

Padilla Bay National Estuarine Research Reserve



Location: North of Seattle, Washington between Mount Vernon and Anacortes

Date Designated: 1980

Area Protected: 11,966 acres

Web Address: ecy.wa.gov/programs/sea/padillabay

Management: Daily oversight is provided by the Washington State Department of Ecology. NOAA's Office for Coastal Management provides funding, national guidance, and technical assistance.

Access and Infrastructure

- The Breazeale Interpretive Center sits directly on the bay and features three short nature trails. A birder's paradise, the reserve is home to everything from winter eagles to flocks of shorebirds. Near the center are meeting rooms, a guesthouse for visiting researchers, and a laboratory. During low tide, visitors can access the beach via a tunnel under the road. During high tide, exploration is possible via the observation deck.
- A saltwater aquarium—part of the Breazeale Center houses local sea life and other exhibits.
- The reserve offers a small boat launch and access to a marine trail for water exploration.

The Padilla Bay National Estuarine Research Reserve protects one of the largest beds of eelgrass in the contiguous United States—nearly 8,000 acres. Located in the northern reaches of greater Puget Sound, at the saltwater edge of the delta of the Skagit River in the Salish Sea, the reserve is eight miles long and three miles across. Habitats here support herring, smelt, salmon, flatfish, Dungeness crab, ducks, eagles, shorebirds, and peregrine falcons. Tourists, artists, and wildlife enthusiasts flock here for the pristine beauty as well as for harbor seal and sea otter spotting.

Research and monitoring cover a wide variety of topics in estuarine science—with many projects focused on some aspect of the eelgrass ecosystem—and the research enables staff to get the community involved in protecting the reserve's resources. The reserve also supports research projects by visiting students and scientists, creating an environment dedicated to conservation, education, and stewardship.

NOAA Office for Coastal Management

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Interesting Things to Know

- The reserve's nearly 8,000 acres of eelgrass serve a valuable purpose: eelgrass is a habitat for wildlife and commercially-harvested species, and is used as a nursery by salmon, crab, perch, and herring. The millions of invertebrates found in the eelgrass provide food for great blue herons, eagles, otters, seals, and humans.
- Every October, Brant geese migrate all the way from Izembek Lagoon in Alaska's Aleutian Islands just to eat Padilla Bay's eelgrass. The journey takes 72 hours, and the birds don't stop until they reach their destination.
- The reserve's Breazeale Interpretive Center is named after the Breazeale family, who moved to a farm on the shore of Padilla Bay in 1897 and became instrumental in protecting it. They raised their three children with a strong conservation ethic and a relationship with nature that later fueled efforts to preserve Padilla Bay.

About the Programs

The nation's 30 research reserves represent a tremendous asset, protecting nearly 1.4 million acres and providing habitat where plants and wildlife thrive. Community benefits include recreation, flood protection, and water filtration. Because the following programs are offered at each reserve, the system is able to make an environmental impact at the local level, as well as nationally.

Stewardship. Site protection and enhancement are part of every research reserve. Activities may include managing land and water resources, restoring habitat, controlling invasive species, maintaining biodiversity, and reducing environmental stressors.

Research. Reserve research is focused on how environmental factors such as nutrient loading, climate change, invasive species, and storms—impact coastal ecosystems. The monitoring program, known as the System-Wide Monitoring Program, or SWMP, provides long-term data on water quality, weather, biological communities, habitat, and land-use and land-cover characteristics. This combination of research and data provides a strong, science-based foundation for addressing coastal management challenges.

Training. To provide the community with the information and skills needed to integrate coastal science into local decision-making and everyday lives, reserves provide specialized courses and information. Reserve training professionals are active in community planning and improvement initiatives.

Education. Local data generated at the reserve provide students with a firsthand experience of local environmental conditions. Educators lead student, teacher, and citizen field trips that are life-changing experiences, as participants see, feel, and smell what makes an estuary one of the most remarkable places in the world.

To learn more, visit coast.noaa.gov/nerrs.



