DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF AQUATIC RESOURCES 1151 PUNCHBOWL STREET, ROOM 330 HONOLULU, HAWAII 96813

April 12, 2021

Dear Congressman Case,

The Division of Aquatic Resources (DAR) enthusiastically supports the University of Hawaii's proposal for a pilot bioenhancing seawall materials and designs at Hawaii Institute of Marine Biology (HIMB) and DAR will serve as a collaborator and partner for the project.

Moku o Lo'e Marine Laboratory refuge, home of the Hawaii Institute of Marine Biology (HIMB), is suffering from major seawall failure throughout Moku o Lo'e (Coconut Island). The sea wall is over 80 years old and protects millions of dollars in infrastructure supporting cutting edge research focused on marine conservation. It is critical that shorelines are restored to protect the island and prevent further erosion and sedimentation to surrounding reefs.

Sea level rise, frequent and severe storm events, and ailing coastal infrastructure has led to failing sea walls throughout the state. There are major environmental issues with sea walls increased erosion and scouring, loss of beach sand, invasive species, and lack of nearshore habitat for aquatic organisms. New eco-friendly solutions to sea walls are being developed and implemented in other cities throughout the world, with designs to promote growth and habitat for native marine organisms and improve durability of these structures long-term. New concrete mixes and molds provide more biologically friendly materials and habitat for marine environments to promote growth by native organisms and provide longer life spans.

The reef and shallow waters immediately surrounding the island make up the Hawaii Marine Laboratory Refuge, a unique reserve designated by the State Legislature specifically to allow for research and development associated with Hawaii's coral reef ecosystems. The proposed project aims to test ecologically-designed seawalls to both protect shorelines and enhance nearshore marine resources in a site designed by the Legislature for exactly this purpose.

This project could serve as a model system and proof of concept to address sea wall issues throughout the State. The Division of Aquatic Resources stands ready to support this project.

Sincerely,

Brian Neilson Administrator Division of Aquatic Resources

SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> ROBERT K. MASUDA FIRST DEPUTY

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