

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Office of Conservation and Coastal Lands
Honolulu, Hawaii

March 11, 2016

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

REGARDING: Proposed MEMORANDUM OF AGREEMENT between THE STATE OF HAWAII, Department of Land and Natural Resources, by its Board of Land and Natural Resources and the UNIVERSITY OF HAWAII SEA GRANT COLLEGE PROGRAM to Help Fund the NOAA Regional Coastal Resilience Grant.

The Department of Land and Natural Resources (DLNR) is proposing a partnership with the University of Hawai'i Sea Grant College Program (Hawai'i Sea Grant) to support a coastal community resilience project (The Project) funded by the National Oceanic and Atmospheric Administration (NOAA). The primary goal of The Project is to reduce vulnerability and increase resilience to coastal hazards and climate change in Hawai'i's coastal communities. The Project work will include the development of:

- 1) A *Web-based Hazard Exposure and Vulnerability Mapping Tool*, including erosion and coastal inundation hazard exposure with SLR to improve access to high-resolution geospatial data related to coastal hazards and support resilience planning for communities and decision-makers;
- 2) *Guidelines for Integrating Coastal Resilience into Existing Planning Frameworks* to increase the number of plans and policies that address coastal hazards and climate change impacts; and
- 3) *Guidelines and Training for Post-Disaster Rebuilding and Recovery* to improve the ability of island communities to prepare for, adapt to, and recover from coastal disasters.

The proposed partnership between DLNR and Hawai'i Sea Grant will leverage and inform ongoing planning and policy development for climate change, sea level rise, and related coastal hazards under the Hawai'i Climate Adaptation Initiative Act (State Act 83, 2014), which includes development of a statewide Sea Level Rise Vulnerability and Adaption Report; the Hawai'i State Planning Act, which includes priority guidelines for addressing the impacts of climate change (as amended by State Act 286, 2012); and other existing plans and policies.

**Board of Land and
Natural Resources**

Hawai'i Sea Grant has secured funding in the amount of \$845,160 through the NOAA 2016 Regional Coastal Resilience Grants Program to support The Project. NOAA requires cost-sharing through cash or in-kind match at a 2:1 ratio of federal to non-federal contributions for The Project under this grant. DLNR has agreed to provide the required cost-match for The Project including \$322,580 of in-kind support through funding from the Hawai'i Climate Adaptation Initiative.

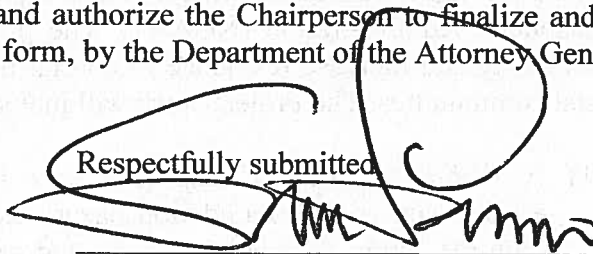
DLNR proposes to appropriate an additional \$100,000 of cash support to The Project. Thus, the DLNR wishes to enter into a Memorandum of Agreement (MOA) with Hawai'i Sea Grant for \$100,000 to cover the costs of contractual services to support the development of project deliverables. The funds subject to this MOA will be used solely for the purchase of contractual services. The source of public funds for the MOA is from the DLNR Beach Restoration Special Fund.

The proposed MOA for \$100,000 is attached (**Attachment A**). A letter of support for The Project from the Hawai'i Governor David Y. Ige is also attached (**Attachment B**). The proposed recipient, Hawai'i Sea Grant, is in agreement with the proposed language of the MOA.

RECOMMENDATION:

That the Board of Land and Natural Resources (BLNR) approve the Department entering into an MOA for the subject project, and authorize the Chairperson to finalize and sign the MOA subject to the approval, as to form, by the Department of the Attorney General.

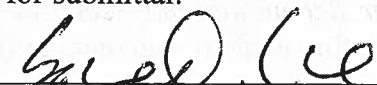
Respectfully submitted



SAMUEL J. LEMMO, Administrator
Office of Conservation and Coastal Lands

Approved for submittal:

By:


SUZANNE CASE, Chairperson
Board of Land and Natural Resources

A PROPOSAL
SUBMITTED BY
UNIVERSITY OF HAWAII

TO: State of Hawai'i
Department of Land & Natural Resources

PROJECT TITLE: Building Resilience to Coastal Hazards and
Climate Change in Hawai'i

PRINCIPAL INVESTIGATOR: Dr. Bradley M. Romine

DEPARTMENT: Sea Grant College Program

PROJECT PERIOD: May 01, 2016 – April 30, 2019

AMOUNT REQUESTED: \$100,000.00

AUTHORIZING UNIVERSITY
OFFICIAL:

DATE: _____

Kathy Yoshinaga
Grants Specialist

ADDRESS: University of Hawai'i
Office of Research Services
2440 Campus Road, Box 368
Honolulu, HI 96822-2234

Please ensure that all correspondence regarding this application and project are addressed to the
Office of Research Services.

STATE OF HAWAII
MEMORANDUM OF AGREEMENT
BETWEEN DEPARTMENT OF LAND AND NATURAL RESOURCES
AND UNIVERSITY OF HAWAII ON BEHALF OF ITS SEA GRANT COLLEGE PROGRAM

This Memorandum of Agreement (hereinafter "Agreement"), made and entered this _____ day of _____, 2016, by and between the Department of Land and Natural Resources (hereinafter "DLNR") and the University of Hawai'i on behalf of its Sea Grant College Program (hereinafter "Hawai'i Sea Grant")

WHEREAS, the DLNR is a co-chair of the Interagency Climate Adaptation Committee and is responsible for planning for climate change and sea level rise through the Hawai'i Climate Adaptation Initiative (Act 83, Session Laws Hawai'i 2014);

WHEREAS, the principal purpose of the Hawai'i Climate Adaptation Initiative is to address the effects of climate change and protect the state's economy, health, environment, and way of life.

WHEREAS, the DLNR is a collaborative partner on the Hawai'i Sea Grant project entitled "Building Resilience to Coastal Hazards and Climate Change in Hawai'i" (hereinafter The "Project").

WHEREAS, Hawai'i Sea Grant has secured funding in the amount of \$845,160 through the National Oceanic and Atmospheric Administration's (NOAA) 2016 Regional Coastal Resilience Grants Program to support The Project.

WHEREAS, NOAA requires cost-sharing through cash or in-kind match at a 2:1 ratio of federal to non-federal contributions for The Project under this grant.

WHEREAS, DLNR agrees to provide required cost-match for The Project including \$322,580 of in-kind support through funding from the Hawai'i Climate Adaptation Initiative and \$100,000 (cash), for a total cost-match of \$422,580.

WHEREAS, the funds subject to this agreement are non-federal funds. Funds will be appropriated from the DLNR Special Land Development Fund.

WHEREAS, The Project deliverables will support DLNR's and the State's climate change adaptation planning efforts under the Hawai'i Climate Adaptation Initiative by producing a web-based coastal hazard and sea level rise exposure and vulnerability mapping tool, guidelines for integrating coastal resilience into existing planning frameworks, and guidelines and training for post-disaster rebuilding and recovery;

WHEREAS, The Project has the support of the Governor of the State of Hawai'i (letter enclosed);

WHEREAS, there is considerable need for contractual services for The Project;

NOW THEREFORE, in consideration of the promises contained in this Agreement, the DLNR and the Hawai'i Sea Grant agree as follows:

1. Scope of Services. All parties agree to the Scope of Services set forth in Attachment 1, which is hereby made part of this Agreement.
2. Time of Performance. The DLNR shall provide funding for a three-year period set forth in Attachment 2, which is hereby made a part of this Agreement.
3. Compensation. The DLNR shall provide a portion of the funding to Hawai'i Sea Grant towards the Project contractual services, in accordance with the Compensation and Payment Method set forth in Attachment 3, which is hereby made a part of this Agreement.
4. Other Terms and Conditions. This Agreement shall be subject to any other applicable terms and conditions set forth in Attachment 4, which is hereby made a part of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first above written.

DEPARTMENT OF LAND AND NATURAL RESOURCES

By: _____
SUZANNE D. CASE
Chairperson

UNIVERSITY OF HAWAII

By: _____
YAA-YIN FONG
Director, Office of Research Services

SCOPE OF SERVICES

Background

Hawai'i Sea Grant was recently awarded grant funding of \$845,160 to support the project entitled *Building Resilience to Coastal Hazards and Climate Change in Hawai'i* (The Project). The Project was developed through collaboration between Hawai'i Sea Grant, DLNR, the State Office of Planning, and others. Funding for The Project is being provided by the National Oceanic and Atmospheric Administration, Office of Coastal Management (NOAA OCM) through their 2016 Regional Coastal Resilience Grants Program¹. This program requires cost-sharing through cash or in-kind match at a 2:1 ratio of federal to non-federal contributions. DLNR agrees to provide cost-match for this grant including \$322,580 (in-kind support), and \$100,000 (cash), for a total cost-match of \$422,580.

The funding subject to this agreement will be used toward contractual services to develop deliverables for The Project, which will directly support the *Hawai'i Climate Adaptation Initiative*.

Project Description

Hawai'i is highly vulnerable to coastal hazards including impacts related to climate change and sea-level rise (SLR). As SLR accelerates and climate and ocean conditions change, it is becoming increasingly important for island communities to develop policies and implement strategies that reduce vulnerability and increase resilience to natural hazards. Development, infrastructure, and populations in Hawai'i are generally concentrated on low-lying coastal plains making communities and local economies highly vulnerable to flooding, coastal erosion, SLR, particularly with coastal disaster events including tropical cyclones and tsunamis.

The overarching goal is to increase community resilience to coastal hazards and impacts from climate change and SLR in Hawai'i. The primary objectives are to:

- 1) Leverage and inform ongoing planning activities in Hawai'i that improve community resilience to coastal hazards including impacts from climate change and SLR;
- 2) Address critical gaps in stakeholder knowledge and capacity to conduct localized assessments of exposure and vulnerability to coastal hazards;
- 3) Increase the number of state and county plans and policies that integrate strategies for improved community resilience to coastal hazards;
- 4) Support the development of post-disaster recovery plans and policies that improve community resilience; and
- 5) Share easily transferrable methods, guidance, and planning tools from this project and related efforts to the broader Pacific Islands region and nationally through existing partnerships.

¹ <https://coast.noaa.gov/resilience-grant/>

The overarching project goal and objectives will be accomplished through three complementary sub-projects:

- 1) A *Web-based Hazard Exposure and Vulnerability Mapping Tool*, including erosion and coastal inundation hazard exposure with SLR to improve access to high-resolution geospatial data related to coastal hazards and support resilience planning for communities and decision-makers;
- 2) *Guidelines for Integrating Coastal Resilience into Existing Planning Frameworks* to increase the number of plans and policies that address coastal hazards and climate change impacts; and
- 3) *Guidelines and Training for Post-Disaster Rebuilding and Recovery* to improve the ability of island communities to prepare for, adapt to, and recover from coastal disasters.

The project will leverage and inform ongoing planning and policy development for climate and SLR-related hazards under the *Hawai'i Climate Adaptation Initiative* (State Act 83, 2014)², which includes development of a statewide SLR Vulnerability and Adaption Report for Hawai'i.

² Hawai'i Climate Adaptation Initiative Act, Act 83 Session Laws of Hawai'i, 2014; Hawai'i Revised Statutes (HRS) §225P-3.

Attachment 2

TIME OF PERFORMANCE

The DLNR will provide the funding required under this Agreement for the period May 1, 2016 through April 30, 2019, unless this Agreement is extended or sooner terminated as hereinafter provided.

Attachment 3

BUDGET COMPENSATION AND PAYMENT METHOD

Year 1 (2016-2017)

Budget	12 Months	Total
Contractual Services		36,000.00
Indirect Cost	10%	4,000.00
Total		40,000.00

Year 2 (2017-2018)

Budget	12 Months	Total
Contractual Services		27,000.00
Indirect Cost	10%	3,000.00
Total		30,000.00

Year 3 (2018-2019)

Budget	12 Months	Total
Contractual Services		27,000.00
Indirect Cost	10%	3,000.00
Total		30,000.00

The DLNR shall pay UH \$40,000.00 for the first year (2016 to 2017), \$30,000.00 for the second year (2017-2018), and \$30,000.00 for the third year (2018 to 2019) for the contractual services under this Agreement in accordance with the following:

1. This payment shall be made upon submission of an invoice. Excess funds resulting from a termination in service shall be returned to the DLNR prior to the end of the contract year.
2. Upon approval of the invoice, the DLNR shall issue a check for the funds to the University of Hawai'i.

Attachment 4

SPECIAL CONDITIONS

1. This Agreement may be extended by mutual agreement in writing by all parties.
2. Either party may terminate this Agreement for any reason upon thirty (30) days notice to the other party for good cause.
3. The DLNR and Hawai'i Sea Grant shall ensure that the funds are used for the purchase of contractual services