

**Testimony of The Nature Conservancy
Providing Comments on Agenda Item D-9, "Issuance of Immediate Management Right-of-Entry Permit and Authorization to Set Aside Lands to County of Maui for the Lahaina Wildfire Final Disposition Project; Olowalu, Maui, Tax Map Key No. (2) 4-8-003:007;" and Agenda Item D-10, "Issuance of Immediate Management Right-of-Entry and Revocable Permit to County of Maui for the Lahaina Wildfire Final Disposition Project; Olowalu, Maui, Tax Map Key No. (2) 4-8-003:008 por."**

**Hawai'i Board of Land and Natural Resources
October 27, 2023, 9:15 AM
Kalanimoku Building, 1151 Punchbowl St., Room 132 and via Teleconference**

Aloha Chair Chang and Board Members:

The Nature Conservancy (TNC) of Hawai'i and Palmyra is working with the Olowalu community on efforts to identify and implement actions to protect Olowalu's reef, which plays a vital role in West Maui's community and economy. **We ask the Board to consider the comments and questions below as the State and Maui County determines how to implement the Lahaina Wildfire Final Disposition Project.**

In 2017, the Olowalu reef was declared a Mission Blue Hope Spot—a place that is critical to the health of our oceans. Spanning the coast from Olowalu to Pāpalaua, the 939-acre reef boasts a stunning diversity of coral, harbors the largest known manta ray population in the United States and is a primary source of coral larvae for the reefs of Lāna'i, Moloka'i, and West Maui.

The Olowalu reef is also immensely important to West Maui's community and economy. This expansive reef reduces wave energy reaching the shoreline, moderating flooding along the coast and protecting the Olowalu community and the only major road currently connecting West Maui with the rest of the island. The reef protects two beach parks used by tens of thousands of residents and tourists each year and is an important area for nature-based recreational activities, including snorkeling, diving, surfing, and paddling.

But the Olowalu reef is threatened by global and local stressors. Surveys following the 2015 statewide bleaching event documented up to a 45% coral loss on the reef, and it is under constant pressure from sediments originating from upland areas degraded by wildfires and feral ungulates. Those sediments are carried by nearby streams and culverts to the ocean, where they settle on the reef and can be churned up by wave events, smother live corals and prevent new corals from growing. Herbivorous fish are critical to maintaining reef health but are in decline at Olowalu, leading to a proliferation of turf algae that holds sediments and takes up valuable space on the reef where coral cannot grow.

BOARD OF TRUSTEES

Duke E. Ah Moo Paul D. Alston Kris Billeter Dr. C. Tana Burkert Anne S. Carter (Chair) Ka'iulani de Silva Dave Eadie
Matt Emerson Hon. Judith Epstein Dr. Alan M. Friedlander Benjy Garfinkle Sean A. Hehir Puni Jackson Brett MacNaughton
Janet Montag Alicia Moy Bradley E. Smith Julie Smolinski Vern Yamanaka Richard N. Zwern

Ihupani Advisory Council: Paul D. Alston Christopher J. Benjamin Kenton T. Eldridge Eiichiro Kuwana
Duncan MacNaughton Jean E. Rolles Crystal K. Rose Nathan E. Smith

Founders: Samuel A. Cooke Herbert C. Cornuelle

In the very dry leeward side of Maui that Olowalu watershed is located, most of the water transported to the coast is through groundwater. Submarine groundwater discharge happens when groundwater flows to the coastline, creating a brackish mixing zone as it seeps into nearshore ocean waters. Groundwater emerges as springs in the intertidal zone and on the reef – and sometimes as what feels like an underground stream. Submarine groundwater discharge buffers the effects of warming ocean waters by adding colder, nutrient rich waters that benefit our coral reef ecosystems, limu (macroalgae) and fisheries. The pollutants and nutrients that we put on the land can be connected to the ocean through groundwater.

We are concerned that adding a landfill very near to the ocean filled with toxic debris from the fire at Lahaina will add an additional stressor that could potentially have seriously detrimental impacts on this vital reef ecosystem.

We understand that the County and State are dealing with an emergency and must make decisions expeditiously. We also believe that a memorial is key for the community, and that less transport distance for the debris is ideal. However, with the potential impacts, we are hopeful that agencies will consider the following concerns:

- What other options for disposal were considered?
- Is it possible to deposit culturally sensitive or ash known to contain remains separately from the rest of the debris?
- Are there opportunities to separate large debris from toxic ash so that ash is deposited at a location farther away from the ocean?
- Has any impact from the currently closed Olowalu landfill on the reef been measured or observed? What can be learned from that experience?
- Considering recently released data from Kula fires showing the high levels of several toxins within the ash, are any heightened protective containment measures or methods being designed for transport as well as at the site of final disposition? Has the County engaged toxicity experts to help understand heightened risks of transport and disposal?
- As this area is known for very high winds that may exacerbate air and marine pollution concerns, are there mitigation methods for airborne contaminants being developed to protect the environment and community areas from the ash and debris is being disturbed, cleared, and then deposited?
- Can opportunities be developed to include bioremediation of the toxic ash prior to Phase Two removal as well as at the deposition site? (Bioremediation involves using biological agents such as plants, fungus, and microbes to remove or lessen the effects of environmental pollutants.)
- What is the minimum efficacy of the clay and composite liners of the landfill site to prevent leaching of toxins and contaminants that can pollute groundwater or harm marine life? What is the management and containment plan if the lining layers fail? What is the expected life of the lining layers and what are expected outcomes for leachate containment after this lifespan?

- What is the management plan if leachate containment basin fails or overflows during a storm or flood event? Will there be a long-term monitoring plan that includes groundwater, coastal water, and coral reef sites?

TNC looks forward to continuing our work with the community, the County, and the State in the conservation and management of the Olowalu-Ukumehame area. **We ask that the Board consider these concerns and ensure that agencies implementing the Lahaina Wildfire Final Disposition Project are considering all possibilities and impacts on our natural resources and communities.**

Mahalo for your support and stewardship of Hawai'i's natural resources.

The Nature Conservancy of Hawai'i and Palmyra is a non-profit organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll and has supported over 50 coastal communities to help protect and restore the nearshore reefs and fisheries of the main Hawaiian Islands. We manage 40,000 acres in 13 nature preserves in Hawai'i and Palmyra Atoll. We forge partnerships with government, private parties, and communities to protect forests and coral reefs for their ecological values and for the many benefits they provide to people.
