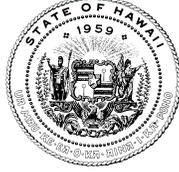


JOSH GREEN, M.D.
GOVERNOR
STATE OF HAWAII
*Ke Kia'āina o ka Moku'āina 'o
Hawaii*

SYLVIA J. LUKE
LT. GOVERNOR
STATE OF HAWAII
*Ka Hope Kia'āina o ka Moku'āina
'o Hawaii*



KALI WATSON
CHAIRPERSON, HHC
Ka Luna Ho'okele

KATIE L. LAMBERT
DEPUTY TO THE CHAIR
Ka Hope Luna Ho'okele

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
Ka 'Oihana 'Āina Ho'opulapula Hawaii'i

P. O. BOX 1879
HONOLULU, HAWAII 96805

TESTIMONY OF KALI WATSON, CHAIR
HAWAIIAN HOMES COMMISSION
BEFORE THE HOUSE COMMITTEE ON FINANCE
HEARING ON FEBRUARY 20, 2025 AT 12:00PM IN CR 308

HB 1307, HD 2, RELATING TO THE DEPARTMENT OF HAWAIIAN HOME LANDS

February 19, 2025

Aloha Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee:

The Department of Hawaiian Home Lands (DHHL) **strongly supports** this bill which would appropriate funds to DHHL for water well development for geophysical investigation, exploration, and identification of geothermal resources on Hawaiian Home Lands.

This legislative proposal was approved by the Hawaiian Homes Commission (HHC). The appropriation request is for follow-up funds to the initial funds appropriated to DHHL through Act 205, Session Laws of Hawaii 2022, which was successfully expended by DHHL. This appropriation of funds would be used for geophysical data collection, drilling of slim holes at previously examined sites, water well development, and hiring consultants to help DHHL navigate the intricacies of geothermal development.

The HHC requested that a permitted interaction group (P.I.G.) be established to study, evaluate, and recommend strategies related to geothermal exploration, feasibility, extraction, and/or use on Hawaiian Home Lands. Please see attachment. The P.I.G. continues to work with the University of Hawai'i's – Hawaii Groundwater and Geothermal Resource Center, including Dr. Nicole Lautze who also serves at the University of Hawai'i's - Hawai'i Institute of Geophysics and Planetology. The P.I.G. has participated in several listening sessions with beneficiaries and intends to host more community meetings.

Thank you for your consideration of our testimony.

DEPARTMENT OF HAWAIIAN HOME LANDS



Geothermal Development Project

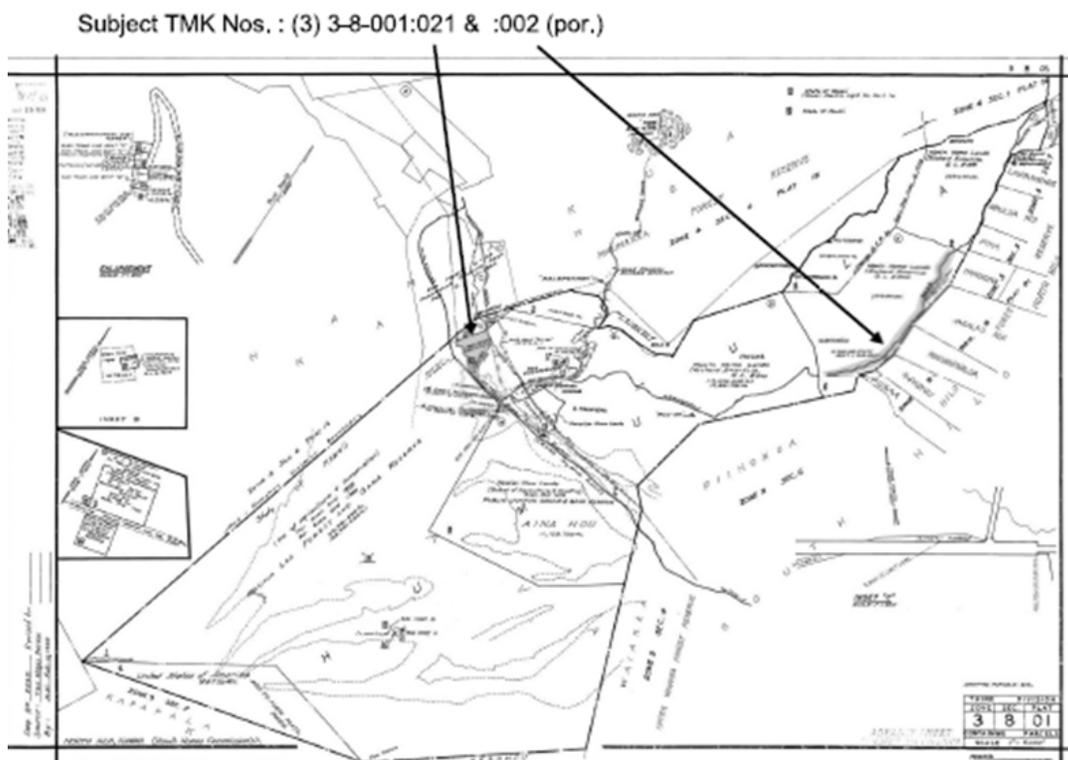
Summary

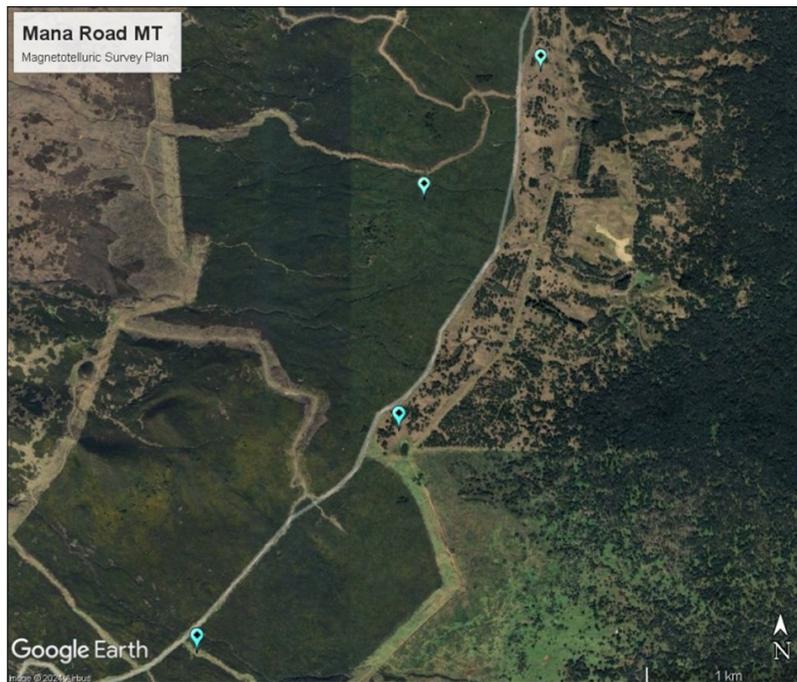
The Hawaii Department of Hawaiian Home Lands (DHHL), under the governance of the Hawaiian Homes Commission, through its Geothermal Permitted Interaction Group, continues to investigate the viability of geothermal production on Hawaiian Home Lands. The main sites under current consideration are on Hawaii Island: Humu'ula, Kawaihae, and South Point (Ka'u). Humu'ula is the preferred development site, located directly next to lands leased by the Department of Defense for the Pōhakuloa Training Area.

DHHL is pursuing a multi-faceted approach to achieve its objectives, collaborating with the Hawaii State Energy Office (SEO) and the University of Hawaii's School of Ocean and Earth Science and Technology, specifically the Hawaii Institute of Geophysics and Planetology's Hawaii Groundwater and Geothermal Resources Center (HGGRC). DHHL has met with staff from the Hawaii Congressional Delegation and the U.S. Department of Energy (DOE). Additionally, the National Renewable Energy Laboratory (NREL), under contract with the US DOE's Geothermal Technologies Office, is conducting community-based listening sessions across the state, in which DHHL has been actively involved.

As this represents DHHL's initial effort to commercialize its geothermal resources, the Department continuously seeks guidance from geothermal specialists to assist in its mission. DHHL recognizes that establishing commercial energy projects is complex and capital-intensive. Therefore, the Department is exploring funding opportunities at both federal and state levels and seeking private industry partners who can facilitate third-party investments in a public-private partnership (PPP) to develop and operate the project.

Recently, DHHL collaborated with HGGRC to have magnetotelluric (MT) testing and data collection take place at multiple sites within the DHHL's lands at Humu'ula and on the East Flank of Mauna Kea (see map below). This MT testing will further confirm or disprove the respective sites' suitability for geothermal power production. If this MT testing produces positive results, DHHL will move forward to financing and conducting exploratory slim-hole drilling. This step is crucial for further establishing the viability of the chosen site(s) for commercial geothermal production. The collected data will facilitate entering into a PPP with an experienced geothermal developer/operator.





Next Steps

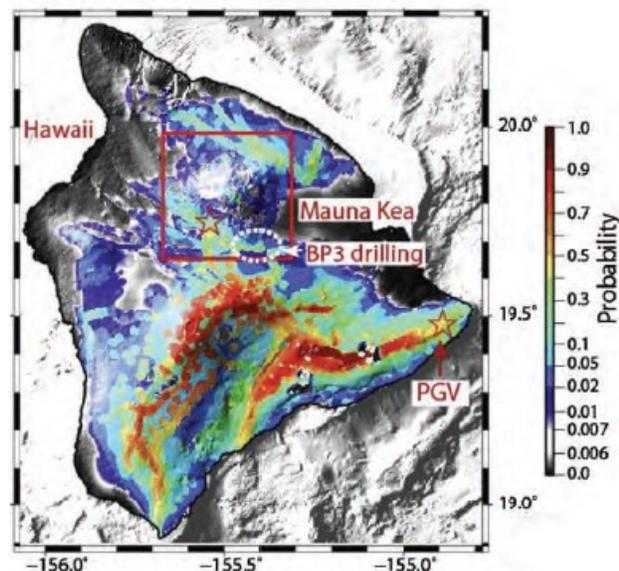
The aforementioned MT testing on DHHL’s lands commenced in October 2024. Contingent on securing funding, DHHL would like to commence slim-hole water well drilling in 2025.

State and Federal Policy and Funding

State: DHHL will request \$20,000,000 in the state fiscal year 2025-2026 to develop slim-hole water wells for geophysical investigation, exploration, and identification of geothermal resources on Hawaiian home lands.

Federal: DHHL is considering policy proposals for submission to the Hawaii Congressional Delegation and is exploring USDOE funding opportunities to conduct MT testing and slim-hole water well drilling on various DHHL properties. In the long term, DHHL estimates that up to \$200M of non-competitive federal funding is ultimately needed: (i) to determine which DHHL site(s) provides the “best” opportunity for commercial production of geothermal power, and (ii) to position such site(s) for PPP development.

Resource probability map for Hawaii Island. Red box outlines area of geophysical surveying. Stars indicate a Saddle Drill site where high temperatures were found (north) and Hawaii’s only geothermal production site Puna Geothermal Venture (south)(Lautze et al., 2020)



Other Information

Findings from the December 9, 2016, geothermal investigation suggest the following:

- Information found to date at the DHHL sites investigated supports the elements required for a blind (no surface features) geothermal system to exist are present
- Further exploration is needed to determine if the elements combine sufficiently to create a viable geothermal resource at depth
- Blind, high enthalpy systems do exist in volcanic settings elsewhere globally
- Analysis of the PTA-1 core log from 1,000m showed zones of highly fractured rock & geothermal fluid-rock interaction occurred in the core
- Same core section saw a temperature increase from 40° C - 140°C (104°F - 284°F)
- Important information on 2 key control variables for the geothermal resource. Relevant for “ground-truthing” the apparent resistivity values from the Magnetotelluric (MT) survey
- Additional testing & exploration are needed to justify any exploration drilling (slim hole) at sites
- Sufficient information to warrant & justify moving forward to undertake further MT surveys to create a robust 3D subsurface model at a number of potential locations



Hydrothermally altered ground at Kilauea. Various alteration clays, discharging steam, silica residue, sulphur vents and areas of bare ground all indicate the presence of a subsurface steam zone.

Image by Gary Smith





TESTIMONY BEFORE THE HOUSE COMMITTEE ON FINANCE

**HB 1307, HD2
Relating to the Department of Hawaiian Home Lands**

Thursday, February 20, 2025
12:00 PM
State Capitol, Conference Room 308

Rebecca Dayhuff Matsushima
Vice President, Resource Procurement
Hawaiian Electric

Dear Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee,

My name is Rebecca Dayhuff Matsushima and I am submitting testimony on behalf of Hawaiian Electric in **support** of HB 1307, HD2, which seeks to appropriate funding for the continued investigation, exploration, and identification of geothermal resources on Hawaiian home lands so these resources could potentially be used in the production of renewable energy.

Hawaiian Electric supports the exploration of geothermal resources as a means to help accelerate the development of renewable energy projects, achieve the State's Renewable Portfolio Standards requirements, reduce reliance on imported fossil fuels, help stabilize customers' bills, and reduce greenhouse gas emissions.

Hawaiian Electric supports the intent of identifying and developing the State's geothermal resources and renewable energy potential, and defers to policy makers on the appropriateness of funding allocations and the entity or entities responsible for managing such exploration.

Thank you for this opportunity to submit testimony in support of HB 1307, HD2.



Sustainable Energy Hawai'i

sustainableenergyhawaii.org
info@sustainableenergyhawaii.org

February 20, 2025

TESTIMONY in SUPPORT of HB1307 HD2

'RELATING TO THE DEPARTMENT OF HAWAIIAN HOMELANDS'

Dear Chair Yamashita, Vice Chair Takenouchi, and Committee members,

This testimony is submitted on behalf of **Sustainable Energy Hawai'i (SEH)**, a 501(c)3 non-profit dedicated to improving the quality of life for all of Hawai'i's residents. Our mission is to enable an economic, social, and environmental revival in Hawai'i through a just transition to sustainable, 100% locally sourced, renewable energy and the creation of a thriving clean hydrogen economy.

SEH supports HB1307 HD2, which *"Appropriates funds to the Department of Hawaiian Home Lands for water-well development for geophysical investigation, exploration, and identification of geothermal resources on Hawaiian home lands."*

Hawai'i likely has accessible geothermal resources statewide. According to the Hawai'i Groundwater and Geothermal Resource Center (HGGRC) at UH Manoa, the detailed characterization of its subsurface geology remains virtually unknown outside of Hawai'i Island's East Riff Zone. Historically, this has been due to lack of financial support. If passed, HB1307 HD2 will fund some, but not all, of the data acquisition needed to de-risk geothermal development decisions in Hawaii. We encourage our state legislature to appropriate this funding, furthering our collective progress toward that ultimate end.

We know that the ability to generate clean, dispatchable and baseload power is a required component of a modern, non-fossil-fuel energy infrastructure as well as to serve as a hedge against both natural and man-made disasters. Hawaiian energy self-sufficiency is an urgent goal, one that will benefit all who call Hawai'i home for generations to come.

Additionally, SEH supports a broad statewide policy for the funding of cost effective, qualified geophysical and geothermal research entities such as HGGRC to characterize our subsurface and geothermal resources for the purpose of effectively supporting DHHL's commercial development efforts.

Thank you for this opportunity to testify.

Respectfully,

Keith Neal
Policy Lead
Sustainable Energy Hawai'i



Email: communications@ulupono.com

HOUSE COMMITTEE ON FINANCE
Thursday, February 20, 2025 — 12:00 p.m.

Ulupono Initiative supports HB 1307 HD 2, Relating to the Department of Hawaiian Home Lands.

Dear Chair Yamashita and Members of the Committee:

My name is Mariah Yoshizu, and I am the Government Affairs Associate at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food, renewable energy and clean transportation choices, and better management of freshwater resources.

Ulupono supports HB 1307 HD 2, which appropriates funds to the Department of Hawaiian Home Lands (DHHL) for water well development for geophysical investigation, exploration, and identification of geothermal resources on Hawaiian home lands.

Hawai'i needs all viable forms of renewable energy to meet the 100% renewable portfolio standard by 2045. New data underscores the widespread support among residents for this transition. Between October 2023 and January 2024, Ulupono Initiative partnered with Anthology Research to conduct a statewide public opinion survey on energy in Hawai'i involving 1,985 surveys across all four counties. With a margin of error +/- 2.21%, this is arguably the most extensive and comprehensive study on the topic to date. The findings are compelling.

A staggering 91% of respondents expressed their support for the expansion of renewable energy resources throughout the islands. Moreover, the importance of developing Hawai'i's own energy resources was emphasized across all counties by residents. This resounding endorsement from the community validates the strong support for continued investment and advancement in renewable energy solutions to meet our collective energy goals.

The proposed legislation to appropriate additional funding for geothermal resource exploration and development on Hawaiian home lands represents a forward-thinking approach to renewable energy development and community empowerment. Geothermal energy, a proven and stable renewable resource, has already provided significant benefits in other regions, such as California, Nevada, and Iceland. In Hawai'i, where energy costs are among the highest in the nation and the dependence on imported fuels creates economic

Investing in a Sustainable Hawai'i



vulnerability, investing in geothermal energy can reduce reliance on external resources and promote energy self-sufficiency. Additionally, similar measures across the country have demonstrated that geothermal projects can catalyze local economic development, provide job opportunities, and generate sustainable revenue streams for communities.

This legislation also reaffirms a commitment to the stewardship of Hawaiian home lands by enabling DHHL to develop a natural resource that could bring long-term economic and environmental benefits to Native Hawaiian beneficiaries. These efforts reinforce the importance of community engagement and equitable benefits in geothermal projects, ensuring that local populations directly experience the advantages of locally produced clean energy. This worthy investment offers the potential to not only enhance energy security but also support the DHHL's broader mission of improving the welfare of Native Hawaiians.

Finally, the legislation is a vital step in advancing Hawai'i's renewable energy and climate goals. It supports the state's ambitious target of achieving 100% renewable energy by 2045 while maintaining sensitivity to community priorities. By allocating resources for the exploration and potential development of geothermal energy, the state ensures the diversification of its renewable energy portfolio. Through this appropriation, Hawaii positions itself as a leader in sustainable development while addressing critical environmental and economic challenges.

Thank you for the opportunity to testify.

Respectfully,

Mariah Yoshizu
Government Affairs Associate



Hawai'i Island Chamber of Commerce

1321 Kino'ole Street - Hilo, Hawai'i 96720

Phone (808) 935-7178 - Fax (808) 961-4435 - Email exec@hicc.biz - www.hicc.biz

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Carla Kuo

2024-2025

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Larisa Hamamoto

Bonnie Irwin

Daniel Kea

Tyson Klask

Geoli Ng

Lisa Shiroma

James Staub

Jase Takeya

Nimr Tamimi

Irene Yamanaka

Tracie Yoshimoto

TESTIMONY BEFORE THE HOUSE COMMITTEE ON FINANCE HB 1307 - Relating to The Department of Hawaiian Home Lands – IN SUPPORT

Thursday, February 20, 2025 12:00 PM

Aloha Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee,

On behalf of the Hawai'i Island Chamber of Commerce, representing over 300 businesses and individual members primarily on the East side of Hawai'i Island, I am testifying in support of HB 1307.

This bill provides essential follow-up funding for the next steps in investigating, exploring, and identifying geothermal resources on Hawaiian Home Lands.

The allocated funding would be used to:

- Hire consultants to assist the Department of Hawaiian Home Lands (DHHL) in navigating the complexities of geothermal development.
- Collect geophysical data.
- Develop water wells.
- Drill slim holes at designated sites on Hawaiian Home Lands.

A successfully identified commercial-grade geothermal resource on Hawaiian Home Lands would generate much-needed firm revenue for DHHL. These revenues would play a crucial role in fulfilling the purpose and intent of the Hawaiian Homes Commission Act of 1920—helping to return Native Hawaiians to the 'āina.

We deeply appreciate the continued support of our State legislators for the Native Hawaiian community and are grateful for the opportunity to provide this testimony. Thank you!

Sincerely,

Carla Kuo

Executive Officer

Hawai'i Island Chamber of Commerce



Japanese Chamber of Commerce & Industry of Hawaii

**HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE
REGULAR SESSION OF 2025
Thursday, February 20, 2025, 12:00 p.m.
VIA VIDEO CONFERENCE
Conference Room 308
State Capitol
415 South Beretania Street**

Hearing on HB 1307 (Relating to The Department of Hawaiian Home Lands)

Representative Kyle T. Yamashita, Chair, Representative Jenna Takenouchi, Vice Chair, COMMITTEE ON FINANCE (FIN).

Aloha Chair Yamashita, Vice Chair Takenouchi and respected committee members of the Committee on Finance:

Thank you for the opportunity to provide this testimony on HB 1307. My name is Ka'iu Kimura, and I represent the Japanese Chamber of Commerce and Industry of Hawai'i.

I support the purpose and intent of this bill:

- To provide follow-up funding for the next steps in the investigation, exploration, and identification of geothermal resources on Hawaiian Home Lands.
- Funding would be utilized to:
 - a. Hire consultants to help DHHL navigate the complexities of geothermal development.
 - b. Collect geophysical data.
 - c. Develop water wells.
 - d. Drill slim holes at sites on Hawaiian Home Lands.
- Ultimately, a commercial grade geothermal resource located on Hawaiian Home Lands, would provide the opportunity for the Department of Hawaiian Home Lands to garner much needed firm revenue. Revenues from a geothermal development on Hawaiian Home Lands would go a long way with executing the purpose and intent of the Hawaiian Homes Act 1920, which is to get Hawaiians back to the aina.

We appreciate the continued support from our State legislators for the Native Hawaiian community and want to express our gratitude for the opportunity to provide this testimony. Mahalo!

Respectfully,

Ka'iu Kimura
President

HB-1307-HD-2

Submitted on: 2/18/2025 10:22:35 AM

Testimony for FIN on 2/20/2025 12:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kim	Individual	Oppose	Remotely Via Zoom

Comments:

I strongly oppose this bill.

NO public consultation has been done in the Kau area.

NO environmental review has started for this project and HRS 343 states the process must begin at the earliest possible time.

Drilling "exploration holes" requires environmental review.

The southpoint complex, is a desert with NO WATER, so how would they even think of doing a geothermal project there? Kau has water restrictions(no new meters) dating back to the 1980s because our only source of water is a natural spring.

DHHL has been threatening to gate our only access to the ocean and boat ramp for 20 miles either way. This project would expedite that.

DO NOT fund this project until an EIS is completed as required by law, and full community consultation occurred regarding our only ocean access

HB-1307-HD-2

Submitted on: 2/18/2025 10:37:15 AM

Testimony for FIN on 2/20/2025 12:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Eric Koch	Individual	Oppose	Written Testimony Only

Comments:

Aloha committee members,

I write to you today as a local community member from Kaū that lives in the Ka Lae/Waiohinu area. DHHL shouldn't be funded to do any geothermal project in our area, especially without first completing a full environmental impact. This proposal is in its pilot phase and DHHL has already testified on record that this will be a joint private-public partnership for profit. In addition, the administrator also stated that these geothermal projects need choke water; a resource we are already strained to produce. You may not be aware but our community has been on water restrictions for a very long time and most residents have to haul water from other areas to even survive. Why should a company for profit be allowed to come in and do a project using all this water while we can't even provide for our own ohanas? This makes no sense. Drilling holes, prospecting or whatever is an impact and based on the triggers for 343, this qualifies! DHHL seems to have their priorities upside down. As they're doing all these schemes, they forget they're primary duties which is to serve and inform the beneficiaries which hasn't happened! All the kanaka in our area are wondering how come no notice for this? seems like we need more transparency and communication and for all these reasons I don't support this proposal. Please vote NO!

aloha

Eric K. Waiohinu

HB-1307-HD-2

Submitted on: 2/18/2025 12:10:45 PM

Testimony for FIN on 2/20/2025 12:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Nawahine Kahoopii	Individual	Oppose	Remotely Via Zoom

Comments:

A"OLE to giving \$20 million dollars to a toxic project

No beneficiaries consult: a condition of the DOI (Hawaiians Home Act 1921)

Conflict of interest: East Hawaii DHHL commissioner Micheal Kalekini is also the director of Puna Geothermal Venture (Ormat)

Environmental Racism: A form of systemic racism that disproportionately affects marginalized communities through environmental degradation.

Corporate Welfare: \$20 million taxpayer dollars for exploration for a \$3.8 billion dollar foreign corporation that trades on the NYSE (ormat technologies Inc. ticker: ORA)

Everything on Hawaiian homelands but Hawaiians:

Cell towers, shopping malls, car lots, churches, airports, rubbish dumps, wastewater treatment plants, public schools, public clinics, wind farms, solar farms, roads for access to telescopes, military bases, parks, easements, wealthy ranches that function as developers like Parker and Kahua ranch lease thousands of acres of pastoral lands while our people die waiting for a pastoral award. And now geothermal.

Bait tactics: Since 1921 every project was THE project that would provide the resources to put kanaka on their lands. 30,000 remain on the notorious "waitlist" while another "project" is fed to the public that will provide infrastructure needed to move the needle on the waitlist.

Greenwashing at the expense of the health and well being of kanaka families: Greenwashing is a deceptive practice that makes policy, activities and corporations environmentally friendly when it isn't.

Health hazard: Geothermal steam contains toxic hydrogen sulfide. Effects of exposure include vomiting, vertigo, loss of coordination.

Endangered species: The biggest threat to the Hawaiian hawk (Io) is geothermal.

Puna geothermal has several lawsuits in various stages, some headed to the Supreme Court.

HB-1307-HD-2

Submitted on: 2/18/2025 3:33:12 PM

Testimony for FIN on 2/20/2025 12:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Esmeralda Kuahiwinui Nunez	Individual	Oppose	Written Testimony Only

Comments:

Aloha my name is Esmeralda Kuahiwinui nunez,

I am opposing to this bill because I don't think we should be locking up south point, turning it into a geothermal plant . It's one of the last places we Hawaiians can go to fish and camp without having to wait 1-5 months to have a spot opening. Also if this is Hawaiian home lands it should stay open not be locked up for federal use where us people get no part in. It's just not fair to many beaches are getting locked up. We will have no place to go freely and it's very depressing because I've grown up down here and so has my parent,grandparents and great grandparents and i consider it my home that I live dearly. So I hope you take into consideration how much people you will be hurting because I am one out of thousands. And there's many more other places to go put a geothermal plant. Why does it have to be down here?.

HB-1307-HD-2

Submitted on: 2/18/2025 10:08:22 PM

Testimony for FIN on 2/20/2025 12:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Noel Morin	Individual	Support	Written Testimony Only

Comments: SUPPORT FOR HB 1307 HD2 (RELATING TO THE DEPARTMENT OF HAWAIIAN HOME LANDS) Dear Chair Yamashita, Vice-Chair Takenouchi, and members of the Committee, I am in SUPPORT of HB1307 HD2, which Appropriates funds to the Department of Hawaiian Home Lands for water well development for geophysical investigation, exploration, and identification of geothermal resources on Hawaiian home lands. Geothermal energy is a valuable but underutilized resource in Hawaii. Our ability to develop this resource is a key to a clean energy future, one that is less dependent on imports and enables a truly resilient economy. Importantly, HB1307 HD2 will facilitate the development of the resource on Hawaiian Home Lands, generating revenue that will support DHHL’s mission. Please pass this HB1307 HD2 Mahalo for the opportunity to testify. Noel Morin Climate, Sustainability, and Resilience Advocate Hilo, Hawai‘i

HB-1307-HD-2

Submitted on: 2/19/2025 4:39:03 AM

Testimony for FIN on 2/20/2025 12:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Glen Kagamida	Individual	Support	Written Testimony Only

Comments:

I STRONGLY SUPPORT HB1307 TO PURSUE A MORE DIVERSIFIED PORTFOLIO OF ENERGY PRODUCTION FOR HAWAII ISLAND AND THE STATE.

THE INVESTMENT TO HIRE CONSULTANTS, COLLECT GEOPHYSICAL DATA, DEVELOP WATER WELLS AND DRILL SLIM HOLES ON HHL WILL PAY BIG DIVIDENDS IN THE NOT TO DISTANT FUTURE.

A COMMERCIAL GRADE GEOTHERMAL RESOURCE WILL BE AN IMPORTANT REVENUE SOURCE FOR THE DHHL.

MAHALO!

HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE
REGULAR SESSION OF 2025
Thursday, February 20, 2025, 12:00 p.m.
VIA VIDEO CONFERENCE
Conference Room 308
State Capitol
415 South Beretania Street

Hearing on HB 1307 (Relating to The Department of Hawaiian Home Lands)

Representative Kyle T. Yamashita, Chair, Representative Jenna Takenouchi, Vice Chair,
COMMITTEE ON FINANCE (FIN).

Aloha Chair Yamashita, Vice Chair Takenouchi and respected committee members of the
Committee on Finance:

Thank you for the opportunity to provide this testimony on HB 1307. My name is David
Kurohara

I support the purpose and intent of this bill:

- To provide follow-up funding for the next steps in the investigation, exploration, and identification of geothermal resources on Hawaiian Home Lands.
- Funding would be utilized to:
 - a. Hire consultants to help DHHL navigate the complexities of geothermal development.
 - b. Collect geophysical data.
 - c. Develop water wells.
 - d. Drill slim holes at sites on Hawaiian Home Lands.
- Ultimately, a commercial grade geothermal resource located on Hawaiian Home Lands, would provide the opportunity for the Department of Hawaiian Home Lands to garner much needed firm revenue. Revenues from a geothermal development on Hawaiian Home Lands would go a long way with executing the purpose and intent of the Hawaiian Homes Act 1920, which is to get Hawaiians back to the aina.

We appreciate the continued support from our State legislators for the Native Hawaiian community and want to express our gratitude for the opportunity to provide this testimony. Mahalo!

Respectfully,

David Kurohara

HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE
REGULAR SESSION OF 2025
Thursday, February 20, 2025, 12:00 p.m.
VIA VIDEO CONFERENCE
Conference Room 308
State Capitol
415 South Beretania Street

Hearing on HB 1307 (Relating to The Department of Hawaiian Home Lands)

Representative Kyle T. Yamashita, Chair, Representative Jenna Takenouchi, Vice Chair,
COMMITTEE ON FINANCE (FIN).

Aloha Chair Yamashita, Vice Chair Takenouchi and respected committee members of the
Committee on Finance:

Thank you for the opportunity to provide this testimony on HB 1307. My name is Mike
Kaleikini, a life long Hawai`i resident and long time resident of Hilo, Hawai`i.

I support the purpose and intent of this bill:

- To provide follow-up funding for the next steps in the investigation, exploration, and identification of geothermal resources on Hawaiian Home Lands.
- Funding would be utilized to:
 - a. Hire consultants to help DHHL navigate the complexities of geothermal development.
 - b. Collect geophysical data.
 - c. Develop water wells.
 - d. Drill slim holes at sites on Hawaiian Home Lands.
- Ultimately, a commercial grade geothermal resource located on Hawaiian Home Lands, would provide the opportunity for the Department of Hawaiian Home Lands to garner much needed firm revenue. Revenues from a geothermal development on Hawaiian Home Lands would go a long way with executing the purpose and intent of the Hawaiian Homes Act 1920, which is to get Hawaiians back to the aina.

I appreciate the continued support from our State legislators for the Native Hawaiian community, and the entire State. I want to express gratitude for the opportunity to provide this testimony. Mahalo!

Respectfully,

Mike Kaleikini

Mike Kaleikini
1134 Ainalako Road
Hilo, Hawai`i

**HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE
REGULAR SESSION OF 2025
Thursday, February 20, 2025, 12:00 p.m.
VIA VIDEO CONFERENCE
Conference Room 308
State Capitol
415 South Beretania Street**

Hearing on HB 1307 (Relating to The Department of Hawaiian Home Lands)

Representative Kyle T. Yamashita, Chair, Representative Jenna Takenouchi, Vice Chair, House Finance Committee (FIN).

Thank you for the opportunity to provide this testimony on HB 1307. My name is Peter Sternlicht. I am a resident of Hawai'i Island. I have been active in the sustainable energy arena for some 20 years and the entire time I have lived on the Big Island of Hawai'i. As we know, the time to phase out the use of fossil fuels is upon us. Hawai'i is blessed with resources that are not available in other places on the planet. This is a gift to the people of Hawai'i.

I support HB1307 HD2 which appropriates state funds funds “... to the Department of Hawaiian Home Lands for water well development for geophysical investigation, exploration, and identification of geothermal resources on Hawaiian home lands.”

Ultimately, the discovery of a commercial grade geothermal resource located on Hawaiian Home Lands would provide the opportunity for the Department of Hawaiian Home Lands (DHHL) to garner generations of recurring revenue. Those revenues would go a long way to fulfilling the purpose and intent of the Hawaiian Homes Act 1920, which is to get Hawaiians back to the aina and into homes they can call their own powered by energy they can call their own, too.

I further support a broad statewide policy for the funding of cost effective, scientifically qualified geophysical and geothermal research entities such as the University of Hawai'i's HGGRC¹ to characterize our subsurface and geothermal resources for the purpose of effectively supporting DHHL's commercial development efforts.

Respectfully,

Peter Sternlicht
Pepeekeo, HI 

¹ HGGRC – Hawaii Groundwater and Geothermal Resources Center at UH Manoa.

HB-1307-HD-2

Submitted on: 2/19/2025 9:11:01 AM

Testimony for FIN on 2/20/2025 12:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Joy Dillon	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Yamashita, Vice Chair Takenouchi and respected committee members of the Committee on Finance:

Thank you for the opportunity to provide this testimony on HB 1307.

We should take advantage of our rich geothermal resources and utilize them for the advantage of the Native Hawaiian Community.

I appreciate the continued support from our State legislators for the Native Hawaiian community and I urge you to support this bill.

Joy Dillon, Hilo Resident

HB-1307-HD-2

Submitted on: 2/19/2025 9:22:35 AM

Testimony for FIN on 2/20/2025 12:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Alice Kim	Individual	Support	Written Testimony Only

Comments:

Currently, the Kilauea East Rift Zone on Hawaii Island is Hawaii’s only geothermal system from which geothermal electric power is being produced. According to research by the Hawaii Groundwater and Geothermal Resources Center (HGGRC), all of the major Hawaiian Islands hold geothermal potential. Unfortunately, much of Hawaii’s geothermal resources is unknown.

Under the administrative oversight of the Department of Hawaiian Home Lands (DHHL), HGGRC should execute the geothermal resource characterization. Doing so will enable the State to further benefit from HGGRC’s research and expertise. Through HGGRC, the state’s most prominent earth scientists are researching Hawaii’s groundwater resources. HGGRC obtained land access for research from dozens of landowners across the state. For research equipment, HGGRC has access to \$1 million worth of geophysical equipment and a \$3 million drill rig (Notably, Puna Geothermal Venture is the only other geothermal-focused organization in Hawaii that has a suitable drill rig).

When DHHL was considering geothermal development on Hawaiian home lands, HGGRC’s senior researchers Donald Thomas and Nicole Lautze freely shared their knowledge. Collectively, these preeminent Hawaii geothermal scientists presented at least 5 presentations relating to their findings about geothermal resources on DHHL lands: 1 to DHHL, 3 to Sovereign Council of Hawaiian Homestead Associations.

Historically, native Hawaiians have used volcanic heat directly for bathing and cooking, and so did the Maoris of New Zealand, another group of Pacific Islanders. Geothermal energy now provides more than 17 percent of New Zealand’s energy and serves as one of New Zealand’s cheapest energy sources. Indigenous Maori tribes are benefitting from the geothermal power plants on their tribal lands.

New Zealand has demonstrated that geothermal energy can be produced while improving the quality of life for its residents including Maoris, respecting the Maori culture, and caring for the environment. Hawaii can do the same for the betterment of the native Hawaiians.

Aloha e Chair Yamashita, Vice Chair Takenouchi and respected committee members of the Committee on Finance:

My name is Leinani Lozi, and I am speaking on behalf of myself and my 'ohana who live in Hilo, Hawai'i. I support the purpose and intent of this bill, HB 1307 which provides follow-up funding for the next steps in the investigation, exploration, and identification of geothermal resources on Hawaiian Home Lands. I understand that funding would be utilized to hire consultants to help DHHL with geothermal development, collect geophysical data, develop water wells, and drill slim holes at sites on Hawaiian Home Lands.

I believe that a commercial grade geothermal resource located on Hawaiian Home Lands would be extremely beneficial to DHHL, and to our island community as a whole as it would bring us one step closer to a sustainable future and a cleaner Earth for our keiki. Furthermore, revenues from a geothermal development on Hawaiian Home Lands would go a long way with executing the purpose and intent of the Hawaiian Homes Act 1920, which is to get Hawaiians back to the 'āina.

Mahalo,
Leinani Lozi

HB1307

He Mele komo a he mele aloha no na kupuna o ke au i hala Aloha mai kakou.

Aloha,

My name is Cindy Freitas and I'm a Native Hawaiian descended of the native inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i.

I am also a practitioner who still practice the cultural traditional customary practices that was instill in me by my grandparents at a young age from mauka (MOUNTAIN TO SEA) to makai in many areas.

I'm in **OPPOSITION FOR HB1307** for the following reasons;

In all due respect for DHHL.

The appropriation of **\$20 million for geothermal exploration** on Hawaiian home lands presents an **opportunity for renewable energy growth** but also comes with **legal, cultural, and environmental challenges**.

1. **Transparent community engagement** to ensure Native Hawaiian beneficiaries have a say in the project.
2. **Strict environmental oversight** to mitigate risks associated with drilling and land use.
3. **Legal compliance** with the **Hawaiian Homes Commission Act** and **state/federal regulations**.
4. **Fair distribution of economic benefits** to ensure Native Hawaiians directly benefit from any future energy development. **FOR ALL INCOME BRACKET WHICH WILL NOT HAPPEN!!!**

Environmental Concerns of Geothermal Exploration on Hawaiian Home Lands

The development of **water wells for geophysical investigation and geothermal exploration** raises several environmental concerns. While geothermal energy is often seen as a **clean and renewable resource**, the process of exploration and drilling can have **negative environmental impacts**.

A. Groundwater Depletion & Contamination

- **Drilling geothermal wells requires large amounts of water**, which could put stress on **local aquifers**.
- If not properly managed, water extraction for drilling may lower **water table levels**, affecting drinking water supplies and agriculture.
- There is a risk of **toxic contamination**, as drilling can introduce **heavy metals, arsenic, or hydrogen sulfide** into groundwater.

B. Thermal & Chemical Pollution

- Geothermal fluids can be **hot and mineral-rich**. If released into nearby water bodies, they can cause **thermal pollution**, harming aquatic life.
- **Chemical leaching** from geothermal fluids can introduce **salts and heavy metals** into the environment.

C. Effects on Nearby Ecosystems

- Water extraction and disposal could **disrupt local ecosystems**, especially in areas with **endemic Hawaiian species**.
- **Changes in groundwater flow** could impact nearby wetlands, streams, or coastal areas.

2. Seismic Activity & Land Stability

A. Induced Seismicity (Man-Made Earthquakes)

- **Geothermal drilling has been linked to increased seismic activity** in some regions.
- Injecting water into the ground (a process used in geothermal energy extraction) **can trigger small to moderate earthquakes**.
- **Hawaii is already seismically active** due to volcanic activity, so any additional risk of induced earthquakes must be carefully studied.

B. Land Subsidence & Sinkholes

- Removing large amounts of **geothermal fluids** can cause **land subsidence** (gradual sinking of the ground).
- In extreme cases, this could lead to **sinkholes** or structural damage to nearby homes and
- infrastructure.

3. Air Quality Concerns

A. Hydrogen Sulfide (H₂S) Emissions

- **Geothermal wells often release hydrogen sulfide**, a gas with a strong "rotten egg" odor.
- At **high concentrations, H₂S is toxic** and can cause respiratory issues, headaches, and nausea.

B. Carbon Dioxide (CO₂) & Methane (CH₄) Emissions

- While geothermal energy has lower carbon emissions than fossil fuels, **some CO₂ and methane can be released** during drilling.
- The extent of emissions depends on the **depth and composition of the geothermal reservoir**.

4. Impact on Native Hawaiian Ecosystems & Cultural Sites

A. Disruption to Endemic Wildlife & Plants

- Hawaiian home lands may include **fragile ecosystems** with **endangered native species** like the 'ōhi'a lehua tree or native birds.
- Construction, drilling, and infrastructure development could lead to **habitat destruction and species displacement**.

B. Potential Desecration of Sacred Lands

- Many Native Hawaiians view **volcanic activity and geothermal energy as connected to Pele**, the Hawaiian goddess of fire and volcanoes.

- Past geothermal projects in Hawaii, such as Puna Geothermal Venture (PGV), have faced strong opposition due to **cultural and spiritual beliefs**.
- If geothermal exploration takes place on lands with cultural significance, there could be **protests, legal challenges, and community backlash**.

5. Waste Disposal & Toxic Byproducts

A. Geothermal Brine & Mineral Waste

- Geothermal wells produce **brine (salty water with dissolved minerals)**, which must be disposed of properly.
- If brine leaks into **soil or water sources, it can be toxic to plants and animals**.

B. Radioactive Elements & Heavy Metals

- Some geothermal reservoirs contain **trace amounts of radioactive elements** (such as uranium and thorium).
- **Heavy metals like lead, arsenic, and mercury** may also be brought to the surface.
- Byproducts can **contaminate soil and water**, leading to **long-term environmental damage**

While **geothermal energy** has the potential to support **Hawaii's clean energy goals**, the **environmental risks must be carefully managed**. **Water depletion, seismic activity, air pollution, and cultural site disruption** are all valid concerns.

Sources:

nepis.epa.gov

[Subsurface Environmental Assessment for Four Geothermal Systems](#)

[The environmental effects to be considered are potential groundwater pollution, subsidence and induced seismic events, which in turn may affect the ecology ...](#)

ililani.media

[Hawai'i Geothermal Heats Up: Environmental Review & UH Thesis](#)

[August 1, 2019 — Thermal Power prepared an Environmental Impact Statement \(EIS\) in 1987 and then sold the facility to PGV. The EIS identified “effects on the ...](#)

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[\[PDF\] environmental impact analysis - potential geothermal resource areas](#)

[September 14, 2010 — One of the most serious potential impacts of geothermal energy development in Hawaii is the disruption of native forest. Air pollution and groundwater ...](#)

tandfonline.com

[Native Hawaiian opposition to geothermal energy development](#)

[This article proposes that the conflict over geothermal energy development represents two belief systems holding opposing views of the environment.](#)

files.hawaii.gov

[\[PDF\] 2023-05-08-HA-DEIS-Puna-Geothermal-Venture-Repower-Project.pdf](#)

[May 7, 2023 — With this letter, the County of Hawai'i Planning Department hereby transmits the Draft Environmental Impact Statement \(Draft EIS\) for the Puna ...](#)

Mahalo,

_____/c/____

Cindy Freitas