assessment, and Review (SEDAR); Data Scoping Webinar for South Atlantic Red Grouper; Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of SEDAR 53 Assessment webinar.

SUMMARY: The SEDAR 53 assessment of the South Atlantic stock of red grouper will consist of a series webinars. See **SUPPLEMENTARY INFORMATION.**

DATES: A SEDAR 53 Assessment webinar will be held Wednesday, February 1, 2017, from 9 a.m. to 12 p.m.

ADDRESSES: The meeting will be held via webinar. The webinar is open to members of the public. Those interested in participating should contact Julia Byrd at SEDAR (see **FOR FURTHER INFORMATION CONTACT**) to request an invitation providing webinar access information. Please request webinar invitations at least 24 hours in advance of each webinar.

SEDAR address: South Atlantic Fishery Management Council, 4055 Faber Place Drive, Suite 201, N. Charleston, SC 29405; www.sedarweb.org.

FOR FURTHER INFORMATION CONTACT: Julia Byrd, SEDAR Coordinator, 4055 Faber Place Drive, Suite 201, North Charleston, SC 29405; phone (843) 571-4366; email: julia.byrd@safmc.net.

SUPPLEMENTARY INFORMATION: The Gulf of Mexico, South Atlantic, and Caribbean Fishery Management Councils, in conjunction with NOAA Fisheries and the Atlantic and Gulf States Marine Fisheries Commissions, have implemented the Southeast Data, Assessment and Review (SEDAR) process, a multi-step method for determining the status of fish stocks in the Southeast Region. The product of the SEDAR webinar series will be a report which compiles and evaluates potential datasets and recommends which datasets are appropriate for assessment analyses, and describes the fisheries, evaluates the status of the stock, estimates biological benchmarks, projects future population conditions, and recommends research and monitoring needs. Participants for SEDAR Workshops are appointed by the Gulf of Mexico, South Atlantic, and Caribbean Fishery Management Councils and NOAA Fisheries Southeast Regional Office, Highly Migratory Species Management Division, and Southeast Fisheries Science Center. Participants include: data collectors and database managers; stock assessment scientists, biologists, and researchers; constituency representatives including fishermen, environmentalists, and non-governmental organizations (NGOs); international experts; and staff of Councils, Commissions, and state and federal agencies.

The items of discussion in the Assessment webinar are as follows:

1. Participants will continue discussions to develop population models to evaluate stock status, estimate population benchmarks, and project future conditions, as specified in the Terms of Reference.

2. Participants will recommend the most appropriate methods and configurations for determining stock status and estimating population parameters.

3. Participants will prepare a workshop report and determine whether the assessment(s) are adequate for submission for review.

Although non-emergency issues not contained in this agenda may come before this group for discussion, those issues may not be the subject of formal action during this meeting. Action will be restricted to those issues specifically identified in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act, provided the public has been notified of the intent to take final action to address the emergency.

Special Accommodations

This meeting is accessible to people with disabilities. Requests for auxiliary aids should be directed to the SAFMC office (see **ADDRESSES**) at least 10 business days prior to the meeting.

Note: The times and sequence specified in this agenda are subject to change.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: January 4, 2017.

Tracey L. Thompson,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2017-00113 Filed 1-6-17; 8:45 am]

BILLING CODE 3510-22-P

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

Proposed Information Collection; Comment Request; Computer and Internet Use Supplement to the Census Bureau's Current Population Survey

AGENCY: National Telecommunications and Information Administration (NTIA).

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995.

DATES: Submit comments on or before March 10, 2017.

ADDRESSES: Direct all written comments to Jennifer Jessup, Departmental