



CHAPTER 1.

The National Estuarine Research Reserve System

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Figure 1.1. The National Estuarine Research Reserve System, including both current and proposed reserves. Shaded states are those that support at least one current or proposed NERR site.

Table 1.1. Selected characteristics of individual NERR sites. The Chesapeake Bay, Md., and North Carolina reserves have multiple units that were designated in different years.

Reserve Name	State	Year Designated	Acres	Biogeographic Region
South Slough	Oregon	1974	4,779	Columbian
Sapelo Island	Georgia	1976	6,110	Carolinian
Rookery Bay	Florida	1978	110,000	West Indian
Apalachicola	Florida	1979	246,000	Louisianian
Elkhorn Slough	California	1979	1,400	Californian
Padilla Bay	Washington	1980	11,000	Columbian
Narragansett Bay	Rhode Island	1980	4,259	Virginian
Old Woman Creek	Ohio	1980	571	Great Lakes
Jobos Bay	Puerto Rico	1981	2,883	West Indian
Tijuana River	California	1982	2,513	Californian
Hudson River	New York	1982	4,838	Virginian
Wells	Maine	1984	1,600	Acadian
Chesapeake Bay	Maryland	1985, 1990	4,820	Virginian
North Carolina	North Carolina	1985, 1991	10,000	Carolinian
Weeks Bay	Alabama	1986	6,016	Louisianian
Waquoit Bay	Massachusetts	1988	2,600	Acadian
Great Bay	New Hampshire	1989	5,280	Acadian
Chesapeake Bay	Virginia	1991	4,435	Virginian
ACE Basin	South Carolina	1992	134,710	Carolinian
North Inlet-Winyah Bay	South Carolina	1992	12,327	Carolinian
Delaware Bay	Delaware	1993	4,930	Virginian
Jacques Cousteau	New Jersey	1998	114,665	Virginian
GTM	Florida	1999	55,000	Carolinian
Kachemak Bay	Alaska	1999	365,000	Fjord
Grand Bay	Mississippi	1999	18,400	Louisianian
San Francisco Bay	California	2003	3,710	Californian
Mission-Aransas	Texas	2006	185,708	Louisianian



The National Estuarine Research Reserve System

In recognition of the importance of the nation's coastal resources, Congress passed into law the Coastal Zone Management Act (CZMA) in 1972. Section 315 of the CZMA authorizes the establishment of the National Estuarine Research Reserve (NERR) System for the purpose of identifying and protecting estuarine habitats in the United States in order to promote estuarine research, monitoring, education, and stewardship. More specifically, the mission of the NERR System as stated in the CZMA is “the establishment and management, through federal-state cooperation, of a national system (National Estuarine Research Reserve System or System) of estuarine research reserves (National Estuarine Research Reserves or Reserves) representative of the various regions and estuarine types in the United States. National Estuarine Research Reserves are established to provide opportunities for long-term research, education, and interpretation.”

As outlined in the CZMA, the specific goals of the NERR System are to:

- Ensure a stable environment for research through long-term protection of NERR resources
- Address coastal management issues identified as significant through coordinated estuarine research within the NERR System
- Enhance public awareness and understanding of estuarine areas and provide suitable opportunities for public education and interpretation
- Promote federal, state, public, and private use of one or more reserves within the NERR System when such entities conduct estuarine research; and
- Conduct and coordinate estuarine research within the System, gathering and making available information necessary for improved understanding and management of estuarine areas.

Current guidance for the NERR System is outlined in the 2003–2008 strategic plan, which also provides a concise version of the mission statement with an accompanying set of strategic goals. According to the strategic plan, the mission of the NERR System is “to promote stewardship of the nation's estuaries through science and education using a system of protected areas.” The current strategic goals are to:

- Improve coastal decision making by generating and transferring knowledge about coastal ecosystems
- Enhance and expand the NERR System
- Increase awareness, use, and support of the reserve system and its estuarine science, education, and stewardship programs

Individual reserves are jointly managed through a federal-state partnership. The federal partner for each reserve is the Estuarine Reserves Division (ERD) of the U.S. Department of Commerce's National Oceanic and Atmospheric Administration (NOAA). State partners vary by reserve, but include state environmental agencies, universities, and trusts. A rigid selection process is in place to select estuarine sites for designation as a NERR, but a primary consideration for designation is whether the site represents the physical and biological characteristics of the biogeographic region in which it is located. With reserves in nine of the 11 bioregions in the United States, the NERR System is able to provide natural laboratories for conducting research and monitoring programs that can address local issues and be used to assess patterns and trends on a regional and national scale.

As of 2006, the system was composed of 27 reserves in 21 states and one territory, including one reserve in Alaska and one in Puerto Rico (Fig. 1.1; Table 1.1). Additional reserves are proposed for designation in Connecticut, Wisconsin, and on the Saint Lawrence River, N.Y. The current system protects approximately 1,323,554 acres of land and water as NERRs to foster estuarine research and monitoring, education, and stewardship.

A significant effort is made to focus individual reserves on regional and national issues that might only be addressed through a coordinated national effort, which is made possible within the NERR framework. Three current programs illustrate this national coordination: the System-Wide Monitoring Program (SWMP), the Graduate Research Fellowship (GRF) Program, and the Coastal Training Program (CTP). The SWMP is a nationally coordinated effort to monitor water quality conditions at multiple sites in each re-



serve, and to analyze the collected data to identify regional and national trends. The GRF program provides funds to qualified graduate students to conduct research projects in reserves that will help address local, regional, or national management issues. Up to two students may be funded per year at each reserve. The CTP enables research reserves to provide coastal decision makers with up-to-date scientific information and tools to ensure that these individuals have the necessary resources to address coastal management issues. More detailed information on each of these programs, and on the NERR program in general, can be found at www.nerrs.noaa.gov.

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