

HB2077 HD2 SD1

Measure Title: RELATING TO HYDROELECTRIC POWER.

Report Title: Small Hydropower Facilities; Agricultural District Lands

Description: Permits hydroelectric facilities that are considered small hydropower facilities under federal law on agricultural district lands. (SD1)

Companion:

Package: None

Current Referral: TRE/WLA, CPH

Introducer(s): C. LEE, CULLEN, LOWEN, YAMANE

DAVID Y. IGE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

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**Testimony of
SUZANNE D. CASE
Chairperson**

**Before the Senate Committee on
COMMERCE, CONSUMER PROTECTION, AND HEALTH**

**Wednesday, March 30, 2016
10:00 AM
State Capitol, Conference Room 229**

**In consideration of
HOUSE BILL 2077, HOUSE DRAFT 2, SENATE DRAFT 1
RELATING TO HYDROELECTRIC POWER**

House Bill 2077, House Draft 2, Senate Draft 1 proposes to authorize construction of small hydroelectric facilities as defined by the United States Department of Energy in a manner that combines clean energy infrastructure and irrigation for agricultural lands. **The Department of Land and Natural Resources (Department) supports hydroelectric facilities, including pumped storage.**

This measure recognizes the importance and benefit of hydroelectric energy-generating facilities towards energy independence and security and includes provisions requiring compliance with the State Water Code and rules regarding the establishment of instream flow standards to ensure protection of public trust resources and uses.

Thank you for the opportunity to testify on this measure.

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

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON, P.E.
DEPUTY DIRECTOR - WATER

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

DAVID Y. IGE
Governor

SHAN S. TSUTSUI
Lt. Governor



SCOTT E. ENRIGHT
Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER
Deputy to the Chairperson

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**TESTIMONY OF SCOTT E. ENRIGHT
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION,
AND HEALTH**

March 30, 2016
10:00 A.M.
CONFERENCE ROOM 229

**HOUSE BILL NO. 2077 HD2 SD1
RELATING TO HYDROELECTRIC POWER**

Chairperson Baker and Members of the Committee:

Thank you for the opportunity to testify on House Bill No. 2077 HD2 SD1 that allows a “small hydropower facility” as defined by the U. S. Department of Energy as a hydroelectric facility on all Agricultural District lands and requires approval by the Commission on Water Resources Management for new instream flow standards when water diversions are proposed. The Department of Agriculture offers comments and an amendment.

The purpose of this measure is to authorize “the construction of small hydropower facilities...in a manner that combines clean energy infrastructure and irrigation for agricultural lands.” (Section 1, page 1) The Transportation and Energy, and Water, Land, and Agriculture standing committee report (No. 3129, March 24, 2016, page 1) states that “Hydroelectric facilities can provide the State with alternative energy options, as long as it is secondary to agricultural activities on agricultural lands.”

Contrary to these assertions, the Department of Agriculture finds that the amendments proposed in SD1 (pages 18-19) neither requires hydropower facilities to provide irrigation for agricultural lands nor be secondary to agricultural activities on agricultural lands. Hydropower facilities are only required to not adversely impact or impede the uses of agricultural land or availability of surface or ground water.



The Department proposes the following amendment to reinforce the protection to agricultural activities from the construction and operation of hydroelectric facilities:

(page 19, lines 16-21)

"(D) Do not [~~adversely~~] impact or impede whatsoever the use of agricultural land or the availability of surface or ground water for all uses on all parcels that are served by the ground water sources or streams for which hydroelectric facilities are considered."

Thank you for the opportunity to submit our testimony.



Email: communications@ulupono.com

SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, & HEALTH
Wednesday, March 30, 2016 — 10:00 a.m. — Room 229

Ulupono Initiative Strongly Supports HB 2077 HD 2 SD 1, Relating to Hydroelectric Power

Dear Chair Baker, Vice Chair Kidani, and Members of the Committee:

My name is Kyle Datta and I am General Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and reduce waste. We believe that self-sufficiency is essential to our future prosperity and will help shape a future where economic progress and mission-focused impact can work hand in hand.

Ulupono strongly supports HB 2077 HD 2 SD 1, which permits hydroelectric power facilities larger than 500kW on Agricultural District lands, because it aligns with our goal of increasing the production of clean, renewable energy in Hawai'i. Of particular interest to Ulupono is the ability to create run-of-river hydroelectric and pumped storage hydro projects. Energy storage projects are gaining more support as variable renewable energy is increasing. Yet, for all the battery technology developments, hydroelectric and pumped storage hydro are some of the most cost efficient and technologically proven energy storage systems in the world.

Through increasing the electric generating capacity cap, more projects can be built that benefits farmers and ranchers, the utility, and ratepayers. For farmers and ranchers, a hydroelectric power and pumped storage project can provide both a supplemental revenue source and more effective water capture and usage. For the utility, these projects can provide more firm, renewable generating capacity and greater grid effectiveness. For the ratepayer, these energy projects can lower the cost of energy use.

However, these hydroelectric projects can require larger economies of scale to make them economically viable. The current 500kW cap is too small to allow for hydroelectric infrastructure and pumped storage hydro to develop in a timely manner.

As Hawai'i's energy issues become more complex and challenging, we appreciate this committee's efforts to look at policies that support renewable energy production.

Investing in a Sustainable Hawai'i



Thank you for this opportunity to testify.

Respectfully,

Kyle Datta
General Partner