

Mangrove Removal FAQs

Who is cutting the mangrove?

- A hui of grassroots organizations, including Paepae o He'eia, Kāko'o 'Oiwī, and Hui o Ko'olaupoko, with support from kūpuna in the community.
- It's part of a larger effort to restore the lo'i, wetland, and fishpond that used to feed people and provide habitat for native plants and animals.
- The restoration effort is supported by the He'eia National Estuarine Research Reserve. The He'eia NERR was designated in 2017 as a collaboration between the State of Hawai'i and NOAA to help with education, research, and stewardship of the wetland, estuary, and nearby reefs out to Moku o Lo'e.

Why is this happening all of a sudden?

- Paepae o He'eia has been removing mangrove around the fishpond for 20 years, but you couldn't see from the road until now.
- Now that we are at the bridge and stream mouth, we are removing mangrove in phases and monitoring the effects as we go.

Aren't mangroves good in some parts of the world?

- Red mangroves are native to Florida where they provide many functions for the ecosystem.
- They were brought to Hawai'i in the 1920s; they didn't co-evolve here with our native species.
- They are invasive in Hawai'i and don't provide the same ecosystem functions as they do elsewhere. All they do is facilitate the establishment of other invasive species.

Are mangroves providing habitat for native species?

- No. The native species avoid the area.
- Some 'auku'u sit in the trees, but other native shore and wetland birds need open water and mud flats.
- The mangroves are providing habitat for non-native species: rats, pigs, tilapia, egrets, samoan crabs, and non-native sponges and other aquatic invertebrates.
- After mangroves are removed, we have seen native birds and fish move into the open areas.

Are the mangroves trapping sediment?

- They might have at one time, but now they are producing more sediment than they trap because of their leaf litter.
- They also attract pigs that root around and stir up sediment, which washes downstream.

Will the removal result in sediment moving downstream onto the reefs?

- We have researchers monitoring the situation, taking regular measurements before and after mangrove removal.
- They have measured no increase in sediment on the fringing reef, and no change in coral cover.
- Sediment is being deposited near the stream mouth.
- We are leaving the mangrove roots in place to hold sediment.

What about during floods?

- We're also restoring 'auwai and lo'i kalo that are designed to divert flood waters, reducing the storm pulse in the stream channel and allowing sediment to settle out in the wetland before it reaches the ocean.

Is the burning bad for climate change or air quality?

- We are extremely concerned about the effects of climate change.
- Our goal is to re-create a local food system and ecosystem that is resilient to the effects of climate change.
- We are planting agro-forestry plots on the higher areas of the wetland, which will help to offset the trees we are cutting down and provide a sustainable food source.
- Most of the carbon is in the mangrove trunks, which are being saved for hale and other building projects.
- The amount of CO₂ released by burning mangrove branches is small on the global scale, and would get released eventually if the branches and leaves were left to break down on their own.
- Burn permits are in place with the Department of Health.
- The smoke tends to blow onto the wetland, where it disperses.

Won't mangroves help to protect the shoreline from sea level rise?

- It is extremely difficult to predict how exactly sea level rise will impact Kāne'ohe Bay.
- We are putting measurement stations in place as part of a national monitoring program to give us long-term data on water and sediment levels in the estuary and wetland.

What is the plan for keeping the area open after the mangroves are gone?

- We will plant native wetland plants.
- The fishpond and lo'i areas that have been cleared so far have been kept open through thousands of volunteer hours, and the number of volunteers continues to grow.
- We will continue to provide opportunities for people to get involved, and hope that more people will join us to plant native wetland plants, create bird and fish habitat, and keep these areas looking awesome.