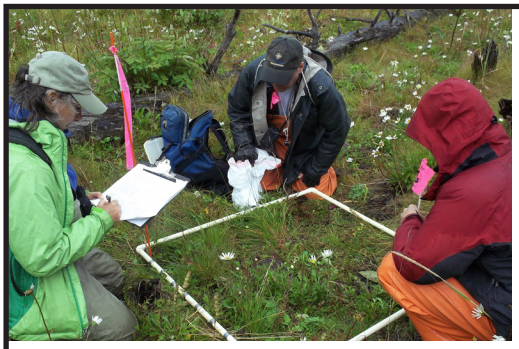


Kachemak Bay

National Estuarine Research Reserve

Location: 240 miles south of Anchorage, on the western coast of the Kenai Peninsula, Alaska

Date Designated: 1999

Area Protected: 372,000 acres

Web Address: *accs.uaa.alaska.edu/kbnerr*

Management: Daily oversight is provided by the University of Alaska Anchorage – Alaska Center for Conservation Science. NOAA's Office for Coastal Management provides funding, national guidance, and technical assistance.

Access and Infrastructure

- The reserve is headquartered in Homer, Alaska.
- Within the reserve's boundaries are the Kachemak Bay and Fox River Flats critical habitat areas, the Kachemak Bay State Park and State Wilderness Area, the Western Hemisphere Shorebird Reserve, and the Kachemak Bay Habitat Focus Area.
- The majority of Kachemak Bay is accessible only by boat or airplane. Facilities include more than 80 miles of trails, campsites, and public-use cabins, and the Halibut Cove Lagoon Public Dock.

The Kachemak Bay National Estuarine Research Reserve is the largest reserve in the national reserve system, and is one of the most productive and intensively used estuaries in the state. Home to Pacific halibut and all five species of Pacific salmon, the bay is an economic driver in a region heavily dependent on commercial and sport fishing. Among its most spectacular features is the Homer Spit, projecting 4.5 miles out into Kachemak Bay. The western end of the Kenai Mountains defines the south side of the bay, with seven glaciers extending down from the Harding Ice Field, one of four remaining ice fields in North America. Within the bay, freshwater streams, glacial meltwater, and tidally-driven ocean waters merge to create a pristine ecosystem.

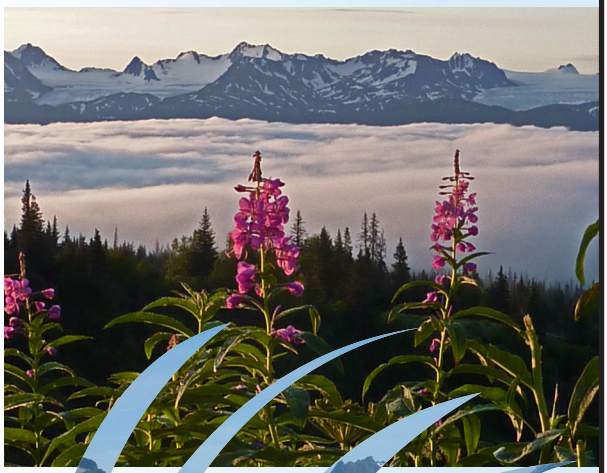
Research reserve staff conduct collaborative research and monitoring with a focus on three key areas: oceanography, coastal ecology, and watershed ecology. The goal is to integrate place-based science into coastal decision-making processes. Staff encourage community involvement through volunteer monitoring programs and boost conservation efforts through education and outreach.

KACHEMAK BAY

National Estuarine Research Reserve

Interesting Things to Know

- The reserve serves a key role as the only sub-arctic site in the reserve system, and the only reserve in a fjord.
- Kachemak Bay was designated under the NOAA Habitat Blueprint Initiative, which seeks to improve habitat for fisheries, marine life, and coastal communities.
- Visitors to the reserve can spot whales, porpoises, harbor seals, sea otters, and a large variety of seabirds.
- Several unique communities live within the reserve's borders, including the Seldovia Village Tribe, accessible only by air and sea, and three Russian Old Believer communities located at the head of the 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.