

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic Resources  
Honolulu, Hawaii 96813

May 23, 2025

Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

SUBJECT: Request Approval for a Federally Funded Project Agreement between the Department of Land and Natural Resources (DLNR) and the Research Corporation of the University of Hawaii (RCUH) for the Division of Aquatic Resources (DAR) Research Project Entitled “Limu Aquaculture and Bio-Banking”

EXECUTIVE SUMMARY

Approval is sought to enter into a new Project Agreement between the DLNR and RCUH. The Project Agreement entitled “Limu Aquaculture and Bio-Banking” is scheduled to run from October 1, 2025 through September 30, 2026. The Project Agreement provides \$134,730.00 in federal funds from the National Oceanic and Atmospheric Administration (NOAA), Pacific Islands Region Office (PIRO) Congressional Earmark. The DLNR-RCUH Project Agreement allows DAR to secure assistance from RCUH to meet project goals and objectives in a timely way.

Project Objectives

- 1) The Division of Aquatic Resources (DAR) will conduct research to develop and implement novel technologies for the aquaculture of limu through its various life stages. This will include the construction of a bio-secure, indoor modular facility at DAR’s Anuenue Fisheries Research Center (AFRC – map attached) to cultivate limu under controlled environmental conditions (i.e. light, photoperiod, salinity, and temperature).
- 2) The DAR will establish an outdoor, grow-out limu nursery at AFRC to cultivate clean seed stock and to research and develop new methods for scaling aquaculture production of target species intended for the stated activities.
- 3) The DAR will engage with the community, including government agencies, universities, NGOs, and public/private stakeholders, to enhance multi-directional knowledge transfer and resource management efforts across the State.

Duration

The Project Agreement is scheduled to run from October 1, 2025 through September 30, 2026.

Funding Sources

Federal funds from a NOAA-PIRO Congressional Earmark will support this Project Agreement in the total amount of \$134,730.00.

HRS Chapter 343 - Compliance with Environmental Law

The Project Agreement will involve the use of state lands (submerged lands zoned in the Conservation District, Resource subzone) and the use of state funds. The Department has determined that the actions to be conducted under the funding and project will have little or no significant effect on the environment and are exempt from the preparation of an environmental assessment. See the Division's proposed Determination of Exemption from the preparation of an environmental assessment (attached).

REMARKS

DAR will launch the first State-led initiative dedicated to the preservation of important limu species that are native and/or endemic to Hawaii. This project will support traditional and cultural practices, increase food security, and strengthen resource management activities across the islands. Currently, there are no publicly accessible limu repositories; therefore, our goal is to establish the first limu laboratory and bio-bank of its kind, which will serve as a valuable resource for all qualified stakeholders who plan to engage in these activities.

Approval to enter into this new Project Agreement is being requested concurrently from the Governor through the Department of Budget and Finance. Also, the Project Agreement is being prepared for submission to the Attorney General's Office for preliminary approval as to form and content. DAR is aware implementation of this Project Agreement is dependent upon receipt of all required approvals as well as the availability of funds and that funding restrictions may occur at any time.

RECOMMENDATIONS

Based on the above discussion, the Division of Aquatic Resources requests:

1. That the Board, based on the attached proposed declaration of exemption prepared after consultation with and on advice of those having similar expertise in exemption determinations for the proposed actions under the Project Agreement, declare that the actions which are anticipated to be undertaken under this Project Agreement will have little or no significant effect on the environment and are therefore exempt from the preparation of an environmental assessment;
2. That the Board authorize the Chairperson to approve and execute the Division of Aquatic Resources Project Agreement entitled "Limu Aquaculture and Bio-Banking," with the Research Corporation of the University of Hawaii subject to approval as to form and content by the Department of the Attorney General; and

3. That the Board delegates to the Chairperson the authority to:
  - a. Approve and execute all future Division of Aquatic Resources Project Agreements and forthcoming amendments with the Research Corporation of the University of Hawaii, subject to approval as to form and content by the Department of the Attorney General; and
  - b. When appropriate, declare that actions that are anticipated to be undertaken under these Project Agreements will have little or no significant effect on the environment and are therefore exempt from the preparation of an environmental assessment.

Respectfully submitted,



BRIAN J. NEILSON  
Administrator

APPROVED FOR SUBMITTAL:

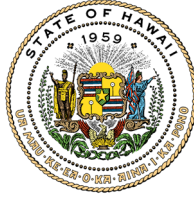


DAWN N. S. CHANG  
Chairperson

Attachment

**JOSH GREEN, M.D.**  
GOVERNOR | KE KIA'ĀINA

**SYLVIA LUKE**  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA**

P.O. BOX 621  
HONOLULU, HAWAII 96809

**DAWN N.S. CHANG**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

**RYAN K.P. KANAKA'OLE**  
FIRST DEPUTY

**CIARA W.K. KAHANE**  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES  
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FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

May 23, 2025

TO: Division of Aquatic Resources File

THROUGH: Dawn N. S. Chang, Chairperson

FROM: Brian J. Neilson, Administrator  
Division of Aquatic Resources

SUBJECT: Declaration of Exemption from the Preparation of an Environmental Assessment under the Authority of Chapter 343, HRS, and Chapter 11-200.1, HAR, for a Request to Approve a Project Agreement between the Department of Land and Natural Resources (DLNR) and the Research Corporation of the University of Hawaii (RCUH) for the Division of Aquatic Resources (DAR) Research Project Entitled "Limu Aquaculture and Bio-Banking."

The following Project Agreement activities are found to be exempted from the preparation of an environmental assessment under the authority of Chapter 343, Hawaii Revised Statutes (HRS), and Chapter 11-200.1, Hawaii Administrative Rules (HAR):

Project Title: Limu Aquaculture and Bio-Banking

Project Description:

DAR will launch the first State-led initiative dedicated to the preservation of important limu species that are native and/or endemic to Hawaii. This project will support traditional and cultural practices, increase food security, and strengthen resource management activities across the islands. Currently, there are no publicly accessible limu repositories; therefore, our goal is to establish the first limu laboratory and bio-bank of its kind at DAR's Anuenue Fisheries Research Center (AFRC), which will serve as a valuable resource for all qualified stakeholders who plan to engage in these activities.

Key project objectives during the grant period include the following:

- 1) The Division of Aquatic Resources (DAR) will conduct research to develop and implement novel technologies for the aquaculture of limu through its various life stages. This will include the construction of a bio-secure, indoor modular facility at

AFRC to cultivate limu under controlled environmental conditions (i.e. light, photoperiod, salinity, and temperature).

- 2) The DAR will establish an outdoor, grow-out limu nursery at AFRC to cultivate clean seed stock and to research and develop new methods for scaling aquaculture production of target species intended for the stated activities.
- 3) The DAR will engage with the community, including government agencies, universities, NGOs, and public/private stakeholders, to enhance multi-directional knowledge transfer and resource management efforts across the State.

Consulted parties: National Oceanic and Atmospheric Administration (NOAA)

Exemption Determination: After reviewing §11-200.1-15, HAR, including the criteria used to determine significance under §§11-200.1-13, HAR, DLNR has concluded that the activities under this Project Agreement would have no significant effect on the environment and that approval of the Project Agreement is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

1. All activities associated with this Project Agreement have been evaluated as a single action. Since this research Project Agreement involves activities that are precedent to a later planned activity, i.e., the monitoring and collection of data and research, the categorical exemption determination here will treat all planned activities as a single action under §11-200.1-10, HAR.
2. The General Exemption Type #5 for Basic Data Collection and Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. §11-200.1-15(c)(5), HAR, exempts the class of actions that involve “basic data collection, research, experimental management, and resource and infrastructure testing and evaluation activities that do not result in a serious or major disturbance to an environmental resource.” This exemption class has been interpreted to include data collection, research, and resource evaluation activities related to Hawaii, Maui, Molokai, Lanai, Oahu, and Kauai marine resources, such as those being proposed.

The proposed activities here appear to fall squarely under the exemption class identified under §11-200.1-15(c)(5), HAR, and as described under the revised 2020 DLNR Exemption List (Concurred on by the Environmental Council on November 10, 2020) under the General Exemption Type #5 (Part 1), items #2 and #13, respectively, which includes “non-destructive data collection and inventory, including field, aerial and satellite surveying and mapping” and “research that the Department declares is designed specifically to monitor, conserve, or enhance native species or native species' habitat”.<sup>1</sup>

3. The General Exemption Type #1 for Operations, Repairs, or Maintenance of Existing Facilities or Structures Appears to Apply. § 11-200.1-15(c)(3), HAR, exempts the class of actions that involve “construction and location of single new, small facilities or structures

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<sup>1</sup> Exemption list for DLNR, approved on November 10, 2020. See Office of Environmental Quality Control (OEQC) website: [http://oeqc2.doh.hawaii.gov/Agency\\_Exemption\\_Lists/State-Department-of-Land-and-Natural-Resources-Exemption-List-2020-11-10.pdf](http://oeqc2.doh.hawaii.gov/Agency_Exemption_Lists/State-Department-of-Land-and-Natural-Resources-Exemption-List-2020-11-10.pdf)

and the alteration and modification of the facilities or structures and installation of new, small equipment and facilities and the modification of the equipment or facilities....” This exemption class has been interpreted to include the construction and replacement of holding tanks and a mobile office trailer for the Limu Aquaculture and Bio-Banking project.

The proposed activities here appear to fall squarely under the exemption class identified under § 11-200.1-15(c)(3), HAR, and as described under the revised 2020 DLNR Exemption List (Concurred on by the Environmental Council on November 10, 2020) under General Exemption Type 1 (Part 1), items #8, #10, #12, #13, and #18 respectively, which include “operation, repair and maintenance of existing nurseries, arboreta, and captive propagation facilities; repair and maintenance of existing bollards, walls, gates, fences, lighting, and other similar items necessary for the security or continued operation of a facility or structure; repair and maintenance of existing utilities and drainage systems; and repair and maintenance of existing water tanks, water catchment basins, water units, pumps and controls, pipes, channels, dikes, and moats.”<sup>2</sup>

4. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not Be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if “the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment.” §11-200.1-15(d), HAR. To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. §11-200.1-13, HAR.

Significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected. All activities will be conducted in a manner that will not diminish the quality of marine resources or their ecological integrity, and the proposed activities will not have any indirect, secondary, cultural, or cumulative effects.

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area located at AFRC are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts will Probably have No Significant Effect on the Environment. Any foreseeable impacts from the proposed activity will be further mitigated by general and specific conditions attached to the Project Agreement. Specifically, all research activities covered by this Project Agreement will be carried out with strict safeguards for the natural,

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<sup>2</sup> Exemption list for DLNR, approved on November 10, 2020. See Office of Environmental Quality Control (OEQC) website: [http://oeqc2.doh.hawaii.gov/Agency\\_Exemption\\_Lists/State-Department-of-Land-and-Natural-Resources-Exemption-List-2020-11-10.pdf](http://oeqc2.doh.hawaii.gov/Agency_Exemption_Lists/State-Department-of-Land-and-Natural-Resources-Exemption-List-2020-11-10.pdf)

historic, and cultural resources, other applicable laws and agency policies, and standard operating procedures.

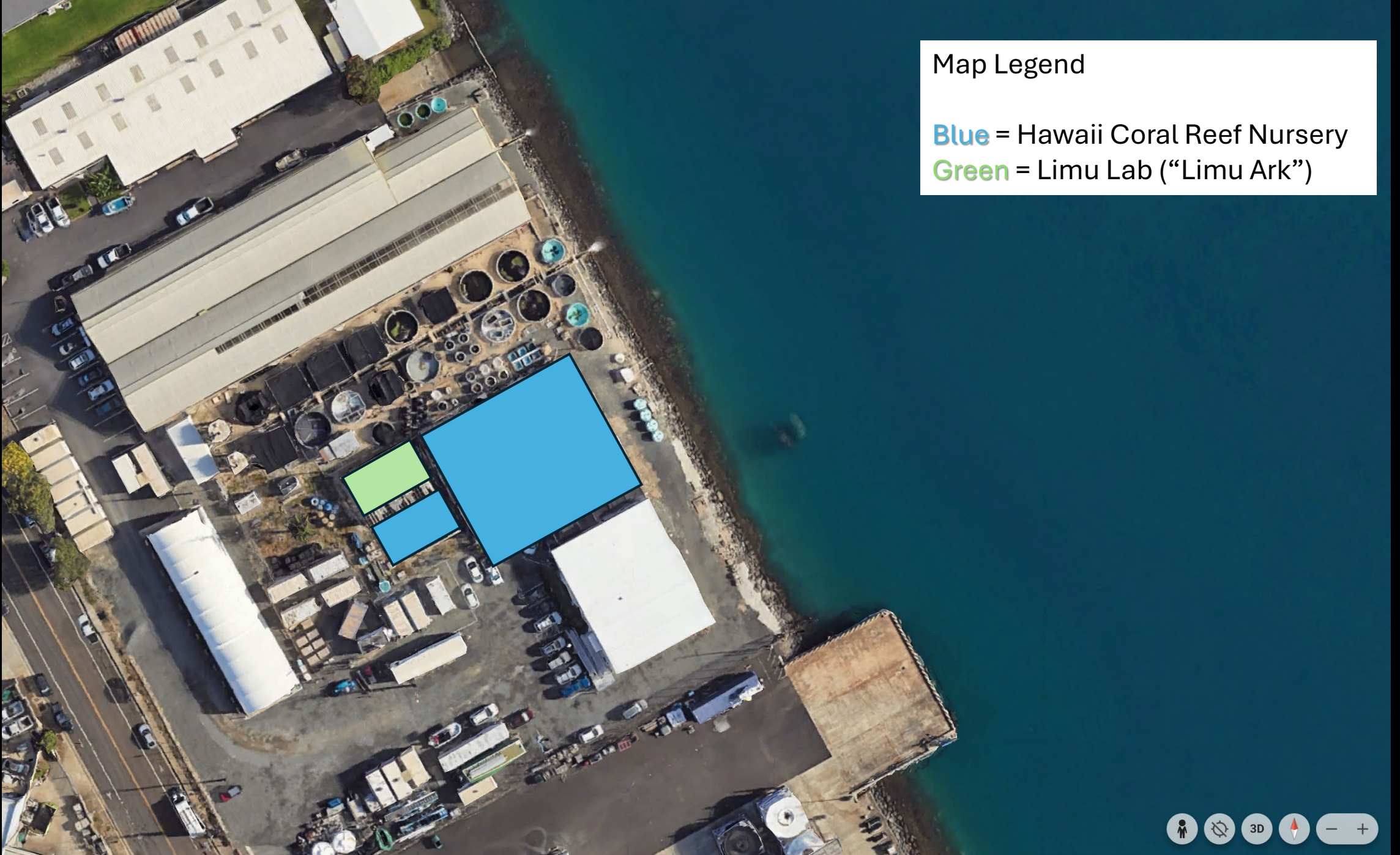
Conclusion. Upon consideration of the Project Agreement to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS, and Chapter 11-200.1 HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.



## Map Legend

Blue = Hawaii Coral Reef Nursery

Green = Limu Lab (“Limu Ark”)



20 m

Camera: 275 m

21°18'17"N 157°52'18"W 9 m