### **Q:** What is an Estuary?

A: Estuaries are coastal areas where salt water from the sea mixes with fresh water from rivers and streams. They are among the most productive ecosystems on Earth. Some familiar examples of estuary ecosystems include Kaneohe Bay, Oahu; Kealia Ponds, Maui; Waipio Bay, Hawai'i and Wainiha Bay, Kauai. Whether they're called a bay, harbor, inlet, or lagoon, estuaries are the transition area between the inland waters and the sea. The physical make-up of estuaries can vary widely, as illustrated by the photos below.

## **Examples of Estuarine Physical Characteristics**



**Exposed Coast** 



Bay



Tidal River



Perched Wetlands



**Sheltered Coast** 



Embayment



Lagoon



Anchialine Ponds

In addition to physical composition, estuaries include different ecosystem types as shorelands transition to submerged lands. Photos of ecosystem types follow.

# Examples of a variety of ecosystems that can be associated with estuaries:

Shorelands



**Coastal Shrublands** 



**Coastal Grasslands** 



Maritime Forest-Woodland

Transition Areas



**Coastal Marshes** 



Intertidal Beaches



Intertidal Sandflats



Intertidal Rocky Areas



Intertidal Algal Beds

Submerged Bottoms



Subtidal Hard Bottoms



Subtidal Soft Bottoms



Subtidal Plants and Coral

## **Q.** What is NERRS?

A. NERRS is an acronym for <u>National Estuarine Research Reserve System</u>. The National Estuarine Research Reserve System is a network of 28 estuaries, representing different biogeographic regions of the United States, that are protected for long-term research, water-quality monitoring, education and coastal stewardship. Established by the Coastal Zone Management Act (CZMA) of 1972, as amended, the NERRS network is a partnership program between the National Oceanic and Atmospheric Administration (NOAA) and the coastal states. NOAA provides funding, guidance and technical assistance to support research. Each reserve is managed on a daily basis by a lead state agency or university, with input from local partners. Hawaii does not have a NERRS reserve and the Pacific biogeographic region is unrepresented in the NERRS network. More information about the NERRS can be found at <u>http://www.nerrs.noaa.gov/.</u>

# Reserve System Sites:



**Q.** What is the legal authority that enables and regulates the NERR program?

A. Several laws and executive orders form the statutory basis of the Reserve System, including the Coastal Zone Management Act (CZMA) of 1972, as amended. A link to the CZMA is here <u>http://coastalmanagement.noaa.gov/about/media/CZMA\_10\_11\_06.pdf</u>. The regulations pertaining specifically to the Reserve System, including the nomination process, NERR characteristics and planning requirements are housed in the Code of Federal Regulations (CFR). A link to the applicable chapter and subpart of the CFR is here <u>http://www.nerrs.noaa.gov/BGDefault.aspx?ID=64</u>.

# **Q.** If a NERR site is designated in Hawaii, will there be restrictions to the cultural, recreational or commercial activities that occur in the area?

**A.** As part of the NERR designation process, the Code of Federal Regulations (15 CFR 921) that set the requirements for NERR sites requires development of a management plan. The management plan must consist of several elements, including a public access plan as well as a resource protection plan. These two plan elements guide allowable uses, describe uses that will require a permit and articulate how the public will interact with the site and its resources. The Code of Federal Regulations does not set forth specific restrictions on uses or activities in NERRS sites. States are allowed to develop their management plan in a manner that respects human as well as natural resource needs. For example, the San Francisco Bay NERRS Public Access Plan acknowledges "traditional uses" as follows: "*Recreational and commercial fishing, hiking, horseback riding, bicycling, camping, and boating are all traditional uses within the boundaries of the Reserve sites. Some of these activities are subject to state regulation and require licenses and/or <i>permits. Traditional use access will continue according to local and state laws.*" This is just one approach that a NERR Management Plan can take. Development of a management plan for a Hawaii NERRS site will require the State to work with stakeholders to determine an approach that serves Hawaii's resources and people best.

## **Q.** Does the NERRS designation mean that new Federal regulations are imposed?

A. The NERRS designation does not add any new Federal regulations.

## **Q.** Why should Hawaii participate in the National Estuarine Research Reserve System?

A. Currently, the NERRS does not include a representative Pacific island estuary. Designation of a NERRS site in Hawaii will facilitate research about our unique estuaries and support decision-making about our coastal resources. A site in Hawaii would also create new opportunities for educating residents and visitors about Hawaii's unique native plants, animals and environments that connect the land and the ocean. These "living laboratories" focus on important resources that are easily overlooked but are rich with life and critical to the health of a watershed.

## **Q.** What is the process for designating a NERRS site in Hawaii?

**A.** The Office of Planning's Coastal Zone Management Program is conducting a selection and evaluation process to select a site. Proposals for a Hawaii NERRS site will be accepted by the Coastal Zone Management Program until 4:00 PM, May 15, 2013. Proposal forms, checklists and resources pages are all available on the CZM Program's website http://planning.hawaii.gov/czm/initiatives/nerrs-site-proposal-process/. Site selection criteria have been developed and are also available for review on the website. An objective Site Evaluation Committee will review the proposed sites against the selection criteria and develop a "short list" of potential NERRS sites that meet the selection criteria and recommend a preferred site and alternative sites. These recommendations will be reviewed by a neutral Site Selection Committee. This committee will recommend a site to the Governor for nomination to NOAA. The Governor will then submit to the NOAA Administrator a site selection document and a nomination letter identifying the proposed site by December 31, 2013. NOAA will review the site selection document and send a letter to the Governor accepting or rejecting the nomination. Once approved by NOAA, an Environmental Impact Statement and Management Plan must be developed. Upon approval of the EIS and Management Plan, the site is officially designated and added to the NERRS network.



#### Photo Credits & Acknowledgements

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