TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
KA ʻOIHANA O KA LOIO KUHINA
THIRTY-THIRD LEGISLATURE, 2026

ON THE FOLLOWING MEASURE:
H.B. NO. 1983, RELATING TO NATURAL RESOURCES.

BEFORE THE:
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

DATE: Tuesday, February 10, 2026 **TIME:** 9:05 a.m.

LOCATION: State Capitol, Room 325

TESTIFIER(S): Anne E. Lopez, Attorney General, or
Candace J. Park, Deputy Attorney General

Chair Lowen and Members of the Committee:

The Department of the Attorney General provides the following comments.

This bill, among other things, establishes the Hawaii Groundwater and Geothermal Resources Center within the University of Hawaiʻi at Manoa School of Ocean and Earth Science and Technology, and requires the University of Hawaiʻi to amend its exemption list to specify that certain geological subsurface characterization activities shall be exempt from the environmental review process or shall only require an exemption notice.

This bill implicates article X, section 6, of the Hawaiʻi Constitution, which gives the Board of Regents of the University of Hawaiʻi "exclusive jurisdiction over the internal structure, management, and operation of the university." Section 6 further provides: "This section shall not limit the power of the legislature to enact laws of statewide concern. The legislature shall have the exclusive jurisdiction to identify laws of statewide concern." We recommend an amendment that adds a statement identifying this bill as a law of statewide concern.

Thank you for the opportunity to provide these comments.

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

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA ʻOIHANA KUMUWAIWAI ʻĀINA
P.O. BOX 621
HONOLULU, HAWAII 96809

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RYAN K.P. KANAKAʻOLE
FIRST DEPUTY

CIARA W.K. KAHAHANE
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

Testimony of
RYAN K.P. KANAKAʻOLE
Acting Chairperson

Before the House Committee on
ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, February 10, 2026
9:05 AM
State Capitol, Conference Room 325

In consideration of
HOUSE BILL 1983
RELATING TO NATURAL RESOURCES

House Bill (HB) 1983 proposes to exempt certain geological subsurface characterization activity from existing regulatory oversight, environmental review, and permitting requirements as set forth in Hawaii Revised Statutes (HRS) Chapters 174C, 182, and 343. It also proposes to amend the HRS by amending Chapter 182 and by adding a new chapter titled "Geological Subsurface Characterization," to be overseen by the Department of Business, Economic Development, and Tourism (DBEDT). **The Department of Land and Natural Resources (Department) recognizes the intent of this measure and offers the following comments.**

While the Department understands the need for scientific research into the State's natural resources, the permitting and environmental review processes set forth in HRS Chapters 174C, 182, and 343 enact important safeguards on proposed drilling plans to mitigate health and safety risks and ensure careful regard is taken to protect the State's natural resources.

Regarding Section 1, Purpose No. 2 (page 4, lines 9-13):

(2) Clarify that boreholes or test holes drilled for the purposes of geological subsurface characterization are distinct from water well exploration and geothermal or mineral exploration and are therefore exempt from the requirements of chapter 174C, Hawaii Revised Statutes;

The Department acknowledges that some overlap exists between how wells, including exploratory boreholes, are defined and regulated by HRS Chapter 174C for water wells and Chapter 182 for geothermal exploration wells. The "temporary, small-diameter boreholes" described in this bill fall under the definitions for wells in both chapters and may be subject to either or both HRS Chapters 174C and 182, depending on the specific circumstances of the proposed activity.

The Department reviews drilling applications on a case-by-case basis to determine which statutes apply to a specific project. While this overlap can create the need for additional conversations and paperwork with the Department when planning geological subsurface characterization activity, the overlap ensures that drilling proposals are reviewed thoroughly for potential impacts on the State's water and geothermal resources.

Therefore, the Department recommends that Section 1, Purpose No. 2, be removed from this bill.

Regarding Section 1, Purpose No. 5 (page 5, lines 4-10):

(5) Require the department of land and natural resources to amend its exemption list to be consistent with administrative rules adopted by the department, clarifying that certain geological subsurface characterization activities shall be exempt from the environmental review process or shall only require an exemption notice.

In its current form, this bill does not include enough information about the types of geological subsurface characterization that would be exempted from review under HRS Chapter 343. Defining drilling for the purpose of geological subsurface characterization as "temporary, small-diameter boreholes" creates a lot of opportunity for interpretation in what is considered "temporary" and what is considered "small-diameter." Information on borehole drilling, including limits on diameters, target temperatures, depth, rig size, and surface disturbances would need to be specified in order for the Department to evaluate if the activity this bill seeks exemptions for would not result in a serious or major disturbance to an environmental resource. Establishing "one-size-fits-all" limits for a Chapter 343 exemption that could apply anywhere in the State will be challenging, however, because the potential environmental impacts and risks with any drilling project will vary significantly from site to site. Additionally, well control plans, casing design, cementing plans, and plugging and abandonment timelines and procedures are also critical components that would need to be evaluated to determine potential environmental impacts.

Several exemptions applicable to "geological subsurface characterization" activities already exist on the current Exemption List for the Department of Land and Natural Resources, published November 10, 2020 and the current Exemption List for the Commission on Water Resource Management (CWRM), published January 5, 2021. The Department suggests that these existing exemptions are reviewed, and that the bill is amended to clarify the specific activities for which a new exemption is being sought.

In 2012, the Department proposed to amend the Department's Exemption List to add an exemption for drilling exploratory geothermal, but the Environmental Council voted against adding the exemption. The Department is concerned that any new proposals that would exempt exploratory geothermal wells under the umbrella of "geological subsurface characterization" will likely face similar challenges.

Therefore, the Department recommends that Section 1, including Purpose No. 5 be amended to include sufficient descriptions of and constraints on the proposed exempted activities to show: (1) clear explanations of and limits on included activities such that all included activities

conducted anywhere in the State would not result in a serious or major disturbance to an environmental resource; and (2) explanations of how activities seeking exemption differ from existing exemptions on the Department's 2020 list and CWRM's 2021 list.

Regarding Section 2 (starting on page 6, line 6): This section proposes to amend the Hawaii Revised Statutes by adding a new chapter titled "Geological Subsurface Characterization" with the purpose of clarifying that boreholes or test bore drilling activity for geological subsurface characterization would not be treated under HRS Chapters 182 and 174C and would be exempt under Chapter 343.

The Department of Business, Economic Development, and Tourism (DBEDT) is proposed to oversee the proposed chapter on "Geological Subsurface Characterization," but DBEDT does not currently have any geologists, hydrologists, or relevant engineers on its organizational chart. The Department, on the other hand, employs geologists, hydrologists, and engineers in the CWRM and the Engineering Division who review drilling plans to assess the applicability of HRS Chapters 174C, 182, and 343 and determine when water well drilling permits, geothermal exploration permits, and/or environmental assessments, impact statements, or exemptions apply. They are trained to evaluate risks and prescribe appropriate mitigation of groundwater contamination, well blowouts, and other potential environmental and health and safety impacts.

In addition to reviewing drilling plans for applicability under HRS Chapters 174C and 182, the Department also conducts additional reviews which may include, but are not limited to:

- Land Division reviews for parcel ownership and mineral rights
- State Historical Preservation Department (SHPD) reviews for potential impacts to historic properties.
- Office of Conservation and Coastal Lands (OCCL) reviews for parcels in conservation districts and/or coastal lands.

The proposal of this bill to shift regulatory oversight of a subset of exploratory wells away from the Department to DBEDT, would place important scientific, environmental, and natural resource management decisions in the charge of an agency that does have the same scientific and technical expertise and does not share the same statutory responsibilities to protect the State's natural resources in the best interests of the public.

When drilling where geothermal conditions might be encountered, the most critical health and safety risk is a blowout, which is an uncontrolled flow of formation steam, fluids, or gas from a well bore into the atmosphere or into lower pressure subsurface zones. A blowout occurs when formation pressure exceeds the pressure applied by the column of drilling fluid. Appropriate well control procedures and equipment are essential to mitigate the risk of a blowout. Well control can include driller training, geothermal-specific drilling techniques, specialized monitoring equipment, and blowout prevention equipment. A blowout can pollute shallow groundwater aquifers with geothermal fluids, pollute air with geothermal gases, and cause injury or death to drilling personnel. Circumnavigating the oversight provided by HRS Chapter 182, as this bill proposes to do, will put human lives at risk if appropriate well control procedures and equipment are not utilized when necessary to mitigate the risk of a blowout.

In locations where geothermal heat exists, any size well can experience a blowout, even small-diameter wells. The well control requirements for small-diameter wells differ from larger diameter wells, but well control still must be evaluated for each drilling situation. The following summary of blowout prevention in geothermal slim holes, one type of small-diameter well, is included in the Hawaii Geothermal Drilling Guide, Circular C-126, published by the Department in 2014:

> 5.4.4 Blowout Prevention in Slim Holes
> Much smaller volumes of drilling fluids are circulated in slim holes than in full-scale production holes. Kicks of any volume in slim holes are therefore of more consequence, and immediate detection of fluid entry, or lost circulation, is critical…In summary, blowout prevention in slim holes requires special training, precise flow metering, real-time data presentation and dynamic kill proficiency.

The Department reviews all geothermal exploration permits and geothermal drilling permits to assess blowout risks and prescribe appropriate well control procedures and equipment. The specific well control requirements will vary with many factors, including, but not limited to:

1. Anticipated temperatures, and pressure regimes for specific well location. For example, the level of well control needed for a small-diameter well is higher when drilling in an active rift zone like Puna vs. on Oahu or Kauai.
2. Target depths
3. Well design, including well diameters, casing, and cementing program
4. Type and size of rig
5. Groundwater conditions

Because so many factors need to be considered when assessing well control needs, the Department is concerned that creating a separate category of “geological subsurface characterization” drilling not reviewed under HRS Chapter 174C and Chapter 182 will lead to important safety and environmental considerations being missed.

Therefore, the Department recommends removing Section 2 in its entirety from this bill.

Regarding Section 3 (starting on page 21, line 4): Amending HRS Chapter 182 as proposed in this bill would have significant consequences on the regulatory framework for geothermal resources in the State. The proposed amendment would remove the authority of the Department to permit and regulate any geothermal exploration, including commercial exploration. Since the proposed new HRS chapter described in Section 2 of this bill would only apply to non-commercial geothermal exploration, this proposed amendment would create a regulatory gap where no agency would have the authority to regulate commercial geothermal exploration.

This proposed amendment would also require significant revisions to additional sections of Chapter 182, and to Hawaii Administrative Rules Chapter 183, Rules on Leasing and Drilling of Geothermal Resources.

Therefore, the Department recommends removing Section 3 in its entirety from this bill.

Regarding Section 4 (starting on page 21, line 18): HRS Chapters 174C and 182 include statutory requirements for the reporting of well data and geothermal exploration data to the Department. The Department does not oppose the creation of data repository for geological subsurface characterization with the Hawaii groundwater and geothermal resources center, as long as existing statutory requirements for data are followed. The Department also suggests this section be amended to elaborate on how data will be shared, and who it will be shared with.

Therefore, the Department recommends that Section 4 be amended to: (1) state that geothermal exploration data and well data, as defined and required in HRS Chapters 174C and 182 shall be reported to the Department as required by applicable statutes and administrative rules; and (2) address how data will be shared and who it will be shared with.

Regarding Section 5 (starting on page 22, line 8): Previous comments from the Department regarding Section 1, Purpose No. 5 also apply here. Additionally, this section references “part 1” and “part 2” of the Department’s Exemption List, but multiple “part 1” and “part 2” sections exist, so this needs to be clarified. The Department assumes this is meant to refer to “part 1” and “part 2” of the General Exemption Type 5 category for “Basic data collection, research, experimental management, and resource and infrastructure testing and evaluation activities that do not result in a serious or major disturbance to an environmental resource.”

Therefore, the Department recommends that Section 5 be amended to (1) align with the amendments recommended by the Department in Section 1; and (2) clarify that “part 1” and “part 2” are referring to the General Exemption Type 5 category.

Mahalo for the opportunity to comment on this measure.

Related documents:

HRS – Chapter 174C – State Water Code:
https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0174C/HRS_0174C-.htm

HRS – Chapter 182 – Reservation and Disposition of Government Mineral Rights:
https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0182/HRS_0182-.htm

HRS – Chapter 343 – Environmental Impact Statements
https://www.capitol.hawaii.gov/hrscurrent/Vol06_Ch0321-0344/HRS0343/HRS_0343-.htm

HAR – Chapter 168 – Water Use, Wells, and Stream Diversion Works
https://files.hawaii.gov/dlnr/cwrm/regulations/13-168.pdf

HAR – Chapter 183 – Rules on Leasing and Drilling of Geothermal Resources:
https://dlnreng.hawaii.gov/geothermal/wp-content/uploads/sites/17/2013/03/CHAP1831.pdf

January 5, 2021 –Exemption List for the Commission on Water Resource Management:
https://files.hawaii.gov/dbedt/erp/Agency_Exemption_Lists/State-Commission-on-Water-Resource-Management-Exemption-List-2021-01-05.pdf

November 10, 2020 – Exemption List for the Department of Land and Natural Resources:
https://files.hawaii.gov/dbedt/erp/Agency_Exemption_Lists/State-Department-of-Land-and-Natural-Resources-Exemption-List-2020-11-10.pdf

September 2014 – Hawaii Geothermal Drilling Guide Circular C-126 (See Section 5.4.4)
https://dlnreng.hawaii.gov/geothermal/wp-content/uploads/sites/17/2016/01/Circular_C-126_DLNR_DEC2014_sm.pdf

May 17, 2012 Environmental Council Meeting Minutes (See Part 5., Section ii., Item No. 6.):
https://files.hawaii.gov/dbedt/erp/EC_Meetings/2012-05-17-Environmental-Council-Minutes.pdf

JOSH GREEN, M.D.
GOVERNOR OF HAWAII
KE KIA'ĀINA O KA MOKU'ĀINA 'O HAWAI'I

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WRITTEN TESTIMONY ONLY

Testimony COMMENTING on HB1983
RELATING TO NATURAL RESOURCES

REPRESENTATIVE NICOLE E. LOWEN, CHAIR
HOUSE COMMITTEE ON ENERGY & ENVIRONEMTNAL PROTECTION

Hearing Date, Time and Room Number: 02/10/2026, 9:05 am, 325

Fiscal Implications: Undetermined.

Department Position: The Department of Health ("Department") offers comments.

Department Testimony: The Environmental Management Division (EMD) provides the following testimony on behalf of the Department.

HB1983 proposes to exempt certain geological subsurface characterization activity from regulatory oversight and environmental review. Among other provisions, HB1983 would require the Department to amend its hazardous waste regulations to exempt wastes produced by these subsurface characterization activities.

While the Department appreciates the bill's intent to characterize natural resources and supports the State's renewable energy goals, existing regulations on subsurface drilling are designed to protect public health and the environment, including the quality of groundwater that could serve as a potential future drinking water resource.

Geological subsurface characterization activity is regulated because this activity could impact the surrounding environment. Test boreholes need to be very deep (likely over 1 kilometer) and, without proper safeguards, can be potential preferential pathways for

contaminants to contaminate drinking water. Concern regarding potential contamination is amplified if boreholes are drilled mauka of the underground injection control line, where groundwater is a potential drinking water resource.

The Department respectfully requests removing Section 7 from the bill, as it could jeopardize the Department's federal authority delegation for hazardous waste programs. The measure requires the Department to amend its hazardous waste rules "for consistency with" the federal definition of hazardous waste and "to clarify that certain investigative-derived waste products generated by geological subsurface characterization activity are exempt from hazardous waste management requirements" (page 23 lines 13 to 20). The Department's hazardous waste program is authorized and partially funded by the U.S. Environmental Protection Agency and must meet national minimum standards (40 CFR part 271). To maintain authorization, the state hazardous waste rules may be more stringent but cannot be less stringent than federal rules. Exempting investigation-derived waste from geological subsurface characterization activity, beyond the existing exemption for "a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics of composition" and limited to 25 kilograms, would make state rules less stringent than the federal regulations (40 CFR section 261.4(d)). Where the state rules are more stringent, the Department does not exempt "drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy" from management as hazardous waste (40 CFR section 261.4(b)(5)).

Offered Amendments: None.

Thank you for the opportunity to testify on this measure.

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

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

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 Hawai'i
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HONOLULU, HAWAII 96805

TESTIMONY OF KALI WATSON, CHAIR
HAWAIIAN HOMES COMMISSION
BEFORE THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
ON FEBRUARY 10, 2026 AT 9:05AM IN CR 325

HB 1983, RELATING TO NATURAL RESOURCES

February 10, 2026

Aloha Chair Lowen, Vice Chair Perruso, and Members of the Committee:

The Department of Hawaiian Home Lands (DHHL) **supports** this bill which 1) authorizes geological subsurface characterization activities conducted by a public research institution under certain conditions, 2) clarifies that boreholes or test holes drilled for the purposes of geological subsurface characterization are distinct from water well exploration and geothermal or mineral exploration, 3) requires the Department of Business, Economic Development, and Tourism, to designate the Hawaii Groundwater and Geothermal Resources Center of the University of Hawaii, or a successor entity, as the repository for data collected from any geological subsurface characterization activity, 4) requires the Department of Hawaiian Home Lands to designate a repository or be the repository for any scientific data collected from any geological subsurface characterization activity on lands it holds in trust, 5) requires the Department of Land and Natural Resources to amend its exemption list to specify that certain geological subsurface characterization activities shall be exempt from the environmental review process or shall only require an exemption notice, 6) requires the University of Hawaii to amend its exemption list to specify that certain geological subsurface characterization activities shall be exempt from the environmental review process or shall only require an exemption notice, 7) requires the Department of Health to amend its rules related to hazardous waste and hazardous waste management for consistency with federal regulations to specify that certain waste products generated by geological subsurface characterization activity are exempt from hazardous waste management requirements, 8) requires that the first site where a borehole or test hole is drilled shall be on lands owned by DHHL, 9) establishes the Hawaii Groundwater and Geothermal Resources Center within the School of Ocean and Earth Science and Technology of UH Manoa and 10) appropriates funds.

DHHL appreciates the inclusion of Hawaiian Home Lands for certain purposes outlined in this measure. In particular, DHHL appreciates that this bill requires DHHL to designate a repository or be the repository for any scientific data collected from any geological subsurface characterization activity on lands DHHL holds in trust. This bill clarifies that boreholes or test holes drilled for the purposes of geological subsurface characterization are distinct from water well exploration and geothermal or mineral exploration. This bill would require that the first site where a borehole or test hole is drilled shall be on lands owned by DHHL.

DHHL is currently in the exploration/investigation phase of development of geothermal resources on its trust lands. Earlier work done at the University of Hawai‘i has identified several sites where the probability of finding viable geothermal resource warrants further investigation.

Thank you for your consideration of our testimony.

Sustainable Energy Hawai‘i
Testimony in Support – HB1983

HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE
REGULAR SESSION OF 2026

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair
Rep. Amy A. Perruso, Vice Chair

Committee Members:

Rep. Cory M. Chun; Rep. Sean Quinlan; Rep. Kirstin Kahaloa;
Rep. Lauren Matsumoto; Rep. Matthias Kusch

Tuesday, February 10, 2026
TIME: 9:05 a.m.

Chair Lowen, Vice Chair Perruso, and members of the Committee on Energy & Environmental Protection, thank you for the opportunity to testify today.

Sustainable Energy Hawai'i supports the passage of HB1983 and believes the strongest testimonial in support of its adoption into law can be found in Section 1 of the bill itself. It reads:

> *SECTION 1*.
>
> *The legislature finds that the State's natural resources are critical to its economic stability, energy security, climate resilience, public health, safety, and cultural continuity.*
>
> *The legislature further finds that planning for the availability of water supplies, the siting of renewable energy infrastructure, accurate wildfire and landslide risk assessment, and response procedures designed for drought and contamination emergencies are among the fiduciary acts performed by the State in the best interests of the public.*
>
> *The legislature believes that such planning and procedure is best made when high-quality, site-specific surface and subsurface data are considered, including information on stratigraphy, permeability, groundwater levels, temperature gradients, gas composition, and other geological conditions.*
>
> *The legislature further finds that the public trust doctrine dictates that the State must protect and manage public natural resources, including water, land, and forests, for present and future generations while also providing for their "highest economic social benefits", necessitating the need to balance various, competing interests.*

Existing statutory and regulatory frameworks governing wells and mining were designed to manage the long-term production and viability of the State's water and mineral resources. However, these frameworks were implemented without consideration of the need to treat investigations conducted for the purpose of collecting scientific data that defines observable subsurface conditions differently from commercial developments. Consequently, these statutory and regulatory frameworks hinder scientific investigation that produces findings often needed by regulatory agencies to identify and guide their management of those resources.

Means and Intent

Sustainable Energy Hawai'i supports the intent of HB1983, which seeks to centralize existing statutory laws, their rules, and definitions under one reference, providing a clear, accessible, and simplified pathway for geological scientific research to be established as a recognized activity of the State and conducted within clear guidelines.

The means by which these guidelines will be structured are built around defining 'Geological Subsurface Characterization' (GSC) as a clearly defined set of scientific research activities that have permitting and environmental assessment exemptions under certain well-defined conditions.

To achieve that state, the bill seeks to clarify the applicability of existing regulations to GSC while making minor amendments to reconcile inconsistencies between statutes and rules within their regulatory authority. Those inconsistencies hinder researchers' ability to understand what is permissible or required to comply.

Status quo outcomes have historically produced a reluctance for research institutions to use limited financial resources to navigate the regulatory landscape.

HB1983 requires DBEDT, DLNR, DOH, and UH to adopt rules that conform to public administrative procedures (including registration and defining the nature of characterization activity) and subsequent reporting.

Opposition

The positions in opposition we've encountered toward HB1983 have centered on the mistaken conclusion that it creates new exemptions to Chapter 343, the State's environmental protection law.

There are, however, existing statutory exemptions that reasonably apply to Chapter 343 and therefore support HB1983's operational goals. The broadest case for this can be found in "*General types of actions eligible for exemption*": HAR 11-200.1-15 (c)(5), which

makes **"Basic data collection, research, experimental management, and resource and infrastructure testing and evaluation activities that do not result in a serious or major disturbance to an environmental resource"** eligible for exemption. References to 'de minimis' impact justifying exemptions also appear under other administrative documents relative to this subsection.

More to address permitting, the specific issue with CWRM concerns a conflict between 174c's statutory language and its own manual/handbook, "Hawai‘i Well Construction & Pump Installation Standards". The statute states permits are required in all situations. The latter states that 'test bores' can be exempted from permitting (Sections 1-10 and 2-1): "Temporary test borings do not require a well construction permit."

Again, HB1983 seeks consistency between statute and rules. (There is more nuance to be considered as this same situation applies to BLNR's and DLNR's jurisdictional roles with regard to permitting and subsequent regulation of geothermal exploration as a mineral resource mining activity.)

As a practical matter, once a permit application is made, whether under mining or water jurisdictions, the entire process is subject to public comment and legal challenges, even when commercial purposes are absent. For temporary scientific research to be subject to the same public scrutiny as if it were permanent, commercial development is counterproductive, especially when the scientific research would produce the very data public EAs and EIS's seek. This is the Catch 22 HB1983 can resolve.

Simply put: This bill intends to allow the State to determine what exists within its natural resources portfolio and to do so within its own set of clarified, consistent rules.

Conclusion

Sustainable Energy Hawai‘i believes this is sound policy and is consistent with the Public Trust Doctrine, the intent of our environmental regulations, and serves the collective best interests of those who make Hawai‘i their home …

Respectfully,

Sustainable Energy Hawaii
admin@sustinableenergyhawaii.org

HB-1983
Submitted on: 2/8/2026 7:05:21 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Gary Rosenberg	The Seeger Institute	Support	Written Testimony Only

Comments:

As a regenerative farmer focused on increasing food production throughout our entire state, it is imperative that we have a baseline, not only of the quality, but the quality of water throughout the state. This bill provides us with an opportunity to conduct surveys of water, quality, and water quantity throughout the state such that should there be exploration in the future Pertaining to any form of industrial or agricultural use which results in the degradation of our water system we can quickly stop those activities that have the possibility of adversely affecting our water in the future.

HOUSE OF REPRESENTATIVES

THE THIRTY-THIRD LEGISLATURE

REGULAR SESSION OF 2026

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair

Rep. Amy A. Perruso, Vice Chair

Committee Members: Rep. Cory M. Chun; Rep. Sean Quinlan; Rep. Kirstin Kahaloa; Rep. Lauren Matsumoto; Rep. Matthias Kusch

Tuesday, February 10, 2026 TIME: 9:05 a.m.

TESTIMONY IN SUPPORT OF HB1983

Aloha Representatives Lowen, Perruso and members of the committee. My name is Keoni Ford. I am President and CEO of Dibshawaii LLC a Native Hawaiian owned entity . I am also an active, concerned resident of our State. I am a father and community stakeholder. I want to thank you for the opportunity to testify today. I lean my full support for strong, common sense, generational impact legislation. This one has some real teeth when it applies to existing law, environmental regulation and framework, supports Hawaii nei as a whole.

Its one thing to harness our local resources to benefit community, its another thing to actually know what resources are out there and where they are located within our communities.

HB1983 change the approach to data collection with better practices. Creating a meaningful pathway for community to engage with the local resource data, water (fresh and brackish) geothermal heat, hydrogen, possibly co2.

We don't know what's out there, that's what makes this smart and simple Legislation

Keoni K Ford

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HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Tuesday, February 10, 2026 — 9:05 a.m.

Ulupono Initiative supports HB 1983, Relating to Natural Resources.

Dear Chair Lowen and Members of the Committee:

My name is Micah Munekata and I am the Vice President of Government Affairs 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 1983, which authorizes geological subsurface characterization activities conducted by a public research institution under certain conditions, and more.

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 the 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.

This bill is a forward-looking initiative that prioritizes scientific research and environmental stewardship. By identifying geothermal and carbon sequestration resources, this measure supports Hawai'i's broader goals of achieving energy resilience and combating climate change. Resource characterization through slim-hole bores offers a minimally invasive method for gathering critical data, ensuring that these activities are conducted responsibly and with minimal environmental disruption. This approach reflects a commitment to balancing energy development with environmental protection.

As the State advances resource exploration activities, Ulupono believes robust, early and ongoing community engagement must be a foundational element of this work. This engagement must take place in parallel with any exploration activities, as it is also important to understand the scope and potential resources to have a deeper conversation about what is at stake. Meaningful engagement—particularly with Native Hawaiian communities, cultural practitioners, and residents of nearby areas—is essential to ensuring these efforts are grounded in place-based knowledge, cultural awareness, and community priorities. Proactive outreach that clearly explains the purpose of the exploration, listens to concerns, and incorporates local perspectives helps build trust and increases the likelihood that any resulting resource development delivers real, lasting benefits to the people of Hawai‘i rather than unintended impacts.

Our support is contingent on maintaining the bill's transparency and data stewardship provisions, which serve as safeguards to ensure accountability and knowledge-sharing throughout this process. By establishing clear reporting obligations and designating the Hawai‘i Groundwater and Geothermal Resources Center as a permanent, centralized repository for data collected through these activities, the bill creates a durable framework for advancing scientific understanding of Hawai‘i's subsurface resources in a manner that remains accessible to communities and decision-makers alike. Adequate funding is essential to support this work responsibly and to ensure that exploration efforts stay aligned with community priorities as well as Hawai‘i's broader renewable energy and sustainability goals for the long-term benefit of its residents.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata
Vice President, Government Affairs

HB-1983
Submitted on: 2/9/2026 7:19:04 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

LATE

Submitted By	Organization	Testifier Position	Testify
Terri Napeahi	Truth for the People and K.A.N.	Oppose	Remotely Via Zoom

Comments:

Terri Napeahi

Keaukaha Action Network & Truth For The People

House Committee: EEP

Energy and Environmental Protection

BILL NUMBER: HB 1983, HB 1981, HB 1982, HB 1979, & HB 1650

POSITION: STRONG OPPOSITION HB1983

RE: STRONG OPPOSITION RELATING TO GEOTHERMAL ENERGY EXPLORATION ON DHHL LANDS AND ENVIRONMENTAL REVIEWS

House Bill 1983: RELATING TO NATURAL RESOURCES:

Authorizes geological subsurface characterization activities conducted by a public research institution under certain conditions. Clarifies that boreholes or test holes drilled for the purposes of geological subsurface characterization are distinct from water well exploration and geothermal or mineral exploration. Requires the Department of Business, Economic Development, and Tourism, to designate the Hawai‘i Groundwater and Geothermal Resources Center of the University of Hawai‘i, or a successor entity, as the repository for data collected from any geological subsurface characterization activity. Requires the Department of Hawaiian Home Lands to designate a repository or be the repository for any scientific data collected from any geological subsurface characterization activity on lands it holds in trust. Requires the Department of Land and Natural Resources to amend its exemption list to specify that certain geological

subsurface characterization activities shall be exempt from the environmental review process or shall only require an exemption notice. Requires the University of Hawai‘i to amend its exemption list to specify that certain geological subsurface characterization activities shall be exempt from the environmental review process or shall only require an exemption notice. Requires the Department of Health to amend its rules related to hazardous waste and hazardous waste management for consistency with federal regulations to specify that certain waste products generated by geological subsurface characterization activity are exempt from hazardous waste management requirements. Requires that the first site where a borehole or test hole is drilled shall be on lands owned by DHHL. Establishes the Hawai‘i Groundwater and Geothermal Resources Center within the School of Ocean and Earth Science and Technology of UH Manoa. Appropriates funds.

House Bill HB1981: RELATING TO A PROGRAM TO CHARACTERIZE CARBON SEQUESTRATION POTENTIAL AND GEOTHERMAL AND UNDERGROUND WATER RESOURCES STATEWIDE.

Establishes a Geothermal, Carbon Sequestration, and Underground Water Resource Characterization Program via slim hole bores and a related statewide environmental assessment. Appropriates funds for the program and positions to support the program.

House Bill HB1982: RELATING TO THE DEPARTMENT OF HAWAIIAN HOME LANDS.

Appropriates funds to the Department of Hawaiian Home Lands for certain geothermal resource exploration and development activities and the hiring of consultants.

House Bill HB1979: RELATING TO ENVIRONMENTAL REVIEW.

Shortens the period within which certain judicial proceedings involving environmental assessments and environmental impact statements for actions that propose the use of land for, or construction of, affordable housing or clean energy projects must be initiated. Requires judicial proceedings involving actions that propose the use of land for, or construction of, affordable housing or clean energy projects to be filed directly with the Supreme Court and prohibits the Supreme Court from awarding attorneys' fees in these judicial proceedings.

House Bill HB 1650: RELATING TO ENVIRONMENTAL ASSESSMENTS.

Removes historic sites and the Waikiki special district from the requirement for environmental assessments under section 343-5, HRS.

Title: RELATING TO GEOTHERMAL ENERGY EXPLORATION ON DHHL LANDS

Aloha Chair Nicole Lowen, Vice Chair Amy Perruso, and Members of the Committee of Energy & Environmental Protection (EEP),

I, Terri Napeahi, submit this testimony in Strong Opposition to HB 1983 & Companion Bill SB 2901 as well as All the above-referenced measures, which requires the Hawai‘i State Energy Office to conduct a statewide environmental assessment for, and subsequently administer, a Geothermal Resources Characterization Program under the direction of the University of Hawai‘i Groundwater and Geothermal Resources Center, and appropriates funds for that purpose.

These Bills represent a fundamental shift toward institutionalizing geothermal exploration under the guise of research while simultaneously weakening environmental protections and public oversight. Of particular concern is the University of Hawai‘i Groundwater and Geothermal Resources Center has been actively advancing legislative proposals that would override or shortcut existing environmental review requirements, including those involving seismic monitoring related to groundwater and geothermal exploration on Department of Hawaiian Home Lands (DHHL) and public trust lands.

Geothermal exploration is not a neutral scientific activity. It involves intrusive testing, drilling, and seismic monitoring that directly affect subsurface water systems, geologic stability, and culturally significant landscapes. Framing these activities as “characterization” does not change their physical impact or their legal implications. Authorizing such activities without full environmental review violates the precautionary principles embedded in Hawai‘i law and undermines long-standing protections for trust resources. We strongly oppose, shortening “the period within which certain judicial proceedings involving environmental assessments and environmental impact statements for actions that propose the use of land for, or construction of, affordable housing or clean energy projects must be initiated. We strongly oppose amendments that will require judicial proceedings involving actions that propose the use of land for, or construction of, affordable housing or clean energy projects to be filed directly with the Supreme Court and prohibits the Supreme Court from awarding attorneys' fees in these judicial proceedings.

Public trust lands and DHHL lands are not appropriate sites for experimental or exploratory geothermal programs. These lands are held in trust for specific Native Hawaiian beneficiaries and purposes, and any activity that risks contamination of groundwater, destabilization of geologic formations, or disruption of cultural sites constitutes a breach of fiduciary duty.

It is deeply concerning that the Department of Hawaiian Homes Lands proposing and administering the industrialization of Geothermal which is a violation of the State Constitution Article XII Section 7. The exclusion of Beneficiary consultation eliminates community input and oversight and creates a closed loop in which project proponents are empowered to define, implement, and evaluate their own impacts. Such an arrangement is incompatible with transparent governance and public accountability. Appropriation of State and/or Federal Funds with the intent of sponsoring statewide geothermal exploration threatens both the integrity of our trust land.

Furthermore, Industrialized geothermal development and drilling into Kūpuna Pele further endanger interconnected trust resources, including groundwater, air quality, and geologic stability. These risks are especially acute on the Moku O Keawe, where volcanic and aquifer systems are inseparable from subsistence practices, burial grounds, and ceremonial sites. The State cannot lawfully authorize degradation of these resources under Article XI, Section 7 of the Hawai‘i State Constitution or under the fiduciary standards imposed by the Admissions Act of 1959 in the name of speculative energy benefit.

With respect to DHHL lands, the breach is even more severe. These lands are held in trust under the Hawaiian Homes Commission Act for the exclusive benefit of Native Hawaiian beneficiaries. Legislation proposing industrialized geothermal exploration or development that authorizes drilling into Kūpuna Pele on DHHL lands without prior beneficiary authorization already constitutes a violation of fiduciary duty. Beneficiary consultation cannot be treated as a procedural afterthought or a remedy for an unlawful act.

Furthermore, consultation does not cure desecration. The proposal of industrialized geothermal exploration, development and drilling into Kūpuna Pele on trust lands without consent reflects a failure to honor both the cultural foundations of these lands and the legal obligations established to protect them. Beneficiaries are not merely stakeholders; we are Lineal Descendants of our Hawai’i, trust beneficiaries whose rights must guide, not follow, legislative action.

Accordingly, I urge this Committee to reject this measure because it:

1. Authorizes geothermal exploration under the guise of research while weakening environmental review;

2. Undermines protections for groundwater, seismic stability, and culturally significant lands;

3. Threatens DHHL and public trust lands with intrusive exploration activities; and

4. Prioritizes energy policy over environmental law and trust obligations.

Energy planning must not come at the expense of environmental integrity, public trust responsibilities, or Native Hawaiian rights. Any geothermal-related activity must remain subject to full, site-specific environmental review and meaningful community consent, particularly where trust lands are concerned.

Mahalo for the opportunity to submit this testimony.

Respectfully,

Terri Napeahi

Keaukaha Action Network

Truth For The People

HB-1983
Submitted on: 2/9/2026 9:08:48 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

LATE

Submitted By	Organization	Testifier Position	Testify
Kanoeuluwehianuhea Case	Truth for the People, Na Wai Ho'ola Nui La'au Lapa'au Foundation	Oppose	Remotely Via Zoom

Comments:

Aloha Chair and Committee Members:

My name is Kanoeuluwehianuhea Case, Co-founder of Na Wai Ho'ola Nui La'au Lapa'au Foundation along with Kuha'o Kawaauhau-Case,in collaboration with Truth For the People grassroots initiative standing in protection of Aloha Aina to protect our "Natural resources" otherwise known to Kanaka as our Na Akua, elemental beings from invasive developments such as geothermal in the name of "Renewable Energy". 'O Mauna A Wakea no ku'u Mauna, 'O Waimea Moku 'O Keawe mai au. I respectfully submit this testimony in STRONG OPPOSITION to HB1983, a bill that would authorize geological subsurface characterization activities under the guise of research, while undermining the cultural, environmental, and public health concerns deeply felt by many Native Hawaiians and community members.

HB1983 should be opposed for the following reasons:

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1. Cultural and Spiritual Harm

For many Kānaka Maoli, the ʻāina is not a resource to be drilled and dissected but is sacred and genealogically connected to Pele, Lono, and other akua. Any bill that facilitates deeper subsurface work — regardless of how it is labeled — risks desecrating wahi kapu, wahi pana, and ancestral landscapes. Geothermal development and characterization historically have been opposed by those who remain committed to honoring our genealogical ties to Pele and Akua of Hawaiʻi.

—

2. Precedent of Geothermal's Negative Impacts

Current geothermal operations in Hawaiʻi — such as Puna Geothermal Venture — have drawn strong resistance from nearby communities who report persistent health issues attributed to emissions, including hydrogen sulfide and other toxins, and the environmental stress associated

with drilling. These experiences are not “theoretical concerns” but lived realities for many families who have testified publicly about respiratory illnesses and chronic conditions following geothermal activity.

Even exploratory work, like boreholes and test drilling to collect data, can disturb ground stability, contamination of irreplaceable aquifer systems and release volatile compounds. The bill’s attempt to distinguish subsurface characterization from water well or geothermal exploration is merely semantic — the harms can overlap.

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3. Insufficient Genuine Community Consent and Oversight

Across multiple hearings and community meetings, residents have repeatedly expressed that meaningful, free, prior, and informed consent has been absent from plans to test and develop geothermal resources. Too often, legislative or agency-promoted “outreach” occurs after decisions have largely been made, or under the influence of high-priced consultants who may not genuinely represent grassroots community interests.

HB1983 does little to guarantee that community voices — especially those of Native Hawaiian beneficiaries, the rightful stewards who are lineal descendants and cultural practitioners of our Home — are honored in land and resource decisions especially involving mineral rights held in Trust also known as Kupuna and Na Akua

—

4. Environmental and Health Risks

Subsurface geological work does not happen in a vacuum. It carries risks of contaminating groundwater, exposing heavy metals and hazardous elements, and damaging fragile ecosystems. Studies and governmental documents have acknowledged potential for mercury, arsenic, boron, and radioisotopes to be brought to the surface — risks that disproportionately affect communities already grappling with environmental burdens.

—

5. Distrust of Industrialized Solutions Over Community-Led Alternatives

While the state moves toward 100% renewable energy, many in our communities ask why we are seeking solutions that may harm our people and desecrate sacred land instead of investing in decentralized, community-oriented alternatives such as rooftop solar, distributed storage, and other low-impact renewable strategies. These alternatives empower residents and reduce dependence on large extractive infrastructure.

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6. Broader Context of Historical Exploitation

This bill, like others before it, sits in the long history of Native Hawaiian lands and resources being managed without adequate redress for historical injustices. The push for geothermal — especially on lands held in trust — evokes patterns where decisions are made for Hawaiian beneficiaries, not with them. This undermines self-determination and perpetuates environmental racism.

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In closing:

Supporting HB1983 risks advancing a framework that normalizes deep subsurface drilling, limits community agency, ignores cultural worldviews and spiritual relationships with the land, and exposes vulnerable populations to real harms. As advocates for Aloha ʻĀina, we urge you to oppose this bill and instead support energy policies that protect our sacred lands, honor Indigenous rights, and prioritize low-impact, community-driven clean energy solutions.

Mahalo nui loa for your consideration.

Kanoeuluwehianuhea Case

Moku O Keawe

Na Wai Ho'ola Nui La'au Lapa'au Foundation

Truth for the People Aloha Aina Grassroots Initiative

HB-1983
Submitted on: 2/8/2026 9:25:59 AM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Douglas Hagan	Individual	Support	Written Testimony Only

Comments:

STRONGLY SUPPORT

- **Enables science-based resource management** by allowing systematic subsurface data collection to improve groundwater protection, geothermal assessment, hazard mitigation, and long-term water security under climate change.
- **Strengthens groundwater protections** beyond existing exploratory drilling standards, including avoidance of aquifer cross-contamination, limits on pumping volumes, prohibition of contamination risks, and required resealing within specified timeframes.
- **Maintains all environmental and land-use safeguards** by streamlining duplicative procedures while preserving conservation district permitting, coastal zone management/SMA requirements, and county ordinances.
- **Ensures public data transparency** by requiring all subsurface characterization data and results to be stored in a public repository at the **University of Hawai‘i Mānoa**.
- **Supports DHHL homestead development** by improving subsurface data availability on lands held in trust, enabling safer and more informed planning decisions.

HB-1983
Submitted on: 2/8/2026 10:17:52 AM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Jasmine Steiner	Individual	Oppose	Remotely Via Zoom

Comments:

Testimony: Opposition to HB1983

To: House Committee on Energy & Environmental Protection

From: Jasmine Steiner, KahuPuna / We Are Puna

Date: February 8, 2026

Re: Strongly Oppose HB1983 – Relating to Geological Subsurface Characterization Activities

Aloha Chair and Members of the Committee,

My name is Jasmine Steiner, representing KahuPuna, a grassroots organization committed to safeguarding the sacred 'āina of Puna, Hawai'i, from the ravages of geothermal mining. As outlined on our website (wearepuna.wixsite.com/aloha-activism), we fiercely oppose ventures like the Puna Geothermal Venture (PGV) that desecrate wahi pana connected to Madame Pele, while devastating our environment, public health, and Native Hawaiian cultural rights. I vehemently oppose HB1983, a sprawling 20-page assault on our protections that authorizes so-called "geological subsurface characterization" activities – essentially pre-drilling for geothermal expansion – by public research institutions, exempts them from critical environmental assessments under Chapter 343, HRS, and funnels millions in appropriations to fast-track this under the guise of science. This bill guts essential safeguards, paving the way for widespread geothermal intrusion, and must be defeated to uphold human rights, constitutional protections, and justice.

At its core, HB1983 violates the fundamental human and constitutional rights of the Hawaiian people, enshrined in the Hawaii Constitution (Article XI, Section 1, mandating protection of

natural resources for present and future generations; Article XI, Section 9, affirming the right to a clean and healthful environment) and international human rights standards, including the Universal Declaration of Human Rights (Articles 3 and 25, affirming rights to life, security, and health). By exempting subsurface drilling – including boreholes for geothermal data collection – from environmental impact statements (EIS) and assessments under Chapter 343, the bill strips away our right to informed participation in decisions affecting our lives and lands. This is a direct attack on due process and equal protection under the law (Article I, Section 5 of the Hawaii Constitution), disproportionately harming Native Hawaiians and low-income communities in Puna, who have already borne the brunt of geothermal's toxic legacy. The bill's amendments to Chapters 174C, 182, and others redefine these activities as "non-commercial" to evade oversight, but this is clearly the precursor to commercial exploitation, denying us the constitutional protections meant to prevent irreversible harm.

This so-called "state" – an illegitimate entity rooted in the illegal 1893 overthrow of the sovereign Hawaiian Kingdom – is criminally fast-tracking HB1983 amid our active Hawaii Geothermal Injunction in the Intermediate Court of Appeals (ICA). Our case against the County of Hawai'i and PGV (operated by Ormat) seeks to halt all future geothermal permits, exposing decades of fraudulent reporting, nonexistent monitoring, and sham Environmental Impact Statements (EIS) that concealed seismic risks, toxic emissions, and groundwater contamination. PGV's operations in the Lower East Rift Zone have involved fracking into Kīlauea's sacred core, with no real oversight – just systematic lies to agencies and the public. Yet, HB1983 rushes to authorize similar "characterization" activities statewide, including on Department of Hawaiian Home Lands (DHHL), with a $6 million appropriation prioritizing DHHL sites like Humu'ula and Kawaihae. Introduced on January 23, 2026, and pushed through committees with scant notice, this bill leaves no time for meaningful public input, a deliberate ploy to bypass scrutiny while our injunction demands accountability. This criminal timing proves their guilt: they know the fraud is unraveling in court, yet they're accelerating exploration as if justice isn't imminent.

Compounding this outrage is the pending rulemaking petition by Sara Steiner (a key advocate in our movement) for future geothermal regulations, set for court review in April 2026. This petition demands stringent, evidence-based rules to address the proven failures in monitoring and reporting – failures that HB1983 would entrench by exempting preliminary drilling from any review. The fake state ignores this entirely, knowing full well that geothermal isn't "green" energy; it's a killer that destroys lives. They've covered up decades of suffering in Puna, where toxic emissions from PGV have caused severe health effects: cancers, respiratory failures, neurological disorders, and chronic illnesses. Our community – Hawai'i's only geothermal-impacted one – has endured immense hardship, with hundreds losing quality of life forever: ongoing sickness, contaminated air and water, foul odors infiltrating homes, and emotional trauma from constant fear. I personally have four generations of immediate family members who have lost their quality of life and any chance of health in this lifetime due to geothermal emissions – my dad with 90% mercury poisoning, myself never developing right as any child should in the geothermal radius with many central nervous system and mental health issues, my

daughter so sensitive to the poison air every day that she can't even go to public school, and my mom with stage 2 aggressive melanoma. And I am not alone. No one in this fake state or county gives two shits; they do everything to conceal these crimes against humanity in Puna, covering up the devastation, dismissing us as "crazy," and selling geothermal as "good" and sustainable while awaiting our day in court. This is not just negligence; it's crimes against humanity under the Rome Statute (Article 7) – widespread and systematic attacks on civilians through environmental harm and denial of health – violating human rights treaties like the International Covenant on Civil and Political Rights (Article 6, right to life).

No real Hawaiian supports the desecration, selling off, or "leveraging" of our deity Madame Pele – only the bought-and-paid-for sell-outs do. DHHL Chair Kali Watson stated in the newspaper: "They've got to be supportive. Otherwise, we're not going to do it." Guess what? Hawaiian beneficiaries have ALL said NO, and you in this Senate know it – it's sick. Even the Royal House and Royal Order of the Still Standing Hawaiian Kingdom said 'A'OLE to geothermal in testimony against HB1307 last year, declaring 'Ā'ole Geothermal! as an assault on our cultural sovereignty. Yet HB1983 mocks these voices, establishing the Hawaii Groundwater and Geothermal Resources Center to hoard data for future exploitation, all while gutting the protections that could reveal the truth.

Geothermal is destructive mining that prioritizes corporate profit over people, planet, and cultural heritage. Puna is woven into Hawaiian mythology as Pele's home – not a lab for boreholes. By gutting environmental protections in this massive 20-page bill, HB1983 enables pollution, seismic instability, and cultural erasure under false promises of jobs and energy independence. This is crimes against humanity: as we fight in court for justice over past deceptions, they cover up the suffering and expand the threat, dooming thousands more kanakas to the same fate. We won't allow it. #aolehewa

Justice is due – reject HB1983 entirely. Honor the injunction, the pending petition, Native Hawaiian rights, and our constitutional safeguards. Stop this criminal legislation that silences, endangers, and kills us.

Ā'ole PGV! Ā'ole Geothermal Expansion!

Respectfully submitted,

Jasmine Steiner

KahuPuna / We Are Puna

@WeArePuna

wearepuna.wixsite.com/aloha-activism

#ENDTHEDESECRATION #ENDTHECOVERUPS #WEAREPUNA
#ITSTIMEWEBREATHE #AOLEPGV

Statement of
Stanley J. Osserman Jr., President
Tigershark, LLC
Before the
House Committee on Energy & Environmental Protection
February 10, 2026
9:05 am
State Capitol Conference Room #325
In consideration of
HB1938
Relating to Natural Resources

Chair Lowen

Vice Chair Perruso and Distinguished Committee Members:

As the retired 12th Commander of the Hawaii Air National Guard (Hawai`i State Department of Defense) and former director of the Hawaii Center for Advanced Transportation Technologies (HCATT; 2013 to 2019), Hawaii Department of Business, Economic Development and Tourism (DBEDT), I continue to serve our state by promoting clean, renewable energy solutions. This testimony is NOT being given for compensation of any kind by any corporate or commercial entity. I am presenting to you today as a concerned "Life-Long" citizen of the State of Hawaii with extensive professional experience in energy systems, retail and wholesale business, military matters, international commerce, aviation, construction, maritime operations and public safety, among others. My goal is to help our government leaders, local, state and federal, make good strategic choices. Again, I state, I am Not being compensated in any way, by any individual, company, organization or group as I provide this testimony.

The State of Hawai`i has a fiduciary duty to manage the natural resources of the State, particularly water and mineral resources, however, the State has very little real data with which to determine prudent decisions in this important area. The University of Hawaii has a department (The Hawaii Groundwater and Geothermal Resources Center, HGGRC), responsible to the State, to help explore and catalog data for the public record to help in this important responsibility to the Public Trust. The HGGRC is OUR TEAM of geological experts! They are not a commercial enterprise and do not represent "for profit" organizations! However, the various regulations and permitting protocols, Federal, State and County, require them, even though they are doing work FOR THE STATE AND ON BEHALF OF THE PUBLIC TRUST, to follow cumbersome and costly procedures, DESIGNED TO REGULATE COMMERCIAL VENTURES! HB1983 is designed to streamline the approval process in accomplishing their vital Public Trust mission.

I STRONGLY SUPPORT HB 1983 because Hawai`i needs to know, in detail, what resources we have as we face the many and growing challenges facing us TODAY!

Very Respectfully,

Brigadier General Stanley J. Osserman Jr, USAF (Ret.)

HB-1983
Submitted on: 2/8/2026 11:29:57 AM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Dana Keawe	Individual	Oppose	Written Testimony Only

Comments:

STRONGLY OPPOSE HB1983

Dana Keawe

Moku O Keawe

Truth For The People

HB-1983
Submitted on: 2/8/2026 11:51:11 AM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Shannon Rudolph	Individual	Oppose	Written Testimony Only

Comments:

OPPOSE

HB-1983
Submitted on: 2/8/2026 12:00:07 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Keil Anderson	Individual	Support	Written Testimony Only

Comments:

I support the passage of HB1983. Fresh water and energy are crucial resources, and yet we have almost no knowledge of our own supplies, relying on faith and imports for our continued presence in the middle of the Pacific. This bill provides a clear permitting process for scientists performing non-invasive activites for public benefit without removing protections against commercial exploitation. That regulatory certainty is currently lacking, and we cannot expect progress without change. Mahalo for your consideration.

HB-1983
Submitted on: 2/8/2026 12:52:56 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

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

Comments:

STRONG SUPPORT FOR HB1983

Aloha Chair Lowen, Vice Chair Perruso, and Members of the Committee,

My name is Noel Morin, a clean energy advocate based in Hilo. I am on the board of nonprofits advocating for our transition to sustainable energy and transportation.

I am in **STRONG SUPPORT of HB1983**, which establishes a framework for geological subsurface characterization to advance our understanding of groundwater and geothermal resources.

Our Subsurface Knowledge Gap

We remain highly dependent on imported energy, with petroleum accounting for over 60% of our electricity generation. This annual $5 billion habit is needed to support electricity and liquid fuel needs. This is resulting in high electricity and gas expenditure and supply chain risks tied to price volatility. This need not be. Beneath our islands lies significant geothermal energy potential that could deliver firm, dispatchable baseload power.

A key barrier to realizing this geothermal potential is the lack of subsurface data. Hawaii is the only state without a geological survey, and we are essentially blind to the gifts beneath our feet. Without a comprehensive characterization of our water and heat resources, developers face additional permitting timelines of many years and millions of dollars in elevated drilling risk costs.

Groundwater knowledge is, likewise, scant. USGS studies show that our aquifers are under increasing stress from withdrawals (around 400 million gallons daily), and climate change projections indicate that recharge will decrease for most islands. Subsurface characterization data, which are needed for yield estimates and saltwater intrusion studies, exist for only a fraction of aquifer recharge zones.

Why HB1983 is Critical

This bill addresses the data bottleneck in the following ways:

1. It distinguishes characterization (research) boreholes from production wells. This removes the ambiguity that has stalled research projects for many years.

2. It creates a central public knowledge repository with UH's Hawaii Groundwater and Geothermal Resources Center (HGGRC) as the data repository. This ensures that research data remain accessible for resource management decisions.

3. It streamlines the environmental review for scientific research activities, while maintaining all environmental protections. Conservation district permitting, coastal zone management, county land-use rules, and cultural/historic preservation requirements all remain in place.

4. It establishes groundwater protection requirements that exceed existing exploratory drilling regulations.

5. It requires the first characterization borehole on the Department of Hawaiian Home Lands parcels. This provision serves two purposes: it provides DHHL beneficiaries with priority access to geothermal royalties and water resources from their ancestral lands, and it accounts for DHHL parcel overlap with promising geothermal zones.

Energy Security

PGV currently produces 38MW with plans to expand to 46MW. Statewide geothermal potential has been estimated at 500MW or higher in past assessments. Despite its potential, geothermal accounts for around 2% of our electricity generation. Geothermal offers levelized costs competitive with or below those of oil-fired generation, provides firm baseload (no batteries needed), and requires a fraction of the land occupied by a solar farm producing the same amount of power.

Hawaii needs both intermittent renewables for the lowest-cost energy when available and clean, firm baseload to provide stability. The recent HSEO study highlighted the need for dispatchable power. Geothermal provides a local, renewable alternative to importing another fossil fuel.

The economic case is compelling, but developers cannot move forward without data to reduce drilling risk and demonstrate resource viability.

Water Security

This bill will also enable better decisions about sustainable yield, saltwater intrusion potential, and allocation across municipal supply, agriculture, and our ecosystems. As demand for freshwater is projected to increase, understanding our subsurface water resources becomes increasingly critical. Improved systematic characterization will enhance modeling accuracy and support evidence-based management to protect our water supply.

Knowledge, Not Development

This bill enables data collection, not resource development. Actual geothermal or new water well development involves separate permitting, community engagement, environmental review, and investment. HB1983 ensures that future development decisions are made with good data

HB1983 is essential for Hawaii's energy independence and water security. It removes barriers to scientific research and protects environmental and cultural resources. It ensures public access to critical subsurface data. It enables evidence-based decisions about our energy and water future.

I urge the Committee to **PASS HB1983**.

Mahalo for the opportunity to testify.

Noel Morin

Climate, Sustainability, and Resilience Advocate

Hilo, Hawaii

HB-1983
Submitted on: 2/8/2026 3:20:18 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Ronald "Ron" Reilly	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Lowen, Vice Chair Perruso, and members of the EEP Committee,

I am in strong support of HB1983.

This bill will further responsible research and increase our understanding of ground water and geothermal resources.

The UH's Hawaii Groundwater and Geothermal Resources Center has the experience and skills to carry out this research and the information gained will be shared publicly via a central public knowledge repository.

A sustainable future requires an urgent transition to clean, healthy, and affordable energy for all.

I respectfully urge your support for HB1983.

Ron Reilly,
Advocate for Climate Solutions

Sara Steiner
13-430 Pohoiki Road
P.O. Box 1081
Pahoa, Hawaii 96778
808-936-9546
pahoatoday@gmail.com

February 10, 2026

RE: OPPOSE HB1983 RELATING TO NATURAL RESOURCES

Dear ENERGY AND ENVIRONMENTAL PROTECTION Committee:

You can not be seriously thinking to delete HRS 343 environmental protections so you can drill an unknown number of test wells into the volcanoes on Hawaii Island searching for geothermal spots. There is no difference in drilling holes for water or exploration. They all use chemicals and lots of water and they all disturb the surface and create pollution. But, there is even a more insidious problem with drilling holes all over active volcanoes.

Ask the University of Hawaii to show you already all the hundreds of test wells they have drilled or "repositoried" the information for (Barnwell and UH and other drilling companies) since the 1980s. This work has already been done in many areas of Hawaii, there is no need to keep doing it over and over again.

Ask the University of Hawaii Geothermal Program to provide a list of exploratory wells drilled in Lower Puna and then ask them to overlay the 2018 fissure line. You will find that those temporary wells (Barnwell off Malama Street) (HGP-A) weakened the ground and turned into fissures 24 and 15, respectively, of the 2018 Fissure Line. There may be more in Lanipuna Gardens we don't know about.

How can the Hawaii Legislature be serious about the environment, yet claim no environmental impacts occur from geologic drilling for geothermal sites? Absurd. We can't even get the one geothermal plant at the heart of the 2018 eruption to provide a real environmental impact statement that declares what happens when you circulate millions of gallons of acidic effluents with added toxic chemicals every day to keep your pipes and equipment free of scale and mold and silica.

We can't even get the USGS/Hawaii Volcano Observatory to investigate the 2018 eruption, all they did was review prior articles about eruption in the LERZ and craft a ridiculous statement that Humans did not influence the eruption and the thousands of earthquakes under PGV aren't caused by them. The University of Hawaii (Paul Okubo) co-authored a report the very next month after Have humans came out, that clearly stated the USGS/HVO does not have a robust array of seismometers in the Lower East Rift Zone and they used AI to relocate earthquakes from 1986-2018, where we found the smoking gun data of earthquakes under PGV wellfield at the exact time they were "cooling the resource" waiting for the State to come and take over the plant.

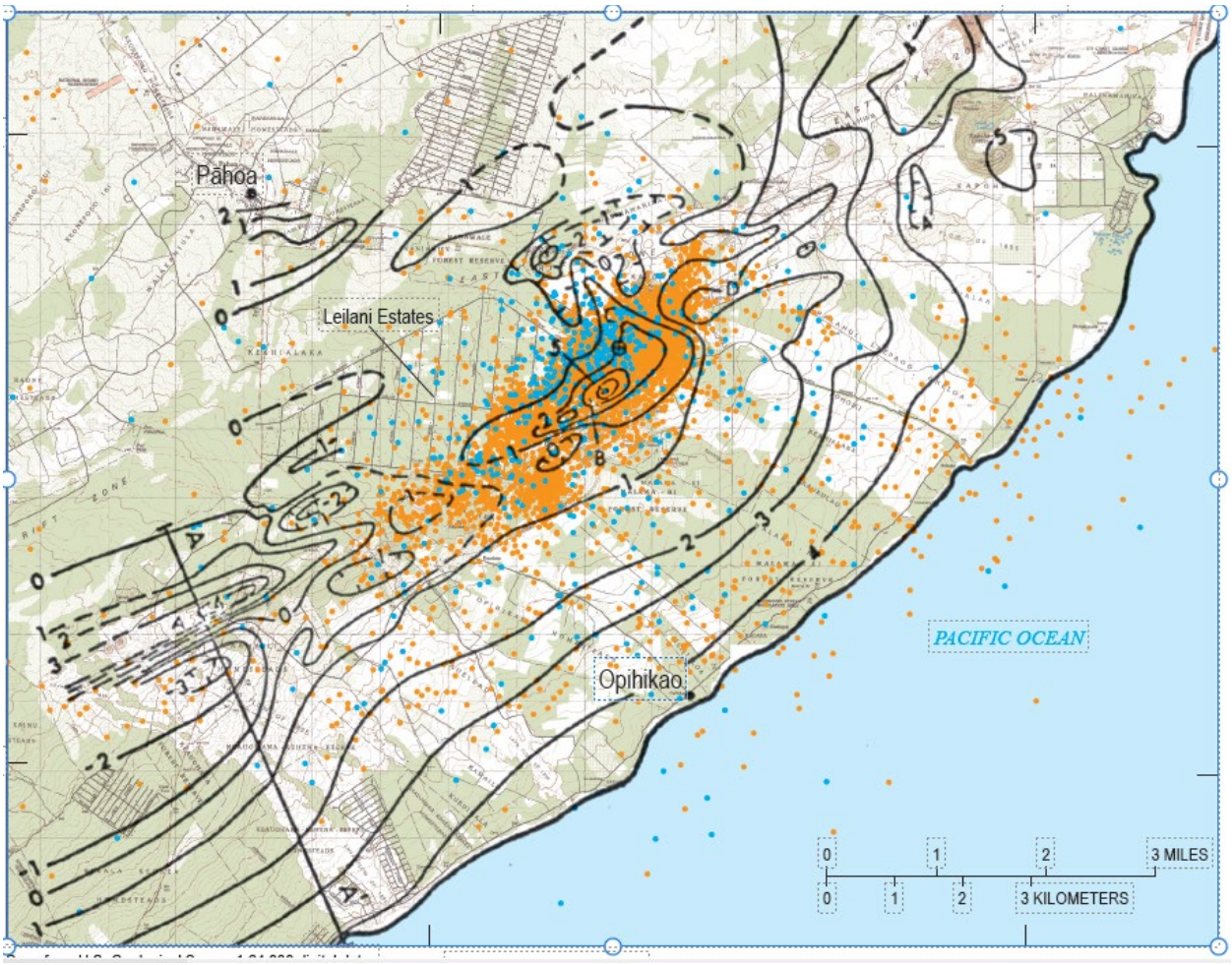

FIG 1. USGS 2020 Have humans influenced the Kilauea Eruption
Graph combining 3 months of Cooper & Dustman (1993) and 3 years Catherine Kenedi (2006-9). Thousands of earthquakes a year originate from PGV and trespass for miles in all directions – the 2018 Fissure line broke out in the weakened area.

The lava from Fissure 17 was exactly like the lava PGV hit under their plant in 2005- but didn't tell anyone until 2009, when the report was being released to the scientific community. Talk about no transparency, we never would have known PGV drilled into magma until someone found a copy of the report. Instead of investigating, the University of Hawaii writes "Tangled tales of the 2018 eruption" which refuses to note that PGV is build over an antithetic fault and did not discuss the pumping of cold water for weeks into the erupting volcano while they waited for National Guard to fly in supplies. The massive explosions under PGV pushed that old magma to the surface down the fault and it came out en echelon as Fissure 17, but there was no recognition of that by USGS. PGV keeps all their seismic data proprietary in Reno, Nevada and refuses to let anyone study them, so of course there is no corroboration on any of my proof. This is NOT PONO!

I have a lawsuit at the Intermediate Court over exactly that. What happens after 25 years of 2000 micro earthquakes a day caused by the withdrawal and injection of fluids? Does that weaken the

stability of the already unstable Lower East Rift Zone? How could it not? The lava came out at the weakest spot along that weakened zone. Then Puna Geothermal Venture did not keep emergency equipment onsite to plug their wells, so instead they put cold water into the wells at high pressure for weeks waiting for the taxpayers to fly in quench pumps, clays, salts, metal plugs and PGV's parent company Ormat ex Veep Charlene Wardlow, who oversaw the blowing up of the rift zone. They said water injections didn't work that well and lamented no overnight delivery to Hawaii… None of this was discussed in PGV's Final EIS.

Then I found out that PGV operated for years without an Underground Injection Control permit for their well KS-21. It took 2 years til the Health Department realized PGV was operating the well without a permit. PGV got a wet noodle slap and have been using the well ever since. No accountability to anyone.

Then I found out that PGV has never, ever EVER had a finaled County of Hawaii building permit for any of their geothermal power plants. Not the 1993 plant, not the 2009 expansion, and to this day they have no building permits for new upgrades yet they continue to build and operate with impunity and no oversite. I had a meeting with Mayor Kimo in August 2025 about the lack of permits and wanted a followup. When I wrote the mayor last month for an update, I was told there is "nothing to report".

There are no less than 36 lawsuits in as many years filed against PGV and the State and County for refusing to protect the residents, refusing to make rules, refusing to give contested cases, and multiple gassings the residents having to sue for compensation because the government permits do not protect us. The way Hawaii has managed it's geothermal program so far is CRIMINAL!

You Hawaii Legislators can't possibly want this for the residents on the rest of the Big Island or any other island with a population less than 300,000!

Continuing on, how come a "borehole" can be turned into a monitoring or production well, but a "test bore" or "test boring" includes "boring for foundation, underground storage tanks, and environmental monitoring under perview of other government agencies and hazardous waste remediation that is not intended for the purpose of conversation to a production well. All of these activities disturb the environment and are subject to environmental review.

Who will decide if you are drilling a borehole or a test borehole? Who will decide the best management practices? Certainly not the State and County of Hawaii – so far they have been derelict at their duties and the residents and environment has suffered greatly. DBEDT has no technical expertise and UHGGRC has never been allowed to study PGV so they know nothing firsthand about Hawaii geothermal, just what they are spoon fed by PGV or find on other geothermal websites and repost.

What kind of tester tracing are you using? Radioactive? You will need an Environmental Impact Statement for sure!

Did you know that Hawaii County has a ban on Fracking and Enhanced Geothermal and you will be sued if you try and build one here?

So it says before drilling a borehole the public research institution shall submit a proposal and register the proposed project with the department of Business and Economic Development and

Tourism, including a declaration that the drilling is for a non-commercial purpose. So if the drilling is for a non-commercial purpose, then how come the definitions for borehole includes "converted into a monitoring or production well? You have a definition for "injection well" that fails to mention the word geothermal, and you have no definition for production well.

Again, NO EXEMPTIONS from Environmental Review.

Why is there not one mention of SEISMIC MONITORING? We live on an island with 4 active volcanoes and you guys and girls don't think that's important???

Finally, if the State and County of Hawaii is not able to properly ensure that the one geothermal plant we have is properly monitored, than how is DBET qualified? They have no technical knowledge of anything, they are just pushing the geothermal agenda without proof it is even safe or economically viable, as the one plant we have had has failed to meet its capacity quota even one time in 33 years, plus it is knocked offline at any little thing like broken electric lines, power plant disruptions, lightening strikes takes PGV off for days. Hurricane Iselle took PGV offline for weeks to a month in 2014 and PGV was offline again for 2 ½ years after the 2018 eruption. Entire power plants will need to be kept at the ready for each geothermal plant Hawaii wants to build, how is that economical?

Just Say Know – Geothermal Is Not Good For Hawaii Nei – OPPOSE HB 1983!!

/s/Sara Steiner

February 10, 2026

Aloha Chair Lowen, Vice Chair Perruso and members of the committee:

Strong support for HB1983:

This bill enables scientific data collection that will improve our ability to manage island resources for resilience and security. Critical decisions about water, geothermal, and hazard mitigation must rely on sufficient subsurface data. Those subsurface datasets are incomplete. This bill enables systematic data collection that will improve our ability to manage aquifers sustainably, assess geothermal resources, and protect our drinking water, thereby being better prepare for water and energy resilience.

Why HB1983 is important:

This bill addresses jurisdiction, rule making and data repository in the following ways:

- Distinguishes subsurface characterization (research) from commercial drilling development. This removes the ambiguity of scientific data collection from commercial development that has hampered research projects historically.
- Creates a central public knowledge repository with UH's Hawaii Groundwater and Geothermal Resources Center (HGGRC) as the data repository. This ensures that research data remain accessible for resource management decisions.
- Streamlines the environmental review for scientific research activities, while maintaining environmental protections.

HB1983 is necessary for Hawaii's energy independence and water security. It removes barriers to scientific research and protects environmental and cultural resources. It ensures public access to critical subsurface data. Critically, it enables evidence-based decisions about our energy and water future.

I urge the Committee to pass **HB1983**.

Thank you for your consideration.
Keith Neal
Waimea

HB-1983
Submitted on: 2/8/2026 6:33:07 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Cindy Conda	Individual	Oppose	Written Testimony Only

Comments:

Aloha I oppose any and all Geothermal projects.
especially with no EIS. PGV has a record of no account ability to anyone. They have hardly come close to there energy projections. They cannot be allowed open access to all of Hawaii or drilling into this Aina without any limits or accountability. Here in Puna we are constantly poisoned by gas and live in fear of another horrible episode that happened on 2018 that I believe happened because of PGV fracking/reinjections No warning system to report to community and (we) are now suppose to call 911 for emergencies. Who can we report to instead of PGV. Unacceptable. Please oppose this bill. Cindy Conda

HB-1983
Submitted on: 2/8/2026 7:26:34 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruth Robison	Individual	Support	Written Testimony Only

Comments:

To: Chair Lowen, Vice Chair Perruso and members of the EEP committee

From: Ruth Robison

My testimony is in strong support of HB1983

I have lived in Hilo since 1982. The only geothermal power plant in the state, as you know, is on our island. Some people who have lived near the plant have complained about the odor and perceived health effects of emissions from the plant. This is basically a problem due to building it too close to a residential area. One of the things that HB1983 will do is to find locations that can be productive, give financial benefit to Native Hawaiians, and be far enough away from residences to avoid problems of the past. Hawai`i should remedy the fact that it is the only state without a geological survey.

We have seen how Aotearoa/New Zealand has been able to take advantage of its geothermal resource to become more energy independent and Hawai`i should be doing that, too. HB1983 preserves cultural and environmental protections (section 3 (d). It explicitly requires the protection of cultural sites and burials, as well as Native Hawaiian traditional practices.

HB1983 is essential for Hawaii's energy independence and water security. It removes barriers to scientific research and protects environmental and cultural resources. It ensures public access to critical subsurface data. It enables evidence-based decisions about our energy and water.

I urge the Committee to PASS HB1983.

Thank you for your service to the people of Hawai`i.

HB-1983
Submitted on: 2/8/2026 10:13:03 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

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

Comments:

Since the 1970s, the University of Hawaii (UH) has led Hawaii's geothermal research. With Hawaii's leading earth scientists, the UH is Hawaii's de facto state geological survey (Hawaii is the only U.S. state without an official geological survey). UH conducted Hawaii's two only statewide geothermal resource assessments and determined that all of the major Hawaiian Islands likely hold geothermal resources.

Since 2014, the Hawaii Groundwater and Geothermal Resources Center (HGGRC) continues UH's leadership in Hawaii's geothermal research. Under the leadership of Dr. Nicole Lautze, the State of Hawaii'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).

As the repository for Hawaii's geothermal information, HGGRC digitized over 4,000 historical documents, converted historical datasets into digital form, and disseminated them through UH online repositories. Since 2015, HGGRC's website (www.higp.hawaii.edu/hggrc) has served as a central information portal for historic and new information on Hawaii's geothermal. Documents have been downloaded over 500,000 times from the institutional repositories; the website has attracted over 495,000 hits.

As much of Hawaii's geothermal resources remain unexplored, the State will need HGGRC and UH's research. While UH has led geothermal exploration in Hawaii since the 1970s and has brought in millions of dollars of grant money for research, UH's geothermal research has relied on insecure funding--grant funding from the federal and state governments and non-profit organizations. For years, job security has been almost non-existent for many of the staff, who are usually funded by grants and hired through the Research Corporation of the University of Hawaii. These staff members are the same ones who serve as experts of Hawaii's geothermal resources after dedicating their career to geothermal and groundwater.

Please support Hawaii's geothermal research by supporting its leader, HGGRC. The state should support knowledgeable earth scientists who understand Hawaii's unique geology to reveal more about Hawaii's geothermal resources.

Date: February 8, 2026
Re: **STRONG SUPPORT for HB1983** RELATING TO NATURAL RESOURCES
Hearing Date: February 10, 2026 @ 9:05 AM

Aloha Chair Lowen, Vice-Chair Perruso, and members of the EEP Committee:

I'm writing in **strong support of HB1983.**

Moving away from fossil fuels will require using local energy sources that are available 24/7 (i.e., firm resources). Geothermal is one such resource. The State of Hawai`i has a duty to manage its natural resources such as geothermal for which it is the sole custodial trustee. However, the State has very little real data with which to make prudent decisions in this important area.

The University of Hawaii has a department (The Hawaii Groundwater and Geothermal Resources Center, HGGRC), responsible to the State, which has the skills needed to explore and catalog data for the public record facilitating this important responsibility to the Public Trust.

The HGGRC is the State's team of geological experts. They are as close to being the Geological Survey of Hawaii as we can get under current law. They are not a commercial enterprise and do not represent "for profit" organizations. However, the various regulations and permitting protocols, Federal, State and County, require them, even though they are doing work for the State and on behalf of the Public Trust, to follow cumbersome and costly procedures, designed to regulate commercial ventures.

The intent of HB1983 is to streamline the approval process in accomplishing their vital Public Trust mission.

I strongly support HB 1983 because Hawai`i needs to know, in detail, what resources we have as we face the many and growing challenges facing us today and into the future.

Mahalo nui loa,

Paul Bernstein
Honolulu

HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE
REGULAR SESSION OF 2026

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair
Rep. Amy A. Perruso, Vice Chair

Committee Members:

Rep. Cory M. Chun; Rep. Sean Quinlan; Rep. Kirstin Kahaloa;
Rep. Lauren Matsumoto; Rep. Matthias Kusch

Tuesday, February 10, 2026
TIME: 9:05 a.m.

TESTIMONY IN SUPPORT OF HB1983

Aloha Representatives Lowen, Perruso and members of the committee.

My name is Peter Sternlicht. I'm a board member with Sustainable Energy Hawaii, a Hawaii 501c3 non-profit organization. I am also an active, concerned resident of our State. I am your neighbor. I want to thank you for the opportunity to testify here today. Before I offer my personal comments, I'd like to say that Sustainable Energy Hawaii stands by its written testimony. Thank you …

I think we're all experiencing a rapidly changing world. Every day we're faced with what truly are the existential challenges of climate change, global resource depletion, and geopolitical uncertainty. … All this is happening as we also try to shift away from a fossil fuel economy to one that is increasingly powered by electricity. It seems the impacts of these challenges are moving much, much faster than we're able to keep up with them.

For us, living here in Hawaii, a small, isolated, island state, one that is dependent on imports for about 90% of what we consume, it seems logical to think that the greater our self-sufficiency, the more secure we'll be … and feel, in our own lives. To achieve that outcome, we'll want to provide as much of what we need to sustain ourselves … ourselves. Therefore, leveraging our indigenous resources in a manner that's responsible & sustainable over multiple generations is not only a logical means, but also critical to the outcome we seek.

Hawaii is considered the only state in the Union without a formal geological survey. That leaves us essentially blind when it comes to delivering the well-informed management of our subsurface natural resources. The subsurface or underground is where we'd look to find new

water supplies for our municipal and agricultural needs as well as geothermal heat, a potential source for indigenous power generation requiring virtually zero imported fuel.

As well intended as they were when written, existing regulatory protocols hinder our scientific institutions from acquiring the information needed to support that well-informed resource management today.

If HB1983 were to be signed into law, it would advance our state's ability to qualify and quantify its current natural resources inventory. That, in turn, would support improved regulatory decision making. It would also accelerate our progress toward economic, food and energy self-sufficiency. All of those seem to be in the best interest of the Public Trust.

We owe it to ourselves to know what our resources are, where they are & to understand how they might interact with each other. HB1983 proposes a more time efficient and cost-effective pathway to achieve that end.

Therefore, I respectfully ask that you support HB1983. ... and again, I thank you for the opportunity to offer my testimony.

Peter Sternlicht
Hawaii Island, HI

GEOTHERMAL ELECTRICITY IS AN ECONOMIC FAILURE

Without Government Assistance It Would Not Exist

The development of commercial level geothermal electricity generation in the United States began in 1960 at the Geysers geothermal field in California, just north of San Francisco. For 22 years this field was the only operating geothermal field in the United States. Its phenomenal success spawned geothermal developments in many other areas of the United States beginning in 1982. None of the subsequent developments have reached anywhere near the level achieved at the Geysers. Yet the belief in that possibility led to the opening of dozens of geothermal plants in the United States over the next 40 years. Most of this development was spurred by two legislative packages which were passed by the US Congress in 1978 and 2009, although there were numerous others.

The following essay attempts to give details about economic aspects of geothermal energy development in the United States, and the government's role in promoting it. The discussion below is based upon data from the Federal government and state agencies. The primary resource has been the US Environmental Information Agency (EIA)[i]. This site provides detailed plant-level data for all US geothermal plants from the beginning of 2001 onward. The EIA site also provides access to various reports dating all the way back to geothermal energy's beginning in 1960. This data is not as comprehensive, especially at the plant level. There is fairly comprehensive data for the period from 1989-1998[ii], but I have only been able to find data for other years through the state of Nevada [iii] and the California Energy Commission [iv].

Figure 1 below shows details of these developments. There was a meteoric rise in geothermal capacity and production during the period from 1980-1990. Since 1993 total production has actually decreased, in spite of a doubling of the geothermal capacity. Until 1990 the Geysers was still the almost exclusive producer of geothermal electricity in the United States, therefore the national production was closely tied to the Geysers production. Since 1990, opening of new geothermal plants in the United States has been largely confined to Nevada. Production at the Geysers in 2023 was less than half of its production in 1990. The addition of 26 new plants in Nevada and seven others in five other states have been insufficient to overcome that decline. That is a very clear example of failure. As of the end of 2023, the Geysers had still produced 57% of the entire United States geothermal industry output.

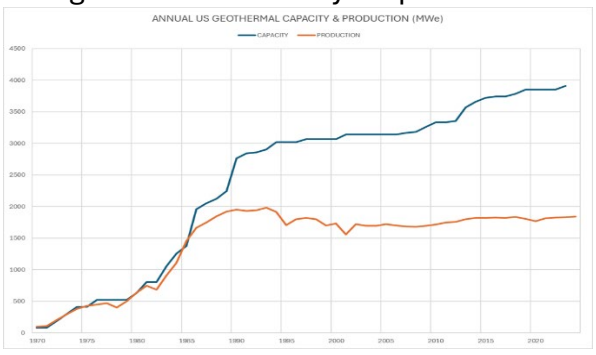

Figure 1. Total US Geothermal Capacity/Production

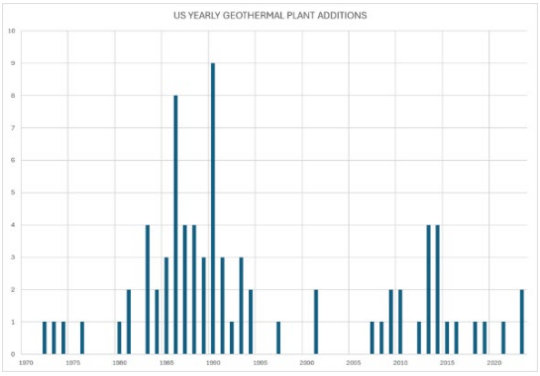

Figure 2. Total US Geothermal Plant Additions

Figure 2 above details the two main episodes of geothermal plant building in the United States since the first plant opened in 1960. These two periods are the entire 1980s as well as an interval between 2008 and 2015. Development between 1993 and 2008 was limited to 7 plants; from 2015 to 2023 it was also 7. My contention is that those two episodes of rapid geothermal growth were a direct product of legislation passed by the US Congress in 1978 and 2009. The Acts to which I am referring to are the "Public Utilities Regulatory Policies Act" (PURPA) in 1978[v], and the "American Recovery and Reinvestment Act" (ARRA) of 2009.[vi]

After the passage of PURPA in 1978, new startups quickly rose and by 1990, 40 new plants had been built, quintupling US capacity from 522 MW per year in 1980 to 2764MW in 1990. The only peak after that begins in 2009 with the passage of ARRA, which took capacity from 3182 MW in 2008 to 3660 MW in 2014, when the initial program ended. 13 new geothermal plants opened during this interval. Thus, it seems fair to conclude that the legislation had a major influence on the number of plant startups. The great majority of plant startups resulting from PURPA were in California, while a majority of those from ARRA were in Nevada.

So far I have spoken only in generalizations, but a few specific cases will make the basis of my thoughts more apparent. Most of the plants that were built during the 1980s were in the Geysers geothermal field just north of San Francisco in California. A large geothermal development also occurred on the shores of the Salton Sea in Southern California. Together these two areas account for most of the plants opened as a result of PURPA. They have long been and remain the two largest areas of geothermal production in the United States.

The Geysers area is by far the largest geothermal field in the world. During the 1980s a wildcat environment prevailed with dozens of entities opening 20 geothermal plants in an area of 50 square miles. PURPA companion legislation mandated that utilities purchase energy from "renewable" sources. At that time, geothermal was the only "renewable" possibility, with the exception of hydropower, so this almost mandated purchase from geothermal plants.

The Act directed individual states to develop policies for pricing electricity as well as long-term contracts. California became the leader in this endeavor since it was the only state with geothermal plants at that time. They developed what became known as "standard offer" contracts which dictated prices as well as increasing rate charges over the time of contracts, which were typically for 30-year purchase power agreements.

The first PURPA contracts were signed in the early 1980's, when natural gas prices were very high. This made these early contracts very lucrative. During the mid-1980's natural gas prices (the main fuel used to generate electricity in California) decreased considerably, yet the utilities were still forced to pay the high rates for geothermal power, so they raised their rates and customers began to complain. This necessitated a change in the terms of the standard offer contracts so that they were based on natural gas prices.

Subsequently, the economic attractiveness of geothermal plants decreased, and no major geothermal plants were developed at the Geysers after 1985. So many plants had been built at the Geysers that by 1987 wellhead pressure values and production began to decrease. But the wave of new plants dwindled, so that only 3 small plants were opened after 1985. By 1993 production at the Geysers was only half of what the production was at its peak in 1987. This represents a classic case of over-development, "too many straws sucking from the same glass".

By 1980, significant pressure decreases and water deficits had begun to appear at the Geysers. In response, and with some foresight, the Northern California Power Authority (NCPA) initiated the building of a new geothermal plant near the southern edge of the Geysers field. Planned in conjunction with the plant, a pipeline pumping sewage effluent from Santa Rosa to the plant was built to forestall the reservoir declines which had been observed at some existing plants at the Geysers. This pipeline was built with a capacity of 10 million gallons a day.

The overall production at the Geysers plummeted beginning in 1989. Due to the success of the NCPA pipeline project, two much larger pipelines were built which came into operation in late 1997. These pipelines were built by Lake County and Santa Rosa, each with a capacity of 19 million gallons a day. The current capacity of these pipelines is 40 million gallons a day, with an average usage volume of 30 million gallons a day.

Additional pipelines have been built to distribute the effluent among the other Geysers plants. This import of water definitely lessened the steady decline in overall production of the Geysers field, but by 1995 it was 60% of its 1987 peak; today its production is only 45% of its level in the 1980s. While some of this decrease can be attributed to overdevelopment, it is typical of most geothermal plants in the United States.

As a whole, plants in the United States have averaged a 3% yearly decrease in production unless new processing facilities are built or new wells are drilled. There has not been a new plant opened at the Geysers since 1989.

Economically, this decrease is not sustainable. Geothermal plants require massive amounts of up-front capital to drill the wells and create the generating facility. Roads and transmission lines to connect to the grid are another major possible expense. Return on investment is increasingly difficult to maintain, especially in competition with solar, for which costs are still decreasing rapidly.

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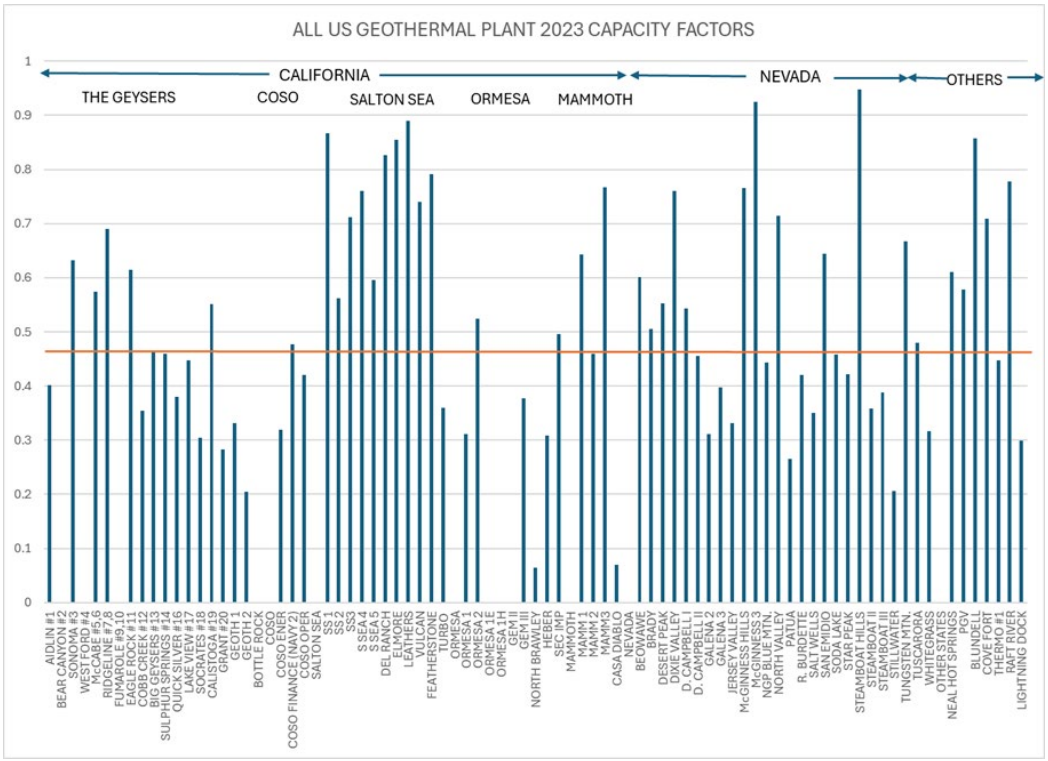

Figure 3. All US geothermal plant capacity factors for 2023

Figure 3 above shows capacity factors for all US geothermal plants in 2023, grouped by areas and states. Capacity factor is determined by dividing the total electrical output by the number of hours in a year. If a plant were operating at full capacity for an entire year, the capacity factor would be 100%. The horizonal red line shows the average capacity factor for all US power plants, which is 47%.

The National Renewable Energy Lab (NREL) attempts to include all possible costs in order to evaluate what they term the Levelized Cost of Energy (LCOE)[vii]. In their standard tables there is an estimation of capacity factors which they arbitrarily place at 90% for steam/flash plants and 80% for binary plants. Currently about half of the US geothermal fleet is steam/flash, which would place their average estimated capacity at 85% according to the NREL. Figure 3 shows the actual capacity factor which should be used is 47%. Thus, if a true capacity factor were to be used in the NREL calculations, an 80% reduction would be necessary in the estimated geothermal revenue of the plant (85/47=1.81). This makes geothermal far more costly than any other renewable energy.

Another factor overlooked by the NREL is declining geothermal production. Figure 4 below illustrates typical behavior of individual geothermal plants over time. Unless new processing facilities are added or new wellfields developed, this behavior seems universal. The Coso operating area in eastern California provides a classic example of this. The field is exploited by 3 plants, 2 of the plants operate in a US Naval Weapons Testing Area. Military authorities are reluctant to allow frequent outside visitors. Therefore, there has been almost no new development in the field since it became fully operational in 1990.

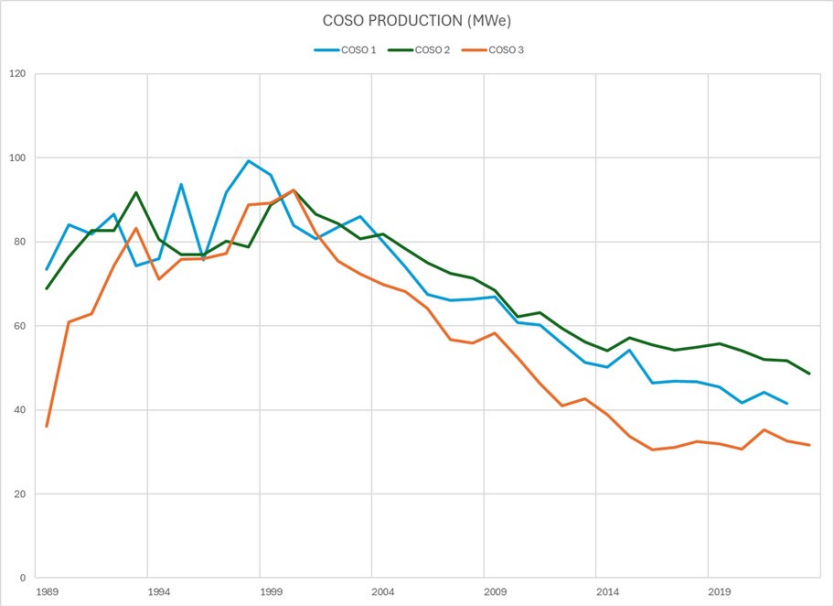

Figure 4 – Coso production 1989-2023

Production at all 3 areas in Coso peaked in the late 1990's and has since declined to less than half of that amount in a period of 25 years. Yet the NREL also assumes minimal operating costs throughout a plant's lifetime. Without new processing equipment or new wells, production will decline so that the average capacity factors discussed above will worsen over time for each individual plant.

Doubling the NREL estimates for geothermal LCOE would be very conservative if this decline and other factors are considered. The NREL has a category for variable expenses incurred at a geothermal plant but zero is the assigned estimate. This assumes that a plant can operate for 30 years without drilling new wells or replacing generating equipment. It looks like NREL estimates it will cost $8 million dollars a year in fixed operating expenses for a 40MW plant, which if operating a full capacity and prevailing rates would generate about $35 million a year gross income.

The NREL assumes that geothermal power would cost between $.062 -.106 per KWH. Doubling these estimates is justified by Figures 3 and 4, which would place geothermal energy's LCOE at $.124 -.212. This places it far above any renewable energy in cost. The LCOE of Solar plus Storage is $.075-.123. An additional factor to consider is that almost all new geothermal plants will be binary, which is at the high end of the geothermal cost estimates, and surely over $.20 per KWH.

The Geysers is not only the greatest geothermal production area in the United States, it is also the largest geothermal producing area in the world and has been for over 50 years now. It represents a resource that has no equal anywhere else on earth. Production from lesser areas is even more subject to economic uncertainties. Many plants never reach their projected capacity, and some are abandoned after only a few years of operation. The second most productive geothermal area in the United States is located on

the southeastern shore of the Salton Sea in the southern California desert. In this small area of 50 square miles, there are 11 operating geothermal plants. Seven of them were developed in the years while PURPA was still in force, between 1982 and 1990.

The Salton Sea area was a glamourous resort from the 1950-70s. Salton Sea has since become an unmitigated environmental disaster, yet the presence of eleven geothermal plants near the sea's southeastern shore is rarely, if ever, mentioned as a possible cause of this degradation. The salinity of the lake has increased dramatically since the 1980s. As a result, there have been massive fish die-offs as well as massive die-offs of the migratory birds which feed on these fish in the lake. There are reports of respiratory difficulties and documented high concentrations of hydrogen sulfide in the lake and surrounding areas.

The level of the Salton Sea has declined since the 1980s, leaving contaminated salt flats. The geothermal plants also use thousands of acre-feet of pumped Colorado river water (billions of gallons) per year to help maintain their operations. Meanwhile, the plants produce about 300MW per year. This amount could be generated by using the space set aside for the geothermal plants to produce solar energy without using any water, but that does not seem to have occurred to government planners.

Geothermal energy has caused numerous environmental problems which have been experienced throughout the world. The three primary environmental difficulties, which seem to be almost universal are: increased seismicity, toxic gas emissions and land subsidence. Indigenous religious and cultural beliefs and practices have also been ignored and damaged. Economic values cannot be placed on these problems, even though they are more significant.

Even upon strict economic grounds, geothermal energy should not exist. It was created and survives through subsidies and other incentives institutionalized by PURPA and ARRA as well as numerous other bills over the last 45 years.
Similar economic incentives were also included in the Big Beautiful Bill of 2025[viii] which cancels all residential renewable electricity tax credits but continues tax credits for commercial level geothermal projects.

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[i] EIA data is available through the Electricity Data Browser located at: https://www.eia.gov/electricity/data/browser/

[ii] EIA form EIA-867,"nonutility power producer report 1989-1998 available at: EIA.gov//electricity/data/EIA923. (The actual data table can be downloaded from the historical data section near the bottom of the page under:"1989-1998:EIA-867.)

[iii] State of Nevada Bureau of Mines available at : https://pubs.nbmg.unr.edu/Data-tables-and-graphs-p/of2012-03.htmli

[iv] California Energy Commission available at:

https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources

[v] PURPA - Public Law No. 95-617 (92 Stat. 3117).

[vi] ARRA – Public Law No 111-5 2009.

[vii] NREL – LCOE available at : https://atb.nrel.gov/electricity/2024/geothermal

[viii] Big Beautiful Bill – Public Law 119-21 2025 largely preserves investment and production tax credits for geothermal plants: National Groundwater Association: ngwa.org

HB-1983
Submitted on: 2/9/2026 8:57:48 AM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
John Hamilton	Individual	Support	Written Testimony Only

Comments:

I fully support this bill as it is essential for future decision making. One must know data before making rules and laws

I strongly support HB 1983 because Hawai`i needs to know, in detail, what resources we can access.

Also having data transparency through a public repository is pono.

Please enact this bill

John Hamilton

HOUSE OF REPRESENTATIVES

THE THIRTY-THIRD LEGISLATURE

REGULAR SESSION OF 2026

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair

Rep. Amy A. Perruso, Vice Chair

Rep. Cory M. Chun

Rep. Kirstin Kahaloa

Rep. Matthias Kusch

Rep. Sean Quinlan

Rep. Lauren Matsumoto

One of the most significant, and costly, impediments to both geothermal and groundwater exploration is the difficulty in meeting the environmental review requirements for a groundwater, geothermal, or any exploration borehole. These bores provide information that is essential to the State in its goals of sustainably managing its natural resources.

I support this measure to facilitate this kind of exploration

HB-1983
Submitted on: 2/9/2026 12:54:35 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Tara Rojas	Individual	Oppose	Remotely Via Zoom

Comments:

Aloha Chair and Members of the Committee,

I STRONGLY OPPOSE HB1983. WE ALL NEED TO OPPOSE HB1983!

HB1983 weakens Hawai‘i’s environmental protections by exempting subsurface drilling and boreholes - redefined as “non-commercial research” - from meaningful environmental review under Chapter 343. In practice, these activities are the well-documented precursors to geothermal development, not neutral or low-impact actions.

READ AND RE-READ SUBMITTALS BY THOSE WHO HAVE LIVED WITH GEOTHERMAL NEGATIVE HEALTH EFFECTS FOR OVER 40 YEARS: Sara Steiner-Jackson, Jasmine Steiner, Terri Napeahi.

WATCH THE DOH CLEAN AIR BRANCH PUBLIC HEARING ON DEC. 8, 2025 RE: PGV PERMIT EXTENSION AND YOU WILL HEAR THREE HOURS OF TESTIMONY FROM THE PUNA-PĀHOA COMMUNITY SUFFERING WITH HEALTH EFFECTS FROM PGV AND ZERO HELP...FOR OVER 40 YEARS.

Communities in Puna have already borne decades of harm associated with geothermal operations, including toxic emissions, inadequate monitoring, missing permits, and lack of accountability. As raised by long-time community members and practitioners, drilling, groundwater injection, and subsurface “characterization” in an active volcanic system carry real seismic, environmental, and cultural risks that demand full transparency and public oversight.

HB1983 allows drilling to proceed without environmental review, public participation, or clear limits on future use of the data, effectively advancing geothermal expansion under a different name. This undermines public trust responsibilities and disproportionately impacts Kanaka Maoli and frontline communities.

Pele and Hawai‘i Nei are not laboratories.

Environmental review must come before, not after, irreversible harm.

For these reasons, I urge you to reject HB1983.

YOU WILL ALSO LIVE WITH THESE NEGATIVE HEALTH EFFECTS TO PEOPLE AND ENVIRONMENT - AS WILL ALL THOSE YOU LOVE. ONCE BUILT, IT WILL NEVER GET TAKEN DOWN. WE NEED TO BREATHE CLEAN AIR. OPPOSE GEOTHERMAL NOW.

HB-1983
Submitted on: 2/9/2026 6:11:42 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

LATE

Submitted By	Organization	Testifier Position	Testify
Deborah Umiamaka	Individual	Oppose	Written Testimony Only

Comments:

Re: Opposition to H.B. 1983 – Exemptions from HRS Chapter 343 for Geothermal Exploration on DHHL Lands

Dear Chairperson Wakai and Committee Members:

I am a Hawai‘i Island resident opposing H.B. 1983. This bill exempts preliminary geothermal activities (surveys, slim-hole drilling) from Chapter 343, HRS environmental review on Department of Hawaiian Home Lands (DHHL). These exemptions violate public trust duties and harm residents' interests under state law.

Legal Violations of Public Trust Doctrine

H.B. 1983 breaches state co-trustee duties under Article XII, Sections 1 & 5, Hawai‘i Constitution, and Pele Defense Fund v. Paty, 73 Haw. 578 (1992). It skips required environmental assessments (EA/EIS) for activities risking aquifer contamination in our sole-source systems, contravening HRS Section 343-5(a).

Risks to Unique Island Ecosystems and Health

Our porous volcanic geology amplifies drilling risks to groundwater, reefs, and fisheries. Exemptions ignore cumulative impacts, exposing residents to toxins like hydrogen sulfide, with cleanup costs falling on taxpayers per state superfund laws.

Undermines Native Hawaiian Rights and Cultural Sites

Bill skips cultural impact assessments under HAR Section 11-200, threatening wahi pana and traditional practices on ceded lands (Article XII, Section 7). DHHL lessees face disproportionate harm without consultation.

Sets Dangerous Precedent for Bypass

Exemptions create loopholes for industry, eroding state sovereignty and enabling future waivers of HRS Chapter 342 enforcement. Past community wins in Puna/Holualoa show prevention works.

Environmental Justice Concerns

Low-income and Native Hawaiian communities bear added burdens, violating Article XI, Section 9 sustainable yield and EO 21-01. No adaptive capacity for emerging risks like PFAS.

H.B. 1983 is not in Hawai‘i residents' best interests. I urge the Committee to INDETERMINATE it.

Sincerely,

Deborah Umiamaka

Hawai‘i Island Resident

LATE

February 9, 2026

Aloha Chair and Committee Members:

My name is Cheyenne Paris ‘Makanui‘ Kitahara I respectfully submit this testimony in **STRONG OPPOSITION to HB1983,** a bill that would authorize geological subsurface characterization activities under the guise of research, while undermining the cultural, environmental, and public health concerns deeply felt by many Native Hawaiians and community members. As a Hawaiian, a mother, a cultural practitioner, an eleventh generation grand-daughter of Kekahawai‘olenākona, kia‘i wai and kia‘i loko I strongly **OPPOSE HB1983**.

HB1983 states that “The legislature further finds that the **public trust doctrine dictates that the State must protect and manage public natural resources, including water, land, and forests, for present and future generations** while also providing for their "highest economic social benefits", necessitating the need to balance various, competing interests.”

Opposing HB1983 upholds the public trust doctrine and protects public natural resources, including water, land, and forests, for present and future generations. The state's **"highest economic social benefits"** is to keep Hawaii, Hawaii for Hawaiians - our leaders' interests should be its people. **I strongly oppose HB1983.**

“Existing statutory and regulatory frameworks governing wells and mining were designed to manage the long-term production and viability of the State's water and mineral resources. However, these frameworks were implemented without consideration of the need to **treat investigations conducted for the purpose of collecting scientific data** that defines observable subsurface conditions differently from commercial developments. Consequently, these **statutory and regulatory frameworks hinder scientific investigation that produces findings often needed by regulatory agencies to identify and guide their management of those resources.”**

Opposing HB1983 prevents the scientific data from being used as a weapon of mass resource destruction and impairment; these “**statutory and regulatory frameworks”** do not hinder science, it protects our honua from greed and exploitation. **I strongly oppose HB1983.**

You have the kuleana to protect these resources, not exploit them.
I strongly oppose HB1983.

<u>HB1983 should be opposed for the following reasons:</u>

1. Cultural and Spiritual Harm
For many Kānaka Maoli, the ʻāina is not a resource to be drilled and dissected but is sacred and genealogically connected to Pele, Lono, and other akua. Any bill that facilitates deeper subsurface work — regardless of how it is labeled — risks desecrating wahi kapu, wahi pana, and ancestral landscapes. Geothermal development and characterization historically have been opposed by those who remain committed to honoring our genealogical ties to Pele and Akua of Hawaiʻi.

2. Precedent of Geothermal's Negative Impacts
Current geothermal operations in Hawaiʻi — such as Puna Geothermal Venture — have drawn strong resistance from nearby communities who report persistent health issues attributed to emissions, including hydrogen sulfide and other toxins, and the environmental stress associated with drilling. These experiences are not "theoretical concerns" but lived realities for many families who have testified publicly about respiratory illnesses and chronic conditions following geothermal activity.
Even exploratory work, like boreholes and test drilling to collect data, can disturb ground stability, contamination of irreplaceable aquifer systems and release volatile compounds. The bill's attempt to distinguish subsurface characterization from water well or geothermal exploration is merely semantic — the harms can overlap.

3. Insufficient Genuine Community Consent and Oversight
Across multiple hearings and community meetings, residents have repeatedly expressed that meaningful, free, prior, and informed consent has been absent from plans to test and develop geothermal resources. Too often, legislative or agency-promoted "outreach" occurs after decisions have largely been made, or under the influence of high-priced consultants who may not genuinely represent grassroots community interests.

HB1983 does little to guarantee that community voices — especially those of Native Hawaiian beneficiaries, the rightful stewards who are lineal descendants and cultural practitioners of our Home — are honored in land and resource decisions especially involving mineral rights held in Trust also known as Kupuna and Na Akua

4. Environmental and Health Risks
Subsurface geological work does not happen in a vacuum. It carries risks of contaminating groundwater, exposing heavy metals and hazardous elements, and damaging fragile ecosystems. Studies and governmental documents have acknowledged potential for mercury, arsenic, boron, and radioisotopes to be brought to the surface — risks that disproportionately affect communities already grappling with environmental burdens.

5. Distrust of Industrialized Solutions Over Community-Led Alternatives
While the state moves toward 100% renewable energy, many in our communities ask why we are seeking solutions that may harm our people and desecrate sacred land instead of investing in decentralized, community-oriented alternatives such as rooftop solar, distributed storage, and other low-impact renewable strategies. These alternatives empower residents and reduce dependence on large extractive infrastructure.

6. Broader Context of Historical Exploitation
This bill, like others before it, sits in the long history of Native Hawaiian lands and resources being managed without adequate redress for historical injustices. The push for geothermal — especially on lands held in trust — evokes patterns where decisions are made for Hawaiian beneficiaries, not with them. This undermines self-determination and perpetuates environmental racism.

In closing:
Supporting HB1983 risks advancing a framework that normalizes deep subsurface drilling, limits community agency, ignores cultural worldviews and spiritual relationships with the land, and exposes vulnerable populations to real harms. As advocates for Aloha ʻĀina, we urge you to oppose this bill and instead support energy policies that protect our sacred lands, honor Indigenous rights, and prioritize low-impact, community-driven clean energy solutions.

Mahalo,

Makanui Kitahara
Kekahawaiolenakona

HB-1983
Submitted on: 2/9/2026 11:48:38 PM
Testimony for EEP on 2/10/2026 9:05:00 AM

LATE

Submitted By	Organization	Testifier Position	Testify
Sha'le Madrona	Individual	Oppose	Written Testimony Only

Comments:

Aloha Chair and Committee Members:

My name is Sha'le Madrona. I am kanaka maoli born and raised on the Big Island. I am with Uprise Media and also in collaboration with Truth For the People grassroots initiative standing in protection of Aloha Aina to protect our "Natural resources" otherwise known to Kanaka as our Na Akua, elemental beings from invasive developments such as geothermal in the name of "renewable energy" I respectfully submit this testimony in OPPOSITION to HB1983, Below you will find powerful reasons, true factual findings and our sacred cultural beliefs to my opposition.

HB1983 should be opposed for the following reasons:

—

1. Cultural and Spiritual Harm

For many Kānaka Maoli, the ʻāina is not a resource to be drilled and dissected but is sacred and genealogically connected to Pele, Lono, and other akua. Any bill that facilitates deeper subsurface work — regardless of how it is labeled — risks desecrating wahi kapu, wahi pana, and ancestral landscapes. Geothermal development and characterization historically have been opposed by those who remain committed to honoring our genealogical ties to Pele and Akua of Hawaiʻi.

—

2. Precedent of Geothermal's Negative Impacts

Current geothermal operations in Hawaiʻi — such as Puna Geothermal Venture — have drawn strong resistance from nearby communities who report persistent health issues attributed to emissions, including hydrogen sulfide and other toxins, and the environmental stress associated with drilling. These experiences are not "theoretical concerns" but lived realities for many families who have testified publicly about respiratory illnesses and chronic conditions following geothermal activity.

Even exploratory work, like boreholes and test drilling to collect data, can disturb ground stability, contamination of irreplaceable aquifer systems and release volatile compounds. The bill's attempt to distinguish subsurface characterization from water well or geothermal exploration is merely semantic — the harms can overlap.

—

3. Insufficient Genuine Community Consent and Oversight

Across multiple hearings and community meetings, residents have repeatedly expressed that meaningful, free, prior, and informed consent has been absent from plans to test and develop geothermal resources. Too often, legislative or agency-promoted "outreach" occurs after decisions have largely been made, or under the influence of high-priced consultants who may not genuinely represent grassroots community interests.

HB1983 does little to guarantee that community voices — especially those of Native Hawaiian beneficiaries, the rightful stewards who are lineal descendants and cultural practitioners of our Home — are honored in land and resource decisions especially involving mineral rights held in Trust also known as Kupuna and Na Akua

—

4. Environmental and Health Risks

Subsurface geological work does not happen in a vacuum. It carries risks of contaminating groundwater, exposing heavy metals and hazardous elements, and damaging fragile ecosystems. Studies and governmental documents have acknowledged potential for mercury, arsenic, boron, and radioisotopes to be brought to the surface — risks that disproportionately affect communities already grappling with environmental burdens.

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5. Distrust of Industrialized Solutions Over Community-Led Alternatives

While the state moves toward 100% renewable energy, many in our communities ask why we are seeking solutions that may harm our people and desecrate sacred land instead of investing in decentralized, community-oriented alternatives such as rooftop solar, distributed storage, and other low-impact renewable strategies. These alternatives empower residents and reduce dependence on large extractive infrastructure.

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6. Broader Context of Historical Exploitation

This bill, like others before it, sits in the long history of Native Hawaiian lands and resources being managed without adequate redress for historical injustices. The push for geothermal —

especially on lands held in trust — evokes patterns where decisions are made for Hawaiian beneficiaries, not with them. This undermines self-determination and perpetuates environmental racism.

—

In closing, I OPPOSE HB1983. As a strong advocate for our Moku, I urge you to oppose this bill and not just stand WITH us, stand FOR us. KU'E

Mahalo for you time for your consideration.

Aloha Nui,

Sha'le Madrona

Uprise Media, Truth for the People

HB-1983
Submitted on: 2/10/2026 2:13:04 AM
Testimony for EEP on 2/10/2026 9:05:00 AM

LATE

Submitted By	Organization	Testifier Position	Testify
Mar Ortaleza	Individual	Oppose	Written Testimony Only

Comments:

RELATING TO NATURAL RESOURCES
House Bill (HB) 1983 proposes to exempt certain geological subsurface characterization activity from existing regulatory oversight, environmental review, and permitting requirements as set forth in Hawaii Revised Statutes (HRS) Chapters 174C, 182, and 343. It also proposes to amend the HRS by amending Chapter 182 and by adding a new chapter titled "Geological Subsurface Characterization," to be overseen by the Department of Business, Economic Development, and Tourism (DBEDT). The Department of Land and Natural Resources (Department) recognizes the intent of this measure and offers the following comments.
While the Department understands the need for scientific research into the State's natural resources, the permitting and environmental review processes set forth in HRS Chapters 174C, 182, and 343 enact important safeguards on proposed drilling plans to mitigate health and safety risks and ensure careful regard is taken to protect the State's natural resources.
Regarding Section 1, Purpose No. 2 (page 4, lines 9-13):
(2) Clarify that boreholes or test holes drilled for the purposes of geological subsurface characterization are distinct from water well exploration and geothermal or mineral exploration and are therefore exempt from the requirements of chapter 174C, Hawaii Revised Statutes;
The Department acknowledges that some overlap exists between how wells, including exploratory boreholes, are defined and regulated by HRS Chapter 174C for water wells and Chapter 182 for geothermal exploration wells. The "temporary, small-diameter boreholes" described in this bill fall under the definitions for wells in both chapters and may be subject to either or both HRS Chapters 174C and 182, depending on the specific circumstances of the proposed activity.
2
The Department reviews drilling applications on a case-by-case basis to determine which statutes apply to a specific project. While this overlap can create the need for additional conversations and paperwork with the Department when planning geological subsurface characterization activity, the overlap ensures that drilling proposals are reviewed thoroughly for potential impacts on the State's water and geothermal resources.
Therefore, the Department recommends that Section 1, Purpose No. 2, be removed from this bill.
Regarding Section 1, Purpose No. 5 (page 5, lines 4-10):
(5) Require the department of land and natural resources to amend its exemption list to be consistent with administrative rules adopted by the department, clarifying that certain geological subsurface characterization activities shall be exempt from the environmental review process or shall only require an exemption notice.

In its current form, this bill does not include enough information about the types of geological subsurface characterization that would be exempted from review under HRS Chapter 343. Defining drilling for the purpose of geological subsurface characterization as "temporary, small-diameter boreholes" creates a lot of opportunity for interpretation in what is considered "temporary" and what is considered "small-diameter." Information on borehole drilling, including limits on diameters, target temperatures, depth, rig size, and surface disturbances would need to be specified in order for the Department to evaluate if the activity this bill seeks exemptions for would not result in a serious or major disturbance to an environmental resource. Establishing "one-size-fits-all" limits for a Chapter 343 exemption that could apply anywhere in the State will be challenging, however, because the potential environmental impacts and risks with any drilling project will vary significantly from site to site. Additionally, well control plans, casing design, cementing plans, and plugging and abandonment timelines and procedures are also critical components that would need to be evaluated to determine potential environmental impacts.

Several exemptions applicable to "geological subsurface characterization" activities already exist on the current Exemption List for the Department of Land and Natural Resources, published November 10, 2020 and the current Exemption List for the Commission on Water Resource Management (CWRM), published January 5, 2021. The Department suggests that these existing exemptions are reviewed, and that the bill is amended to clarify the specific activities for which a new exemption is being sought.

In 2012, the Department proposed to amend the Department's Exemption List to add an exemption for drilling exploratory geothermal, but the Environmental Council voted against adding the exemption. The Department is concerned that any new proposals that would exempt exploratory geothermal wells under the umbrella of "geological subsurface characterization" will likely face similar challenges.

Therefore, the Department recommends that Section 1, including Purpose No. 5 be amended to include sufficient descriptions of and constraints on the proposed exempted activities to show: (1) clear explanations of and limits on included activities such that all included activities

conducted anywhere in the State would not result in a serious or major disturbance to an environmental resource; and (2) explanations of how activities seeking exemption differ from existing exemptions on the Department's 2020 list and CWRM's 2021 list.

Regarding Section 2 (starting on page 6, line 6): This section proposes to amend the Hawaii Revised Statutes by adding a new chapter titled "Geological Subsurface Characterization" with the purpose of clarifying that boreholes or test bore drilling activity for geological subsurface characterization would not be treated under HRS Chapters 182 and 174C and would be exempt under Chapter 343.

The Department of Business, Economic Development, and Tourism (DBEDT) is proposed to oversee the proposed chapter on "Geological Subsurface Characterization," but DBEDT does not currently have any geologists, hydrologists, or relevant engineers on its organizational chart. The Department, on the other hand, employs geologists, hydrologists, and engineers in the CWRM and the Engineering Division who review drilling plans to assess the applicability of HRS Chapters 174C, 182, and 343 and determine when water well drilling permits, geothermal exploration permits, and/or environmental assessments, impact statements, or exemptions apply. They are trained to evaluate risks and prescribe appropriate mitigation of groundwater contamination, well blowouts, and other potential environmental and health and

safety impacts.
In addition to reviewing drilling plans for applicability under HRS Chapters 174C and 182, the Department also conducts additional reviews which may include, but are not limited to:
• Land Division reviews for parcel ownership and mineral rights
• State Historical Preservation Department (SHPD) reviews for potential impacts to historic properties.
• Office of Conservation and Coastal Lands (OCCL) reviews for parcels in conservation districts and/or coastal lands.
The proposal of this bill to shift regulatory oversight of a subset of exploratory wells away from the Department to DBEDT, would place important scientific, environmental, and natural resource management decisions in the charge of an agency that does have the same scientific and technical expertise and does not share the same statutory responsibilities to protect the State's natural resources in the best interests of the public.
When drilling where geothermal conditions might be encountered, the most critical health and safety risk is a blowout, which is an uncontrolled flow of formation steam, fluids, or gas from a well bore into the atmosphere or into lower pressure subsurface zones. A blowout occurs when formation pressure exceeds the pressure applied by the column of drilling fluid. Appropriate well control procedures and equipment are essential to mitigate the risk of a blowout. Well control can include driller training, geothermal-specific drilling techniques, specialized monitoring equipment, and blowout prevention equipment. A blowout can pollute shallow groundwater aquifers with geothermal fluids, pollute air with geothermal gases, and cause injury or death to drilling personnel. Circumnavigating the oversight provided by HRS Chapter 182, as this bill proposes to do, will put human lives at risk if appropriate well control procedures and equipment are not utilized when necessary to mitigate the risk of a blowout.

In locations where geothermal heat exists, any size well can experience a blowout, even small-diameter wells. The well control requirements for small-diameter wells differ from larger diameter wells, but well control still must be evaluated for each drilling situation. The following summary of blowout prevention in geothermal slim holes, one type of small-diameter well, is included in the Hawaii Geothermal Drilling Guide, Circular C-126, published by the Department in 2014:

5.4.4 Blowout Prevention in Slim Holes
Much smaller volumes of drilling fluids are circulated in slim holes than in fullscale production holes. Kicks of any volume in slim holes are therefore of more consequence, and immediate detection of fluid entry, or lost circulation, is critical…In summary, blowout prevention in slim holes requires special training, precise flow metering, real-time data presentation and dynamic kill proficiency.
The Department reviews all geothermal exploration permits and geothermal drilling permits to assess blowout risks and prescribe appropriate well control procedures and equipment. The specific well control requirements will vary with many factors, including, but not limited to:
1. Anticipated temperatures, and pressure regimes for specific well location. For example, the level of well control needed for a small-diameter well is higher when drilling in an active rift zone like Puna vs. on Oahu or Kauai.
2. Target depths
3. Well design, including well diameters, casing, and cementing program

4. Type and size of rig
5. Groundwater conditions
Because so many factors need to be considered when assessing well control needs, the Department is concerned that creating a separate category of "geological subsurface characterization" drilling not reviewed under HRS Chapter 174C and Chapter 182 will lead to important safety and environmental considerations being missed.
Therefore, the Department recommends removing Section 2 in its entirety from this bill.
Regarding Section 3 (starting on page 21, line 4): Amending HRS Chapter 182 as proposed in this bill would have significant consequences on the regulatory framework for geothermal resources in the State. The proposed amendment would remove the authority of the Department to permit and regulate any geothermal exploration, including commercial exploration. Since the proposed new HRS chapter described in Section 2 of this bill would only apply to non-commercial geothermal exploration, this proposed amendment would create a regulatory gap where no agency would have the authority to regulate commercial geothermal exploration.
This proposed amendment would also require significant revisions to additional sections of Chapter 182, and to Hawaii Administrative Rules Chapter 183, Rules on Leasing and Drilling of Geothermal Resources.
Therefore, the Department recommends removing Section 3 in its entirety from this bill.
5
Regarding Section 4 (starting on page 21, line 18): HRS Chapters 174C and 182 include statutory requirements for the reporting of well data and geothermal exploration data to the Department. The Department does not oppose the creation of data repository for geological subsurface characterization with the Hawaii groundwater and geothermal resources center, as long as existing statutory requirements for data are followed. The Department also suggests this section be amended to elaborate on how data will be shared, and who it will be shared with.
Therefore, the Department recommends that Section 4 be amended to: (1) state that geothermal exploration data and well data, as defined and required in HRS Chapters 174C and 182 shall be reported to the Department as required by applicable statutes and administrative rules; and (2) address how data will be shared and who it will be shared with.
Regarding Section 5 (starting on page 22, line 8): Previous comments from the Department regarding Section 1, Purpose No. 5 also apply here. Additionally, this section references "part 1" and "part 2" of the Department's Exemption List, but multiple "part 1" and "part 2" sections exist, so this needs to be clarified. The Department assumes this is meant to refer to "part 1" and "part 2" of the General Exemption Type 5 category for "Basic data collection, research, experimental management, and resource and infrastructure testing and evaluation activities that do not result in a serious or major disturbance to an environmental resource."
Therefore, the Department recommends that Section 5 be amended to (1) align with the amendments recommended by the Department in Section 1; and (2) clarify that "part 1" and "part 2" are referring to the General Exemption Type 5 category.
Mahalo for the opportunity to comment on this measure

Attorney General's comment
TESTIFIER(S): Anne E. Lopez, Attorney General, or.
Candace J. Park, Deputy Attorney General.

Chair Lowen and Members of the Committee:

The Department of the Attorney General provides the following comments.

This bill, among other things, establishes the Hawaii Groundwater and Geothermal Resources Center within the University of Hawai‘i at Manoa School of Ocean and Earth Science and Technology, and requires the University of Hawai‘i to amend its exemption list to specify that certain geological subsurface characterization activities shall be exempt from the environmental review process or shall only require an exemption notice.

This bill implicates article X, section 6, of the Hawai‘i Constitution, which gives the Board of Regents of the University of Hawai‘i "exclusive jurisdiction over the internal structure, management, and operation of the university." Section 6 further provides: "This section shall not limit the power of the legislature to enact laws of statewide concern. The legislature shall have the exclusive jurisdiction to identify laws of statewide concern." We recommend an amendment that adds a statement identifying this bill as a law of statewide concern.

Thank you for the opportunity to provide these comments.