



Common terms and definitions associated with the NERR process

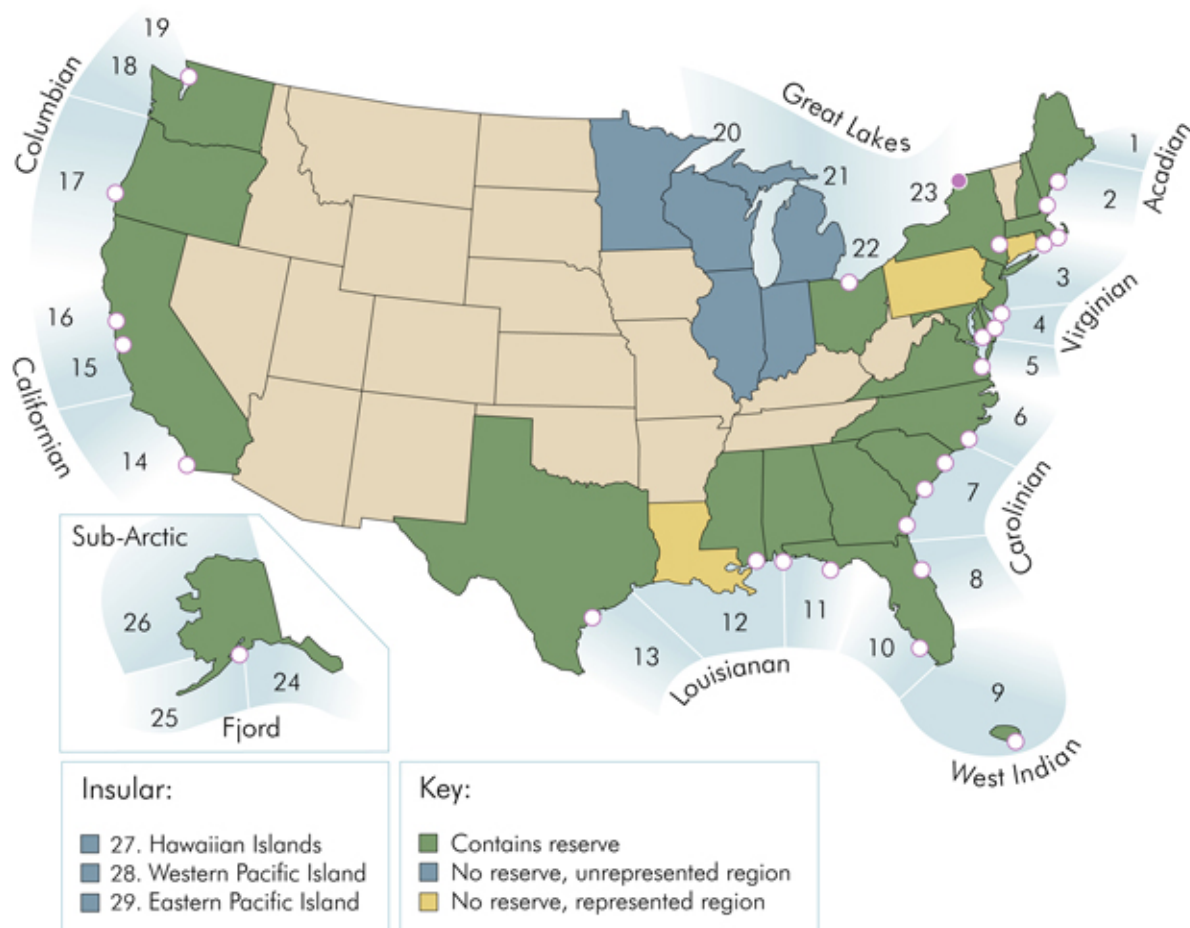
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Integrity – Ecosystem integrity is generally used to refer to the completeness, functionality, and health of an ecosystem. Declines in integrity reduce habitat quality for native biota, disrupt ecological processes and functions, and diminish ecosystem resilience and capacity to sustain species and many ecosystem services. Significant declines in ecosystem integrity could jeopardize the NERR system goal of long-term research. For example, substantial future land loss and/or habitat degradation could jeopardize the integrity of candidate LaNERR sites.

- **Core and buffer areas** – NOAA regulations define key or “core” land and water areas which contain “ecological units of a natural estuarine system 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.” The core area is “so 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...[These areas] should encompass resources that are representative of the total ecosystem which, if compromised, could endanger the research objectives of the reserve.” A buffer area is defined as an “area adjacent to or surrounding key lands and water areas and essential to their integrity. Buffer zones protect the core area and provide additional protection for estuarine-dependent species.” The buffer area may include areas for research and education facilities (15 C.F.R Part 921.11). The majority of publicly-owned land used as core areas within a candidate site cannot be federal lands – the state must demonstrate adequate management control for core areas to be designated as a NERR.
- **In perpetuity** – NOAA requires that the integrity of a NERR be maintained in perpetuity. For the purposes of the LaNERR site selection and nomination process, the best available information to determine whether the integrity of a candidate site will be maintained in perpetuity is the 2017 Coastal Master Plan 50-year projections of land and vegetation change. While pre-screening is taking place using 50-year projections, consideration of a Louisiana NERR site should include the assumption that the site will exist permanently.
- **Unique** – Unique, as referred to in terms of NERR designation, refers to limited known occurrence of a habitat type, process, landscape feature, endangered or threatened species, etc. in the biogeographic region or sub-region. The ‘unique’ component of a LaNERR candidate site cannot already be included in a NERR within the Louisianian Biogeographic Zone of the NERR System (see sections 11, 12, and 13 below for more detail on the sites and the unique features included in the Louisianian Biogeographic Zone.)
 - Section 11 - Apalachicola Bay, FL: This reserve is a major forage area for trans-gulf migratory bird species and supports a local fishing industry worth \$14-16 million annually, which in turn directly supports up to 85 percent of the local population. The site encompasses two barrier islands and a portion of a third, the lower 52 miles of the Apalachicola River and its



- floodplain, portions of adjoining uplands, and the Apalachicola Bay estuarine, riverine, and floodplain systems.
- Section 11 - Weeks Bay, AL: considered a delta estuary and characterized by unique pitcher plant bog habitat.
 - Section 12 - Grand Bay, MS: considered a closed bay with pine savannas. Characterized by waters that are semi-enclosed by land but have open, partly obstructed, or sporadic access to the ocean, in which seawater is at least occasionally diluted by freshwater runoff from land.
 - Section 13 - Mission-Aransas, TX: Coastal prairie, oak motte, riparian freshwater, and salt marsh habitats make up the reserve. The water portion consists of three large, open and shallow bays that support extensive tidal flats, seagrass beds, mangroves, and oyster reefs. The largest wetland habitat (24,400 acres) on the north side of the reserve is part of the Aransas National Wildlife Refuge and is the winter home to the critically endangered *Whooping Crane*.



<https://celebrating200years.noaa.gov/foundations/nerrs/image4.html>



Consumptive Use Examples from NERRS

Apalachicola, Florida: Hunting

Hunting is a popular activity in the floodplain areas along the Apalachicola River. The cooperative agreement between Florida Fish and Wildlife Commission (FWC) and Florida Dept. of Environmental Protection (DEP) designates the lower Apalachicola area as a Type I Wildlife Management Area. FWC does not require a Management Area Permit to hunt those lands. However, other permits/stamps may be required depending on the type of hunt: quota permits for wild hog-dog season, archery permits, muzzle loading, gun permit, deer, wild turkey, migratory birds, waterfowl (state and federal) permit. Only a regular state hunting license is required. Dove hunting is allowed on Little St. George Island during specific seasons and is consistent with and managed by FWC regulations. Game hunting is allowed on the Lower River Marshes consistent with FWC regulations and seasons for the Apalachicola River Wildlife and Environmental Area. Other hunting opportunities exist in FWC-managed hunt areas, timber company lands, Tate's Hell State Forest, Apalachicola National Forest, St. Vincent National Wildlife Refuge, Northwest Florida Water Management District lands and private hunt leases. Management of hunting activities is through enforcement of rules by FWC and by refuge staff on St. Vincent NWR. Hunting information publications are available through the appropriate agency offices.

Mission-Aransas, Texas: Oil and Gas

Oil and gas exploration and production are allowed within the Reserve and are regulated by the Texas General Land Office and the Railroad Commission of Texas. Prior to the beginning of any oil and gas operation, permit(s) must be obtained from the USACE. The Nationwide Permits (NWP) required for oil and gas operations in bays and estuaries include NWP 6 for seismic activities and NWP 44 for mining activities. The NWPs

have several general conditions relevant to environmental protection. Some of these conditions include compliance with laws regarding water quality, coastal zone management, endangered species, historic properties, shellfish beds, mitigation, waterfowl breeding areas, and designated critical resource waters. The water quality and endangered species laws are two laws that more readily hold up permit approval.

Mission-Aransas, Texas: Commercial and Recreational Fishing

Commercial and recreational fishing and hunting are allowed within the Reserve boundary, and both activities require appropriate licenses administered by Texas Parks and Wildlife Department (TPWD). Numerous boat ramps and marinas are located near the Reserve boundary, providing ample opportunity for access to the Mission-Aransas Estuary for these uses. Texas law dictates that any person who takes or attempts to take fish, mussels, clams, crayfish, or other aquatic life in the public waters of Texas must have a current Texas fishing license with the appropriate stamp endorsement issued by TPWD. A saltwater endorsement is required to fish in coastal waters, while a freshwater endorsement is required for inland waters. Recreational anglers must have a Texas fishing license and saltwater endorsement to bring any fish taken in federal waters ashore in Texas.

Grand Bay, Mississippi: Recreational Fishing

Grand Bay NERR is open to boating, fishing, hunting, shellfish harvesting, photography, and other recreational activities that existed before the designation of the reserve site.