JOSH GREEN, M.D. GOVERNOR I KE KIA'ĀINA

SYLVIA LUKELIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA





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

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DAWN N.S. CHANG

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LAND
STATE PARKS

Testimony of DAWN N. S. CHANG Chairperson

Before the Senate Committee on WATER AND LAND

Monday, February 3, 2025 1:06 PM State Capitol, Conference Room 229 & Videoconference

In consideration of SENATE BILL 848 RELATING TO DESALINATION

Senate Bill 848 proposes to establish a Desalination Planning Task Force to examine the feasibility of, and develop a plan and timeline for, the use desalination as a source of potable water in the State. The Department of Land and Natural Resources (Department) supports this measure and offers comments.

The Department supports the use of feasible alternative water sources to supplement Hawai'i's natural water supplies. Desalination is used in many places around the world to produce fresh water from brackish or seawater. As the Legislature acknowledges, there are challenges to the large-scale implementation of desalination in Hawai'i, including high energy costs and the disposal of byproduct brine water. While desalination for water supply has been narrowly studied in Hawai'i, it would be constructive to establish a Desalination Planning Task Force to further investigate and understand the opportunities and constraints for statewide use of desalination in Hawai'i.

Given the level of effort to complete a statewide desalination study, the Department respectfully recommends adding a funding appropriation to this measure for hiring a contractor to assist with completing the report to the Legislature.

Thank you for the opportunity to testify in support of this measure.

BOARD OF WATER SUPPLY KA 'OIHANA WAI CITY AND COUNTY OF HONOLULU

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RICK BLANGIARDI MAYOR *MEIA*

ERNEST Y. W. LAU, P.E. MANAGER AND CHIEF ENGINEER MANAKIA A ME KAHU WILIKĪ

ERWIN KAWATA DEPUTY MANAGER HOPE MANAKIA



February 3, 2025

NĀ'ĀLEHU ANTHONY, Chair JONATHAN KANESHIRO, Vice Chair BRYAN P. ANDAYA LANCE WILHELM KĒHAULANI PU'U EDWIN H. SNIFFEN, Ex-Officio GENE C. ALBANO, P.E., Ex-Officio



The Honorable Lorraine R. Inouye, Chair and Members Senate Committee on Water and Land Hawai'i State Capitol, Room 229 Honolulu, Hawai'i 96813

Dear Chair Inouye and Members:

Subject:

Senate Bill 848: Relating to Desalination

The Honolulu Board of Water Supply supports Senate Bill (SB) 848.

The BWS suggests a minor amendment to be added to Section 2 (c) (6) as follows:

(6) Address environmental concerns associated with the operation of desalination plants, including high energy consumption <u>and disposal of brine concentrate.</u>

Thank you for the opportunity to testify in support of SB 848.

Very truly yours,

ERNEST'Y. W. LAU, P.E. Manager and Chief Engineer

SB-848

Submitted on: 1/31/2025 11:24:55 AM

Testimony for WTL on 2/3/2025 1:06:00 PM

Submitted By	Organization	Testifier Position	Testify
Michael I Rice	Individual	Support	Written Testimony Only

Comments:

I stand in SUPPORT of this bill. Given the growing water needs and the vulnerability of our current water systems this is long overdue. We have the technology to turn salt water into safe drinking water and are island surrounded by salt water, we should NEVER have to hear the words 'drought' or 'water restrictions' again.

I would also suggest that the task force, once it is established, look into recent studies on the use of byproducts from desalination for chemical production, some of which can even be used to improve the desalination process. These chemicals are useful around the world and would be one way to offset the costs of producing clean drinking water as well as reduce the environmental effects of simply pumping unprocessed brine back into the ocean.

If done right, our desalination plants could also produce renewable energy. The abovementioned byproducts can be used to produce clean burning hydrogen, and the Orkney Islands in the North Atlantic used Pumped Hydro Energy Storage using salt water. Since reservoirs or holding tanks will likely be required, the two can be combined and use the same infrastructure.

I would even suggest looking at turning the Red Hill fuel storage facility into a desalination plant.

SB-848

Submitted on: 1/31/2025 7:18:26 PM

Testimony for WTL on 2/3/2025 1:06:00 PM

Submitted By	Organization	Testifier Position	Testify
Jacob Wiencek	Individual	Support	Written Testimony Only

Comments:

Aloha Committee Members,

We are facing significant water resource management challenges in Hawaii. Natural drought, climate change, man-made disasters, and increased usage are all working to put ever more pressure on our water sources.

Supporting desal really is a NO BRAINER! It will let us sustainbly use the bountiful ocean resource around us to meet our population's needs.

I STRONGLY urge this Committee to SUPPORT desalination!