

Kachemak Bay Research Reserve

Education is Change on the Ground



2022

Connect



372,000 acres of estuary habitat
512 public program attendees
1,591 K-12 students engaged



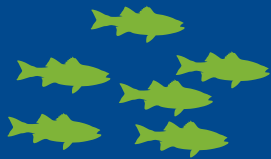
Prepare

50 teachers trained and supported
13 student interns
449 teacher contact hours

Improve



171 harmful algal bloom plankton
samples collected



"Kachemak Bay is a very special place because we coexist with the ocean and the mountains. Being a part of the Semester by the Bay program as well as participating in events with activities like this just makes it more clear to me that these ecosystems are worth fighting for and protecting."

Kayla Doucette Semester
By the Bay Student

"I was surprised at how many scientists are actively conducting various projects at the same time, while crossing over to different areas within the reserve. The research was fascinating and can be applied in our local classrooms to boost knowledge, awareness, and engagement."

Teacher
TOTE Participant

For Peatland's Sake

Elementary school teachers took peatland science into their classroom after the latest Kachemak Bay National Estuarine Research Reserve (KBNERR) teacher training. The vision came during the field training component, as teachers lit up with the possibilities of bringing the importance of peatlands as a school-wide focus. Activities included: drone mapping of the schoolyard peatlands, soil and plant sampling, and communicating science through art (and a lot of blueberry picking!). Students and teachers gained an understanding of peatlands and their connections to climate change, groundwater, and carbon storage. This successful program is now established as a long-term focus for the K-6 grade school.

Partnering with Plankton

Kachemak Bay NERR's partnership with The Alaska Native Science and Engineering Program (ANSEP) allows the Education team to provide science exploration to rural middle school and high school programs. The focus is hands-on science and field biology skill building through monthly half day Marine Science Academies. The program is designed to build awareness of harmful algal blooms and teach research skills related to plankton monitoring and identification, and food webs. These academies allow rural youth to work on science projects with professional scientists and experience how science is used in careers in Alaska.

The Future is Bright with Semester by the Bay

In the fall, Kachemak Bay NERR partners with the local Kachemak Bay Campus of University of Alaska Anchorage (UAA) to provide internship opportunities to Semester By the Bay undergraduate students. These students live at Kachemak Bay NERR facilities and work alongside education and research staff during their semester stay. These students gain not only new skills and experiences, but also have an opportunity to build the bridges needed to move from the classroom to the workplace.

Alaska's Kachemak Bay Reserve is one of 30 sites in the National Estuarine Research Reserve System. Each site is a state federal partnership that combines research, monitoring, and education to advance the understanding and management of estuarine environments.



Kachemak Bay National Estuarine Research Reserve
Alaska Center for Conservation Science
UNIVERSITY of ALASKA ANCHORAGE



National Estuarine Research Reserve Education Change on the Ground in 2022

Connects

People to Estuaries

**1 million+
ACRES**

of natural classrooms & living laboratories with



**26 INTERPRETIVE
CENTERS**



*Hello to the
Connecticut
Reserve,
designated
in 2022!*



**296,131
VISITORS**

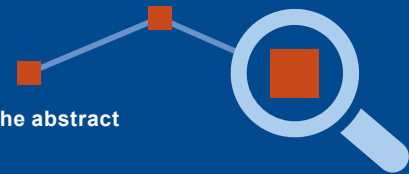
learn about estuaries through Research Reserve outreach & education

Prepares

the Next Generation

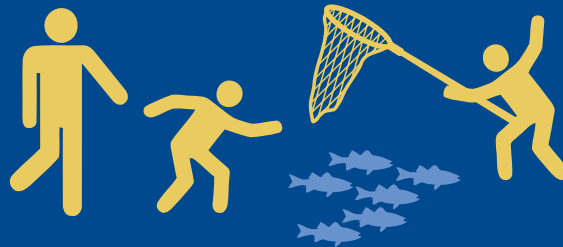
**54,773
STUDENTS**

take learning out of the abstract & into the outdoors



**4,347
TEACHERS**

are trained in the estuary & supported in the classroom



SKILLS BUILT

- ✓ Observation
- ✓ Asking research questions
- ✓ Problem solving
- ✓ Data driven decision making

ESTUARY SCIENCE

LOCAL DATA

LAB WORK

FIELD INVESTIGATION

Improves

the Environment

**10,570
CITIZENS**

are trained & inspired to protect their coasts & estuaries



VOLUNTEER ACTIONS

- ✓ Protect wildlife
- ✓ Monitor water quality
- ✓ Plant native species
- ✓ Clean up the coasts

**30 RESEARCH RESERVE
EDUCATORS**

lead programs that foster coastal stewardship in communities in 25 states



Creating value through education
37,371 volunteer hours = \$1,119,261*