

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

November 9, 2017

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

Delegation of Authority to the Chairperson to Select and Contract Consultants for Projects in Support of Hawaii Revised Statutes (HRS) Chapter 179D, Dams and Reservoirs to: (1) Procure, Negotiate, Approve, Enter, Sign, and Execute Contracts and Agreements for HRS Chapter 179D Projects; (2) Negotiate, Approve, Enter, Sign, and Execute Supplemental Contracts to Address Unforeseen Conditions for these HRS Chapter 179D Projects; and (3) Declare these HRS Chapter 179D Projects Exempt from the Preparation of an Environmental Assessment or Approve an Environmental Assessment and Issue a Finding of No Significant Impact, if Appropriate

The Engineering Division (Division) desires to execute agreements with consultants, contractors and/or government agencies as necessary to implement and administer projects in support of the Dam and Reservoir Safety Act of 2007, HRS Chapter 179D. Rights of Entry Agreements may be desired for execution for some of these projects, as approximately seventy percent of the state regulated dams are located on privately owned property.

Funding for this work will be provided primarily from the Dam and Reservoir Safety Special Fund (LNR 810 Operating Special Fund) and may be supplemented by the Department of Homeland Security, National Dam Safety Program Grant and other State Operational Funds.

This authorization is being requested to support all projects in support of HRS Chapter 179D, including emergency preparedness and response actions, for Fiscal Year (FY) 2018. The following is a listing of known projects which are anticipated to be contracted:

1. Dam Safety Permit Review and Related Technical Services Estimate \$ 800,000
The Division would like to utilize consultant services to conduct Phase I inspection and assessment of existing dams and to assist in the technical review of proposed dam safety construction, alteration and removal permit applications, certificate of approval to impound applications and related dam safety technical assistance. Although the Division conducts their own inspections of the regulated dams, third party consultant Phase I Investigations have not been updated in about 10 years. Multiple consultants may be selected and contracted to fulfill various portions of this work.

2. Dam and Reservoir Water Level Monitoring System Estimate \$ 750,000
This project is estimated to cost about \$750,000 in total which is anticipated to be contracted annually over the next three years at \$250,000 per year. The project will include the installing of water level monitoring systems at regulated dam facilities and an analysis of the correlation between upper watershed rainfall events and the water level in the reservoirs. The Division has partnered with the University of Hawaii, Sea Level Center as they have extensive experience in installing reliable monitoring systems all over the world and have technical resources within the university that can benefit this project. The Division has secured 80 slots on the NOAA GOES

Request Authorization to Select Consultants for Projects in Support of Hawaii Revised Statutes (HRS) Chapter 179D, Dams and Reservoirs; Delegation of Authority to the Chairperson to (1) Procure, Negotiate, Approve, Enter, Sign, and Execute Agreements and Contracts for HRS 179D Projects; (2) Declare These HRS 179D Projects Exempt from the Preparation of an Environmental Assessment or Approve an Environmental Assessment and Issue a Finding of No Significant Impact, if Appropriate.

satellite transmission system for this effort and has installed reservoir gages on 15 facilities on Maui and Kauai.

3. Dam Failure Mapping and Hazard Assessment Estimate \$ 50,000
The Division desires to contract with the Pacific Disaster Center (PDC), under management by the Research Corporation of the University of Hawaii (RCUH), to conduct dam failure model simulations of selected dams statewide, along with a detailed hazard assessment of the modeled area and evacuation mapping documentation. The Division has previously worked with the PDC to provide dam failure modeling of almost all regulated dams statewide. Additional structures have been identified for inclusion into the regulatory program and will be evaluated to determine their appropriate hazard classification, as well as the remodeling of existing structures with changed conditions.
4. Information Technology Maintenance Support Estimate \$ 200,000
The Division hosts a number of information technologies (IT) applications and servers that support the Dam Safety Program. The Dam Inventory Maintenance System (DIMS), which is an online database management system of regulated dams; Dam Watch, a web GIS application for monitoring real time reservoir levels, rainfall imagery and stream gages; Dam and Reservoir Permitting System, application for filing online permit applications; and our Division Webpage. Maintenance support is required to provide ongoing licensing, service, maintenance, hosting and help desk support for these systems. Additional services may be procured for hardware/software upgrades and to modify these applications to best meet current program needs and objectives.
5. Updated Aerial Photography Estimate \$ 100,000
The Division desires to contract or purchase a consumer pro-grade drone aircraft and related software to update the aerial photography of selected regulated dams and reservoirs, as significant amounts of work have been accomplished on many of these facilities from the last set of aerial photographs. The updated aerial imagery can also be used to verify downstream hazard assessments and provide approximate topographic information. As part of this project, the Division will first setup policies and protocol for these types of devices, which may also include obtaining any recommended/required training and licensing requirements. Similar successful programs and policies have been developed for the Honolulu Fire Department and Maui County Fire Department.

Procurement and Contracts for these Projects

All procurements will be made in accordance with the State Procurement Code, HRS Chapter 103D and the latest Executive Memorandum on Budget Execution Policies and Instructions.

Supporting Agreements and Emergency Work

Request authorization for the Chairperson to negotiate and execute memorandums of agreement, right of entry agreements or other agreements in support of these HRS Chapter 179D projects and/or Emergency Work. The Department maintains funding for emergency work and may employ remedial measures, where in the opinion of the Department the conditions of any dam or reservoir are so dangerous to the health and safety of life or property.

Request Authorization to Select Consultants for Projects in Support of Hawaii Revised Statutes (HRS) Chapter 179D, Dams and Reservoirs; Delegation of Authority to the Chairperson to (1) Procure, Negotiate, Approve, Enter, Sign, and Execute Agreements and Contracts for HRS 179D Projects; (2) Declare These HRS 179D Projects Exempt from the Preparation of an Environmental Assessment or Approve an Environmental Assessment and Issue a Finding of No Significant Impact, if Appropriate.

HRS Chapter 343 Compliance


All projects will comply with applicable provisions of HRS Chapter 343, and Hawaii Administrative Rules Title 11, Chapter 200, (HAR). We ask the Board to delegate to the Chairperson the authority to declare a project exempt from the preparation of an EA or to approve an EA and issue a Finding of No Significant Impact (FONSI) for projects in which an EA is prepared and resulting in such findings. All projects for which an environmental impact statement (EIS) is prepared will be presented to the Board.

RECOMMENDATIONS:

That the Board of Land and Natural Resources (Board) delegate authority to the Chairperson to select and contract consultants for projects in support of HRS Chapter 179D, Dams and Reservoirs to:

- (1) Procure, negotiate, approve, enter, sign, and execute agreements and contracts for HRS Chapter 179D projects;
- (2) Negotiate, Approve, Enter, Sign, and Execute Supplemental Contracts to Address Unforeseen Conditions for these HRS Chapter 179D Projects; and
- (3) Declare these HRS Chapter 179D Projects Exempt from the Preparation of an Environmental Assessment or Approve an Environmental Assessment and Issue a Finding of No Significant Impact, if Appropriate, subject to Governor's approval, and review and approval as to form by the Department of the Attorney General.

Respectfully submitted,



CARTY S. CHANG
Chief Engineer

APPROVED FOR SUBMITTAL:



SUZANNE D. CASE, Chairperson
Board of Land and Natural Resources