

## Management Plan Review



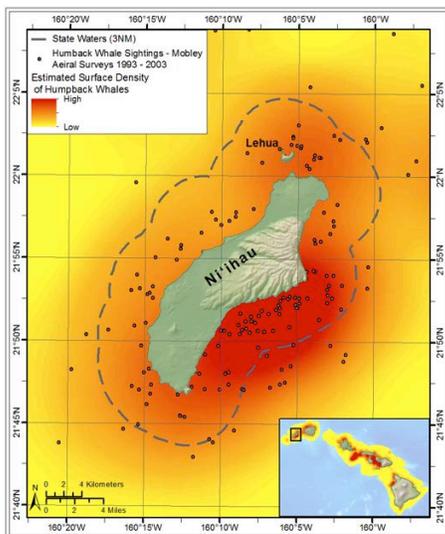
Photo: Norman Wang

Lehua Island is a seabird sanctuary, providing habitat for more than 25,000 pairs of seabirds.



Photo: Ray Boland

Ni'ihau may contribute to connectivity of fish larval transport between the NW and SE Hawaiian Islands.



Aerial surveys have shown a high density of humpback whales around Ni'ihau.

## Focus Areas: Expanding the Sanctuary to Include Ni'ihau and Lehua

### Ni'ihau: A transition zone between pristine and populated

The coastal and marine ecosystems of Ni'ihau and Lehua are unique and provide important habitat for many nationally significant species in the Hawaiian Islands. In several ways, Ni'ihau acts as a transition zone between the relatively untouched islands to the northwest, and the more densely populated islands to the southeast.

### Cultural significance of Ni'ihau

The largest population of people of pure Hawaiian descent in the state reside on Ni'ihau, and they have maintained a strong connection to traditional Hawaiian culture.

Traditional fishing methods, employing nets, and frequenting particular fishing spots called ko'a, are still often used, in addition to more modern techniques.

Ni'ihauans have also maintained other traditional practices such as cooking in imu or underground ovens, and making lei pūpū o Ni'ihau from pūpū (shells) that wash up on the shores in winter.

### Biological significance of Ni'ihau

- Fish biomass and endemic fish are higher than elsewhere in the inhabited Hawaiian Islands.
- Three times as many monk seals have been observed on Ni'ihau and Lehua than on other populated Hawaiian islands.
- Humpback whales have been observed in great frequency around Ni'ihau in aerial surveys (see lower left map).
- Ni'ihau may play a role in larval transport within the Hawaiian archipelago, genetically connecting marine species, especially among Kaua'i, Middle Bank, Nihoa and O'ahu.
- Bottlenose and rough-toothed dolphin populations inhabit the water around Ni'ihau and the channel between Ni'ihau and Kaua'i. These dolphins exhibit a high degree of site fidelity.
- Lehua serves as an important breeding habitat for more than 25,000 pairs of seabirds including brown and red-footed boobies. It is one of only two known nesting sites for black-footed albatrosses.

### Threats to natural resources on Ni'ihau and Lehua

Marine and coastal ecosystems around Ni'ihau and Lehua face many of the same stressors that other Hawaiian Islands face, such as:

- Warmer temperatures and increased acidification due to climate change;
- Marine debris, which causes particular harm to seabirds and monk seals;
- Potential water quality issues due to erosion caused by grazing ungulates;
- Overfishing, particularly of the most common species commercially caught around Ni'ihau, including: uku, ono, 'ū'ū, Kona crab and the culturally important 'opihi. Records show the highest fish catches around Ni'ihau in 2007 and 2008 with lower catches every year since.



Photo: Derek Wang

Ni'ihau has the highest fish biomass, as well as endemic fish biomass, of any of the populated Hawaiian Islands.



Photo: Norman Wang

Lehua Island has been identified as an important feeding and resting site for monk seals, which haul out on its coasts.

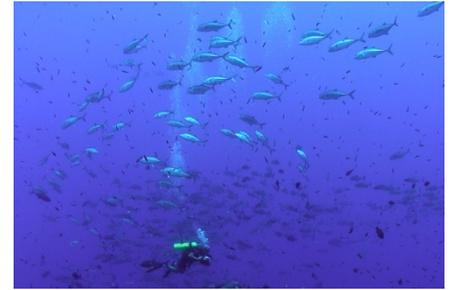


Photo: Derek Wang

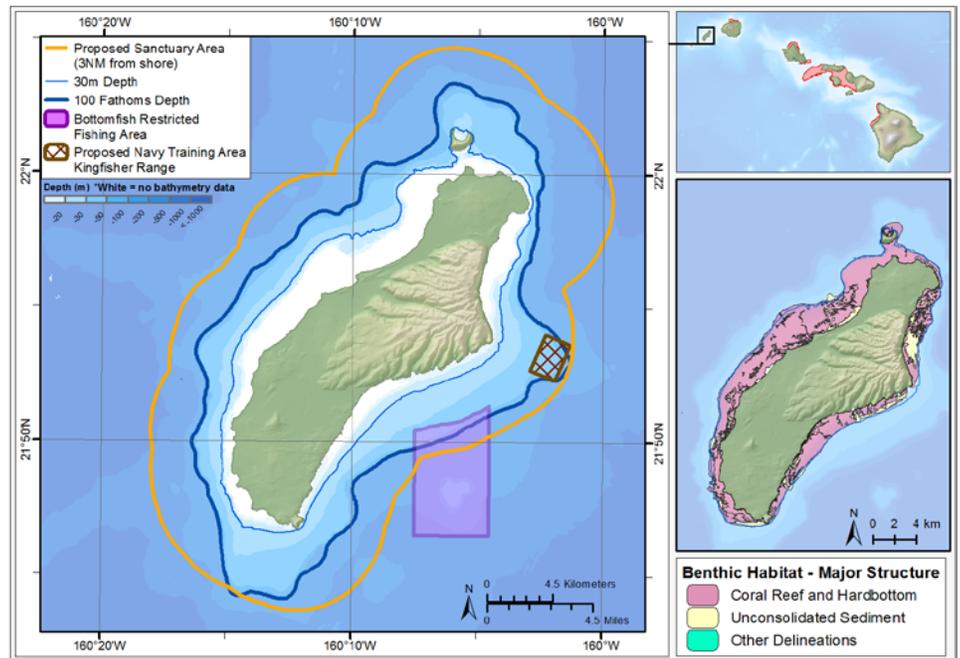
Planned research around Ni'ihau and Lehua will increase understanding of these unique ecosystems.

## Establishing sanctuary boundaries around Ni'ihau

The sanctuary proposes to include the waters surrounding Ni'ihau and nearby Lehua into the sanctuary to increase protection of this unique marine habitat.

The proposed boundary would extend out three nautical miles to be consistent with state waters. The sanctuary would allow managers to collect user information around Ni'ihau. The total area of the proposed boundary expansion would be approximately 217 square miles.

Within this proposed boundary addition, the sanctuary has outlined a plan to support the natural and cultural resources of Ni'ihau and Lehua.



Proposed boundary expansion around Ni'ihau.

### How will the sanctuary increase protection of Ni'ihau and Lehua?

The sanctuary has identified Ni'ihau as one of four *Sanctuary Focus Areas* statewide. Planned activities include:

- Working with local residents and scientists to assess marine habitats, species of concern and cultural resources;
- Conducting this work through a process that integrates traditional knowledge and science-based management;
- Monitoring water quality around Ni'ihau and Lehua to determine changes over time.

### How will the new boundary affect Ni'ihau?

Sanctuary-wide regulations will apply in existing sanctuary areas as well as in proposed boundary additions, including the waters surrounding Ni'ihau.

### Will there be any changes to existing sanctuary-wide regulations?

Yes. Revisions to the current sanctuary-wide regulations, proposed under Alternative 2, 3 and 4, would:

- (1) Clarify humpback whale approach regulation ;
- (2) Combine the two regulations prohibiting the taking and possession of humpback whales into one regulation;
- (3) Remove the prohibition against discharge in the sanctuary;
- (4) Remove the prohibition against discharging from outside the sanctuary anything that enters and injures a sanctuary resource;
- (5) Remove the prohibition on altering submerged lands;
- (6) Add the authority to issue sanctuary permits and authorizations; and
- (7) Add sanctuary-wide regulations prohibiting the disturbance of submerged cultural and maritime heritage resources.