

THE ESTATE OF JAMES CAMPBELL

RECEIVED

SEP 61, 1989 36

5 P 21 15

Mr. Frank Jroski  
2041 Fernway Avenue  
Bethlehem, PA 18018

DIV. OF WATER &  
LAND DEVELOPMENT

STATE OF HAWAII

Dear Mr. Jroski:

Thank you for your letter regarding geothermal development activities planned for Campbell Estate lands on the island of Hawaii. Congressman Don Ritter has asked me to respond to your questions about the process Campbell Estate and its geothermal developers, True/Mid-Pacific, undertook in working with government and the community in response to the national and State of Hawaii energy crisis that occurred in 1974, as well as the process by which Campbell Estate acquired the land on which development will occur.

In 1974, our reliance on oil for the production of electrical energy in the State was pegged at ninety-seven percent (97%). Since then, alternative sources of energy, including biomass production, coal, wind and solar energy, relieved that dependency on oil by five percent (5%). Today, the State of Hawaii is still ninety-two percent (92%) dependent on oil imports for its source of energy.

The potential near-term alternatives remaining for energy resource development to meet the major portion of the State's needs include coal, nuclear energy and geothermal energy. Our attention as well as the State's, turned to geothermal energy as a proven, clean source of energy which has been used to generate electricity since 1903 beginning in Italy and now occurring in 17 countries, with 9 more geothermal energy projects in the planning stage.

The U.S. currently leads the world in the use of geothermal energy for generating electricity. California, a state with very strict environmental regulations, has allowed geothermal development to proceed to its full potential under tight regulatory controls. About 1,700,000 kw of electrical power is being generated in northern California while another 400,000 kw will be on line by the end of 1989 in the Imperial Valley in the heart of prime California farm land.

Campbell Estate's land on the island of Hawaii is located in a natural resource area along the Kilauea east rift zone which is the State's primary source of geothermal energy. The State has

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designated three areas along this rift zone as Geothermal Resource Subzones - the only areas in which geothermal development is authorized. Geothermal activity on this land is under the jurisdiction of the State Board of Land and Natural Resources (BLNR). The State's permitting and regulatory procedures for developing geothermal resources under current land use policy is a very rigid, scrutinized process with full opportunity for community input. As an example of this process, we have gone through a series of contested case (quasi-judicial) hearings on geothermal development starting in the early 1980's. During this process there was extensive public input. Without the support of a large majority of the residents of the island of Hawaii, it would not have been possible to obtain government approvals necessary for development to proceed. Questions regarding native Hawaiian practices, the real and potential impacts of geothermal activities on native forests, air quality, noise levels and other concerns have been subjected to prolonged and detailed examination as part of government's policy to protect our island beauty and native ecosystem from serious degradation.

We have ~~appeared before the State Legislature~~, the BLNR, various County agencies and various community groups and associations to respond to any concerns with geothermal development. Our developers have submitted two Environmental Impact Statements (EIS) which were open to public scrutiny and which the public took an active interest in analyzing and questioning. These documents has been accepted by government agencies as representing the actual and potential impacts of geothermal development on our lands and as setting forth mitigation measures to minimize those impacts to acceptable levels. As we have gone through this long process, we have maintained our belief that this project serves a public purpose - meeting our energy needs - and that we must work with government and the local community if we are to accomplish this purpose while recognizing community values relating to the environment.

In April, 1985, the Legislature adopted, unanimously, Senate Concurrent Resolution No. 30 "REQUESTING THE BOARD OF LAND AND NATURAL RESOURCES TO PROCEED EXPEDITIOUSLY WITH ALL REQUIRED ACTIONS TO CONSUMMATE, IF FEASIBLE, A LAND EXCHANGE BETWEEN CAMPBELL ESTATE LANDS AT KAHUALE'A WITH THE ADJACENT

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STATE-OWNED LANDS FOR THE PURPOSE OF FACILITATING THE DEVELOPMENT OF GEOTHERMAL RESOURCES ON THE EXCHANGED STATE LANDS." This resolution was prompted by a request from the BLNR to the Campbell Estate in December, 1984, to consider exchanging Campbell Estate lands for State lands and Wao Kele O'Puna Natural Area Reserve lands of lesser environmental quality than the Estate lands where geothermal development was originally planned. Testimony before the BLNR indicated that the Estate lands were clearly superior to the State's reserve lands. Botanical surveys of the Wao Kele O'Puna lands conducted by the State and the developer revealed a degraded forest infested with the growth of numerous exotic plants and shrubs. The Kilauea east rift zone which passes through portions of the national park (upper area) and the Campbell Estate lands (middle area) and other public and private lands (lower area) cover a range of vegetative ecosystems along its 33 mile length beginning with wet forest in the upper area, significantly less wet forest in the middle area and little or no wet forest in the lower area. These forests, while not comparable to the great rainforests of the world, are carefully controlled and maintained by the State so that development activity involving natural resources in these areas is extremely limited. Geothermal development is being confined to the lower and middle portions of the east rift zone. Contested case and other public hearings provided numerous opportunities for public information and discussion regarding both the exchange of lands and the development of the geothermal resource.

In 1986, the Legislature reviewed the land exchange and allowed it to proceed. In so doing, the State gained environmentally superior forest areas adjacent to the existing Hawaii Volcanoes National Park, while maintaining strict control over activities on the lands which have been transferred to the Estate. It should be noted that the land exchange was first proposed by community interests concerned with minimizing the environmental impacts of geothermal activities in the Kahauale'a parcel and adjacent portions of the national park.

In perspective, geothermal development activities currently authorized will require approximately one percent (1%) or 270 acres, of the surface area of the contiguous 27,000 acres of the Estate's forested and wooded lands. There are strict State and County land use procedures to closely regulate the type,

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location, size and impact of any geothermal development and continuous monitoring of the area to limit and control any impacts is mandatory. Air quality, noise and other environmental impacts are of importance to all of us who live here, whether attributable to human or volcanic activity.

I hope that this lengthy letter helps you to understand that we have taken very seriously our responsibility to work with government and the community in developing our geothermal resources. We have agreed to abide by governmental procedures, to address concerns affecting the public health and welfare, to proceed at a pace largely determined by government approvals, and to recognize the many different values held by various segments of our island community. Please be assured that the process guiding geothermal development of our lands incorporates a desire to protect the land while benefitting the larger and long time public interest towards assuring a local and natural resource to meet Hawaii's energy needs. Government has set forth the process to responsibly address the concerns of those favoring or opposing this project. We are committed to being a part of this process.

Sincerely,



Herman P. Clark  
Manager, Governmental Affairs

crn:0716S

cc: Mr. William Paty, Chairman, Board of Land & Nat. Resources  
The Honorable Don Ritter, U.S. Representative  
The Honorable Dan Akaka, U.S. Representative  
The Honorable Patricia Saiki, U. S. Representative  
The Honorable Daniel Inouye, U.S. Senator  
The Honorable Sparky Matsunaga, U.S. Senator

1 +  
Dr. Mha Atma Singh Khalsa  
1536 Crest Drive  
Los Angeles, CA 90035

Dear Dr. Singh Khalsa:

Your recent letter to Governor Waihee was referred to our Department of Land and Natural Resources for reply. We appreciate your taking the time to express your concerns regarding geothermal development and the rainforests in Hawaii.

The proposed geothermal development that you refer to is located along the Kilauea Middle East Rift Zone, approximately three miles away from the Hawaii Volcanoes National Park. Because of public concern over the preservation of prime native forest, the proposed project was moved from its original location to an area assessed as having lower quality native habitat. The scattered areas of prime native forest which may be contained within the limits of the new project area will be protected throughout the permitting process by requiring that development activities avoid these sensitive areas, *or that mitigating measures be taken to protect precious flora and fauna.*

The State of Hawaii encompasses approximately 4 million acres of land. Of this total, over 900,000 acres are contained within the State's Forest Reserves, 270,000 acres are within the National Park and wildlife refuges, and 46,000 acres are private conserves under the management of the Nature Conservancy.

In the furtherance of forest protection and wildlife management, the State of Hawaii within the last two decades, has established model law and practice, in creating a Statewide Natural Area Reserves System (NARS), which protects unique island ecosystems, in addition to programs for the conservation of aquatic life, wildlife and plants, which safeguards endangered species and promotes conservation action.

The State of Hawaii depends upon petroleum supplies for over 90 percent of all the energy consumed in the islands and renders Hawaii vulnerable to disruptions in the supply of foreign oil. This administration believes that geothermal energy is the largest, near-term baseload electric energy resource for Hawaii and that prudent development of our geothermal resources is essential to the State in attaining our goal of energy self-sufficiency.

Thank you again, for your interest and concern for the State of Hawaii.

Very truly yours,

William W. Paty  
Chairperson of the Board

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RECEIVED

Dr. Mha Atma Singh Khalsa  
1536 Crest Drive  
Los Angeles, CA 90035

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88 OCT 10 AM 1:32

Governor John Waihe'e  
State Capitol  
Honolulu, HI 96813

October 2, 1989

DEPT. OF LAND  
& NATURAL RESOURCES  
STATE OF HAWAII

DIV. OF WATER &  
LAND DEVELOPMENT

Dear Governor Waihe'e,

Citizens of your state and across the U.S. are looking to you for leadership in protecting the precious rainforests of Hawaii. Over-development of your beautiful state threatens to destroy the very gifts that draw millions there every year. If power plant development goes forward on the Big Island, it will inevitably be followed by unrestrained development and ecological tragedy.

It is painfully obvious that unneeded power from the proposed geothermal plant will not make your state "oil independent" but will instead fuel rampant industrialization and development on the islands of Hawaii, Maui, and Oahu. Increasing air pollution will lead to acid rain; noise pollution will also result. And this proposed "development" will destroy the last lowland tropical rainforest in the United States. The Puna rainforest is too precious and unique to sacrifice for short-term economic growth.

I would love to return to Hawaii (I've had the pleasure of visiting your beautiful state twice) many times in the future...to see its unspoiled natural beauty and its native species unique in all the world. I don't want to see it ruined by the greed of over-development.

If the proposed geothermal plant is not stopped, I will take my tourist dollars elsewhere and will actively encourage friends, relatives, associates, and my patients to do likewise. I also intend to boycott Hawaiian products until the project is stopped once and for all.

I join millions of people across the globe in watching and hoping for your leadership to save the Hawaiian rainforest.

Most sincerely,

*Mha Atma Singh Khalsa*

Dr. Mha Atma Singh Khalsa

cc: Stanley Hong, Director  
Hawaii Tourist Bureau  
2270 Kalakaua, Suite 801  
Honolulu, HI 96815

Chairman's Office, DLNR  
GOVERNOR'S REFERRAL

REQUIRES EXPEDITIOUS HANDLING

TO: WL  
Direct Reply  
10-67-89

TO: Director, DLNR  
☐ PLEASE COORDINATE with \_\_\_\_\_  
FOR: \_\_\_\_\_  
☐ Comment/Recommendation (required)  
☐ Appropriate attention  
☒ Direct reply (cc/acc: Governor)  
☐ Your information/lie  
☐ Draft reply for Governor's signature  
☐ Follow up/report  
☐ Submit copy of response (if any)  
☐ Keep enclosure(s)  
☐ Return enclosure(s)  
☐ Other

DUE seven working days (cc: 10-67-89)  
(if delay is encountered in meeting suspense  
date, please advise by telephone immediately)  
In reply, please refer to: 622-16

622-16

example1

Dear \_\_\_\_\_:

Your letter to the Governor of Hawaii, dated May \_\_\_\_\_, 1987, has been referred to our Department of Land and Natural Resources for reply. We appreciate your input and thank you for taking the time to write and advise us of your concerns.

The proposed geothermal development that you refer to is located along the Kilauea Middle East Rift Zone, approximately 3 miles away from the Hawaii Volcanoes National Park.

Pursuant to public concern over the preservation of prime native forest, the proposed project was moved from its original location to an area assessed as having lower quality native habitat. The scattered areas of prime native forest which may be contained within the limits of the new project area will be protected throughout the permitting process by requiring that development activities avoid these sensitive areas.

~~The practice of Hawaiian religion which you mention~~, has included the belief and worship of the volcano goddess Pele, and some individuals suggest that Pele would be offended by geothermal development. However, the recognition and use of geothermal energy has been recorded in the history of the Hawaiian Islands for both personal and religious purposes.

While are research has shown that no religious sites are located on the subject property and that theological claims are a matter of personal belief, it is our Department's position that the proposed project will not in any way prohibit any ceremony, custom, practice, habit or access to religious sites.

The State of Hawaii depends upon petroleum supplies for over 90 percent of all the energy consumed in the islands and costs the State about \$1.5 billion per year in funds which flow out of our State. This dependency renders Hawaii vulnerable to disruptions in the supply of foreign oil and has resulted in electricity rates that are among the highest in the nation.

This admninstration believes that geothermal energy is the largest, near-term baseload electric energy resource for Hawaii and that prudent development of our geothermal resources is essential to the State in attaining our goal of energy self-sufficiency.

Thank your again for your interest in the State of Hawaii.

Very Truly Yours,

William W. Paty  
Chairperson of the Board

kislak  
example E

Mr. Philip T. Kislak  
Philip T. Kislak, Inc.  
5180 N. Soldier Trail  
Tucson, Arizona 85749

Dear Mr. Kislak:

The Board of Land and Natural Resources would like to thank you for your recent letter concerning geothermal development on the island of Hawaii.

The exploration and development of Hawaii's geothermal resources is of statewide concern, and this interest must be balanced with interests in preserving Hawaii's unique social and natural environment. Towards this goal, the Board which is charged with the responsibility of regulating geothermal development in the State, has examined the following factors: the potential for production, prospects for utilization, geologic hazards, social and environmental impacts, land use compatibility and economic benefits.

We appreciate your input and thank you for taking the time to write and advise us of your concerns.

Very Truly Yours,

William W. Paty  
Chairperson of the Board



REF:WL-KO

OCT 5 1989

Ms. D. Pi'iwa'a  
P.O. Box 154  
Sequel, California 95073

Dear Ms. Pi'iwa'a:

Thank you for your recent letter to Governor Waihee expressing your concerns regarding development of our geothermal resources here in Hawaii. He has asked that I respond to your concerns.

Regarding your concern about preserving our State's rain forests, please be assured that measures are indeed taken to provide for the preservation of the environment. Prior to any permit for geothermal development being issued, studies are conducted to identify endangered plant or animal species in the area and steps are provided to mitigate any adverse impacts anticipated. Specifically, parts of the project you refer to were relocated to accommodate sightings of two endangered species of trees and to avoid an area of 'ohi'a forest known to contain a resident population of a native bird, the Hawaii'i 'elepaio, even though the bird is not an endangered species.

Another of your concerns related to our basic freedom of religious expression. We do not think that the development of our geothermal resource is incompatible with our freedom to practice our native Hawaiian religious beliefs. Time after time the courts have reaffirmed us in this thinking.

As to the threat of water contamination, we do not believe that any source of fresh water will be affected by currently permitted projects. As for air pollution, the technology exists to virtually eliminate air pollution in the vicinity of geothermal plants. In the long run, geothermally produced energy will result in significantly less pollution of the atmosphere than what is now resulting from oil-based electrical power generation.

I appreciate your concern for your beautiful home state of Hawaii. Again, thank you for taking the time to write.

Very truly yours,

WILLIAM W. PATY

MT:JS:GM:ko  
bcc: Gov. John Waihee

(89:590-13)

February 8, 1991

91:044-16

Mr. Palikapu Dedman  
President  
Dr. Noa Emmett Aluli  
Vice President  
The Pele Defense Fund  
Post Office Box 404  
Volcano, Hawaii 96785

Dear Mr. Dedman and Dr. Aluli:

Thank you for your letter of January 25, 1991 concerning geothermal exploration and the preservation of our land and Hawaiian culture.

With regard to True/Mid-Pacific Geothermal Venture's current activities, the permittee has the legal right to proceed with his project under the terms and conditions of the issued permits. As such, the State cannot reasonably intervene except in cases of regulatory violations or failure to meet the prescribed conditions of these permits. A pending lawsuit does not in itself prevent a permittee from proceeding under an approved permit unless an injunction is issued by the courts. However, in view of the pending litigation, the permittee has agreed to refrain from any grubbing or grading until the date of the scheduled Third Circuit Court hearing on February 14, 1991.

In reference to your comment regarding the export of energy to other islands, the Conservation District Use Permit issued to True/Mid-Pacific authorizes the exploration and development of geothermal resources for up to 25 megawatts of electrical power to

service the island of Hawaii. If the permittee wishes to develop additional power, he must show to the satisfaction of the Board of Land and Natural Resources that there is a need for such additional energy production and that the additional geothermal facilities can meet applicable health and safety requirements.

Another condition of the permit issued to True/Mid-Pacific requires that an archaeological survey be conducted for any area proposed for clearing. The survey field work for the permittee's next well site has been verified and approved by the Department of Land and Natural Resources. Additionally, in recognition of the recent discovery of lava tube burial sites, the permittee has agreed to perform extra Department-approved mitigative measures during the preparation of the drill site and while drilling.

With regard to volcanic hazards, this issue was extensively addressed during the contested case hearings held by the Board of Land and Natural Resources. In compliance with the Conservation District Use Permit issued, True/Mid-Pacific submitted an emergency plan to deal with situations such as volcanic activities and earthquakes, which was approved by the Hawaii County Civil Defense Agency.

In response to your concerns regarding social and cultural impacts, the Department of Land and Natural Resources has proceeded to engage the services of E Ola Mau to assist in the documentation and preparation of a medicinal plant survey. This action is a direct result of our earlier meeting and is being implemented to address the protection and enhancement of native environmental, cultural and social practices, including the practice of herbal medicine.

On a related matter, you had referred to the curtailment of native gathering activities in the undeveloped areas of Wao Kele O Puna. Ahupua'a tenants are authorized under State Constitution and statute to exercise their rights on such property, provided this right is not exercised in developed areas. To this extent, it is my understanding that no one in this category has been denied the right to enter the property in undeveloped areas.

In light of the current conflict with Iraq and the disastrous oil spill in the Persian Gulf, Hawaii more than any other state faces potentially critical energy supply problems associated with the import and use of petroleum. Any interruption of oil supplies to Hawaii, or dramatic increases in price, cannot be presently compensated by electricity generated from other resources.

In searching for resource alternatives to meet the energy needs of our growing population, and while protecting our natural environment, the State is committed to the careful investigation of geothermal energy as a viable option for reducing our dependence on imported oil.

Therefore, in response to your comment that my administration withdraw its request for additional funding for geothermal exploration activities, I continue to believe that these programs are vital to the assessment and management of our State's geothermal resource. Any new information generated as a result of this program, such as the Scientific Observation Hole Project, will benefit the State, geothermal development and the scientific community in general.

Thank you again for your continued input, and I welcome the opportunity to have my staff discuss these matters with you further. In this regard, I have directed Mr. Keith Ahue, Deputy Director of the Department of Land and Natural Resources, to arrange a meeting with you to discuss your concerns in detail.

With kindest regards,

Sincerely,

JOHN WAIHEE

91:044-17

February 12, 1991

Ms. Meg Ruby, Coordinator  
Greenpeace U.S.A. Tropical  
1436 U Street NW  
Washington D.C. 20009

Dear Ms. Ruby:

Thank you for your letter of January 25, 1991 regarding geothermal exploration activities on the island of Hawaii. We appreciate your interest in protecting our State's natural environment.

In light of the current conflict with Iraq and the disastrous oil spill in the Persian Gulf, Hawaii more than any other state faces potentially critical energy supply problems. Any interruption of oil deliveries to Hawaii, or dramatic increases in its price, cannot be presently compensated with electricity generated from other resources. Accordingly, the State is committed to the careful investigation of geothermal energy as a viable future option to reduce our dependence on imported oil. The State is also committed to protecting our natural environment.

Towards this end, the State's promotion of geothermal resource exploration and development within designated Geothermal Resource Subzones (GRS) has been pursued in a cautious and environmentally sound manner. For example, the regulatory process for the issuance of the Conservation District Use Permit authorizing activity within the Kilauea

Ms. Meg Ruby

February 7, 1991

91:044-17

Middle East Rift GRS involved the preparation of two environmental impact statements and an extensive series of quasi-judicial contested case hearings which addressed numerous issues, including air quality, noise, and other impacts to the environment.

Cognizant of the pending litigation in the Federal and State courts, the Department of Land and Natural Resources continues to actively monitor and regulate activities of True/Mid-Pacific Geothermal Venture under the terms and conditions of the issued permits. While a pending lawsuit does not prohibit a permittee from proceeding, unless an injunction is issued by the courts, it is my understanding that the permittee has agreed to refrain from any grubbing or grading work until the date of the scheduled Third Circuit Court hearing on February 14, 1991.

We might point out that the Department has not issued any "forest clearing" permit to either True/Mid-Pacific or to the University of Hawaii for its Scientific Observation Hole Project. What had been granted was an approval of the archaeological survey for True/Mid-Pacific's next well site, as conditionally required under the existing Conservation District Use Permit issued in 1986.

Also, relative to your request that my administration not pursue additional funding from the legislature for geothermal exploration activities, I continue to believe that these

Ms. Meg Ruby

February 7, 1991

91:044-17

activities are vital to the assessment and management of our State's geothermal resource. Any new information resulting from this exploration program, including the Scientific Observation Hole Project, will benefit the State, geothermal developers, and the scientific community in general.

I share your concerns regarding the need to preserve our natural environment. I firmly believe the prudent development of our geothermal resource can proceed in balance with our interest in preserving Hawaii's unique social and physical values. Thank you again for your thoughtful comments.

With kindest regards,

Sincerely,

JOHN WAIHEE

bcc: William W. Paty,



(dedman)

Dear Mr. Dedman and Dr. Aluli:

Thank you for your letter of January 25, 1991 concerning geothermal exploration and the preservation of our land and Hawaiian culture.

With regard to True/Mid-Pacific Geothermal Venture's current activities, the permittee has the legal right to proceed with the activities authorized under the terms and conditions of the issued permits. As such, the State cannot reasonably intervene except in cases of regulatory violations and/or failure to meet the prescribed conditions of these permits.

A pending lawsuit does not in itself prevent a permittee from proceeding under an approved permit unless an injunction is issued by the courts. However, in recognition of the pending litigation the permittee has agreed to refrain from any grubbing or grading until the date of the scheduled hearing on February 14, 1991.

In reference to your comment regarding the export of energy to other islands, the Conservation District Use Permit issued to True/Mid-Pacific authorizes exploration and development of geothermal resources for up to 25 Megawatts of electrical power for purposes of satisfying the requirements of the island of Hawaii.

Should the permittee wish to develop beyond the initial 25 Megawatts authorized, they must show to the satisfaction of the Board of Land and Natural Resources that there is a need for such additional energy production and that the development of additional geothermal facilities can continue to meet and be in compliance with applicable health and safety requirements.

Another condition of the permit issued to True/Mid-Pacific requires an archaeological survey for any area proposed for clearing. The survey field work for the permittee's next well site has been verified and approved by the Department of Land and Natural Resources. Additionally, in recognition of the recent discovery of lava tube burial sites, the permittee has agreed to perform extra mitigative measures approved by the Department during the preparation of the drill site and while drilling.

With regard to volcanic hazards, this issue was extensively addressed during the quasi-judicial contested case hearings held by the Board of Land and Natural Resources. In compliance with the Conservation District Use Permit issued, True/Mid-Pacific submitted an emergency plan to deal with situations such as volcanic activities and earthquakes which was approved by the Hawaii County Civil Defense Agency.

In response to your concerns regarding social and cultural impacts, the Department of Land and Natural Resources has proceeded to engage the services of E Ola Mau to assist in the documentation and preparation of a medicinal plant survey. This action is a direct result of our meeting and is being implemented to address the protection and enhancement of native environmental, cultural and social practices, including the practice of herbal medicine.

On a related matter, you make reference to the curtailment of native gathering activities in the undeveloped areas of Wao Kele O Puna. Ahupua'a tenants are authorized under State Constitution and statute to exercise their rights on such property provided that this right is not exercised in developed areas. To this extent, it is my understanding that no one in this category has been denied the right to enter the property in underdeveloped areas.

In light of the current conflict with Iraq and the disastrous oil spill in the Persian Gulf, Hawaii more than any other state faces potentially critical energy supply problems associated with the import and use of petroleum. Any interruption of oil supplies to Hawaii, or dramatic increases in price, cannot be presently compensated by electricity generated from other resources.

In searching for resource alternatives to meet the current and projected energy needs of our growing population, and while protecting our natural environment, the State is committed to the careful investigation of geothermal energy as a viable option for reducing our dependence on imported oil.

Therefore, in response to your comment that my administration withdraw its request for additional funding for geothermal exploration activities, I continue to believe that these programs are vital to the assessment and management of our State's geothermal resource. Any new information generated as a result of this program such as the Scientific Observation Hole Project will benefit the State, geothermal development and the scientific community in general.

Thank you <sup>have my staff</sup> again for your continued input and I welcome the opportunity to discuss these matters with you further. In this regard, I have directed Mr. Keith Ahue, Deputy Director of the Department of Land and Natural Resources to arrange a meeting with you to discuss your concerns in detail.

With kindest regards,

Sincerely,

JOHN WAIHEE

DRAFT

Mr. Palikapu Dedman and Dr. Noa Emmett Aluli,  
The Pele Defense Fund  
P. O. Box 404  
Volcano, Hawaii 96785

Dear Mr. Dedman and Dr. Aluli,

Aloha. Thank you for your letter of January 25, 1991 and for your continuing concern for preservation of our land and of our Hawaiian culture, in this instance with regard to development of our geothermal resources on the Big Island.

With regard to True/Mid-Pacific Geothermal Venture's ongoing activities, the permittee has the legal right to proceed with permitted activities under the terms and conditions of issued permits. The State cannot intervene except in case of regulatory violations on failing to meet the terms and conditions of the permit, such as those currently under review by the Department of Land and Natural Resources and others. Further, as you note in your second paragraph, the developer will not be initiating actions to clear a drilling site before a court hearing occurs on February 14, 1991. A pending law suit does not prevent a permittee from proceeding under a permit unless an injunction is issued by a court.

With regard to exporting energy to other islands, the State permit for True/Mid-Pacific Geothermal Venture authorizes the exploration for and development of geothermal resources without regard to where the geothermal energy generated therefrom will be used. However, the developer must apply for an additional permit should they wish to develop more than the 25 megawatts currently authorized.

Your concern about traditional practices within Wao Kele O Puna is being addressed. The Department of Land and Natural Resources is preparing to engage the services of a Hawaiian practitioner to study and evaluate this situation.

Ahupua'a tenants, under State law and court decisions are authorized to exercise their rights on such property as long as the right is not exercised in developed areas. No one in this category has been denied the right to enter the property in undeveloped areas.

The war with Iraq, and the disastrous oil spill in the Persian Gulf, demonstrate in the most unequivocal terms the problems Hawaii faces, more directly than any other state, with imported oil. Petroleum is neither a reliable nor a clean resource for Hawaii to depend upon for more than 90 percent of its energy requirements, in contrast with some states whose electric utilities depend on oil for less than 20 percent of their energy requirements. In other states, an interruption of oil supplies or a sudden dramatic increase in price, will be compensated for with electricity provided by broad regional grids which are powered

largely by other resources. Such continued reliance simply is unacceptable to the great majority of the residents of our mid-oceanic State with its precious cultural heritage.

It is within the context of increasing population and demand for energy while both protecting our environment and searching for energy alternatives that the State is committed to investigating geothermal energy as an option for reducing our dependence on imported oil. I have noted that a key question is whether the resource does in fact exist, and if so, whether it can be harnessed in a safe, environmentally acceptable manner. To help answer these questions the State is pursuing a careful program to characterize and verify the geothermal resource.

The State's geothermal program in the Wao Kele O Puna forest has been pursued in a cautious and environmentally sound manner over nearly a decade, beginning in 1982, seven years before the Rainforest Action Network, based in San Francisco, joined the aggressive campaign against geothermal exploration in Hawaii initiated by Pele Defense Fund in 1986.

In 1982 the Board of Land and Natural Resources accepted an environmental impact statement for a proposed geothermal project in the Kahauale'a forest submitted by True/Mid-Pacific Geothermal Venture. Subsequently the Wao Kele O Puna was selected, after considerable study of potential effects on native Hawaiian forests, as a more appropriate site for geothermal exploration and development, precisely because the forest is heavily overrun with exotic (non-indigenous) plants.

After an exchange of lands was approved by the Legislature in 1985, the Board of Land and Natural Resources accepted a revised environmental impact statement from True/Mid-Pacific Geothermal Venture in 1986. Again following a public hearing and contested case hearing, the Board of Land and Natural Resources approved a Conservation District Use Permit to allow True/Mid-Pacific Geothermal Venture to explore for and incrementally develop up to 100 megawatts of geothermal energy within the sub-zone.

Exploration was initiated in 1989; no construction activity has taken place to date.

The Wao Kele O Puna forest is located in the Kilauea Middle East Rift Geothermal Resource Subzone, one of three subzones designated by the Board of Land and Natural Resources in 1985 following a public hearing and a quasi-judicial contested case hearing.

To date thirteen separate legal actions against the State and/or True/Mid-Pacific Geothermal Venture have been brought by Pele Defense Fund and others aimed at stopping geothermal exploration within geothermal resource sub-zones designated by the Legislature in 1985.

In 1989 the University of Hawaii completed an environmental assessment for four to six scientific observation holes (SOH) within designated geothermal resource sub-zones. To date only one SOH hole has been drilled in the Wao Kele O Puna forest. One is planned to start in mid-1991. Each SOH hole requires State and County permits. Permit requirements include the submission of botanical and cultural resource surveys.

Commercial exploration for geothermal resources is occurring in two relatively small and widely separated areas of the Kilauea East Rift Zone, one in the Wao Kele O Puna forest and one in the Kapoho area to the east. The purpose of the SOH program is to conduct resource assessment on a broader scale to the end that the extent and nature of the geothermal resource can be more accurately determined. There are several important differences between the State's exploration program and the drilling programs of the two active commercial developers. The State is presently sponsoring the drilling of so-called 'slim' holes, which are based on a technique known as core-drilling. Core samples, once removed from the ground and arranged by section, provide a continuous record of the subsurface geologic and hydrologic structure. They facilitate the production of subsurface maps. This information is of both scientific and potential commercial interest. In addition, slim holes lend themselves to certain temperature, pressure, and geophysical tests, which are useful in establishing resource potential.

Because this research is so important, I am continuing to pursue funding for it, and for the related state and federal environmental studies that are required as part of the permitting processes

*and surveyed each site looking for them*

*once alerted to the possible of their existence*

With regard to burial lava tubes in the East Rift Zone, we have investigated and will continue to do so as a required condition prior to permitting drilling.

With regard to volcanic hazards, we believe that emergency situations have been adequately addressed in the emergency plans approved by the County of Hawaii as part of the permitting conditions of the two geothermal projects now underway.

The Hawaiian practitioner's work will include an assessment whether legislation should be proposed to strengthen Hawaiian religious and gathering rights and designating cultural reserves.

I will direct Mr. Keith Ahue of the Department of Land and Natural Resources to set up a meeting with you to go over your concerns in detail.

With kindest regards,

Sincerely,

JOHN WAIHEE

Mr. Palikapu Dedman and Dr. Noa Emmett Aluli,  
The Pele Defense Fund  
P. O. Box 404  
Volcano, Hawaii 96785

Dear Mr. Dedman and Dr. Aluli,

Thank you for your letter of January 25, 1991 and for your continuing concern for preservation of our land and of our Hawaiian culture, in this instance with regard to development of our geothermal resources on the Big Island.

I have not changed in my belief that geothermal energy should be developed. Our population is going to continue to grow, and along with it the demand for energy is going to grow. The basic issue is do we want to use oil or coal or nuclear energy to generate electricity, or the the cleaner geothermal resource. My commitment to develop the cleaner indigenous resource is firm.

The permitting process for allowing True/Mid-Pacific to go ahead with its drilling plans for up to 100 megawatts has already been fulfilled, by the April 11, 1986 Decision and Order, the Mining Lease R-5 of July 23, 1987, and by the approval of the Plan of Operations on March 23, 1989. Subsequent permits are of a technical or administrative nature, and I will not use these as vehicles to hold up True/Mid-Pacific's work as long as the technical and administrative requirements have been properly met, and as long as all the terms and conditions of the basic land use and mining and leasing permits have been fulfilled. These provisions, which apply to each new drill site, include archaeological surveys, botanical surveys, and so on. At this time, the Department of Land and Natural Resources is evaluating an archaeological assessment of a second drill site, and may approve this condition in the near future. The County of Hawaii must approve an administrative permit for grubbing and grading any new site, and the Department of Land and Natural Resources must approve a second drilling permit prior to drilling at a second site. Reviews that must take place in prior to approving conditional requirements and technical and administrative permits will likely take some time. While I did commit not to permit more well permits beyond the 100 megawatt level previously permitted, I do not plan to hold back administrative or technical permits, or to urge Hawaii County to hold back previously permitted projects such as the True/Mid-Pacific project.

True/Mid-Pacific is permitted to carry out exploratory drilling up to 25 megawatts and to develop "ultimately" up to 100 megawatts of power. The permitted Plan of Operations must be amended once development is contemplated up to 25 megawatts. There is no specific commitment that any resource developed by True/Mid-Pacific is targeted for use on another island. Big Island needs alone can absorb up to the total 125 megawatts currently permitted.

Your concern about traditional practices within Wao Kele O Puna is being addressed. It is not clear to me that traditional practices have been curbed. The forest is large, and there are differing opinions as to the nature and extent of interference with customary practices. The Department of Land and Natural Resources preparing to engage the services of a Hawaiian practitioner to study and evaluate this situation. However, I do not confuse traditional practices with demonstrations and civil disturbances such as have taken place in the forest.

As to the other issues you bring up, I will not deviate from pursuing exploring use of geothermal resources. The characterization and verification efforts must go on so that we will know the extent and potential of the resource. I will use whatever proper means and avenues available to do this, including pursuing funding and carrying our exploratory projects. However, I shall also continue to assure that every project is carried out properly and in accordance with the proper environmental and other statutes. Judge Ezra's decision notwithstanding, it was last year that I directed the Department of Business and Economic Development to include federal environmental impact statement requirements into the state environmental impact document under development with regard to geothermal development on the Big Island. The FEMA report to the contrary, I am satisfied with the analysis of True/Mid-Pacific in the siting of the geothermal development, and with the emergency plan, approved by Hawaii County, to mitigate hazards due to lava flow. Finally, should the outcome of the traditional practices study referred to so indicate, I will consider legislation to designate and preserve areas critical to Hawaiian culture.

I will direct Mr. Keith Ahue of the Department of Land and Natural Resources to set up a meeting with you to go over your concerns in detail.

With kindest regards,

Sincerely,

JOHN WAIHEE

(ruby)

Dear Ms. Ruby:

Thank you for your letter of January 25, 1991 regarding geothermal exploration activities on the island of Hawaii. We appreciate your concerns related to the protection of our State's natural environment.

In light of the current conflict with Irag and the disastrous oil spill in the Persian Gulf, Hawaii more than any other state faces potentially critical energy supply problems associated with the import and use of petroleum. Any interruption of oil supplies to Hawaii, or dramatic increases in price, cannot be presently compensated by electricity generated from other resources.

In searching for resource alternatives to meet the current and projected energy needs of our growing population, and while protecting our natural environment, the State is committed to the careful investigation of geothermal energy as a viable option for reducing our dependence on imported oil.

Towards this end, the State's permitting of geothermal exploration and development activities within designated Geothermal Resource Subzones (GRS) has been continuously pursued in a cautious and environmentally sound manner. The permitting process for the Conservation District Use Permit authorizing activity within the Kilauea Middle East Rift GRS involved the preparation of two environmental impact statements and an extensive series of quasi-judicial contested case hearings which addressed numerous issues, including but not limited to, air quality, noise, and impacts to the environment.

Recognizing the pending litigation at both the Federal and State courts, the Department of Land and Natural Resources continues to actively monitor and regulate activities of True/Mid-Pacific Geothermal Venture under the terms and conditions of the issued permits. While a pending law suit does not prohibit a permittee from proceeding under a permit, unless an injunction is issued by the courts, it is my understanding that the permittee has agreed to refrain from any grubbing or grading until the date of the scheduled hearing on February 14, 1991.

It should be noted for the record that the Department has not issued any "forest clearing" permit to either True/Mid-Pacific or the University of Hawaii's Scientific Observation Hole Project. What was granted was approval of the archaeological survey for True/Mid-Pacific's next proposed well site as required under the existing Conservation District Use Permit issued in 1986.



Lastly, in response to your comment that my administration withdraw its request for additional funding for geothermal exploration activities, I continue to believe that these programs are vital to the assessment and management of our State's geothermal resource. Any new information generated as a result of this program such as the Scientific Observation Hole Project will be beneficial to both geothermal development and the scientific community in general.

I share your concerns regarding the prudent development of geothermal energy and agree that it must be balanced with our interests in preserving Hawaii's unique social and physical environment. Thank you again for your continued input and comments.

Sincerely,

John Waihee  
(etc.)

Ms. Meg Ruby, Coordinator  
Greenpeace, U.S.A. Tropical Forests Campaign  
1436 U Street NW  
Washington, DC 20009

Aloha:

~~Thank you for your letter of January 25, 1991, expressing your concern about permit activities of the Department of Land and Natural Resources for geothermal exploration activities in the Wao Kele O Puna forest of the Big Island of Hawaii.~~

~~We appreciate the comments of all interested parties, including non residents of our State, which lead us to more effective ways to ensure the protection of our natural heritage. Even more, we would welcome comments which help us protect the environment while meeting our obligations to ensure reliable, clean and alternatives to Hawaii's present dependence on imported oil.~~

~~In light of the~~  
~~We are certain you will agree that, the war with Iraq, and the disastrous oil spill in the Persian Gulf, demonstrate in the most unequivocal terms the problems Hawaii faces, more directly than any other State, with imported oil. Petroleum is neither a reliable nor a clean resource for Hawaii to depend upon for more than 90% of its energy requirements. Persons who do not live in Hawaii but who have focused on one narrow element of this complex issue may not be aware that such continued reliance simply is unacceptable to the great majority of the residents of our mid-oceanic State with its precious natural heritage.~~

~~By the same token, many in Hawaii find it difficult to understand why groups such as Greenpeace USA, which is based in Washington DC, and Rainforest Action Network, based in Northern California, wish to deprive their fellow citizens here of a prudent and orderly search for alternatives to oil when these groups are headquartered in areas whose electric utilities depend on oil for less than 20 percent of their energy requirements.~~

~~Any interruption of oil supplies in the nation's capital or in California, or a sudden dramatic increases in price, will be compensated for by electricity generated by broad regional grids which are powered largely by other resources. You may be unaware that such is not the case in Hawaii.~~

~~It is within the context of meeting the current and projected energy needs of our State's growing population, while both protecting our environment and searching for energy alternatives, that the State is committed to investigating geothermal energy as an option for reducing our dependence on imported oil. [I have noted that a key question is whether the resource does in fact exist, and if so, whether it can be harnessed in a safe, environmentally acceptable manner. To help answer these questions the State is pursuing a careful program to characterize and verify the geothermal resource.]~~

energy supply problems associated with the import and use of petroleum

and press release of the same date

Available at this present time.

Your comment that "The State of Hawaii is recklessly racing to allow more destruction of the rainforest before any legal injunctions are levied against them" is mistaken. The State's geothermal program in the Wao Kele O Puna forest has been pursued in a cautious and environmentally sound manner over nearly a decade, beginning in 1982, seven years before the Rainforest Action Network, based in San Francisco, joined the aggressive campaign against geothermal exploration in Hawaii initiated by Pele Defense Fund in 1986.

In 1982 the Board of Land and Natural Resources accepted an environmental impact statement for a proposed geothermal project in the Kahauale'a forest submitted by True/Mid-Pacific Geothermal Venture. Subsequently the Wao Kele O Puna was selected, after considerable study of potential effects on native Hawaiian forests, as a more appropriate site for geothermal exploration and development, precisely because the forest is heavily overrun with exotic (non-indigenous) plants.

After an exchange of lands was approved by the Legislature in 1985, the Board of Land and Natural Resources accepted a revised environmental impact statement from True/Mid-Pacific Geothermal Venture in 1986. Again following a public hearing and contested case hearing, the Board of Land and Natural Resources approved a Conservation District Use Permit to allow True/Mid-Pacific Geothermal Venture to explore for and incrementally develop up to 100 megawatts of geothermal energy within the sub-zone.

Exploration was initiated in 1989; no construction activity has taken place to date.

The Wao Kele O Puna forest is located in the Kilauea Middle East Rift Geothermal Resource Subzone, one of three subzones designated by the Board of Land and Natural Resources in 1985 following a public hearing and a quasi-judicial contested case hearing.

To date thirteen separate legal actions against the State and/or True/Mid-Pacific Geothermal Venture have been brought by Pele Defense Fund and others aimed at stopping geothermal exploration within geothermal resource sub-zones designated by the Legislature in 1985.

In 1989 the University of Hawaii completed an environmental assessment for four to six scientific observation holes (SOH) within designated geothermal resource sub-zones. To date only one SOH hole has been drilled in the Wao Kele O Puna forest. One is planned to start in mid-1991. Each SOH hole requires State and County permits. Permit requirements include the submission of botanical and cultural resource surveys.

I must also disagree with your comment that continued funding for the SOH project "would just be throwing good money after bad".

Commercial exploration for geothermal resources is occurring in two relatively small and widely separated areas of the Kilauea East Rift Zone one in the Wao Kele O Puna forest and one in the Kapoho area to the east. The purpose of the SOH program is to conduct resource assessment on a broader scale to the end that the extent and nature of the geothermal resource can be more accurately determined. There are several important differences between the State's exploration program and the drilling programs of the two active commercial developers. The State is presently sponsoring the drilling of so-called 'slim' holes, which are based on a technique known as core-drilling. Core samples, once removed from the ground and arranged by section, provide a continuous record of the subsurface geologic and hydrologic structure. They facilitate the production of subsurface maps. This information is of both scientific and potential commercial interest. In addition, slim holes lend themselves to certain temperature, pressure, and geophysical tests, which are useful in establishing resource potential.

The investment by the State in geothermal exploration as well in the development of the HGP-A pilot geothermal power plant have been important in demonstrating to the private sector the State's commitment to developing its geothermal resources. Commercial investment in geothermal exploration and development will, by the end of 1991, exceed \$100 million. No other alternative energy has been able to attract such a degree of confidence or such a level of investment. To quote the Hawaii Tribune Herald (August 19, 1990): "Opponents of geothermal are likely to respond that other alternate energy forms should be utilized, not geothermal. But what they never explain is why private industry doesn't clamor to invest in these supposedly practical forms of energy but shows a willingness to commit tens of millions of dollars to geothermal development".

We are heartened by the support of those environmental advocates who agree it is reasonable to pursue exploration and development activities in less than one percent of the Wao Kele O Puna forest. These advocates recognize that we are doing so for the critical public purpose of learning whether geothermal can lead us to a safer, cleaner, environmental future for all of our residents.

Meanwhile, we sincerely would welcome your participation in helping us meet this objective instead of postponing it. A spokesperson for one of your groups, Ms. Annie Szvetecz of Rainforest Action Network, said in your January 25, 1991 press release "There is absolutely no evidence that the State has an energy policy that really kicks the oil addiction." We would welcome hearing from Ms. Szvetecz, and any others in your alliance, about comprehensive alternative suggestions for the residents of Hawaii and their elected and appointed officials to study and debate.

Ms. Szvetecz continued, "Every effort will be made to prevent another tree from falling in that forest." We appreciate learning

what you are against. We wish to encourage you and your colleagues to expend similar energies at the same time to help us find solutions to problems which you, as non-residents of our most beautiful State, do not have to live with. May we ask you to join us in finding solutions we can all stand for?

Sincerely,

JOHN WAIHEE

DRAFT

Ms. Meg Ruby, Coordinator  
Greenpeace U.S.A. Tropical Forests Campaign  
1436 U Street NW  
Washington DC 20009

Dear Ms. Ruby,

Thank you for your letter of January 25, 1991 <sup>expressing</sup> ~~and for~~ your concerns regarding preservation of Hawaii's forests.

As you know, a land swap was made in 1986 (?) between the State of Hawaii and the land owner to allow the State to preserve a more pristine forest and utilize a portion of a less pristine area for geothermal development. In this less pristine area, only a small portion of forest is being developed.

Permits already in place in this area allow True/Mid-Pacific Geothermal company to conduct geothermal exploration and development at five well sites for up to 100 megawatts of power. These permits are: the Conservation District Use Permit (Decision and Order dated 4/11/86); an approved mining lease, R-5, dated July 23, 1987; and Board of Land and Natural Resources approval of a Plan of Operations. The Decision and Order and the Plan of Operations as approved include dozens of conditions which must be fulfilled before activity can take place at each well site. In addition, a variety of technical and administrative permits must be separately approved. The purpose of the technical and administrative permits is to assure that the implementation of the project is properly carried out, and provides State and County agencies notification and control of the project within the framework of the larger land use and operating permits that have already been approved.

At this time the Department of Land and Natural Resources is reviewing an archaeological assessment of an area within an already use-permitted location. This is not a "permit" as such. This is one of many conditions of the 1986 land use permit which must be met for each new drill site. Should the Department be satisfied with the archaeological assessment, the technical permit to drill an additional well should be forthcoming, if the applicant has fulfilled the required technical aspects. County of Hawaii grubbing and grading permits must be approved also, for each additional well site to be cleared.

In summary, the decision to pursue geothermal development and the approvals to do so have already been made and met. The Exploration at a second drill site at this point has been permitted except for the technical and administrative approvals mentioned above. The earlier (1986) decision to utilize some forest area for geothermal development came only after environmental assessments

were made and elaborate mitigation measures were taken. You need only examine the Decision and Order, the Plan of Operations and the subsequent programs, studies and monitoring that has gone on to appreciate this. There are dozens of conditions on the Decision and Order, including health measures - air, noise, meteorological monitoring, emergency plans - biological and botanical studies and programs for monitoring, archaeological studies, and so on.

As for the matter before Judge Ezra, I believe that in pursuing development of geothermal power we have met or exceeded every statutory requirement including environmental studies. In envisioning the large scale development of geothermal energy we did not see that incremental development would trigger a federal environmental impact statement until an application would be presented to the U.S. Corps of Engineers in connection with the proposed cable aspect of the project. Nevertheless, the Department of Business and Economic Development was instructed to prepare their environmental impact statements to include both state and federal specifications in one document, so that both requirements would be met. Since that time I have reassessed my priorities with regard to geothermal development to developing geothermal energy for Big Island use first before proceeding to export energy to other islands. Any transference of geothermal energy outside of the Big Island will be viewed as part of the State's Integrated Energy Plan. Both of these points - incorporating federal requirements into the state environmental impact statements, and the emphasis on Big Island energy first - makes the current issue of moot concern.

As for plans to proceed with characterization and verification of the geothermal resource, these must go forward. I have not changed in my belief that the indigenous geothermal resource could provide a superior energy source for Hawaii than coal or oil. The basic issue is that our population is going to continue to grow. Energy demand is going to continue to grow. Government has to provide the means to meet these needs in the best way. Do we want oil, coal or nuclear powered plants or do we want geothermal plants? You know how these alternatives compare. We have made the decision to trade off some marginal forested lands in order to pursue the possibility of geothermal development.

Thank you again for your concerns.

With kindest regards,

Sincerely,

JOHN WAIHEE

RECEIVED

September 25, 1989

TO: Sus Ono  
Roger Ulveling  
Les Matsubara  
Maurice Kaya  
Bill Paty  
Libert Landgraf  
Jack Lewin  
Bruce Anderson  
Josh Agasalud  
Jim Manke

89 SEP 29 AIO:20

F12:48

DIV. OF WATER &  
LAND DEVELOPMENT

STATE OF HAWAII

FR: Chuck Freedman

RE: Geothermal Energy

Attached are two sheets of basic points, one on why geothermal energy is a state priority and the second on forest conservation. Later I hope to get you a third sheet which compares Hawaii's resource management with Brazil.

These sheets are in the hands of Senator Inouye's staff in Washington. Pat Deleon and Jennifer Goto are tracking the environmental conference taking place this week, involving the Rainforest Action Network (RAN). Essentially we want to know if RAN will attempt to use the conference as a basis to promote their anti-geothermal position.

I've asked Senator Inouye's office for Washington leadership on this. I've asked them to monitor activities and, if need be, to clarify Hawaii's positions on geothermal, emphasizing the environmental benefits of going from oil to geothermal.

I will be with the Governor in Charlottesville this week, beginning Tuesday. Should you have or need info, please call Jim Menke at my extensions (3170).



## THE BASICS - ENERGY SELF-SUFFICIENCY

1. Hawaii's energy goal is twofold. First, to reduce our dependence on oil, because oil is a non-renewable, ecologically detrimental import. Second, to increase our energy self sufficiency, because it is critical to our security as an island people.

2. Energy conservation programs have made us more energy efficient. Since 1980 we have achieved an impressive 21% reduction in per-capita energy demand

3. The "Blueprint for the Environment - Advice to the President-Elect from America's Environmental Community" (a cooperative effort by national environmental organizations presented to President-Elect Bush) found that fossil fuels are "responsible for about half the greenhouse gases that are warming the earth" and that energy decisions must move towards the use of clean, renewable energy sources.

Indeed private and public sector action makes Hawaii world leaders in the variety of renewable energy sources which we use....from ocean thermal, to biomass, to wind, to photovoltaic, to solar, to geothermal.

4. Yet the people of Hawaii are the most oil-dependent in the United States. Imported oil fills 90% of energy needs. As a state we must spend 10% of all we produce to buy oil.

5. Geothermal energy has the best near-term potential to supply our baseload energy needs.

6. Geothermal power is cleaner than oil or coal. Oil-generating plants emit 13 times as many gasses and particulates as geothermal plants. Coal plants emit 40 times as much.

7. We are now conducting master planning to ensure that we develop geothermal resource in a way that's sensitive to environmental, social and community concerns.

8. OUR CHALLENGE IS TO REDUCE OUR DANGEROUS DEPENDENCY ON OIL, IMPROVE OUR AIR QUALITY AND STABILIZE OUR ECONOMY THROUGH CONTINUED ENERGY CONSERVATION, RESEARCH AND DEVELOPMENT OF ALL RENEWABLE ENERGY RESOURCES AND THE USE OF GEOTHERMAL ENERGY TO MEET OUR NEAR-TERM BASELOAD NEEDS. WE MUST DECLARE ENERGY INDEPENDENCE AND TAKE ACTION TO ACHIEVE IT.

## THE BASICS - PRESERVING OUR FORESTS AND MORE

1. The State of Hawaii encompasses 4 million acres of land. Over 900,000 acres are State forest reserve, 270,000 acres are national park and wildlife refuges, and 46,000 acres private conserves under management of the Nature Conservancy. These are cherished lands.

2. In the last two decades, Hawaii State has established model law and practice in: a) the Statewide Area Reserves System (NARS), which protects unique island ecosystems and b) the Conservation of Aquatic Life, Wildlife and Land Plants, which safeguards endangered species and promote conservation action.

3. Hawaii State has entered into partnership with the environmental organization, Nature Conservancy, for management of the Natural Area Reserves, with special funding to NARS of \$2 million per year.

4. State programs include a world-class endangered species captive propagation facility, development of the Hawaii Natural Heritage data base, and successful negotiations to dedicate private lands as permanent native forest wildlife habitat areas. Regarding the latter, just this year the Governor announced agreement by a private land-holder for a new 462-acre forest preserve on Lanai, and is now undertaking action at the behest of environmental organizations for a 7-mile wildlife park on unique private lands on the west side of the Big Island. Ulupala (cur)

5. The major threat to these environments are introduced species -- plant and animal. Government and private partnerships have stepped up resources for the control of noxious weeds and feral animals.

6. This year Hawaii beefed up its land-banking law and made a \$20 million appropriation for the acquisition of unique lands. Beyond the land, Hawaii is a national leader in "air and sea" resource conservation. Just this year we became the first State to pass a law limiting the sale of CFC-containing refrigerants to protect the ozone layer and passed tough laws forbidding gill-netting and prohibiting the use of nondegradable plastic connecting devices which trap sea life.

7. OUR PROGRAMS ARE NATIONAL MODELS, SPEAK FOR THEMSELVES AND WILL MOVE FORWARD. CORNERSTONES INCLUDE: FUNDS FOR FOREST PROTECTION AND WILDLIFE MANAGEMENT, NEGOTIATION FOR PRIVATE LAND ACQUISITION AND DEDICATION FOR WILDLIFE HABITATS, PARTNERSHIPS WITH NATURE CONSERVANCY AND CONCERNED ORGANIZATIONS AND CONTINUED RESEARCH ON BEHALF OF TROPICAL RESOURCE CONSERVATION.

DRAFT

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2011/22 10:40  
**PART II  
PRIORITY GUIDELINES**

The following are Priority Guidelines for implementation of the Policy Statement on geothermal development in the State of Hawaii.

1. As our geothermal energy resources are developed, continue to support research into and development of other indigenous energy sources. Further, through the auspices of the Hawaii Integrated Energy Policy Development Program, continue to re-evaluate and, as appropriate, revise State energy priorities.
2. Ensure that the designated responsible regulatory agencies establish performance standards (i.e., air quality and noise standards, set-back criteria, etc.). These criteria will provide a quantifiable unit of measure against which to monitor project development and operation compliance.
3. Require that responsible regulatory agencies develop resource conservation programs which include data collection and management, resource and facility monitoring, staff training and equipment, and research funding designed to monitor and evaluate development and operation activities.
4. Designate the State Department of Business and Economic Development to be responsible for the continued updating and evaluation of the geothermal database, and ensuring that this information is available to the public, other agencies, and the geothermal industry.
5. Continue efforts to establish the geothermal compensation asset fund for administration by the County of Hawaii.
6. Continue support of permitted and future geothermal development projects necessary to meet Big Island electrical needs, enabling the benefits of energy development to go first to the island most affected by such development.
7. Encourage further exploration for geothermal resources in the Kilauea East Rift Zone, as well as other prospective areas such as the Kilauea Southwest Rift Zone, to determine if adequate geothermal resources exist to justify continued support of geothermal development.
8. Continue and complete the master development planning process to determine the most environmentally-sound means of proceeding with further geothermal development for export to Oahu and perhaps Maui.
9. Continue <sup>review</sup>~~support~~ of and participation in the HECO/State process for selection of a consortium to further develop, as necessary, geothermal resources for Big Island use, and for state-wide export should it prove technically, financially and environmentally feasible.

## I. ENERGY SELF-SUFFICIENCY

1. Hawaii's energy goal is twofold. First, to reduce our dependence on oil, because oil is a non-renewable, ecologically detrimental import. Second, to increase our energy self sufficiency, because it is critical to our security as an island people.

2. Energy conservation programs have made us more energy efficient. Since 1980 we have achieved an impressive 21% reduction in per-capita energy demand

3. The "Blueprint for the Environment - Advice to the President-Elect from America's Environmental Community" (a cooperative effort by national environmental organizations presented to President-Elect Bush) found that fossil fuels are "responsible for about half the greenhouse gases that are warming the earth" and that energy decisions must move towards the use of clean, renewable energy sources.

Indeed private and public sector action makes Hawaii world leaders in the variety of renewable energy sources which we use....from ocean thermal, to biomass, to wind, to photovoltaic, to solar, to geothermal.

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## II. PRESERVING OUR FORESTS AND MORE

1. The State of Hawaii encompasses 4 million acres of land. Over 900,000 acres are State forest reserve, 270,000 acres are national park and wildlife refuges, and 46,000 acres private conserves under management of the Nature Conservancy. In fact, although Hawaii is the fourth smallest State in the country, it proudly ranks 7th highest in State-owned forest lands.

2. In the last two decades, Hawaii State has established model law and practice in: a) the Statewide Area Reserves System (NARS), which protects unique island ecosystems and b) the Conservation of Aquatic Life, Wildlife and Land Plants, which safeguards endangered species and promote conservation action.

3. Hawaii State has entered into partnership with the environmental organization, Nature Conservancy, for management of the Natural Area Reserves, with special funding to NARS of \$2 million per year.

4. State programs include a world-class endangered species captive propogation facility, development of the Hawaii Natural Heritage data base, and successful negotiations to dedicate private lands as permanent native forest wildlife habitat areas. Regarding the latter, just this year the Governor announced agreement by a private landholder for a new 462-acre forest preserve on Lanai, and is now undertaking action at the behest of environmental organizations for a 7-mile wildlife park on unique private lands on the west side of the Big Island.

5. The major threat to these environments are introduced species -- plant and animal. Government and private partnerships have stepped up resources for the control of noxious weeds and feral animals.

6. We are very serious about reforestration and tree planting. For example in the last two years, the State Department of Land and Natural Resources produced and distributed 900,000 tree seedlings, planted 850 acres of land, and prepared hundreds more for new planting.

7. The Department of Land and Natural Resources budget for natural conservation is \$15.4 million and includes a state of the art Endangered Species Captive Rearing Project. In addition, this year Hawaii beefed up its land-banking law with a \$20 million appropriation for the public acquisition of privately owned unique lands. Beyond the land, Hawaii is a national leader in "air and sea" resource conservation. Just this year we became the first State to pass a law limiting the sale of CFC-containing refrigerants to protect the ozone layer and passed tough laws forbidding drift gill-netting and prohibiting the use of nondegradable plastic connecting devices which trap sea life.

8. OUR PROGRAMS ARE NATIONAL MODELS, SPEAK FOR THEMSELVES AND WILL MOVE FORWARD. CORNERSTONES INCLUDE: FUNDS FOR FOREST PROTECTION AND WILDLIFE MANAGEMENT, NEGOTIATION FOR PRIVATE LAND ACQUISITION AND DEDICATION FOR WILDLIFE HABITATS, PARTNERSHIPS WITH NATURE CONSERVANCY AND CONCERNED ORGANIZATIONS AND CONTINUED RESEARCH ON BEHALF OF TROPICAL RESOURCE CONSERVATION.

### III. BACKGROUND - THE GEOTHERMAL SUBZONE AND THE FOREST

While the wet forests and woodlands of Puna are not Brazilian rainforests, they are a great resource. To protect them, the State conducted lengthy public contested case hearings, including considerable input from environmentalist groups.

The result was an exchange which protects the higher elevation ohia forests known as Kahaualea, then owned by Campbell Estate, from all development. These lands are adjacent to the National Park, are a valuable habitat and are now public lands. By our action, we have created a State and Federal "mega-reserve", which virtually all parties agreed was a conservation achievement.

In exchange a portion of the lower lands known as Wao Kele O Puna were designated for geothermal use. Of these lands, a maximum of 400-600 acres will be used for geothermal development (roads, pads, power plant areas). Only specific parts of this acreage will be cleared.

### IV. SUMMARY POINTS - GEOTHERMAL ENERGY

1. Increasing use of renewable energy over oil generated energy is a national policy endorsed by many environmental groups. Geothermal power is far cleaner than oil or coal and contributes to the reduction of global warming. Developing geothermal energy is good economic and environmental policy for the State of Hawaii.

2 Hawaii is proud of our conservation programs, land, sea and air. We have the cleanest natural environment in America and are national trend-setters with many of our laws and programs.

3. The land being used for geothermal development is part of a parcel exchanged with private landowners through opened and detailed hearings. In return the State received lands called Kahaualea, which are higher land forests with rich habitats. Adjacent to the National Park, we have now created a "mega-reserve" of immeasurable future benefit to nature and mankind.

February 1, 1991

MEMORANDUM

TO: Manabu Tagamori

FROM: Dean Anderson

SUBJECT: Assistance in responding to letters and press release opposing geothermal.

DLNR was asked to coordinate the Administration's response to letters dated January 25, 1991, from Greenpeace, et al and Pele Defense Fund. Rainforest Action Network also issued a press release on the same date which refers to the two letters.

I asked Bruce Benson to prepare some language (attached) to help in responding. Please draw from that language as you think appropriate.

I have prepared the following two responses for you to use as you see fit, keeping clear of the matters under litigation as well as the hypothetical implications and ramifications of anticipated court rulings:

1. On Meg Ruby's comment in the RAN press release: "The State of Hawaii is recklessly racing to allow more destruction of the rainforest before any legal injunctions are levied against them".

The State's geothermal program in the Wao Kele O Puna forest has been pursued in a cautious and environmentally sound manner over nearly a decade, beginning in 1982, seven years before the Rainforest Action Network, based in San Francisco, joined the aggressive campaign against geothermal exploration in Hawaii initiated by Pele Defense Fund in 1986.

In 1982 the Board of Land and Natural Resources accepted an EIS for a proposed geothermal project in the Kahauale'a forest submitted by True/Mid-Pacific Geothermal Venture. Subsequently, the Wao Kele O Puna was selected, after considerable study of potential effects on native Hawaiian forests, as a more appropriate site for geothermal exploration and development, precisely because the forest is heavily overrun with exotic (non-indigenous) plants.

After an exchange of lands was approved by the Legislature in 1985, BLNR accepted a revised EIS from True/Mid-Pacific in 1986. Again following a public hearing and contested case hearing, the BLNR approved a Conservation District Use Permit to allow True/Mid-Pacific to explore for and incrementally develop up to 100 megawatts of geothermal energy within the sub-zone.

Exploration was initiated in 1989; no construction activity has taken place to date.

The Wao Kele O Puna forest is located in the Kilauea Middle East Rift Geothermal Resource Subzone, one of three subzones designated by the BLNR in 1985 following a public hearing and a quasi-judicial contested case hearing.

To date thirteen separate legal actions against the State and/or True/Mid-Pacific have been brought by PDF and others aimed at stopping geothermal exploration within geothermal resource subzones designated by the Legislature in 1985.

In 1989 the University of Hawaii completed an environmental assessment for four to six scientific observation holes (SOH) within designated geothermal resource subzones. To date only one SOH hole ~~has been drilled~~ <sup>is planned to</sup> in the Wao Kele O Puna forest. One is planned to start in mid-1991. Each SOH hole requires State and County permits. Permit requirements include the submission of botanical and cultural resource surveys.

2. On the request made in both the Greenpeace letter and the Pele Defense Fund letter that the legislative request of \$3 million for characterization and verification of the geothermal resource be withdrawn and of criticism in the RAN news release that continued funding of SOH exploration "would be throwing good money after bad", etc.

Commercial exploration for geothermal resources is occurring in two relatively small and widely separated areas of the Kilauea East Rift Zone, one in the Wao Kele O Puna Forest and one in the Kapoho area to the east. The purpose of the SOH program is to conduct resource assessment on a broader scale to the end that the extent and nature of the geothermal resource can be more accurately determined. There are several important differences between the State's exploration program and the drilling programs of the two active commercial developers. The State is presently sponsoring the drilling of so-called 'slim' holes, which are based on a technique known as core-drilling. Core samples, once removed from the ground and arranged by section, provide a continuous record of the subsurface geologic and hydrologic structure. They facilitate the production of subsurface maps. This information is of both scientific and potential commercial interest. In addition, slim holes lend themselves to certain temperature, pressure, and geophysical tests, which are useful in establishing resource



potential.

The investment by the State in geothermal exploration as well in the development of the HGP-A pilot geothermal power plant have been important in demonstrating to the private sector the State's commitment to developing its geothermal resources. Commercial investment in geothermal exploration and development will, by the end of 1991, exceed \$100 million. No other alternative energy has been able to attract such a degree of confidence or such a level of investment. To quote the Hawaii Tribune Herald (August 19, 1990): "Opponents of geothermal are likely to respond that other alternate energy forms should be utilized, not geothermal. But what they never explain is why private industry doesn't clamor to invest in these supposedly practical forms of energy but shows a willingness to commit tens of millions of dollars to geothermal development".

DRA:resp291.mem



**DEPARTMENT OF BUSINESS  
AND ECONOMIC DEVELOPMENT**

JOHN WAIKES  
GOVERNOR  
ROGER A. UVELINO  
DIRECTOR  
BARBARA KIM STANTON  
DEPUTY DIRECTOR  
LESLIE S. MATTHEWS  
DEPUTY DIRECTOR

ENERGY DIVISION, 235 MERCHANT ST., RM. 118, HONOLULU, HAWAII 96813 FAX: (808) 531-5243

**FACSIMILE TRANSMITTAL PAGE**

**GEOHERMAL PROJECT OFFICE - ENERGY DIVISION**

TO: JANET SWIFT  
COMPANY: DLNR  
FROM: DEAN ANDERSON  
DATE: 2-4-91

**MESSAGE:**

Total number of pages: 3

If you do not receive all of the pages legibly, please call back. Phone: (808) 586-2353.

Sending Facsimile Number: (808) 586-2355.

Receiving Facsimile Number: 548-6052.

PAGE 2 OF 3 PAGES

SUGGESTED LANGUAGE FOR  
RESPONSES TO GREENPEACE +  
PDF LETTERS DATED JAN 25, 1991.

Aloha:

Thank you for your letter to Governor Waihee of January 25, 1991 and press release of the same date expressing concern about permit activities of the Department of Land and Natural Resources for geothermal exploration activities in the Wao Kele O Puna forest of the Big Island.

We appreciate the comments of all interested parties, including non-residents of our State, which lead us to more effective ways to ensure the protection of our natural heritage. Even more, we would welcome comments which help us protect the environment while meeting our obligations to ensure reliable, clean alternatives to Hawaii's present dependence on imported oil.

We are certain you will agree that the war with Iraq, and the disastrous oil spill in the Persian Gulf, demonstrate in the most unequivocal terms the problems Hawaii faces, more directly than any other State, with imported oil. Petroleum is neither a reliable nor a clean resource for Hawaii to depend upon for more than 90 percent of its energy requirements. Persons who do not live in Hawaii but who have focused on one narrow element of this complex issue may not be aware that such continued reliance simply is unacceptable to the great majority of the residents of our mid-oceanic State with its precious natural heritage.

By the same token, many in Hawaii find it difficult to understand why groups such as Greenpeace USA, which is based in Washington DC, and Rainforest Action Network, based in Northern California, wish to deprive their fellow citizens here of a prudent and orderly search for alternatives to oil when these groups are headquartered in areas whose electric utilities depend on oil for less than 20 percent of their energy requirements.

An interruption of oil supplies in the nation's capital or in California, or a sudden dramatic increase in price, will be compensated for with electricity provided by broad regional grids which are powered largely by other resources. You may be unaware that such is not the case in Hawaii.

It is within the context of both protecting our environment and searching for energy alternatives that the State is committed to investigating geothermal energy as an option for reducing our dependence on imported oil. Governor Waihee has noted that a key question is whether the resource does in fact exist, and if so, whether it can be harnessed in a safe, environmentally acceptable manner. To help answer these questions the State is pursuing a careful program to characterize and verify the geothermal resource.

We are honored by the

JAN-30-91 WED 22:22

Bruce Benson Marketing

FAX NO. 8089555287

P.03

PAGE 3 OF 3 PAGES

advocates who agree it is reasonable to pursue exploration and development activities in less than one percent of the Wao Kele O Puna forest. These advocates recognize that we are doing so for the critical public purpose of learning whether geothermal can lead us to a safer, cleaner, environmental future for all of our residents.

Meanwhile, we sincerely would welcome your participation in helping us meet this objective instead of postponing it. A spokesperson for one of your groups, Ms. Annie Szvetcz of Rainforest Action Network, said in your Jan. 25 press release, "There is absolutely no evidence that the State has an energy policy that really kicks the oil addiction." We would welcome hearing from Ms. Szvetcz, and any others in your alliance, about comprehensive alternative suggestions for the residents of Hawaii and their elected and appointed officials to study and debate.

Ms. Szvetcz continued, "Every effort will be made to prevent another tree from falling in that forest." We appreciate learning what you are against. We wish to encourage you and your colleagues to expend similar energies at the same time to help us find solutions to problems which you, as non-residents of our most beautiful State, do not have to live with. May we ask you to join us in finding solutions we can all stand for?

Sincerely,

---



**Hawaii Island Geothermal Alliance (HIGA)**  
 100 West Lanikaula Street  
 Hilo, HI 96720

*Sony Lesford*  
*HP 586-2355*  
*Hunter Bishop*  
*935-6622*

January 31, 1991

The Honorable John Waihee  
 Governor, State of Hawaii  
 State Capitol  
 Honolulu, Hawaii 96813

Dear Governor,

We thank you and the State Department of Land and Natural Resources for granting the permits which will allow True Geothermal Energy Company to clear a second drilling site for geothermal development on the Island of Hawaii.

We had been concerned over recent requests sent to you from Mainland-based groups seeking a halt to the granting of permits for geothermal development in Wao Kele O Puna and the withdrawal of budget requests for \$3 million for further drilling in the State's Scientific Observation Hole exploratory geothermal project. We feel this is a good time to restate and reinforce our position in support of the initial development of 50 megawatts of geothermal power to serve the growing needs of Hawaii Island.

We are Hawaii Island residents who firmly support the development of 50 megawatts of geothermal power for our County over the next three to five years. This position has been taken by the Big Island Business Council, comprised of 10 Big Island business organizations representing over 3,000 Hawaii Island companies which employ nearly 20,000 Big Islanders; by the Hawaii Island Geothermal Alliance, a coalition of business, labor and grassroots organizations and individuals; by a majority of the Big Island Labor

Telephone:  
 (808) 935-3727  
 Facsimile:  
 (808) 961-2490

Frank Hicks  
 Chairman

Business Co-Chair

Bill Swartz  
 Randolph K. Ahuna, Jr.  
 Wayne Blyth  
 Peter Hauanio  
 Frank Hicks  
 Clinton Topp  
 James W. Ednie  
 Ed Hara  
 Labor Co-Chair

Advisory

Edwin J. Tapscott  
 Arthur J. Lee  
 William J. Warrick  
 John C. Lee  
 Bill Berra, Jr.

Advisory Co-Chair

George M. Mendenhall  
 Dan Makozian  
 Dr. Max Goldberger  
 George Mendenhall

An island-wide  
 business-laboring-alliance  
 coalition in support  
 of clean, dependable  
 geothermal energy  
 for Hawaii Island residents.

Alliance, representing more than 12,000 union members, and the Hawaii Building and Construction Trades Council, comprised of 17,000 working men and women throughout the State.

We are concerned with the welfare of our members and their families, in all, some 60,000 to 70,000 Hawaii Island residents.

We support the State's policies of energy conservation and we compliment the State administration's foresight in researching all alternative energy potentials. We also specifically support Ormat/Puna Geothermal Venture's Pohoiki Power Plant and True Geothermal Energy Company's exploratory drilling in Wao Kele O Puna, and we believe the people of the Hawaii County will benefit from these endeavors.

As you know, Governor, the alien-infested forest of Wao Kele O Puna was designated for geothermal exploration as the result of a major land exchange recommended by area residents and approved by the State.

This exchange protected a far more pristine native forest further upslope on Kilauea and established a major "buffer" between Hawaii Volcanoes National Park and the State's designated geothermal subzone.

As a result, this exchange was hailed by residents islandwide and endorsed by the Audubon Society and numerous other environmental and community organizations and individuals.

Within the Wao Kele O Puna geothermal subzone, only 350 acres (less than 1 percent) of the forest will be devoted to geothermal development. Equally important, extremely strict regulations have been imposed on True Geothermal Energy Company to further protect unique botanical species, bird habitats and possible archaeological sites.

Governor, our people support geothermal and other alternative energy development for both environmental and economic reasons; by importing and burning less fossil fuel, we diminish the potential for a major oil spill; we dump significantly less pollutants into the air; we slow global warming and ease Hawaii's stranglehold-dependence on foreign crude in these most uncertain times.

Just as important, we seek to eliminate rolling brownouts and blackouts which are experienced almost daily throughout the Island.

Geothermal opponents, well funded by Mainland organizations, have filed numerous lawsuits to stop geothermal development on the Island of Hawaii. In every case that has been heard in full, the courts have decided in favor of the State and private developers. Opponents have tried several legal and some illegal tactics to block geothermal projects, and we expect the challenges to continue.

We believe the law should take its course in the pending litigation, but in light of the track record of the opponents in the courts, we are pleased to see that neither the State nor private developers have been deterred or intimidated by these tactics.

Governor, we close by pointing out that during the recent election, a number of individuals campaigned on anti-geothermal platforms. This was certainly within their right. The point, however, is that they were not successful. Most were defeated by wide margins even in the District of Puna-Ka'u.

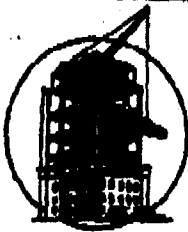
The Hawaii County Democratic Party at its 1990 convention adopted a resolution supporting the development of 50 megawatts on the Island of Hawaii. A very similar resolution was adopted at the State Democratic Party convention.

This very clearly indicates that the Hawaii Island community and residents throughout the State support your administration's approach of imposing strict standards in tandem with continued geothermal development.

We again thank you for your support and attention to this matter.

Sincerely,

Frank Hicks, Chairman, Hawaii Island Geothermal Alliance  
Herbert J. Perreira, Chairman, Big Island Labor Alliance  
Richard West, Chairman, BIBC Economic Development Committee  
George Yokoyama, HIGA Grassroots Coordinator  
Herbert S.K. Kaopua Sr., President, Hawaii Building &  
Construction Trades Council



# HAWAII BUILDING AND CONSTRUCTION TRADES COUNCIL AFL-CIO

1109 Bethel Street • Basement Level • Honolulu, Hawaii 96813  
(808) 538-1605 Fax (808) 528-2629

Herbert S.K. Kaopua Sr.  
President

Howard Tacka  
Vice President

Clyde Eugenio  
Secretary-Treasurer

Paul Anae  
Sergeant-At-Arms

TRUSTEES: Benjamin Seguior/Lawrence Sakamoto/Leonard Sobrosa

February 1, 1991

FROM  
GOV

TO DEAN NAKANO

The Honorable Governor John Waihee  
State Executive Offices  
State Capitol  
Honolulu, Hawaii 96813

GOV REF 91:060-11  
DBED ACTION

Dear Governor:

In light of recent requests sent to you from Mainland-based groups seeking a halt to the granting of permits for geothermal development in Wao Kele O Puna and the withdrawal of budget requests for \$3 million for further drilling in the State's Scientific Observation Hole exploratory geothermal project, we feel we must restate and reinforce our position in support of the initial development of 50 megawatts of geothermal power to serve the growing needs of Hawaii Island.

The State Democratic Party passed a resolution at its 1990 convention supporting the development of geothermal energy on the Island of Hawaii.

We firmly support the development of 50 megawatts of geothermal power for Hawaii County over the next three to five years. This position has been taken by the Big Island Business Council, comprised of 10 Big Island business organizations representing over 3,000 Hawaii Island companies which employ nearly 20,000 Big Islanders; by the Hawaii Island Geothermal Alliance, a coalition of business, labor and grassroots organizations and individuals; by a majority of the Big Island Labor Alliance, representing more than 12,000 union members, and the Hawaii Building and Construction Trades Council, comprised of 21,000 working men and women throughout the State.

We are concerned with the welfare of our members and their families, in all, some 60,000 to 70,000 Hawaii Island residents.

We support the State's policies of energy conservation and we compliment the State administration's foresight in researching all alternative energy potentials. We also specifically support Ormat/Puna Geothermal Venture's Pohoiki Power Plant and True Geothermal Energy Company's exploratory drilling in Wao Kele O Puna, and we believe the people of the Hawaii County will benefit from these endeavors.

As you know, Governor, the alien-infested forest of Wao Kele O Puna was designated for geothermal exploration as the result of a major land exchange recommended by area residents and approved by the State.

Skilled Craftsmanship Makes the Difference.

m. m. m. m. m.

DBED



The Honorable Governor John Waihee  
February 1, 1991  
Page Two

This exchange protected a far more pristine native forest further upslope on Kilauea and established a major "buffer" between Hawaii Volcanoes National Park and the State's designated geothermal subzone.

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Within the Wao Kele O Puna geothermal subzone, only 350 acres (less than 1 percent) of the forest will be devoted to geothermal development. Equally important, extremely strict regulations have been imposed on True Geothermal Energy Company to further protect unique botanical species, bird habitats and possible archaeological sites.

Governor, our members support geothermal and other alternative energy development for both environmental and economic reasons; by importing and burning less fossil fuel, we diminish the potential for a major oil spill; we dump significantly less pollutants into the air; we slow global warming and ease Hawaii's stranglehold-dependence on foreign crude in these most uncertain times.

Just as important, we seek to eliminate rolling brownouts and blackouts which are experienced almost daily islandwide.

Geothermal opponents, well funded by mainland organizations, have filed numerous lawsuits to stop geothermal development on the Island of Hawaii. In every case that has been heard in full, the courts have decided in favor of the State and private developers. Opponents have tried several legal and some illegal tactics to block geothermal projects, and we expect the challenges to continue.

We believe the law should take its course in the pending litigation, but we also believe the State and private developers should not be deterred or intimidated by these tactics, particularly in light of the track record of the opponents in the courts.

Governor, we close by pointing out that during the recent election, a number of individuals campaigned on anti-geothermal platforms. This was certainly within their right. The point, however, is that they were not successful. Most were defeated by wide margins even in the District of Puna-Ka'u.

This very clearly indicates that the Big Island community supports your administration's approach of imposing strict standards in tandem with continued geothermal development.

Thank you for your support and attention to this matter.

Sincerely,



Herbert S. K. Kaopua, Sr.  
President

(hale)

Ms. Helene H. Hale, Councilwoman  
County Council  
County of Hawaii  
Hawaii County Building  
25 Aupuni Street  
Hilo, Hawaii 96720

Dear Councilwoman Hale:

Thank you for your recent letter commenting on geothermal development activities on the island of Hawaii. We appreciate your taking the time to write us and advise of your concerns.

The True/Mid-Pacific Geothermal Venture project that you refer to is situated on Conservation land under the jurisdiction of the Board of Land and Natural Resources. The State's permitting and regulatory procedures for such geothermal exploration and development is a strict and scrutinizing process with full opportunity for public input and comment.

The permitting process for the Conservation District Use Permit issued to Campbell Estate involved the preparation of two Environmental Impact Statements and an extensive series of quasi-judicial contested case hearings which addressed numerous issues including but not limited to air quality, noise, and impacts to the environment.

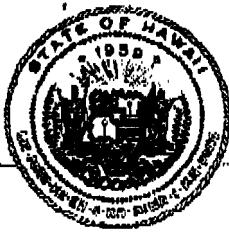
Please be assured that the appropriate State agencies have been charged with the responsibility for regulating geothermal development activities and have continued in their efforts to monitor and enforce compliance with all applicable regulations and permit conditions.

I share your concerns regarding the prudent development of geothermal energy and agree that it must be balanced with our interests in preserving Hawaii's unique social and physical environment.

The Department of Land and Natural Resources appreciates your continued input and comments. Should you have any questions, please contact Manabu Tagomori, Deputy Director at 548-7533.

Sincerely,

WILLIAM W. PATY



## DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

KAMAMALLU BUILDING, 250 SOUTH KING ST., HONOLULU, HAWAII  
MAILING ADDRESS: P.O. BOX 9869, HONOLULU, HAWAII 96804 TELE: 7490258 HONOLULU FAX: (808) 548-8166

JOHN WAIHEE  
GOVERNOR  
ROGER A. ULVELING  
DIRECTOR  
BARBARA KIM STANTON  
DEPUTY DIRECTOR  
LESLIE S. MATSUBARA  
DEPUTY DIRECTOR

89:11228-005

October 18, 1989

Mr. and Mrs. Timothy Frazier  
1369 B Masonic Avenue  
San Francisco, California 94117

Dear Mr. and Mrs. Frazier:

This is to thank you for, and respond to, your letter to Governor Waihee relating to geothermal development and rain forests.

After investigating the many issues concerning the proposed Big Island geothermal project, we would like to offer our response to your recent letter.

Hawaii's residents and its state and local governments are intensely proud of our natural resources of sun, sea and land, clean air and fresh water. We are doing our best to insure that future generations will continue to enjoy the pristine environment that the ancient Hawaiians first encountered centuries ago.

Compared with other states, a very large proportion of Hawaii's land is in natural or protected condition. About one-fourth of our total land area is made up of State forest reserves, national parks, and wildlife refuges, as well as private preserves under the management of the environmental group, the Nature Conservancy of Hawaii.

Our State programs for forest protection and natural resource management are national models.

We are pleased to let you know that all of us share your concern for Hawaii's forest lands. Hawaii's geothermal development will be taking place in areas with the least amount of wet forest acreage, not in areas where there are extensive concentrations of rain forest.

Geothermal promises to provide Hawaii with a renewable energy source which is environmentally much cleaner than burning oil or coal. In terms of oil imports, Hawaii is truly the most vulnerable state in America. We currently import and burn oil for 90% of our energy needs -- even as we receive energy from other alternative sources such as solar, wind, bagasse (sugar cane trash burning), and resource recovery from refuse.

Mr. and Mrs. Timothy Frazier  
Page 2  
October 18, 1989

Be assured that we are safeguarding our natural resources vigorously. Since Hawaii's economy is largely tourism based, it is extremely important that we preserve and protect the unique natural environment which attracts visitors to the islands in the first place.

More importantly, it is imperative that we preserve, maintain and enhance those resources so that Hawaii will always be a desirable home -- now, and for future generations of island residents.

Come and see for yourself the commitment to natural resource conservation of which I have spoken.

Thank you for your concern.

Sincerely,

Roger A. Ulveling

RAU/GOL:sr

April 10, 1989

See second page  
for General  
Mailing List

Dear (\_\_\_\_\_):

Thank you for your recent letter concerning the University of Hawaii's Scientific Observation Hole (SOH) Program. Your concerns regarding potential impacts resulting from the project will be given every consideration.

For your information, an environmental assessment has been prepared by the University addressing potential impacts related to the proposed project which has determined that the project would have no significant adverse effect on the environment.

It should be emphasized that the project is for scientific purposes with the objective to confirm the presence and extent of geothermal resource on the island of Hawaii. None of the SOH test holes will be used for production or be allowed to vent steam into the atmosphere. The proposed activity is benign in nature and the scientific research undertaken would include: core logging, temperature measurements, collecting water samples, and other geophysical measurements.

In addition, the applicant will be required to comply with all applicable Federal, State, and County statutes, ordinances, rules and regulations, and the Department's Administrative Rules, Chapter 13-183 and 13-184.

The Department of Land and Natural Resources appreciates your input and comments on the SOH project. Should you have any questions, please contact Manabu Tagomori at 548-7533.

Very truly yours,

WILLIAM W. PATY

General Mailing List:

Ms. Celine Logan, R R 2, Box 2264, Pahoa, Hawaii 96778

Mrs. Rochelle Wilson, 1481 Third Ave. #108, Chula Vista, Ca 92011

Mr. W. Gregory Braun, President, Asia Pacific Flowers, Inc.,  
P.O. Box 1121, Hilo, Hawaii 96721

Mr. James Jacoby, P.O. Box 1918, Pahoa, Hawaii 96778

Mr. Randal Lee, P.O. Box 943, Pahoa, Hawaii 96778

Mr. and Mrs. Richard Hedtke, P.O. Box 937, Pahoa, Hi 96778

(more to probably follow.....)

(annual rpt)

DLNR 1989-90 Annual Report, Part II

Program: Regulation of Geothermal Resource Development

The Division continues to regulate geothermal development activities within the four (4) geothermal resource subzones designated by the Board of Land and Natural Resources. Throughout the year, regular field inspections were conducted at all geothermal sites to ensure compliance with rules governing the leasing and drilling of geothermal resources.

The commercial exploration and development activities of Puna Geothermal Venture and True/Mid-Pacific Geothermal Venture, as well as the University of Hawaii's Scientific Observation Hole (SOH) Project, were monitored by the Division on a day-to-day basis in an effort to properly regulate well drilling activities and enforce permit conditions.

Puna Geothermal Venture, under approvals received by the Board of Land and Natural Resources and the County of Hawaii, initiated the development and construction of a 25 MW geothermal power plant and well field facility within the Kapoho Geothermal Resource Subzone. True/Mid-Pacific Geothermal Venture under the Conservation District Use Permit issued to Campbell Estate, began drilling of an exploratory well on lands within the Kilauea Middle East Rift Subzone.

The University's SOH Project completed one of four planned observation holes drilled to a depth of over 6,500 feet. Core samples and tests from this scientific well are expected to provide valuable downhole information relative to the underlying geothermal resources in the area.

Program: Geothermal and Cable System Development Permitting

The Geothermal/Cable Permit Center established in 1988, continues to provide assistance and permit information to all interested parties. Pursuant to the promulgation of administrative rules which implement the consolidated permit review process, a master application form for geothermal/cable development and an interagency processing and review procedure was developed.

The Permit Center also continued to monitor the operations and development of existing geothermal projects, in order to gather additional data and experience applicable to the consolidated permit review process and in preparation for coordinating and regulating the proposed development of the geothermal/undersea cable project.

+  
(govrpt)

### Mineral Resources Regulation

The Division under its Mineral Resources Program, regulates the exploration and development of our State's mineral resources. The current focus of the program has been directed toward the regulation of geothermal development activities and the proper management of our geothermal resources.

#### ACCOMPLISHED 1989-90

- o Initiated a review and update of the areas assessed as having geothermal resource potential, as well as those areas designated as geothermal resource subzones on the islands of Hawaii and Maui.
- o Developed a geothermal/cable development consolidated permit application form and review process for the inter-island transmission and production of electrical energy generated from geothermal resources.
- o Continued to regulate well drilling and commercial development activities of Puna Geothermal Venture and True/Mid-Pacific Geothermal Venture, as well as the University of Hawaii's Scientific Observation Hole Project on the island of Hawaii.
- o Maintained the Geothermal/Cable Permit Center and provided permit information and assistance to interested parties.
- o Canvassed mineral producers in the State and maintained a file on mineral production data and quarrying activities, including field inspections of various rock and cinder quarries.

#### PLAN TO ACCOMPLISH 1990-91

- o Complete the evaluation and revise, as necessary, the initial 1983 county-by-county assessment of potential geothermal resource areas in the State.
- o Continue to review permit applications and conduct field inspections and monitoring of all geothermal exploration and development operations to ensure proper compliance with applicable statutes and regulations.
- o Establish a cooperative State and County monitoring team responsible for monitoring and enforcing regulatory requirements and permit conditions.



*Manabu*  
TO: Division/Office Chiefs  
FROM: Linda McCreery, Public Information Officer  
SUBJECT: Report to the Governor  
DATE: August 13, 1990

RECEIVED

30 AUG 14 A 6:40

*Linda*

DIV. OF WATER &  
LAND DEVELOPMENT

Thank you for submitting excellent write-ups for the Report to the Governor 1987-89. We continue to receive positive feedback and constructive comments about the publication. People liked the use of color photos. The two volumes are being distributed to each division. Please distribute one set to each employee in your division/office, including Neighbor Island workers.

We are now starting production for the Report to the Governor 1989-90. Format will be the same: Volume I will have lists of "Accomplished" and "Plan to Accomplish," and Volume II will have tables and statistics.

Deadline for Volume I first drafts is Friday, September 7.

Here are some guidelines for Volume I:

1. Introduction: Please write a new introduction to your section, so that it won't be the exactly same as the report that just came out.

2. Start each item under "Accomplished 1989-90" with a verb in the past tense, such as completed, conducted, constructed, expanded, initiated, improved, provided, maintained, developed, established . . .

3. Make the "Accomplished 1989-90" list match the "Plan to Accomplish 1989-90" list (in the last report) as much as possible, so that readers will see that we are successful in planning ahead and achieving our goals.

4. Photos: Please submit photos showing your main projects or scenic areas. Color slides are preferred. Label each photo with name of subject, division/office, and photographer. If you don't have appropriate photos, submit a "Suggested Photos" list of subjects with explanations. I may assign a professional photographer to take the photos for your section, budget permitting.

5. Disks: Input your manuscript doublespaced on computer, on a 3-1/2" or 5-1/4" disk. After editing changes are made, you will give the disk to Linda to transfer into ASCII for electronic typesetting.

Volume II instructions will be sent to you soon.

#### PLAN TO ACCOMPLISH 1989-90

- ▶ Continue to re-evaluate the sustainable yields of the Koolau and Waianae aquifers
- ▶ Prepare investigation and findings of fact on the designation of Windward Oahu and Lanai as Water Management Areas for Commission action

### ***Soil and Water Conservation District Program***

The Division provides administrative services to the SWCD Program, which in turn, provides for the conservation and protection of farm and grazing lands and water resources through education and cooperative programs.

#### ACCOMPLISHED 1987-88

- ▶ Assisted agricultural land users by advising them on the implementation of soil and water conservation measures
- ▶ Reviewed agricultural grading plans and provided follow-up field inspections to enforce compliance with the Counties' grading ordinances
- ▶ Educated land users to protect surface and ground water from nonpoint source pollution
- ▶ Sponsored watershed projects in cooperation with the U.S. Soil Conservation Service to control flooding and soil erosion

#### PLAN TO ACCOMPLISH 1988-89

- ▶ Continue to educate farmers and ranchers in land husbandry and prevention of water pollution from nonpoint sources
- ▶ Continue to address soil erosion

#### ACCOMPLISHED 1988-89

- ▶ Continued grading ordinance and nonpoint source pollution control activities
- ▶ Completed a portion of the SCS Honolulu Watershed project
- ▶ Completed soil erosion control measures to prevent feral pigs from uprooting plants and denuding highly erodible watershed soils

#### PLAN TO ACCOMPLISH 1989-90

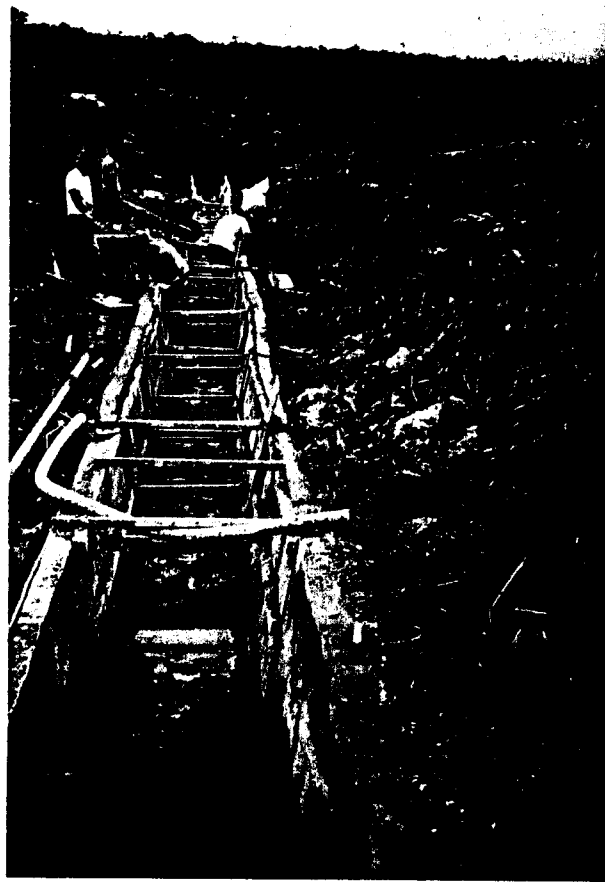
- ▶ Continue to assist the Counties with enforcement of its grading ordinances on agricultural lands and to aid the Department of Health with its Nonpoint Source Pollution Control program

### ***Regulation of Geothermal Resource Subzones***

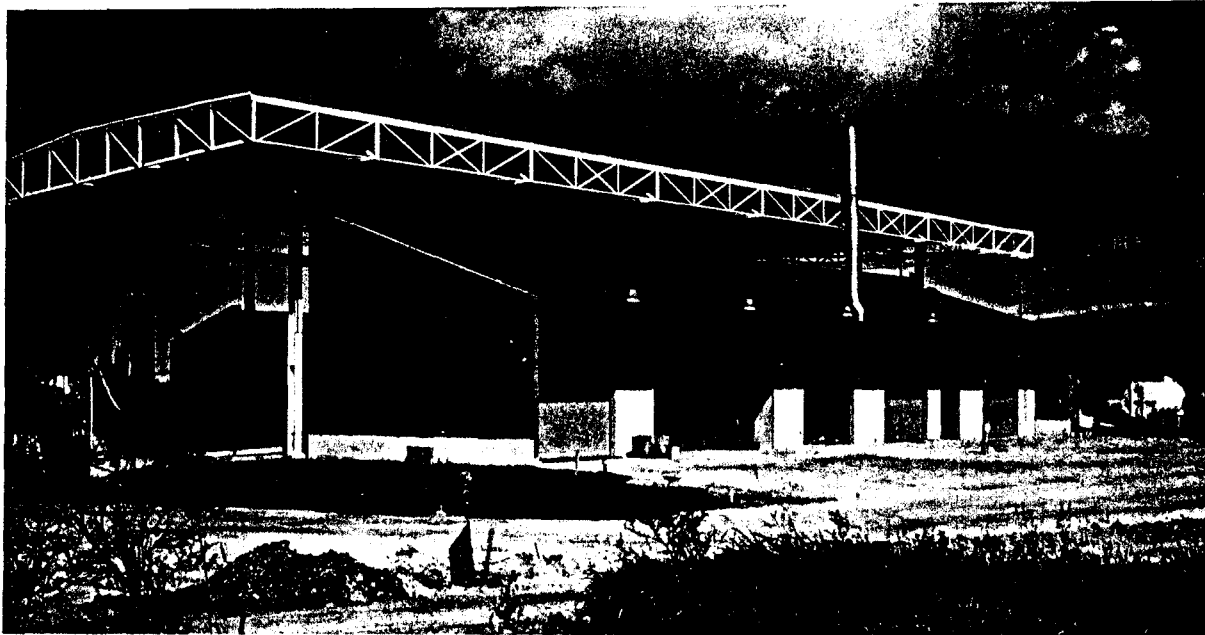
The Department administers State laws and rules concerning exploration and development of geothermal resources.

#### ACCOMPLISHED 1987-88

- ▶ Continued to administer four geothermal resource subzones established in 1984 and 1985 by the Board of Land and Natural Resources on the islands of Hawaii and Maui
- ▶ Conducted field monitoring and inspections at all well sites to ensure compliance with the Department's rules governing the leasing and drilling of geothermal resources



Above, top to bottom, Workers revnoate the Alakahi section of the Upper Hamakua Ditch, Big Island. Construction of a water tank provides infrastructure for irrigation at Kahuku Agricultural Park, Oahu. A diversion structure at Waikolu Stream feeds water into Molokai Irrigation System.



*Division of Water and Land Development broke ground for a demonstration desalination plant at Barber's Point, Oahu. The plant will process brackish water into one million gallons per day of potable water.*

#### PLAN TO ACCOMPLISH 1988-89

- Regulate and monitor all activity related to the development of a proposed 25 megawatt geothermal power plant and well field facility by Puna Geothermal Venture, operator of State Geothermal Resource Mining Lease R-2
- Review and administer all exploration activities proposed by True/Mid-Pacific Geothermal Venture, operator of State Geothermal Mining Lease R-5 which was issued to Campbell Estate, on lands located in the Puna District of the island of Hawaii

#### ACCOMPLISHED 1988-89

- Prepared administrative rules implementing Act 301, SLH 1988 (Chapter 196-D, HRS), which establishes guidelines and procedures for consolidated geothermal and cable system development permitting
- Established a Geothermal/Cable Permit Center to provide permit information and assistance to potential applicants
- Reviewed and processed the approval of Plan of Operations for Puna Geothermal Venture and True/Mid-Pacific Geothermal Venture, and their respective well drilling permit applications for geothermal wells
- Reviewed and processed approval of geothermal well drilling permits for the University of Hawaii's proposed Scientific Observation Hole Project proposed for the islands of Hawaii and Maui

#### PLAN TO ACCOMPLISH 1989-90

- Review and update, as necessary, the initial county-by-county assessment of areas having geothermal resource potential which was conducted in 1983 for the purpose of designating statewide geothermal resource subzones
- Administer the consolidated review and processing of permits related to the development and transmission of geothermally generated electrical energy from the island of Hawaii to Maui and Oahu
- Continue monitoring and inspection programs for all geothermal development activities

### *Flood Control and Prevention Program*

Under grants from the Federal Emergency Management Agency, the Division continued flood plain management activities. The implementation of Federal, State, and County flood control projects are coordinated under this program.

#### ACCOMPLISHED 1987-88

- Held informational meetings to increase public awareness on flood plain management activities
- Assisted in flood mitigation measures due to damage sustained in the 1988 New Year's Day flood on Oahu

#### PLAN TO ACCOMPLISH 1988-89

- Continue public awareness and flood plain management activities

#### ACCOMPLISHED 1988-89

- Conducted community assessment visits to four counties and held public informational meetings
- Continued mitigative measures due to the 1988 New Year's Day Flood

#### PLAN TO ACCOMPLISH 1989-90

- Conduct community assessment visits to four counties and hold public informational meetings

### *Dam Safety Program*

This program regulates the design, construction, operation, maintenance, alteration, repair, and removal of dams in the State.

#### ACCOMPLISHED 1987-88

- Conducted a dam safety conference in the preparation of new administrative rules and dam safety practices

#### PLAN TO ACCOMPLISH 1988-89

- Prepare draft administrative rules and dam safety practices

#### ACCOMPLISHED 1988-89

- Held public hearings for the adoption of the administrative rules

#### PLAN TO ACCOMPLISH 1989-90

- Implement the Dam Safety Program

(finance) 1991

## I. Introduction

### A. Summary of Program Objectives:

1. The mineral resources program regulates the exploration and development of our State's mineral resources. Current focus is on the regulation of geothermal development activities and the proper management of the resource.

### B. Description of Program Activities:

1. Administration of four (4) geothermal resource subzones designated by the Board of Land and Natural Resources and management of the State's geothermal resources.
2. Regulation of geothermal development activities such as the Puna Geothermal (Ormat) and True/Mid-Pacific Geothermal Ventures under existing statutes and regulations governing the exploration and development of the State's geothermal resources.
3. Conduct of field monitoring and inspection of geothermal well drilling activities to ensure compliance with the Department's rules governing the leasing and drilling of geothermal resources.
4. Administration of the geothermal/cable development consolidated permit review process for the inter-island transmission of electrical energy generated from geothermal resources.
5. Continuous review and assessment of areas having geothermal resource potential, including designated geothermal resource subzones, and related information concerning the verification and characterization of the resource.
6. Canvassing of mineral producers in the State regarding mineral production data and quarrying activities, including field inspections of various rock and cinder quarries.
7. Conduct of appropriate studies and investigations concerning mineral resources, geothermal energy, and mining on State and reserved lands.
8. Implementation and administration of mineral resource statutes and the adoption or amendment of rules concerning the exploration, development and protection of the State's mineral resources.

Ms. Regina M. Finnegan  
RR1 Box 184  
Wailuku, Hawaii 96793

Dear Ms. Finnegan:

Thank you for your recent letter dated August 11, 1989, concerning your request for public hearings on the construction of geothermal wells ~~on the Island of Hawaii~~. *in Kilauea, Hawaii.*

In considering ~~any~~ application ~~for an Authority to Construct (ATC)~~ a geothermal well, ~~which is approved by~~ the Director of the Department of Health (DOH), the Director, at his sole discretion or upon timely written request of any person, may allow for notice and opportunity for public comments and public hearings, if the Director is of the opinion that such public comment would aid in his decision-making process.

In the case of the application for ATC submitted by True/Mid-Pacific Geothermal Venture, which I believe you are referencing, it has been determined by the DOH Director that a public hearing will not be required, however, notice and opportunity for public comment was provided to interested parties to submit written comments on matters such as air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations.

Numerous public hearings and contested case hearings related to the designation of Geothermal Resource Subzones and True/Mid-Pacific's Conservation District Use Permit application for geothermal exploration and development have already solicited much public comment and information concerning environmental, social, and economic concerns related to geothermal development activities.

As such it was determined that sufficient information was available to the Department of Health for processing the referenced application for Authority to Construct geothermal wells.

I appreciate your continued input and comments concerning the prudent development of geothermal resources and the achievement of Hawaii's goal towards energy self-sufficiency.

Sincerely,

John Waihee  
(etc.)

Ms. Regina M. Finnegan  
RR1 Box 184  
Wailuku, Hawaii 96793

Dear Ms. Finnegan:

Thank you for your letter dated August 11, 1989, requesting public hearings on the construction of geothermal wells in Kilauea, Hawaii.

In considering applications to construct a geothermal well, the Director of the Department of Health (DOH), at his sole discretion or upon timely written request of any person, may allow for notice and opportunity for public comments and public hearings, if the Director is of the opinion that such public comment would aid in his decision-making process.

As far as public hearings are concerned, the Director of Health has decided that a public hearing on the air quality permit for True/Mid-Pacific Geothermal Venture's geothermal wells would not provide any additional information that would result in further changes to the permit. The proposed project is only for the drilling of exploratory/developmental wells and will result in only a temporary release of air emissions. It should be emphasized that this project has already gone through a 30-day public review and comment period.

In the case of the application submitted by Puna Geothermal Venture (PGV), it has been determined by the DOH Director that the Department will be holding a public hearing on the proposed PGV/Ormat 25 MW project which consists not only with the development of geothermal wells, but also the construction of a power plant facility.

I appreciate your input and comments concerning the prudent development of geothermal resources and the achievement of Hawaii's goal towards energy self-sufficiency. With kindest regards.

Sincerely,

John Waihee  
(etc.)

example1(a)

Dear \_\_\_\_\_:

Thank you for your recent letter to Governor Waihee, dated May \_\_\_\_, 1987. Your correspondence has been referred to our Department of Land and Natural Resources for review and comment. We appreciate your input and thank you for taking the time to write and advise us of your concerns regarding geothermal development on the island of Hawaii.

Various channels and methods of community input are utilized in the permitting process of geothermal development in the State of Hawaii. These channels include state legislative representatives, regulatory agencies, surveys, public informational meetings, public hearings and contested case hearings.

Throughout this process, from the designation of geothermal resource subzones through to the permitting of site specific development projects, the Department of Land and Natural Resources continues to invite public comments and participation.

The proposed geothermal development that you refer to is located along the Kilauea Middle East Rift Zone, approximately 3 miles away from the eastern boundary of the Hawaii Volcanoes National Park.

Pursuant to public concerns received during the public hearing process regarding our environment and the preservation of prime native forest, a land exchange between the Estate of James Campbell and the State of Hawaii was consummated in order to protect our State's unique native rainforest.

As a result of this land exchange, the proposed project was moved from its original location to an area assessed as having lower quality native habitat. The scattered areas of prime native forest which may be contained within the limits of the new project area will be protected throughout the subsequent permitting process by requiring that development activities avoid these sensitive areas.

The practice of Hawaiian religion which you reference, has included the belief and worship of the Hawaiian Volcano goddess Pele, and some individuals suggest that Pele would be offended by geothermal development. However, the recognition and uses of geothermal energy has been recorded in the history of the Hawaiian Islands for both personal and religious purposes.

While our research has shown that no religious sites are located within the proposed project area and that theological claims are a matter of personal belief, it is our Department's position that the proposed development will not in any way prohibit any ceremony, custom, practice, habit or access to religious sites.

The State of Hawaii depends upon petroleum supplies for over 90 percent of all the energy consumed in the islands and costs the State over \$1 billion per year. This dependency renders Hawaii vulnerable to disruptions in the supply of foreign oil and has resulted in electricity rates that are among the highest in the nation.

This administration believes that geothermal energy is the largest, near-term baseload electric energy resource for Hawaii and that prudent development of our geothermal resources is essential to the State in attaining our goal of energy self-sufficiency. This goal, we feel can be accomplished within the existing framework of governmental regulations and will ensure an acceptable level of impact on the environment.

Thank you again, for your interest and concern for the State of Hawaii.

Very Truly Yours,

William W. Paty  
Chairperson of the Board



Mr. Michael LaPlante  
P.O. Box 1037  
Keaau, Hawaii 96749

Dear Mr. LaPlante:

Thank you for your recent letter concerning geothermal development activities on the Island of Hawaii.

While the exploration and development of Hawaii's geothermal resources is a State goal, I agree that it must be balanced with interests in preserving Hawaii's unique social and physical environment.

Towards this end, the appropriate State agencies have been charged with the responsibility of regulating geothermal development activities in the State, and they have continued in their efforts to examine such factors including, but not limited to, Historic Preservation for the purpose of preserving, restoring, and maintaining historic and cultural property.

The Department of Land and Natural Resources is responsible for [the development of] an on-going program of historical, architectural, and archaeological research and development, including surveys and other related preservation activities. As such, I am sure that the Department's Division of State Parks and Historic Sites would welcome any archaeological information that you have collected over your many years of personal field investigations.

With regards to the True/Mid-Pacific's proposed project situated on Campbell Estate's land located in Puna, Hawaii, the Board of Land and Natural Resources has required that True/Mid-Pacific prepare an archaeological research design, and conduct a full archaeological reconnaissance survey that shall include an area two to five times larger than the proposed development area. This condition has been imposed to ensure that any archaeological resources in the immediate vicinity of the project will not be inadvertently damaged by construction activities.

I appreciate your input and comments regarding geothermal development in the State of Hawaii. Thank you for taking the time to write and advise me of your concerns. With kindest regards.

Sincerely,

John Waihee  
(etc.)

Mr. Leonard Moser  
7343 Sunnyview, NE  
Salem, Oregon 97305

Dear Mr. Moser:

Your recent letter to Governor Waihee was referred to our Department of Land and Natural Resources for reply. We appreciate your taking the time to express your concerns about possible geothermal resources development in the Puna District of Hawaii.

The proposed geothermal exploration and potential development referred to in your letter is located approximately three miles from the Hawaii Volcanoes National Park in an area called the Kilauea Middle East Rift Zone. Because of public concern for the preservation of prime native forest lands, the Department took appropriate action to relocate the original project site to the present, more suitable location. I wish to assure you that the Department will continue to respond to community concerns in a reasonable and responsible manner on matters of geothermal exploration and development.

One of the goals of the State is to minimize its dependency on imported fossil fuels for its energy needs, which costs the State about \$1.5 billion per year. The Department believes that geothermal energy will offer a measure of energy self-sufficiency which will benefit the State as a whole. This benefit, we feel, can be accomplished within a reasonable framework of governmental regulation that will ensure an acceptable level of impact on the environment.

Again, thank you for your interest in and concern for the State of Hawaii.

Very truly yours,

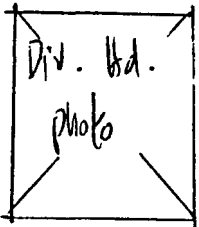
WILLIAM W. PATY  
Chairperson of the Board

MT:DN:dh  
bcc: Hon. John Waihee

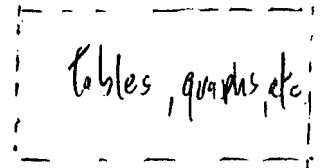
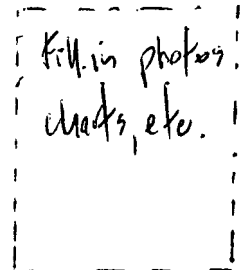
# Two-page format for Executive Summary

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Division functional statement



Fiscal Year 1987-88

Fiscal Year 1988-89

Accomplishments

Future tasks

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Accomplishments

Future tasks

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(Continuation to be in similar 2-page format)

**Division of Water  
and Land Development**

	about the different types of soil in Hawaii and how to incorporate this knowledge into wise conservation practices.		
<b>Mineral Resources Program</b>	The Mineral Resources Program during the year continued to focus on the designation and regulation of geothermal resource subzones (GRS) in areas of the state having geothermal potential and on conserving the State's supply of mineral resources.	<b>Regulation of Geothermal Well Drilling</b>	<p>developer, True/Mid Pacific Co., plans to begin geothermal exploratory well drilling in 1988.</p> <p><i>Div. also</i> The Department continues <i>to</i> regulate geothermal well drilling activities under existing <i>regulations &amp; statutes</i> laws and rules concerning exploration and development of geothermal resources. During the year, field inspections were conducted at all well sites to ensure compliance with the Department's rules governing geothermal well <i>the basic &amp; drilling</i> drilling. In addition, activities at the experimental HGP-A well and power plant facility continued to be monitored throughout the year. <i>Including plans to</i> As in past years, the Division canvassed mineral producers in the state and maintained an up-to-date file on mineral production data and mining activities. Field inspections were made of various rock and cinder quarries. Requests for information, technical data, and rock samples were handled on a routine basis.</p>
<b>Regulation of Geothermal Resource Subzones</b>	<p>The Division continued to <i>administer</i> regulate four geothermal resource subzones established in 1984 and 1985 by the Board of Land and Natural Resources—the Kapoho and Kamaili Subzones on the lower Kilauea East Rift and the Kilauea Middle East Rift Subzone, all in the Puna District of Hawaii, and the Haleakala Southwest Rift Subzone on the southern slopes of East Maui. <i>In September 1985 the Board held a public hearing to consider a proposal to establish the Kilauea Southwest Rift Subzone in the Kau District.</i></p> <p>In the Kapoho Subzone, activities continue for the development of a 12½ megawatt geothermal power plant by Thermal Power Co., operator of a State mining lease. In the Kilauea Middle East Rift Subzone, Campbell Estate obtained a geothermal mining lease from the State in 1987. As a result, Campbell Estate's geothermal</p>	<b>Inventory of Mineral Production</b>	<p>As in past years, the Division canvassed mineral producers in the state and maintained an up-to-date file on mineral production data and mining activities. Field inspections were made of various rock and cinder quarries. Requests for information, technical data, and rock samples were handled on a routine basis.</p>
		<b>Flood Prevention and Control Program</b>	Activities of the flood prevention and control program include managing the use of flood plains and coordinating government actions in flood prevention and control, dam safety inspections, and stream maintenance.

DEPARTMENTAL ANNUAL REPORT (draft 1)

GEOTHERMAL SECTION

FISCAL YEAR 1987-88

ACCOMPLISHMENTS

The division continued to administer four geothermal resource subzones established in 1984 and 1985 by the Board of Land and Natural Resources - Kapoho and Kamaili Subzones on the Kilauea Lower East Rift and the Kilauea Middle East Rift Subzone, all located in the Puna District on the island of Hawaii, and the Haleakala Southwest Rift Subzone on the island of Maui.

The division also regulated geothermal development activities under existing statutes and regulations concerning the exploration and development of the State's geothermal resources.

Field monitoring and inspections were conducted at all well sites to ensure compliance with the Department's rules governing the leasing and drilling of geothermal resources.

FUTURE TASKS

Regulate and monitor all activity related to the development of a proposed 25 megawatt geothermal power plant and well field facility by Puna Geothermal Venture, operator of State Geothermal Resource Mining Lease R-2.

Review and administer all exploration activities proposed by True/Mid-Pacific Geothermal Venture, operator for State mining lease R-5 which was issued to Campbell Estate, on lands located in the Puna District of the island of Hawaii.

FISCAL YEAR 1988-89

ACCOMPLISHMENTS

The division prepared administrative rules implementing Act 301, SLH 1988, (Chapter 196-D, HRS), which establishes guidelines and procedures for consolidated geothermal and cable system development permitting.

Established a Geothermal/Cable Permit Center to provide permit information and assistance to potential applicants.

The division reviewed and processed the approval of Plan of Operations for Puna Geothermal Venture and True/Mid-Pacific Geothermal Venture, and their respective well drilling permit applications for geothermal wells: Kapoho State #3 and True/Mid-Pacific A1-1.

FISCAL YEAR 1988-89 (cont.)

ACCOMPLISHMENTS

The division also reviewed and processed approval of geothermal well drilling permits for the University of Hawaii's Scientific Observation Hole Project proposed for the islands of Hawaii and Maui.

FUTURE TASKS

Review and update, if necessary, the initial county-by-county assessment of areas having geothermal resource potential which was conducted in 1983 for the purpose of designating statewide geothermal resource subzones.

Administer the consolidated review and processing of permits related to the development and transmission of geothermally generated electrical energy from the island of Hawaii to Maui and Oahu.

Continue monitoring and inspection programs for all geothermal development activities.

DEPARTMENTAL ANNUAL REPORT (draft 2)

GEOTHERMAL SECTION

FOR VOLUME II (separate entry for FY 1987-88 and FY 1988-89)

FISCAL YEAR 1987-88

REGULATION OF GEOTHERMAL RESOURCE SUBZONES

The division continues to administer four geothermal resource subzones established in 1984 and 1985 by the Board of Land and Natural Resources - Kapoho and Kamaili Subzones on the Kilauea Lower East Rift and the Kilauea Middle East Rift Subzone, all located in the Puna District on the island of Hawaii, and the Haleakala Southwest Rift Subzone on the island of Maui.

In the Kapoho Subzone, geothermal development activities related to the proposed Puna Geothermal Venture 25 megawatt geothermal power plant and well field facility continued to be monitored by the division. In the Kilauea Middle East Rift Subzone, True/Mid-Pacific Geothermal Venture, developer and operator for Campbell Estate, has initiated plans to begin geothermal exploratory well drilling in late 1988 or early 1989.

REGULATION OF GEOTHERMAL WELL DRILLING

The division also <sup>continues its - of</sup> regulates geothermal well drilling activities under existing statutes and regulations concerning the exploration and development of the State's geothermal resources.

Throughout the year, field monitoring and inspections were conducted at all well sites to ensure compliance with the Department's rules governing the leasing and drilling of geothermal resources. In addition, activities at the experimental HGP-A well and power plant facility continued to be monitored.

FISCAL YEAR 1988-89

REGULATION OF GEOTHERMAL RESOURCE SUBZONES

In conjunction with its responsibilities for the administration of geothermal resource subzones, the division continues to regulate and monitor all activity related to the development of the proposed 25 megawatt geothermal power plant and well field facility by Puna Geothermal Venture located within the Kapoho Geothermal Resource Subzone.

The division also regulates the proposed exploration activities by True/Mid-Pacific Geothermal Venture, operator for State mining lease R-5 which was issued to Campbell Estate, on lands located in the Kilauea Middle East Rift Subzone.

## REGULATION OF GEOTHERMAL RESOURCE SUBZONES (cont.)

Future tasks for the division include <sup>a</sup>the review and update, if necessary, of the initial statewide county-by-county assessment of areas having geothermal resource potential which was conducted in late 1983 for the purpose of designating statewide geothermal resource subzones.

## REGULATION OF GEOTHERMAL WELL DRILLING

The division continues to regulate geothermal well drilling activities which included the review and processing of Plan of Operations for both Puna Geothermal Venture and True/Mid-Pacific Geothermal Venture, and their respective well drilling permit applications for geothermal wells: Kapoho State #3 and True/Mid-Pacific A1-1.

? Under its regulatory responsibilities, the division also reviewed and processed the geothermal well drilling permit applications for the University of Hawaii's Scientific Observation Hole Project proposed for the islands of Hawaii and Maui.

## GEOTHERMAL AND CABLE SYSTEM DEVELOPMENT PERMITTING

Pursuant to Act 301, Session Laws of Hawaii 1988, entitled "Geothermal and Cable System Development Permitting Act of 1988", the division prepared <sup>for adoption</sup> administrative rules implementing the Act, (Chapter 196-D, HRS), which establishes guidelines and procedures for consolidated geothermal and cable system development permitting.

In addition, a Geothermal/Cable Permit Center was established to provide permit information and assistance to potential applicants. The Center and the rules once promulgated, shall serve to administer the consolidated review and processing of permits related to the development and transmission of geothermally generated electrical energy from the island of Hawaii to Maui and Oahu.



soh5(draft4/10/89)

~~Mr. Delan A. Perry~~  
Kapoho Grown  
P.O. Box 537  
Pahoa, Hawaii 96778

Dear Mr. Delan:

As a follow up to our recent meeting and your letter of March 22, 1989, requesting the withdrawal of your property from the existing Kilauea Lower East Rift Geothermal Resource Subzone (GRS), the Department has listed below the necessary information required in order to evaluate and process your request:

- 1) Identification and information on all landowners requesting withdrawal of their property, including name, address, Tax Map Key, and acreage of each land parcel.
- 2) In addition, each landowner shall file in writing a statement describing the rationale for such request including, but not limited to, evidence showing:
  - a) That the area has no longer any potential for geothermal development activities;
  - b) That there is no known or likely prospect for the utilization of geothermal resources for electrical energy production;
  - c) That there exists unexamined potential geologic hazards to geothermal production or use in the subzone area;
  - d) Any potential environmental or social impacts from development of geothermal resources within the area proposed for withdrawal;
  - e) That the development and utilization of geothermal resources within the subzone area is not compatible with other allowed uses within the area and within the surrounding lands; and
  - f) That the potential benefits to be derived from geothermal development and utilization in the subzone area is not in the best interest of the county or counties involved and the State as a whole.

Upon the receipt of the above requested information and review by our Department, a public hearing before the Board of Land and Natural Resources will be scheduled in order to receive testimony on the request to modify the existing subzone. Notice of the date, time, and place of the public hearing will be mailed to all landowners requesting withdrawal of their property. In addition, written testimony may be filed with the Department within 15 days following the close of the hearing.

*In accordance with Admin. Rule 13-184, a public*  
The Board of Land and Natural Resources shall modify or withdraw a designation only upon finding by a preponderance of the evidence that the area is no longer suited for designation; provided, however, that within an existing subzone with active geothermal development activities, the area may not be modified to withdrawn."

Should you have any questions, please contact Manabu  
Tagomori at 548-7533.

Very truly yours,  
WILLIAM W. PATY

*Submitted to  
Dw 8/22/89*

Ms. Regina M. Finnegan  
RR1 Box 184  
Wailuku, Hawaii 96793

Dear Ms. Finnegan:

Thank you for your recent letter dated August 11, 1989, concerning your request for public hearings on the construction of geothermal wells on the Island of Hawaii.

In considering any application for an Authority to Construct (ATC) a geothermal well, which is approved by the Director of the Department of Health (DOH), the Director, at his sole discretion or upon timely written request of any person, may allow for notice and opportunity for public comments and public hearings, if the Director is of the opinion that such public comment would aid in his decision-making process.

In the case of the application for ATC submitted by True/Mid-Pacific Geothermal Venture, which I believe you are referencing, it has been determined by the DOH Director that a public hearing will not be required, however, notice and opportunity for public comment was provided to interested parties to submit written comments on matters such as air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations.

Numerous public hearings and contested case hearings related to the designation of Geothermal Resource Subzones and True/Mid-Pacific's Conservation District Use Permit application for geothermal exploration and development have already solicited much public comment and information concerning environmental, social, and economic concerns related to geothermal development activities.

As such it was determined that sufficient information was available to the Department of Health for processing the referenced application for Authority to Construct geothermal wells.

I appreciate your continued input and comments concerning the prudent development of geothermal resources and the achievement of Hawaii's goal towards energy self-sufficiency.

Sincerely,

John Waihee  
(etc.)

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RR 1 Box 184: 26  
Wailuku HI 96793  
August 11, 1989

DIV. OF WATER & NATURAL RESOURCES  
LAND DEVELOPMENT STATE OF HAWAII  
The Honorable John Waihee  
Governor of Hawaii  
State Capitol  
Honolulu HI 96813

DIV. OF WATER &  
LAND DEVELOPMENT

Dear Governor Waihee:

I am writing to ask for your help in calling for public hearings on the construction of geothermal wells in Kilauea. We need to know all the ramifications of the gigantic step we are taking and it is a very difficult one for the public to understand. It is not something that should be pushed through without public comment, discussions and debate regarding the effect on the public health, safety and our environment.

Thank you for your consideration.

Sincerely,

*Regina M. Finnegan*  
Regina M. Finnegan

cc: W. Paty  
Dept. Land & Nat. Res.

J. C. Lewin  
Dept. of Health

P.S: Mahalo for helping us to save big beach!

TO: Director DLNR  
☐ PLEASE COORDINATE with \_\_\_\_\_

FOR:

- ☐ Comment/Recommendation (required)
- ☐ Appropriate attention
- ☐ Direct reply (cc/bcc: Governor)
- ☒ Your information/file
- ☒ Draft reply for Governor's signature
- ☐ Follow up/report
- ☐ Submit copy of response (if any)
- ☐ Keep enclosure(s)
- ☐ Return enclosure(s)
- ☐ Other

Chairman's Office DLNR  
GOVERNOR'S REFERRAL

REQUIRES EXPEDITIOUS HANDLING

TO: WL  
draft reply  
8/24/89

OFFICE OF THE GOVERNOR

'89 AUG 14 AM 10:21

RECEIVED

DUE seven working days from AUG 15 1989  
(if delay is encountered in meeting suspense date, please advise by telephone immediately)  
In reply, please refer to: 89-505-12

505-

PHILLIPS(draft1)7/5/89

Mr. Ronald C. Phillips, President  
Puna Community Council  
P.O. Box 1294  
Pahoa, Hawaii 96778-1294

Dear Mr. Phillips:

In response to your letter to Governor John Waihee dated June 12, 1989, the Department of Land and Natural Resources would like to provide the following comments:

- 1) Your letter stated a concern that our Department failed to address land uses and the impact to the community that geothermal development may have. It is our understanding that this comment refers to the assessment and designation of Geothermal Resource Subzones (GRS) conducted in 1984 and 1985.

Please be advised that much effort was taken to solicit and receive public input related to the designation of Geothermal Resource Subzones. Beginning in 1984 and prior to the holding of public hearings by the Board of Land and Natural Resources (Board), several public information and participation meetings were conducted by the Department on the island of Hawaii.

During these informational meetings and subsequent public hearings on the proposed subzone designations, many comments on the criteria for GRS designation set forth in Chapter 205, Hawaii Revised Statutes, were received and given every consideration by the Board.

Those criteria included the assessment of environmental and social impacts of geothermal development within the areas proposed for subzone designation and the evaluation of the compatibility of development and utilization of geothermal resources within the proposed GRS with other allowed uses within the area and surrounding lands.

Throughout the process from the enactment of Act 296, SLH 1980 (Chapter 205, HRS), to the final decision of the Board, public input related to land use and community impacts has been and will continue to be solicited from various interested parties to assist the Department and the Board.

- 2) Your letter also stated that the Department's proposed Administrative Rules (Chapter 13-185) implementing Act 301, SLH 1988, "Geothermal and Cable System Development Permitting Act of 1988", do not appear to be in compliance with the intent of the bill.

It should be noted that the Department held several meetings

with the respective permitting agencies during the preparation of the proposed rules in efforts to insure compliance with the law. Furthermore, the rules as drafted were reviewed and preliminarily approved by the State Attorney General's office prior to their distribution for public review.

Lastly, statewide Public Hearings were held on June 21, 1989, to receive comments and public input relating to the proposed administrative rules. In addition, the Department will continue to receive written comments concerning the rules through July 7, 1989, which will be entered into the public hearing record in its entirety and given every consideration.

The Department of Land and Natural Resources appreciates your continued input and comments concerning geothermal development in the State of Hawaii. Should you have any questions or if we may be of further assistance, please contact Manabu Tagomori, Deputy Director, at 548-7533.

Very truly yours,

WILLIAM W. PATY

soh8(draft4/14/89)

Honorable Senator Andrew Levin  
State Senate  
State Capitol  
Honolulu, Hawaii 96813

Dear Senator Levin:

Thank you for your letter of March 29, 1989, concerning the designation of geothermal resource subzones on the Island of Hawaii. The following is in direct response to your inquiry to our Department of Land and Natural Resources and the Attorney General's Office, concerning requirements for notification of public hearings and our Department's compliance with Chapter 91, HRS, and all other applicable statutes and regulations:

- 1) Beginning in 1984, and prior to the holding of any required public hearings related to the designation of geothermal resource subzones by the Board of Land and Natural Resources, several public information and participation meetings were conducted by the Department on the Island of Hawaii. The dates and places of these supplementary informational meetings are listed below:

May 8, 1984.....Hilo, Hawaii  
May 29, 1984.....Hilo, Hawaii  
July 10, 1984.....Pahoa, Hawaii  
July 11, 1984.....Volcano, Hawaii

- 2) During the subzone designation process which occurred prior to 1986, the statutory public hearing notice requirements for subzone designations, as mandated by Section 205-5.2, HRS, and the Department's Administrative Rule Chapter 13-184, required that public notice be published on three separate days in a newspaper of general circulation statewide and in the county in which the hearing was to be held. The following are the dates and newspapers in which the notices of public hearings were published in fulfillment of the statutory notice requirements:

August 4,6,13,15, and 21, 1984- Honolulu Star-Bulletin  
August 5,6,13,15, and 21, 1984- Hawaii Tribune Herald

- 3) During 1986, Section 205-5.2, HRS, was amended and now requires that in addition to the publication requirements described in item (2) above, that copies of the public hearing notice be mailed to all owners of record of real estate within the area proposed for geothermal resource subzone designation, and to those owners within 1000 feet of the proposed GRS area.
- 4) With regards to your constituent's letter and its specific reference to Section 91-9.5, HRS, entitled "Notification of hearing; service.", it should be noted that the section identified pertains to written notice for contested case hearing proceedings and does not apply to the notification requirements related to subzone designations.
- 5) In reference to the County of Hawaii's Geothermal Resource Permit (Rule 12), and their requirement for written notification from the Planning Department to landowners within 300 feet of the boundary of the property for which the permit is being requested, this procedure is a result of the same 1986 legislation which amended Chapter 205, HRS, as described in item (3).

We hope the above answers your questions on the public notice requirements related to the geothermal resource subzone designation process. Should you have any questions, please contact Manabu Tagomori at 548-7533.

Very truly yours,

WILLIAM W. PATY



Mr. and Mrs. Richard Hedtke  
P.O. Box 937  
Pahoa, Hawaii 96778

Dear Mr. and Mrs. Hedtke:

Thank you for your letters of March 20 and 28, 1989, concerning the designation of geothermal resource subzones. The following is in direct response to your questions concerning requirements for notification of public hearings:

- 1) Prior to the holding of public hearings and the designation of geothermal resource subzones by the Board of Land and Natural Resources, several public information and participation meetings were conducted by the Department on the Island of Hawaii. Following are the dates and places of these meeting:  
  
May 8, 1984.....Hilo, Hawaii  
May 29, 1984.....Hilo, Hawaii  
July 10, 1984.....Pahoa, Hawaii  
July 11, 1984.....Volcano, Hawaii
- 2) Statutory public hearing notice requirements for subzone designations prior to 1986, required that public notice be published on three separate days in a newspaper of general circulation statewide and in the county in which the hearing is to be held. Following are the dates and newspapers in which the notices of public hearings were published:  
  
August 4, 6, 13, 15, and 21, 1984 Honolulu Star-Bulletin  
August 5, 6, 13, 15, and 21, 1984 Hawaii Tribune Herald
- 3) During 1986, Chapter 205, HRS, was amended and now requires that in addition to the publication requirements described in item (2) above, that copies of the notice be mailed to all owners of record of real estate within the propose GRS area, and to those owners within 1000 feet of the area proposed for designation as a geothermal resource subzone.
- 4) Your reference to Section 91-9.5, HRS, entitled "Notification of hearing; service" pertains to written notice for contested case hearings and does not apply to the subzone designation process.
- 5) In regards to the County Geothermal Resource Permit (Rule 2), the requirement for written notification from the Planning Department to landowners within 300 feet of the boundary of the property for which the permit is being requested, is a direct result of the same legislative action which amended Chapter 205, HRS, as described in item (3).

- 6) To date, the Board of Land and Natural Resources has not revised or updated its county-by-county assessment of potential geothermal resource areas. The Department will be conducting a review of the earlier statewide assessment as provided by Chapter 205, HRS, and will make a recommendation to the Board of any revisions, if required.

We hope the above ~~will~~ answers your questions on the designation of geothermal resource subzones. ~~It~~ should be emphasized that the subzone areas delineate broad areas where potential development might occur. Site specific development permits will require a thorough analysis of any proposed development. Should you have any questions, please contact Manabu Tagomori at 548-7533.

Very truly yours,

WILLIAM W. PATY



# MINERAL INDUSTRY SURVEYS

**U. S. DEPARTMENT OF THE INTERIOR**  
**BUREAU OF MINES**  
**WASHINGTON, D.C. 20241**



William P. Clark, Secretary

Robert C. Horton, Director

For information call H. R. Babitzke  
Telephone: (509) 456-7914

Annual, Preliminary

## THE MINERAL INDUSTRY OF HAWAII IN 1984

According to the Bureau of Mines, U.S. Department of the Interior, the estimated value of nonfuel minerals produced in Hawaii during 1984 was \$54 million, an increase of 4% over that reported in 1983.

Business activity recorded an exceptional growth in 1984, increasing about 15% over the same time period in 1983. Construction continued of the deep-draft harbor at Barbers Point that will serve as a second commercial port for Oahu. Completion is expected by June 1985. The construction required the removal of 10 million cubic yards of coral. The excavated coral belongs to the Campbell Estate and will be sold as aggregate or for use in road construction. Stockpiling of the coral has raised questions by City Planning Commissioners, but no serious consequences are expected. Kauai Sand & Gravel Co. received approval to construct an asphalt and cement manufacturing plant at the Hanamaulu Valley quarry site. Reportedly, the plant will improve market conditions for Kauai residents by lowering prices.

Of major concern to Hawaii was the sea law controversy in which the U.S. refused to sign the treaty based on objections to its provisions with regard to seabed mining, particularly within international waters. Seabed mining within national economic zones was another matter, because the Federal Government claimed a 200-mile off-shore economic zone, a claim similar to that of most nations. That step was significant to Hawaii because it would facilitate seabed mining near Hawaii. A joint Federal-State task force was formed in February to consider the economic potential and environmental impacts of ocean mining of cobalt-rich manganese crusts in the 200-mile zone surrounding the Hawaiian archipelago. Hawaii's governor said, however, that the U.S. Department of the Interior (DOI) is responsible for exploring and developing ways to mine the ocean bottom. Later in the year, the Minerals Management Service of DOI granted the State of Hawaii \$1.8 million to conduct a search for cobalt on its seamount slopes. Recent findings by the U.S. Geological Survey of large concentrations of manganese crusts are again raising some expectations that Hawaii may still play a role in developing the Pacific's mineral resources. The prospect that Hawaii could become a center for seabed mining would diversify the State's economy.

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Prepared January 25, 1985, in the Spokane Regional Liaison Office in cooperation with the Department of Land and Natural Resources of the State of Hawaii.

Table 1.--Nonfuel mineral production in Hawaii<sup>1/</sup>

Mineral	1983		1984 <sup>p/</sup>	
	Quantity	Value (thousands)	Quantity	Value (thousands)
Cement:				
Masonry-----thousand short tons--	6	\$ 641	10	\$ 1,060
Portland-----do-----	216	20,673	200	19,400
Sand and gravel (construction)-----do-----	<u>e/</u> 440	<u>e/</u> 1,000	600	2,400
Stone:				
Crushed-----do-----	5,532	29,703	6,000	31,200
Dimension-----do-----	( <u>2/</u> )	3	--	--
Combined value of gem stones, lime, and pumice-----	XX	391	XX	294
Total-----	XX	52,411	XX	54,354

e/ Estimated. p/ Preliminary. XX Not applicable.

<sup>1/</sup> Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>2/</sup> Less than 1/2 unit.

U U

Mr. Michael LaPlante  
P.O. Box 1037  
Keaau, Hawaii 96749

Dear Mr. LaPlante:

Thank you for your recent letter concerning geothermal development activities on the Island of Hawaii.

The exploration and development of Hawaii's geothermal resources is of statewide concern and our State's goal of energy self-sufficiency must be balanced with interests in preserving Hawaii's unique social and natural environment.

Towards this end, the appropriate State and County agencies have been charged with the responsibility of regulating geothermal development activities in the State, and they have continued in their efforts to examine such factors including, but not limited to, the potential for production, prospects for utilization, geologic hazards, social and environmental impacts, land use compability, and economic benefits.

This administration believes that geothermal energy is the largest, near-term baseload electric energy resource for Hawaii and that prudent development of our geothermal resources can be accomplished within the existing framework of governmental regulations that will ensure an acceptable level of impact on the environment.

I appreciate your input and thank you for taking the time to write and advise me of your concerns. With kindest regards.

Sincerely,

John Waihee  
(etc.)

✓  
  
(FORM LETTER)

Name:

Address:

Zip:

Dear \_\_\_\_\_:

Thank you for your letter dated August \_\_\_\_, 1989, concerning your request for public hearings, and the State's handling of various matters related to geothermal development activities.

With regards to the Department of Health's air quality standards for geothermal wells and facilities, public hearings were completed in May 1987, and the proposed rules are scheduled for adoption later this year. In the interim, the Department of Health has existing Administrative Rules, Title 11, Chapter 59, "Ambient Air Quality Standards" and Chapter 60, "Air Pollution Control" with which to properly regulate currently proposed geothermal development activities.

Under these existing rules, the Director of Health has determined that a public hearing on the air quality permit for True/Mid-Pacific's geothermal wells would not provide any additional information than that which is currently available. The project is limited to the drilling and testing of exploratory wells which will result in only a temporary release of air emissions. It should be noted that the draft permit has completed a 30-day public review and comment period.

On the other hand the Department will be holding a public hearing on the proposed Puna Geothermal Venture/Ormat project for the development of geothermal energy which includes the construction and operation of geothermal wells and a power plant facility.

The exploration and development of Hawaii's geothermal resources is of statewide concern and our State's goal of energy self-sufficiency must be balanced with interests in preserving Hawaii's unique social and natural environment.

This administration believes that geothermal energy is the largest, near-term baseload electric energy resource for Hawaii and that prudent development of our geothermal resources can be accomplished within the existing framework of governmental regulations that will ensure an acceptable level of impact on the environment.

I share your interest and concerns regarding the prudent development of geothermal resource and thank you for taking the time to write. With kindest regards.

Sincerely,

John Waihee

## VISIONS FOR ENVIRONMENTAL HEALTH

### OVERALL VISION

Hawaii's environment is among the cleanest in the nation. Air and water quality must be protected to assure that we remain the healthiest state in the nation and a premier visitor destination. Hawaii's unique plants, animals and ecosystems must also be preserved. The protection of the environment is a shared responsibility where partnerships among state, county, federal and private agencies will be necessary to assure that environmental quality is not compromised as growth and development continues. Hawaii is a place where people from all over the world come not only to see the natural beauty of our islands but to escape the pollution and congestion elsewhere in the world today.

### ACHIEVEMENTS

- o New programs have been developed and implemented to monitor and protect drinking water and coastal water quality toward the implementation of an anti-degradation policy.
- o To assure that construction of needed wastewater treatment works is not delayed, \$50,000,000 in state funds has been allocated for grants and loans.
- o New air quality monitoring stations have been established and maintained throughout the state to assure that air quality is not compromised.
- o A state hazardous waste program has been established.
- o A new hazard evaluation and emergency response program has been established to respond to oil and chemical emergencies with a \$150,000 emergency response fund.
- o A surveillance system is being established to determine the extent of environmentally-related illness and injury to evaluate the effectiveness of existing regulatory programs and more effectively direct limited resources.
- o A new \$35,000,000 state laboratory is being planned to support the Department's environmental monitoring programs.

### OVERALL GOAL

To promote, preserve and protect a clean, health and natural environment through regulation and environmental education.

## **SAFE DRINKING WATER**

### **VISION**

Safe drinking water free of contaminants that may be harmful to human health through monitoring and enforcement.

### **ACHIEVEMENTS**

- o State laws have been revised and we have increased our monitoring of public drinking water supplies dramatically over the past few years. The number of chemical compounds we are routinely looking for has doubled, from 22 in 1985 to 43 in 1989.
- o A groundwater protection strategy has been developed and implemented to support an anti-degradation policy with respect to groundwater quality.

### **GOALS**

By 1992, a total of 83 contaminants will be regulated at increasing frequency with 25 contaminants added every three years thereafter.

Implementation of the anti-degradation policy in the groundwater protection strategy through interagency coordination to protect and enhance the quality of existing and future drinking water supplies.



## **CLEAN COASTAL WATER**

### **VISION**

Clean coastal water is essential not only to maintaining health and a sense of well-being among residents but also to our visitor industry.

### **ACCOMPLISHMENTS**

- o A dramatically expanded coastal water quality monitoring program has been developed and implemented to implement a non-degradation policy at approximately 200 sites around the state.
- o The most stringent bacterial water quality standards in the nation have been established to protect recreational waters in Hawaii.
- o New standards of approximately 120 toxic chemicals have been established.
- o Enforcement of water pollution laws has improved where penalties collected have increase from 8 percent in 1986 to 82 percent in 1988.
- o An inventory of sources of pollution sources and a plan to reduce problems associated with runoff from urban and agricultural areas has been developed.

### **GOALS**

Improved water quality monitoring will enable the Department to evaluate the effectiveness of existing water pollution control programs.

Enhanced enforcement with improved penalty collection ratios with a policy toward alternative mitigation projects, such as studies, in lieu of cash penalties.

To protect and further enhance coastal water quality throughout the state through the cooperative efforts between federal, state, county and private agencies.

## **CLEAN AIR**

### **VISION**

Air quality in Hawaii is the best in the nation. Through the development of geothermal energy and other alternative energy resources to offset the need to burn oil and coal, we can keep it that way.

### **ACCOMPLISHMENTS**

- o Ten (10) air monitoring stations have been established and maintained sampling for 16 parameters statewide.
- o Two permanent stations and two mobile stations will monitor geothermal emissions to assure that air quality is not compromised in the process of geothermal resource development.
- o Asbestos management plans have been developed and approved for all public and private schools in the state and inspections are being conducted to assure that asbestos is removed prior to demolition and renovation projects.
- o More stringent air pollution controls and more frequent monitoring is required in new permits.

### **GOALS**

To maintain air quality throughout the state.

To expand the current asbestos program to include all public buildings.

To develop programs to address indoor air quality.

## **SOLID AND HAZARDOUS WASTE DISPOSAL**

### **VISIONS**

Waste minimization and recycling programs to assure that resources are conserved and environmental quality is not compromised.

### **ACCOMPLISHMENTS**

- o A new hazardous waste program has been established with 12 permanent positions.
- o New state laws have been developed to ensure the safe handling, transport, and disposal of used oil and hazardous waste.
- o A program is being developed to regulate leaking underground storage tanks.
- o Hazardous waste collection has been offered statewide to homeowners free of charge.

### **GOALS**

To develop and implement an integrated statewide solid waste management plan which will include provisions for recycling and waste minimization.

## WASTEWATER DISPOSAL

### VISION

Groundwater and coastal water quality is protected as a result of the aggressive construction of needed wastewater treatment facilities.

### ACCOMPLISHMENTS

- o A new state revolving fund is established with an appropriation of \$50,000,000 in state funds to provide loans and grants for essential wastewater treatment projects.
- o A wastewater treatment plant operators training center has been established.
- o New rules on wastewater disposal have been implemented emphasizing the protection of groundwater and coastal water through the the phasing-out of the use of cesspools in favor of alternative and innovative treatment systems.

### GOALS

To continue aggressive construction of needed wastewater facilities through additional appropriations to the state revolving fund to protect our coastal waters and underground drinking water supplies.

To assure that wastewater treatment facilities are operated and maintained properly.

To encourage the use of alternate treatment systems and expand regional sewers.

To encourage the reuse of sewage effluent for irrigation to offset the increasing demands for drinking water and water resource conservation.

## EMERGENCY RESPONSE

### VISION

Rapid response to oil and chemical emergencies to minimize environmental impacts.

### ACHIEVEMENTS

- o A new Hazard Evaluation and Emergency Response Office has been established to respond to oil and chemical emergencies.
- o A \$150,000 environmental emergency response revolving fund is established for emergency removals in cases where a responsible party cannot be found or for the purpose of taking timely action to clean up a spill or release.
- o A State Chemical Emergency Response Plan and County Response Plans have been developed to facilitate a coordinated response to chemical and oil emergencies.

### GOALS

To further develop state capabilities to respond to oil and chemical emergencies.

## **FOOD SAFETY**

### **GOAL**

A statewide monitoring and enforcement program to assure that foods consumed in Hawaii are free of harmful substances.

### **ACHIEVEMENTS**

- o 10 new positions have been established for monitoring foods, drugs, cosmetics and medical devices.
- o 4 new positions have been established to monitor pesticide residues in locally produced agricultural products.

### **GOALS**

To increase monitoring of foods statewide.

freedman(draft1)

REGULATORY PROCESS FOR ALTERNATIVE ENERGY DEVELOPMENT AND THE PROTECTION OF OUR ENVIRONMENT

I. List of Governmental Actions which take into consideration environmental concerns during each agency's review and evaluation of any proposed geothermal development project:

A. The designation of Geothermal Resource Subzones by the Board of Land and Natural Resources establishes areas which have potential for geothermal resource development for electrical energy production and direct use applications. Such subzone designation thereby confines geothermal activities to only those sites which demonstrate an acceptable balance between geothermal development and such factors, including but not limited to, environmental and social impacts, compatibility with allowed uses in that area and surrounding lands, and potential benefits which, in the overall perspective, will serve the best interest of the State.

B. The regulation of Conservation Districts provides for the protection of our environment through the use of a permit application and review process by the Board of Land and Natural Resources. Authorization of any proposed use in such lands shall only be issued if the use is compatible with the locality and surrounding areas, and appropriate to the physical conditions and capabilities of the specific parcel of land.

C. The establishment of the Natural Area Reserves System by the Board provides for the control and management of those areas in the State that possess unique natural resources such as geological and volcanological features, and distinctive marine and terrestrial plants and animals. Under such regulation a statewide program is administered which preserves in perpetuity specific land and water areas which support communities, as relatively unmodified as possible, of the natural flora and fauna, as well as geological sites, of Hawaii.

II. Example of government/agency action which chronologically lists the chain of events leading to the designation of a new natural area reserves system:

1982 Campbell Estate filed application to the Board for a Conservation District Use Permit to conduct geothermal development activities in the conservation district at Kahaualea, Hawaii.

1983 After contested case hearings, the Board granted limited exploration rights to Campbell Estate within a designated area of 800 acres at Kahaualea, Hawaii.

Subsequently, the Legislature enacted Act 296, which delegated to the Board the responsibility for designating geothermal resource subzones throughout the state.

1984 Pursuant such legislation, the Board held public hearings to receive testimony on the proposed designation of approximately 5,300 acres in the Kahaualea area as a Geothermal Resource Subzone (GRS). (see figure 1)

As a result of a contested case hearing, information was received concerning the comparable quality of the forest vegetation found in the proposed subzone area and that of the adjacent State land. Testimony was presented which indicated that the native vegetation in the Campbell parcel was of more value and of higher quality ohia forest than that found in the existing Wao Kele O Puna Natural Area Reserve System (NARS). (see figure 2)

After completing the contested case hearing, the Board issued a Decision and Order (D/O) which initiated the consideration of a land exchange between Campbell and the State, and the assessment of the State parcel as a possible GRS, based on the information which indicated that Campbell's Kahaualea property contained higher quality native habitat than that of the existing NARS.

1985 Based on its assessment, the Board proposed the designation of the NARS area as a GRS and held public hearings on its proposal. At that time, a request for a contested case hearing was requested and granted, which resulted in the Board's issuance of a D/O designating 9,014 acres as a GRS. (see figure 3)

In conjunction with these hearings, the Board executed the following actions: 1) approval of the land exchange between Campbell Estate and the State, 2) withdrawal of the Puna Forest Reserve and the cancellation of the Wao Kele O Puna NARS, and 3) the issuance of an executive order designating the Kahaualea parcel acquired from Campbell as a NARS.

The above chronology is a brief example of the efforts undertaken by the Department, Board, and the State of Hawaii, to promote the preservation of our State's environment through the use of existing administrative processes and governmental authority.



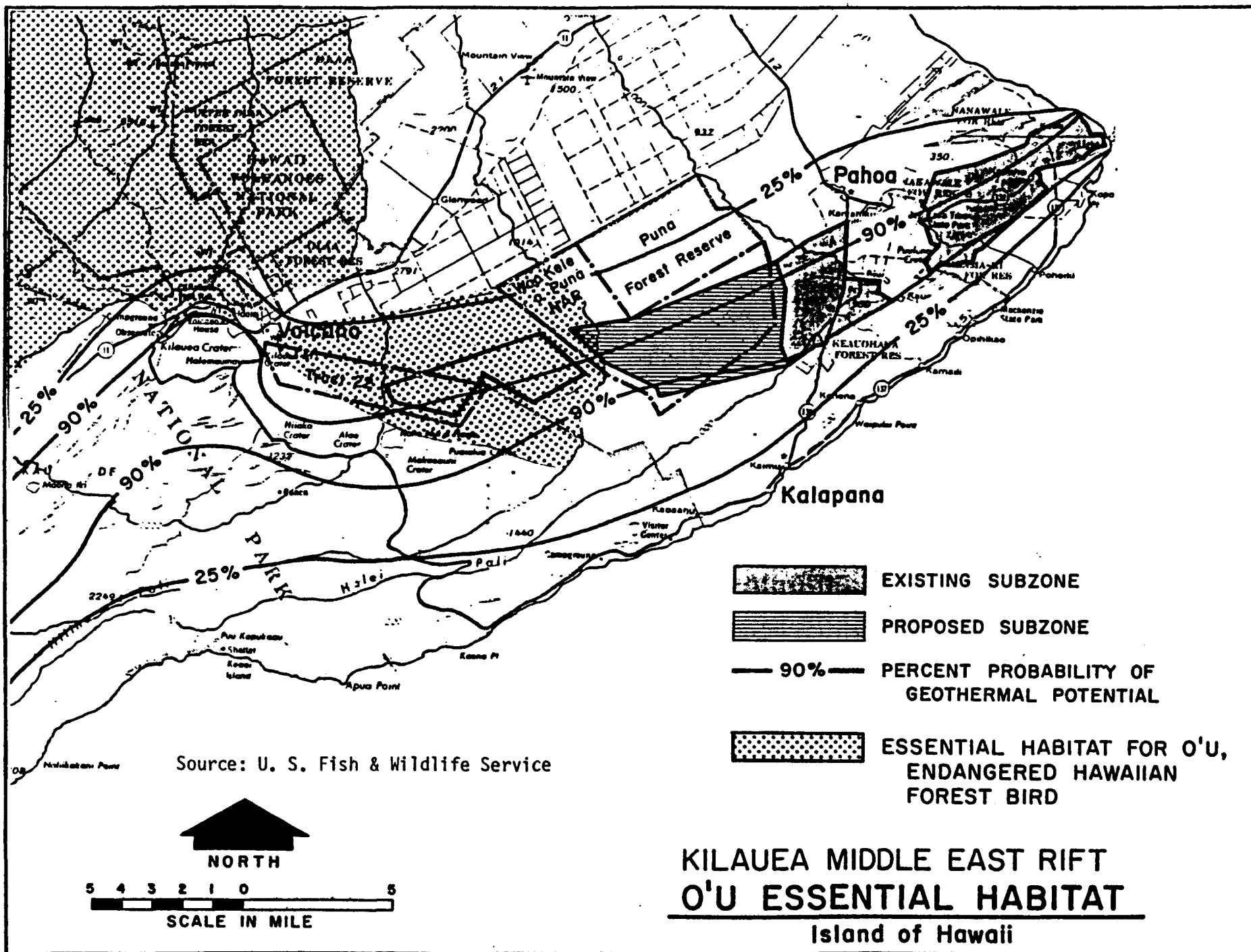
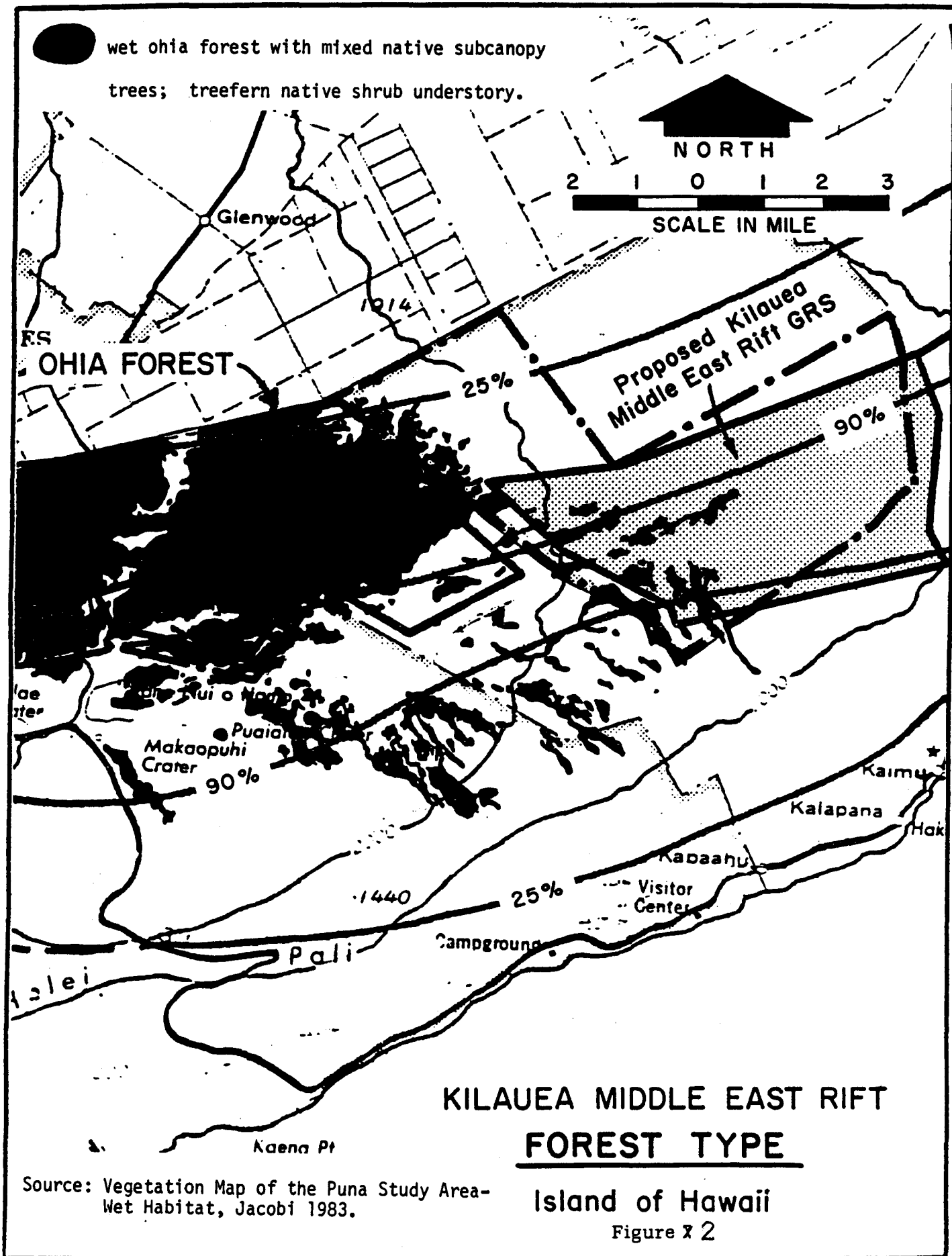
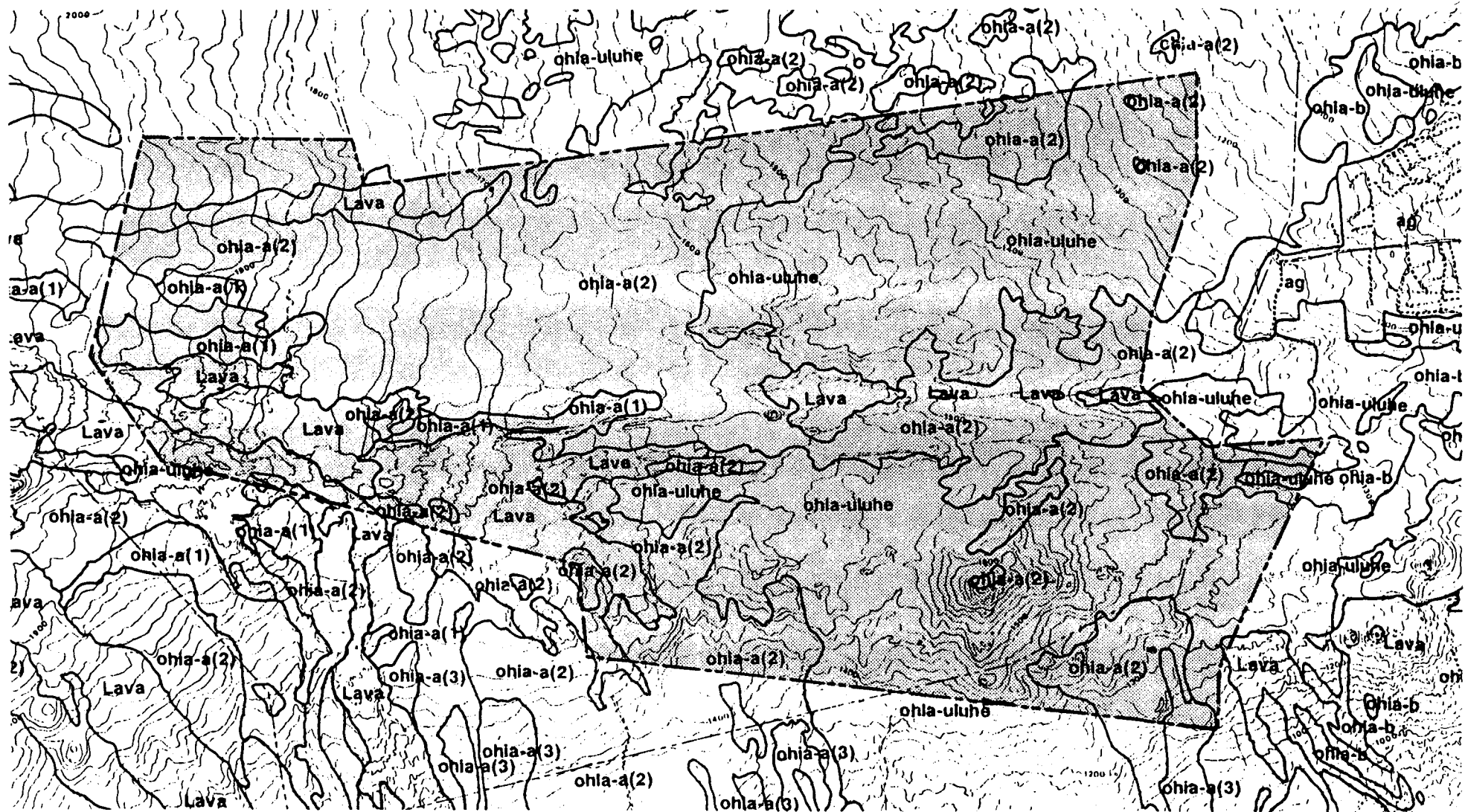


Figure X 1





**LEGEND:**

Lava	LAVA	ohia-a(2)	WET OHIA FOREST WITH NATIVE SPECIES AND EXOTIC SHRUBS
ohia-uluhe	OHIA WOODLAND WITH ULUHE	ohia-b	OHIA FOREST WITH EXOTIC SUBCANOPY AND SHRUB LAYERS
ohia-a(1)	WET OHIA FOREST WITH NATIVE SPECIES		

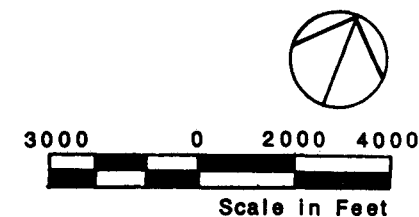


Figure 3  
VEGETATION TYPES IN THE KILAUEA SUBZONE

+ ,  
Deputy  
and Dir.

Instructions



EXECUTIVE CHAMBERS  
HONOLULU

JOHN WAIHEE  
GOVERNOR

January 23, 1987

RECEIVED  
67 JAN 27 P 1: 33

RECEIVED  
STATE OF HAWAII

MEMORANDUM

TO: All Department and Program Secretaries

FROM: Joshua C. Aagsalud  
Administrative Director

SUBJECT: Standardization of Correspondence for  
Governor's Signature

*Joshua C. Aagsalud*

In attempt to standardize the correspondence going out under the Governor's signature, please adhere to the following:

1. Paragraphs to be indented 10 spaces on standard letters (on 8-1/2 x 11").
2. Closing to read:

-10sp. → With kindest regards,

2sp.  
Sincerely,  
4sp.

JOHN WAIHEE (no middle initial or  
III, uppercase)

3. Do not type "Governor" under the signature block.
4. Always use middle initials (if there are any) in the address block:  
"The Honorable Richard S.H. Wong  
The Honorable Richard A. Kawakami"

Salutation should be (if to singular addressee):  
Dear Mr. President/ Mr. Speaker

5. All thoroughfare designations should be spelled out in full (i.e., Street, Lane, Avenue, Boulevard).
6. Spell out names of states (i.e., Hawaii, California).

89:414-09

July 19, 1989

Mr. Robert O. Humphrey, President  
Delta Petroleum Co.  
4040 Ironwood - 702F  
Bradenton, Florida 34209

Dear Mr. Humphrey:

Thank you for your inquiry regarding Hawaii's regulation of its wetlands.

The State of Hawaii does not have regulations specific to the administration of land areas designated as wetlands. Wetlands are normally categorized as Conservation lands whose uses are regulated under our State's Land Use Law. The use of such lands is evaluated on a case-by-case basis. In addition, wetlands in our State are protected through the conservancy provisions of our broad coastal zone management program that is patterned after the Federal law.

Copies of Hawaii's Land Use law and Coastal Zone Management Law, including a typical county ordinance that implements the latter statute, are enclosed for your information.

We are pleased to be of service. With kindest regards,

Sincerely,

JOHN WAIHEE

cc: Hon. William W. Paty  
Enc.

**RECEIVED**  
OCT 02 1989**GEOTHERMAL/CABLE  
PERMIT CENTER**

FREDRICK H. SANDS, M.D.

P.O. BOX 16093 A 0: 329 SEP 28 AIO: 48  
KAHULUI, HI. 96732DIV. OF WATER &  
LAND DEVELOPMENT  
STATE OF HAWAIIMr. William Paty  
Director, DLNR  
P.O. Box 621  
Honolulu, HI. 96813

Re: Energy Policy and Geothermal Development

Dear Bill,

Something different than my letters concerning the Makena-LaPerouse State Park. I sent the following letter to Gov. Waihee. I would appreciate your thoughts and comments as well.

I have several questions in regard to energy in Hawaii. One, does the State of Hawaii have an "Energy Policy?" If so, I would like a copy of the policy. Also, who oversees our energy policy, either appointed or de facto? Two, does the State have an organized, directed effort toward energy efficiency and conservation? Again, I would like a copy of this policy, and would like to know who heads this up.

My comments are that I believe we should place energy conservation efforts at the head of our energy priorities. Amory Lovins, a specialist in alternative energy, was recently quoted as saying that with the \$63 million already spent on geothermal in Hawaii, he could have found ways to save 500 megawatts. This has the obvious benefits of reducing the need for energy production, regardless of the source. I say this because any source of energy appears to have its logistical, production and environmental consequences, be it fossil-fuel, bio-mass, geothermal, hydroelectric, OTEC, solar or wind.

In developing geothermal energy for Hawaii, the stated intention is to reduce our energy dependency. I support this, in particular reducing the use of fossil fuels. As such, I urge you to decrease fossil-fuel energy production on a megawatt for megawatt basis if and when geothermal energy becomes available. Otherwise we have not reduced our fossil-fuel dependency and the environmental destruction which its use is causing. In addition the excess energy capacity which would be developed from a 500 megawatt plant would fuel the rampant development and urbanization which is assaulting Oahu. This may be the choice of those who live on Oahu, however it also imposes a major burden on the Big Island and may affect Maui with massive transmission lines.

Overall, I encourage you to consider that energy production should be localized: in this case, Oahu for Oahu, Big Island for

Big Island. If geothermal comes on board Oahu is again at risk for energy loss if problems occur with the cable, transmission or the plant. Hence, while reducing the State's fossil-fuel dependency it still places Oahu at energy risk. Hence, I encourage you to consider an Energy Policy which emphasizes energy conservation and efficiency while developing local energy resources with the least environmental impact. The use of bio-mass generation from our sugar cane seems to be a logical resource as it would find a use for the cane, the ag lands while reducing our fossil-fuel dependency and the need for cane burning.

I look forward to your reply. I would appreciate not only a response to my questions, but also on my comments. In particular, if we are not emphasizing energy conservation and efficiency, why not? Also, how do you feel about reducing fossil-fuel produced energy on a megawatt for megawatt basis if and when geothermal comes on line? Your thoughts on localized energy production, especially the bio-mass concept using sugar cane will also be appreciated.

I send you much Aloha and my deep appreciation for your leadership as Director of the DLNR.

*Rick Jorras*

DRAFT

As such, I am sure that DBED Energy Division will be better able to respond to your specific questions concerning energy conservation and efficiency

Fredrick H. Sands, M.D.  
P.O. Box 6093  
Kahului, Hawaii 96732

Dear Dr. Sands,

Thank you for your recent letter regarding <sup>the State's</sup> energy policy and geothermal development <sup>in Hawaii</sup>.

*The objectives and policies relating to energy in general and geothermal resources specifically are addressed in the Hawaii State Planning Act Chapter 226, Hawaii Revised Statutes. The State does have an energy policy, as expressed in the State Plan and the various functional plans, among them the State Energy Plan. The Department of Business and Economic Development (DBED) oversees the administration of the State's energy policy which implements the policy through various programs that promote energy efficiency and energy conservation. You may wish to write directly to Mr. Roger Ulveling, Director, DBED, 220 South King Street, Honolulu, Hawaii, 96813 for more detailed information.*

*The Hawaii State Planning Act provides for the formulation of functional plans.*

~~Regarding your comment relating to spending funds on conservation efforts, increased demand for electrical power will outweigh decreases in demand that could be effected through conservation measures such as education of the public, use of various alternate energy technologies, and through installation of various energy conservation devices. This is primarily because of projections of population growth and the historically observed relationship between population growth and electrical power demand. We must provide for the future energy needs of Hawaii's people in the magnitude indicated. The only large scale indigenous resource in Hawaii whose conversion to base load electricity is technologically mature is geothermal energy.~~

*The State energy functional plan addresses*

*Our State's dependence on oil will be reduced by developing such our geothermal resources because the utility firms would have imported oil to provide the projected power for the future if geothermally generated energy were not available.*

*In response to your request regarding localizing energy production, I agree with you in concept. Realistically, however, we must accept the fact that the best and easiest to develop resource is located on the Big Island. No island will become entirely dependant on "imported" geothermal energy, however, as other energy sources will continue to be explored and utilized.*

*While*

*it must be recognized that the area having the greatest potential for geothermal resources*

Thank you again for your concern, and for taking the trouble to write.

*This administration believes that prudent development of your geothermal energy resources is essential to the State in attaining our goal of energy self-sufficiency, and that,*

Very truly yours,  
WILLIAM W. PATY



RECEIVED

79 JAN 30 P-1: 53

January 25, 1989

DEPT. OF WATER &  
LAND DEVELOPMENT

Daniel Tirreno  
Grade 3A  
Timothy Dwight School  
Redding Road  
Fairfield, Connecticut 06430

Dear Daniel:

Your letter to Governor Clements of Texas has by accident been received by Governor John Waihee of Hawaii. Since your class is sending letters to all 50 states, we are pleased to answer this letter which requests a sampling of State soil and a State flag.

I am sorry that we must disappoint you. We have contacted both the Forestry and Wildlife Division of the State Department of Land and Natural Resources, and the Plant Quarantine Branch of the State Department of Agriculture. They tell us that the federal government prohibits the movement of soil between states without a special permit.

Because of the numerous requests we receive for flags, we cannot provide one free of charge. If you wish to purchase one, however, here is some information we believe will be helpful: Flags N' Things, 1027 Pensacola Street, Honolulu, HI 96814, telephone (808) 521-9704, sells a 4-by-6 inch desk-top model of the Hawaii State flag for \$1.25 plus postage.

I hope that the information on ordering a flag is useful. We are enclosing three brochures about Hawaii which you and your third grade class may find interesting. We also want to congratulate you on the 350th anniversary of the town of Fairfield.

Sincerely,

THOMAS J. WATSON, JR.  
DEPT. OF WATER & LAND DEVELOPMENT

Roger A. Ulveling

RAU:KS:rh

Enclosures AS  
Names & Insignia  
HVB Oahu brochure

bcc: The Honorable John Waihee  
Ref No. 89:38-02

ref: Kislau

JOHN WAIHEE  
GOVERNOR OF HAWAII



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621  
HONOLULU, HAWAII 96809

WILLIAM W. PATY, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

LIBERT K. LANDGRAF  
DEPUTY

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
CONSERVATION AND  
ENVIRONMENTAL AFFAIRS  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

Mr. Leonard Moser  
7343 Sunnyview, NE  
Salem, Oregon 77305

Dear Mr. Moser:

Your recent letter to Governor Waihee was referred to our Department of Land and Natural Resources for reply. We appreciate your taking the time to express your concerns about possible geothermal resources development in the Puna District of Hawaii.

The proposed geothermal exploration and potential development referred to in your letter is located approximately three miles from the Hawaii Volcanoes National Park in an area called the Kilauea Middle East Rift Zone. Because of public concern for the preservation of prime native forest lands, the Department took appropriate action to relocate the original project site to the present, more suitable location. I wish to assure you that the Department will continue to respond to community concerns in a reasonable and responsible manner on matters of geothermal exploration and development.

One of the goals of the State is to minimize its dependency on imported fossil fuels for its energy needs, which costs the State about \$1.5 billion per year. The Department believes that geothermal energy will offer a measure of energy self-sufficiency which will benefit the State as a whole. This benefit, we feel, can be accomplished within a reasonable framework of governmental regulation that will ensure an acceptable level of impact on the environment.

Again, thank you for your interest in and concern for the State of Hawaii.

Very truly yours,

WILLIAM W. PATY

Chairperson of the Board

This not what he (they) want to hear! The whole statement sounds like Governmental double talk... words. Include at least some thing about multiple public hearings, maybe exchanging lands to protect (the) "best" native forest in area although maybe not best geothermal area etc. etc.

November 21, 1988

Mr. John D'Aloia, Jr.  
Vice-President Regulatory Affairs  
Deuel & Associates, Inc.  
311 West Alama Street  
St. Marys, Kansas 66536

Dear Mr. D'Aloia:

Thank you for your letter of October 25, 1988, concerning your risk assessment study.

Information on the general geology of Oahu may be found in "Geology of the State of Hawaii" by Harold T. Stearns, 1966, Pacific Books, Palo Alto, California; and "Volcanoes in the Sea" by G.A. Macdonald and A.T. Abbott, 1970, University Press of Hawaii. A more detailed study of the geology and hydrology of Oahu can be found in an out-of-print reference entitled "Geology and Ground Water Resources of the Island of Oahu, Hawaii" by Harold T. Stearns and Knute H. Vaksvik, 1935, Bulletin 1, Hawaii Division of Hydrography.

An excellent out-of-print reference on soils in the area is, "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii" by the U.S. Department of Agriculture, Soil Conservation Service in cooperation with the University of Hawaii Agricultural Experiment Station. These publications should be available at larger libraries in your area.

I hope this information is useful for your study.

Sincerely yours,

MANABU TAGOMORI  
Deputy Director

ES:DL:ko

Landgraf  
June 19, 1987

*(Kay)  
Jenal*

MEMORANDUM

TO: Mr. Libert Landgraf, Deputy Director  
FROM: Manabu Tagomori  
SUBJECT: DOWALD Comments on Public Records and Privacy

DOWALD has reviewed the Department's Administrative Rules as they apply to <sup>its</sup> ~~our~~ area's of concern and <sup>offices</sup> ~~have prepared~~ the following comments on the subject of Public Records and Privacy:

Geothermal Records and Reports

<sup>deals with</sup> Chapter 183 (Leasing and Drilling of Geothermal Resources) ~~provides for~~ the confidentiality of exploration and well test data.

<sup>Board</sup> Section 13-183-14 <sup>provides</sup> ~~states~~ that exploration results submitted to the ~~Chairperson~~ shall be kept confidential ~~by the Board~~ until a lease <sup>for</sup> of the lands explored has been issued, or for three years from the date of submission of the data.

Section 13-183-62(b) <sup>provides</sup> ~~states~~ that all physical and factual information such as logs and surveys, well test data, and other data resulting from operations under the lease ~~shall~~ be kept confidential as ~~a~~ trade secret<sup>s</sup> for a period of one year from the date of receipt, or longer at the discretion of the board.

Nonfuel Mineral Production Data

Mineral production data of individual companies are provided to us by the U.S. Bureau of Mines <sup>which</sup> ~~who~~ acquire the data on a confidential basis, exempt from disclosure according to federal law. In accordance with our agreement with the U.S. Bureau of Mines, any request for such data is referred to the Office of Technical Information, Bureau of Mines, in Washington, D.C.

<sup>Basic resources</sup> However, other <sup>made</sup> ~~data (such as water resources)~~ on file in our Division are generally ~~considered~~ available to the public.

MANABU TAGOMORI

DN:ko

*OK-gbm*

Dear  
as discussed  
Jerry L



## DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

KAMAMALU BUILDING, 250 SOUTH KING ST., HONOLULU, HAWAII  
MAILING ADDRESS: P.O. BOX 2359, HONOLULU, HAWAII 96804 • TELE X: 7430250 HDPED

Ref. No. 26643

May 29, 1987

JOHN WAIHEE  
GOVERNOR  
ROGER A. ULVELING  
DIRECTOR  
MURRAY E. TOWILL  
DEPUTY DIRECTOR  
BARBARA KIM STANTON  
DEPUTY DIRECTOR

DIVISIONS  
BUSINESS AND INDUSTRY DEVELOPMENT DIVISION  
ENERGY DIVISION  
335 Merchant St., Room 110, Honolulu, Hawaii 96813  
FOREIGN-TRADE ZONE DIVISION  
Plan 2, Honolulu, Hawaii 96813  
LAND USE DIVISION  
PLANNING DIVISION  
RESEARCH AND ECONOMIC ANALYSIS DIVISION  
OFFICES  
ADMINISTRATIVE SERVICES OFFICE  
INFORMATION OFFICE

Ms. Sheila McAllenan  
3173 24th Street  
San Francisco, California 94110

Dear Ms. McAllenan:

This is to respond to, and to thank you for, your letter to Governor Waihee dated May 18, 1987, relating to geothermal development in Hawaii.

Hawaii currently relies on imported petroleum for 90 percent of its electricity generation. This puts us in an extremely vulnerable position because people outside our State can dictate the cost and even the availability of our electricity resource. It is essential that we turn to our own natural resources for our energy needs.

Geothermal energy is the only large-scale, indigenous, baseload electricity source in Hawaii that is now commercially mature. In 1981, the Government installed a small demonstration geothermal power plant that has proved the technical, economic and environmental feasibility of the geothermal resource. We have proceeded in a responsible way to encourage the commercial development of geothermal energy. An Environmental Impact Statement is currently being prepared for the first commercial geothermal project which will provide 12-1/2 megawatts of electricity to the Island of Hawaii by 1989 and another 12-1/2 megawatts by 1993.

We have studied the issues and we are convinced that future electric plants should use the geothermal resource rather than petroleum.

Very truly yours,

Roger A. Ulveling

RAU/GOL:stk

bcc: Hon. John Waihee  
Gov's Ref. No. 87:319-07.

G-1

Councilmember Wayne K. Nishiki  
County Council  
200 S. High Street  
Wailuku, Maui, Hawaii 96793

Dear Councilman Nishiki,

Thank you for your letter of August 4, 1989 expressing concerns regarding the State's handling various matters pertaining to development of our geothermal resources.

In the case of the proposed administrative rules for geothermal permitting, the department considered and analysed all of the comments received at the public hearings held June 21, 1989, and up to fifteen days after the hearings. Some changes were made in the proposed rules to address a number of these concerns. The changes were not of such a nature as to require conducting a second public hearing.

The Department of Health estimates that rules for air quality standards for geothermal wells and facilities will be finalized and promulgated later this year. In the meanwhile, the Department does have the existing Hawaii Administrative Rules, Title 11, Chapter 59, "Ambient Air Quality Standards" and Chapter 60, "Air Pollution Control" which have appropriate provisions to properly permit and regulate currently proposed geothermal activities.

The Director of Health has decided that a public hearing on the air quality permit for True/Mid Pacific geothermal wells would not provide any additional information that would result in further changes to the permit. The project is only for the drilling of the exploratory/development wells and will result in only a temporary release of air emissions. It should be emphasized that this project has already gone through a 30-day public comment period. The Department will be holding a public hearing on the Puna Geothermal Venture (Ormat) proposed project which consists not only of the development of the geothermal wells, but also of the power plant.

If you have any further questions or concerns on the geothermal and cable system development permitting rules, please contact Mr. Manabu Tagomori of the Division of Water and Land Development at 548-7533. On air quality standards, please call Dr. Bruce Anderson at the Environmental and Health Services Division at 548-4139.

Sincerely yours,

JOHN WAIHEE  
Governor

Mrs. Esther Ueda,  
Executive Director  
Land Use Commission  
Old Federal Building  
335 Merchant Street, Room 104  
Honolulu, Hawaii 96813

Dear Mrs. Ueda,

SUBJECT: Administrative Rules for Title 13, Department of Land and Natural Resources, Subtitle 7. Water and Land Development, Chapter 185 Rules of Practice and Procedure for Geothermal and Cable System Development Permitting

Thank you for your July 31, 1989 letter regarding the proposed rules for geothermal permitting. I appreciate your review of two drafts of the rules, and of the assistance provided by Mr. Ray Young of your staff. Mr. Young was very helpful in making suggestions for clarifying the language in the rules and for assuring enforcement provisions would be included.

I agree that the Land Use Commission must be sent a copy of all applications for district boundary amendments and copies of all final decisions on petitions by the Board of Land and Natural Resources along with copies of maps showing the reclassified areas. I assure you that if either of the two transferred Land Use Commission functions is ever evoked for purposes of geothermal development, your agency will be sent copies of all applications and decisions, along with the appropriate maps.

I appreciate your concern that the official State Land Use District boundary maps are kept as accurate as possible. By copying you on all applications and decisions, this will be possible. For your information, this is the same administrative arrangement the department has made regarding the function of the Department of Transportation that has been transferred for purposes of geothermal development, i.e. an administrative agreement to copy the department on all applications and decisions having to do with that transferred function.

If you have any questions regarding this arrangement, please call me at Ext. 7533.

Sincerely,

MANABU TAGOMORI  
Manager-Chief Engineer

JOHN WAINEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL PROTECTION AND HEALTH SERVICES DIVISION  
ENVIRONMENTAL PERMITS BRANCH  
645 HALEKAUWILA STREET, 3RD FLOOR  
HONOLULU, HAWAII 96813

FACSIMILE REQUEST AND COVER SHEET  
(Use Black or Blue Ink Only)

DATE: August 23, 1989

TO: Dean Nakano

OFFICE/PHONE NO.: DLNR / (809) 548-7541

SUBJECT: Gov. referral on geothermal

ORGANIZATION CODE/MAIL STOP: \_\_\_\_\_

FROM: Willy Nagamine

OFFICE/PHONE: Env. Permits / (808) 548-6410

SIGNATURE OF SENDER: \_\_\_\_\_

Enclosed is some language on the geothermal issue. Use and  
revise accordingly. Call me if you have any other DOH  
issues that need addressing.

No. of pages transmitted (Including Cover Sheet) 3

Rev. 6/89  
AFL20



Second, regarding your concern about the air quality standards, the Department of Health estimates that the geothermal rules will be finalized and promulgated later this year. In the meanwhile, the Department does have the existing Hawaii Administrative Rules, Title 11, Chapter 59, "Ambient Air Quality Standards" and Chapter 60, "Air Pollution Control". Although not written to specifically address the geothermal industry, the existing rules have appropriate provisions to properly permit and regulate the proposed geothermal activities.

As far as public hearings are concerned, the Director of Health has decided that a public hearing on the air quality permit for True/Mid Pacific geothermal wells would not provide any additional information that would result in further changes to the permit. The project is only for the drilling of the exploratory/developmental wells and will result in only a temporary release of air emissions. It should be emphasized that this project has already gone through a 30-day public comment period. The Department will be holding a public hearing on the Puna Geothermal Venture (Ormat) proposed project which consists not only with the development of the geothermal wells, but also the power plant.

With the assistance of an air advisory committee, the Department of Health developed the proposed air rules for geothermal wells and facilities. In May 1987, public hearings were held on those proposed rules. Due to increased permitting activity associated with electrical generating units and the critical need for additional generating capacity, the Department has been unable to finalize the proposed geothermal rules. With the recent hiring of some engineering graduates and some outside assistance, the Department will be finalizing and promulgating the proposed rules later this year.

RECEIVED



AUG 28 P 3:13

JOHN WAIHEE  
GOVERNOR OF HAWAIIJOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

DIV. OF WATER &  
STATE OF HAWAII DEVELOPMENT  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL PROTECTION AND HEALTH SERVICES DIVISION  
ENVIRONMENTAL PERMITS BRANCH  
645 HALAUAHILA STREET, 3RD FLOOR  
HONOLULU, HAWAII 96813

FACSIMILE REQUEST AND COVER SHEET  
(Use Black or Blue Ink Only)

DATE: August 28, 1989TO: Dean NakanoOFFICE/PHONE NO.: DLNR / (808) 548-7541SUBJECT: GEOT. Referral on geothermal

ORGANIZATION CODE/MAIL STOP: \_\_\_\_\_

FROM: Willy NagamineOFFICE/PHONE: Env. Permits / (808) 548-6410

SIGNATURE OF SENDER: \_\_\_\_\_

Dean,

Here's a type written copy of the DOH response that  
you may use and revise accordingly. Call if you have any questions.

No. of pages transmitted (Including Cover Sheet) 2Rev. 6/89  
AFL20

JOHN WAINEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

August 28, 1989

In reply, please refer to:  
EPI/SD/EPB

A08100WN

MEMORANDUM TO THE FILES

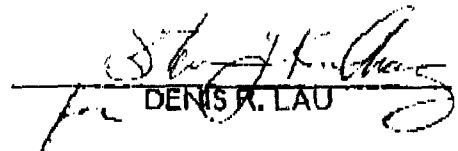
From: Chief, Environmental Permits Branch

Subject: Governor's Referrals 89:519-20 and 89:520-14  
DOH's Response Provided to the Lead Agency, DLNR

With the assistance of an air advisory committee, the Department of Health developed the proposed air rules for geothermal wells and facilities. In May 1987, public hearings were held on those proposed rules. Due to increased permitting activity associated with electrical generating units and the critical need for additional generating capacity, the Department has been unable to finalize the proposed geothermal rules. With the recent hiring of some engineering graduates and some outside assistance, the Department will be finalizing and promulgating the proposed rules shortly.

In the meanwhile, the Department does have the existing Hawaii Administrative Rules, Title 11, Chapter 59, "Ambient Air Quality Standards" and Chapter 60, "Air Pollution Control". Although not written to specifically address the geothermal industry, the existing rules have appropriate provisions to properly permit and regulate the proposed geothermal activities.

As far as public hearings are concerned, the Director of Health has decided that a public hearing on the air quality permit for True/Mid Pacific geothermal wells would not provide any additional information that would result in further changes to the permit. The project is only for the drilling of the exploratory/developmental wells and will result in only a temporary release of air emissions. It should be emphasized that this project has already gone through a 30-day public comment period. The Department will be holding a public hearing on the Puna Geothermal Venture (Ormat) proposed project which consists not only with the development of the geothermal wells, but also the power plant.

  
DENIS R. LAU

WN/sk

(FORM LETTER)

Name:

Address:

Zip:

Dear \_\_\_\_\_:

Thank you for your letter dated August \_\_\_\_, 1989, concerning your request for public hearings, and the State's handling of various matters related to geothermal development activities.

Concerning the proposed Administrative Rules for geothermal permitting, the Department of Land and Natural Resources has reviewed the testimony received at the statewide public hearings held on June 21, 1989, including the those comments received fifteen days after the close of the hearings. Pursuant to these comments, revisions were made to the proposed rules which addresses a number of concerns raised by the public. These changes which were reviewed by the Attorney General's Office, were deemed of such a nature as to not require the holding of a second round of public hearings.

With regards to the Department of Health's air quality standards for geothermal wells and facilities, public hearings were completed in May 1987, and the proposed rules are scheduled for adoption later this year. In the interim, the Department of Health has existing Administrative Rules, Title 11, Chapter 59, "Ambient Air Quality Standards" and Chapter 60, "Air Pollution Control" with which to properly regulate currently proposed geothermal development activities.

Under these existing rules, the Director of Health has determined that a public hearing on the air quality permit for True/Mid-Pacific's geothermal wells would not provide any additional information than that which is currently available. The project is limited to the drilling and testing of exploratory wells which will result in only a temporary release of air emissions. It should be noted that the draft permit has completed a 30-day public review and comment period.

On the other hand the Department will be holding a public hearing on the proposed Puna Geothermal Venture/Ormat project for the development of geothermal energy which includes the construction and operation of geothermal wells and a power plant facility.

I share your interest and concerns regarding the prudent development of geothermal resource and thank you for taking the time to write. With kindest regards.

Sincerely,

John Waihee

DRAFT #4

Councilmember Wayne K. Nishiki  
County Council  
200 S. High Street  
Wailuku, Maui, Hawaii 96793

Dear Councilman Nishiki,

Thank you for your letter of August 4, 1989 expressing concerns regarding the State's handling of various matters pertaining to development of our geothermal resources.

*Regarding Of Land and Natural Resources*  
In the case of the proposed administrative rules for geothermal permitting, the department considered and analyzed all of the comments received at the public hearings held June 21, 1989, and *15 days afterwards in accordance with law* some changes were made in the proposed rules to address a number of these concerns. *However, which were reviewed by the Attorney General's Office* The changes were not of such a nature as to require conducting a second public hearing.

*for adoption*  
*Round of* *Regarding*  
The Department of Health estimates that rules for air quality standards for geothermal wells and facilities *will be finalized and promulgated later this year. In the meanwhile, the Department uses the existing Hawaii Administrative Rules, Title 11, Chapter 59, "Ambient Air Quality Standards" and Chapter 60, "Air Pollution Control", which have appropriate provisions to properly permit and regulate currently proposed geothermal activities.*

*under the existing rules,*  
The Director of Health has decided that a public hearing on the air quality permit for True/Mid Pacific geothermal wells would not provide any additional information that would result in further changes to the permit. *and that* The project is *limited to* the drilling of *exploratory/development wells* and will result in only a temporary release of air emissions. It should be emphasized that this project has already gone through a 30-day public comment period. *On the other hand,* The Department will be holding a public hearing on the Puna Geothermal Venture *Health* proposed project which consists not only of the development of the geothermal wells, but also of the power plant.

*and operation*  
If you have any further questions or concerns on the geothermal and cable system development permitting rules, please contact Mr. Manabu Tagomori of the Division of Water and Land Development at 548-7533. On air quality standards, please call Dr. Bruce Anderson at the Environmental and Health Services Division at 548-4139.

*I share your interest based concern regarding geothermal matters and thank you for taking the time to write.*

Sincerely yours,

JOHN WATHEE  
Governor

*Proposed energy planning includes the correct matter and operation of geothermal wells and a power plant*

(FORM LETTER)

Name:

Address:

Zip:

Dear \_\_\_\_\_:

Thank you for your recent letter concerning public hearings and other matters related to geothermal development activities.

Concerning the proposed Administrative Rules for geothermal permitting, the Department of Land and Natural Resources has reviewed the testimony received at the public hearings held on June 21, 1989, including those comments received fifteen days afterwards. Based upon these comments, revisions were made to the proposed rules. These revisions which were reviewed and approved by the Attorney General's Office, were deemed to not require the holding of a second round of public hearings.

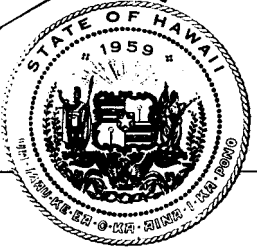
With regards to the Department of Health's air quality standards for geothermal wells and facilities, public hearings were completed in May 1987, and subject to review, the proposed rules are scheduled for adoption within the next few months. Currently, the Department of Health under existing Administrative Rules, Title 11, Chapter 59, "Ambient Air Quality Standards" and Chapter 60, "Air Pollution Control" is properly regulating all proposed geothermal development activities.

Under the existing rules, the Director of Health has determined that a public hearing on the authority to construct permit for True/Mid-Pacific's proposed geothermal wells would not provide any additional information than that which has already been submitted and received through a 30-day public review and comment period. True/Mid-Pacific's project is limited to the drilling and testing of exploratory wells to locate and determine if geothermal resources are available in commercial quantities, and will result in only a temporary release of air emissions.

I share your interest and concerns regarding the prudent development of geothermal resources in the State of Hawaii, and thank you for taking the time to write. With kindest regards.

Sincerely,

John Waihee



## DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

ENERGY DIVISION, 335 MERCHANT ST., RM. 110, HONOLULU, HAWAII 96813 FAX: (808) 531-5243

JOHN WAIHEE  
GOVERNOR  
ROGER A. ULVELING  
DIRECTOR  
BARBARA KIM STANTON  
DEPUTY DIRECTOR  
LESLIE S. MATSUBARA  
DEPUTY DIRECTOR

89:1112B-689

SEP 15 1989  
DEPARTMENT OF WATER &  
LAND DEVELOPMENT

September 8, 1989

### MEMORANDUM

TO: The Honorable William W. Paty  
Chairman, Department of Land and Natural Resources

FROM: Roger A. Ulveling

SUBJECT: Geothermal Development Impact

The County of Hawaii Planning Commission has deferred a decision on an application by Puna Geothermal Venture for a Geothermal Resources Permit, pending additional information from the State of Hawaii.

Among other concerns, the Chairman of the County Planning Commission has stated the need for "... a procedure to be established to give directly affected property owners the option of permanent or temporary relocation or equitable buyout options by the developer, the County of Hawaii and/or the State of Hawaii."

Could you please provide us with information relating to the above issue. The particular geothermal application under consideration is for development in Pohoiki about 1/4 mile north of the existing government-owned HGP-A geothermal power plant.

I would like to incorporate your response in testimony I intend to provide at the September 19, 1989, Commission hearing in Kona and would appreciate your input by September 15, 1989.

Attached are verbatim excerpts from the Commission's public hearing on August 28, 1989.

Mr. Maurice Kaya at extension 4150 or Mr. Gerald Lesperance at extension 4020 are DBED's contact persons. Their facsimile number is 531-5243.

*[Signature]*  
for Director

RAU/GOL:1ta  
Attachment



ULVELING(draft1)

MEMORANDUM

TO: Roger Ulveling, etc.

FROM: William W. Paty, etc.

SUBJECT: Request for Information Relating to Geothermal  
Development Impacts

In response to your memorandum dated September 8, 1989, requesting information relating to the proposed establishment of a State assest fund for compensation of individuals and communities impacted by geothermal development, the Department of Land and Natural Resources ~~has prepared~~ the following comments:  
*submit*

In the Governor's letter to Mr. Peter Adler, dated August 16, 1989, which addressed the issue of compensation, the Department of Land and Natural Resources was designated as the lead agency on this matter.

However, it is clear that the Governor intended that a task force comprised of county/community members, in coordination with the State, would determine the specifics of such a fund. As such, implementation of this compensation plan which is envisioned to be managed at the county level working with the community groups, necessitates further meetings with the respective parties.

Any input from our Department at this time regarding the administration of such a fund would be premature, without further discussions on the matter. However, we can provide some general comments as to how the funds may be utilized for community benefit. Such benefits could be derived through the Department's initiation of CIP projects for infrastructure, recreational, and community based facilities. Direct benefits may include, but not be limited to, (1) improvements to the existing county water system and construction of new county water lines into those communities currently utilizing water catchment systems, (2) the creation of new parks, and (3) the improvement of county roads in the impacted community.

It must be emphasized that concept of community benefit endorsed by the Governor in his letter, is directed primarily to the maintainance or enhancement of the community's quality of life rather than direct compensation to impacted individuals.

In closing, the Department in its role as the designated lead agency on this matter, will assist in the initiation of the ~~Required~~ task force meetings to begin discussion on the specifics of the compensation plan, and further offer its assistance in drafting any legislation which may be required in order to implement the funding of such a fund.

---

I hope this information will be useful in your preparation of testimony for the September 19, 1989, Planning Commission meeting in Kona. Should you have any questions, please contact Manabu Tagomori, Deputy Director, at Ext. 7533.

WILLIAM W. PATY



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
P. O. BOX 621  
HONOLULU, HAWAII 96809

REF:WL-KO

*Draft - sent to Paty  
for signature 9/18/89*

WILLIAM W. PATY, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

LIBERT K. LANDGRAF  
DEPUTY

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
CONSERVATION AND  
ENVIRONMENTAL AFFAIRS  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

MEMORANDUM

TO: Honorable Roger Ulveling, Director  
Department of Business & Economic Development

FROM: William W. Paty, Chairperson  
Board of Land and Natural Resources

SUBJECT: Request for Information Relating to Geothermal  
Development Impacts

In response to your memorandum dated September 8, 1989, requesting information relating to the proposed establishment of a State asset fund for the benefit of communities impacted by geothermal development, the Department of Land and Natural Resources submits the following comments:

In the Governor's letter to Mr. Peter Adler, dated August 16, 1989, which addressed the issue of compensation, the Department of Land and Natural Resources was designated as the lead agency on this matter. Additionally, it is clear that the Governor intended that a task force comprised of county-community members, in coordination with the State, would determine the specifics of such a fund. As such, implementation of this compensation plan which is envisioned to be managed at the county level working with the community groups, necessitates further meetings with the respective parties. On this matter, the Department is in the process of arranging meetings of the parties involved. Discussions will initially focus on two areas identified by the Governor.

First, the State's initiation of CIP projects for infrastructure, recreational, and community based facilities. Direct benefits may include, but not be limited to, (1) improvements to the existing county water system and construction of new county water lines into those communities currently utilizing water catchment systems, (2) the creation of new parks, and (3) the improvement of county roads in the impacted community.

Second, means to derive funds from the State's geothermal regulations which may necessitate new legislation.

It must be emphasized that concept of community benefit endorsed by the Governor in his letter, is directed primarily to the maintenance or enhancement of the community's quality of life rather than direct compensation to impacted individuals.

In closing, the Department in its role as the designated lead agency on this matter, is arranging meetings to flesh out details of the asset fund, to begin discussion on the specifics of the compensation plan, and further offer its assistance in drafting any legislation which may be required in order to implement the funding of such a fund.

I hope this information will be useful in your preparation of testimony for the September 19, 1989, Planning Commission meeting in Kona. Should you have any questions, please contact Manabu Tagomori, Deputy Director, at Ext. 7533.

WILLIAM W. PATY

DIVISION OF AQUATIC RESOURCES (1989)

HAWAII COUNTY - Capital for a Day

1. Issues and Possible Remedy

Commercial fishers of Kailua Kona complain that the "no netting" boundary of Chapter 13-52, Hawaii Administrative Rules, in Kailua Bay closes off akule in the area. They suggest the boundary should be moved further offshore and ban netting except for taking of akule.

Commercial dive tour operations along Kona are concerned that Aquarium Fish Collectors are harvesting in areas where the tour operates.

Commercial tour boat operators along Kona are concerned that their anchoring along the shoreline is damaging live stony coral. They suggest that day moorings be placed along the coast in place of anchoring.

A conflict between pole and line and net fishing recurs annually when hahalalu (young akule) school in the South Small Boat Basin of Kawaihae Harbor, Hawaii. The complaint is that few netters, in a short time, take the hahalalu being fished by many recreational anglers over a long period. The anglers ask that the small basin be set-aside for their fishing.

A public meeting would be held to discuss a larger area of Kailua Bay to be closed to net fishing, except for taking of akule. The Administrative Rule needs to be amended to establish the change.

The Commercial Dive Tour Operators and Aquarium Fish Collectors held meetings and agreed to stay away from each others area of operation. However, new fish collectors that were not part of the agreement occasionally operate in the areas. Administrative Rules may be needed to formally set-aside the diving areas.

The group TORCH, is testing a pin that is inserted and cemented into a hole drilled out of the hard rock bottom to hold the mooring lines. The DOT is sponsoring the experiment to protect our nearshore live coral resource.

Public meetings were held to discuss the problem, and on a draft administrative rule proposing to set-aside the South Small Boat Basin area only to pole and line fishing. A public hearing is scheduled for September 20, 1989 at the Waimea School Public Library in Waimea, Hawaii, as part of the process to formalize the administrative rules.

2. Significant Projects

- a. The 18 Fish Aggregating Devices around Hawaii were serviced in early June, 1989.
- b. The Department is working with Mauna Lani Resorts to transfer young green sea turtles to the hotel's fishponds from Sea Life Park. The federal National Marine Fisheries Service will monitor the growth and health of the sea turtles.

8/24/89

MT-  
you ask them  
former. Please  
submit original  
Please 5 copies.  
Thank.  
Barry  
9/7

## **Division of Water and Land Development**

### **Capital for Day - Kona**

#### **A. ONGOING ACTIVITIES TO IMPLEMENT HAWAII'S NEW WATER CODE**

1. Informing and requiring all water users to report their water use monthly to the State.
2. Processing applications for permits to:
  - a. Use water in designated water management areas
  - b. Alter stream channels
  - c. Drill water wells or construct stream diversion works
  - d. Install pumps in water wells
3. Enforcing recently adopted interior instream flow standards that disallow new diversions without permission of the Commission on Water Resource Management.
4. Investigating high quality streams so that they can be protected through instream flow standards.
5. Preparing the Hawaii Water Plan
  - a. Water Resource Protection Plan (by DLNR)
  - b. Water Quality Plan (DOH)
  - c. County Water Use and Development Plans (by Counties)
  - d. State Water Projects Plan (by DLNR)

#### **B. ACTIVITIES TO IMPLEMENT HAWAII'S NEW DAM SAFETY LAW**

1. Public hearings have been held to adopt administrative rules. Administrative rules are being revised for adoption.
2. A dam safety inspection program is being developed.

#### **C. GEOTHERMAL PROGRAM**

1. Implementing Act 301, SLH 1988.
2. Provides for consolidated permit processing of geothermal resources/cable system development activities.
3. Administrative rules have been adopted.

#### D. KONA PROJECTS

##### 1. Kona Marshalling Yard, Phase II

- Construction initiated - August 1989
- Contractor - N. Rego Contracting
- Contract Amount - \$336,000
- Construction Complete - May 1990

##### 2. North Kona (Kalaoa) Exploratory Well

- Construction to be initiated - October 1989
- Contractor - Water Resources International, Inc.
- Construction Amount - \$1,000,135
- Construction Complete - October 1990

##### 3. Keel No. 4 Exploratory Well

- Design underway
- Estimated Construction Cost - \$700,000
- Scheduled Construction to be initiated - January 1990
- Construction Complete - October 1990

##### 4. Honokahau Boat Harbor Water System

- Design to be initiated - October 1989
- Estimated Construction Cost - \$600,000
- Scheduled Construction to be initiated - September 1990
- Construction Complete - September 1991

#### E. NEW CIP PROJECTS TO BE INITIATED

##### 1. Hualalai Exploratory Well

- Design to be initiated - March 1990
- Estimated Construction Cost - \$870,000

##### 2. Kahaluu Shaft Improvements

- Design to be initiated - January 1990
- Estimated Construction Cost - \$350,000

##### 3. Keahole Reservoir and Booster Pump

- Design to be initiated - April 1990
- Estimated Construction Cost - \$622,000

##### 4. Kainaliu Water Development Shaft

- Design to be initiated - May 1990
- Estimated Construction Cost - \$1,000,000

**New CIP Projects to be Initiated (continued)**

**5. Alternative Water Source Development, Keauhou Underground Grout Curtain**

- Design to be initiated - October 1990 .
- Estimated construction cost - \$1,500,000

**6. North Kona Well Development**

- Design to be initiated - October 1990
- Estimated construction cost - \$1,200,000

*Submitted  
for Typing 10/31*

(Swanander)

Ms. Andrea Swanander  
P.O. Box 1141  
Puunene, Hawaii 96784

Dear Ms. Swanander:

Thank you for your recent letter to the Department of Land and Natural Resources concerning geothermal development on the Island of Maui.

Please be assured that during the process of designating the Haleakala Southwest Rift Zone as a Geothermal Resource Subzone, the Board of Land and Natural Resources assessed the compatibility of development and utilization of geothermal resources with the allowed uses within the area and within surrounding lands.

In addition, the regulation and permitting of any proposed geothermal development activities within designated subzone areas provides for the evaluation of such proposed use prior to the issuance of a permit authorizing such activity. One of the criterion utilized by the Board of Land and Natural Resources in its evaluation of Conservation District Use Permit Applications, includes but is not limited to, the determination that the desired uses would not have unreasonable adverse health, environmental or socio-economic effects on residents or surrounding property.

Furthermore, in our continuing efforts to preserve our State's historic properties, the Department's Division of State Parks, Outdoor Recreation and Historic Sites has been charged with the responsibility for identifying significant historic properties and in developing plans to eliminate or reduce impacts to such sites. One example being the requirement for a Historic Preservation Review for all applicable projects.

In response to your offer of assistance in identifying archaeological sites on the Island of Maui, our Department would be most appreciative of any information you may provide.

Thank you again for taking the time to write and advise me of your concern for the Island of Maui.

Very truly yours,

WILLIAM W. PATY



(COOK)

~~Ms. Patricia M. Cook~~ Mr. Daniel Klein  
~~739 Husten Street~~ P.O. Box 657  
~~Honolulu, Hawaii 96826~~ Waialua, Hawaii 96791

Dear ~~Ms. Cook~~ Mr. Klein:

Thank you for your recent letter to the Department of Land and Natural Resources concerning geothermal development and the rainforests on the island of Hawaii.

The proposed geothermal development that you refer to is located along the Kilauea Middle East Rift Zone, approximately three miles away from the Hawaii Volcanoes National Park. Because of public concern over the preservation of prime native forest, the proposed project was moved from its original location to an area assessed as having lower quality native habitat. The scattered areas of prime native forest which may be contained within the limits of the new project area will be protected throughout the permitting process by requiring that development activities avoid these sensitive areas, *and that mitigating measures be taken to protect precious flora and fauna.*

The State of Hawaii encompasses approximately 4 million acres of land. Of this total, over 900,000 acres are contained within the State's Forest Reserves, 270,000 acres are within the National Park and wildlife refuges, and 46,000 acres are private conserves under the management of the Nature Conservancy.

In the furtherance of forest protection and wildlife management, the State of Hawaii within the last two decades, has established model law and practice, in creating a Statewide Natural Area Reserves System (NARS), which protects unique island ecosystems. In addition, we have implemented programs for the conservation of aquatic life, wildlife and plants, which safeguards endangered species and promotes conservation action. Most recently, the State of Hawaii, by Executive Order, designated over 16,000 acres of land aquired from Campbell Estate as the Kahaualea Natural Area Reserve under the control and management of the Department of Land and Natural Resources.

The State of Hawaii depends upon petroleum supplies for over 90 percent of all the energy consumed in the islands and renders Hawaii vulnerable to disruptions in the supply of foreign oil. This administration believes that geothermal energy is the largest, near-term baseload electric energy resource for Hawaii and that prudent development of our geothermal resources is essential to the State in attaining our goal of energy self-sufficiency.

Thank you again *for* taking the time to write and advise me of your interest and concern for the State of Hawaii.

Very truly yours,

William W. Paty  
Chairperson of the Board

*10/30*  
*Done,*  
*per type final*  
*and pass to*  
*M.T. for approval*  
*Dean*

(COOK)

Ms. Patricia M. Cook  
739 Hausten Street  
Honolulu, Hawaii 96826

Ms. Carla Deicke  
Univ. of Hawaii at Manoa  
Dept. of Philosophy  
2530 Dole St.  
Honolulu, Hawaii 96822

*Dear, Mr. Tyne  
and from M.T.  
for approval.  
Drew*

Dear Ms. Cook ~~and~~ Deicke:

Thank you for your recent letter to the Department of Land and Natural Resources concerning geothermal development and the rainforests on the island of Hawaii.

The proposed geothermal development that you refer to is located along the Kilauea Middle East Rift Zone, approximately three miles away from the Hawaii Volcanoes National Park. Because of public concern over the preservation of prime native forest, the proposed project was moved from its original location to an area assessed as having lower quality native habitat. The scattered areas of prime native forest which may be contained within the limits of the new project area will be protected throughout the permitting process by requiring that development activities avoid these sensitive areas, and that mitigating measures be taken to protect precious flora and fauna.

*With regard to your statement about native Hawaiian religious practices, we believe that the development of the state's geothermal resources <sup>does</sup> not preclude nor is incompatible with the continued practice of Hawaiian religion. In legal challenges of this opinion, the courts ~~has~~ have supported this view.*

The State of Hawaii encompasses approximately 4 million acres of land. Of this total, over 900,000 acres are contained within the State's Forest Reserves, 270,000 acres are within the National Park and wildlife refuges, and 46,000 acres are private preserves under the management of the Nature Conservancy.

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Thank you again for taking the time to write and advise me of your interest and concern for the State of Hawaii.

Very truly yours,

William W. Paty  
Chairperson of the Board

Hill and Knowlton/Communications-Pacific, Inc.  
International Public Relations Counsel  
820 Millilani Street, Suite 400  
Honolulu, Hawaii 96813  
Telephone: 808-521-5391  
Facsimile: 808-537-6836

**FAX COVER LETTER**

Total number of pages (including cover letter): 8

IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL BACK AS SOON  
AS POSSIBLE. (808) 521-5391. ASK FOR STEVE/HARQUET.

Date: 9-14-89 Time: 2:50

TO: CHUCK FREEDMAN

COMPANY: OFFICE OF THE GOVERNOR

FAX NUMBER: 548-2230

FROM: STEVE OKINO

**SPECIAL INSTRUCTIONS:**

WORLD BANK/IMF/ENVIRONMENTAL  
CONFERENCE SUMMARY & AGENDA,  
AS PROMISED F.Y.I.

PLEASE CALL WITH ANY QUESTIONS.

THANKS.

We are transmitting from: (808) 537-6836--RICOH FAX60, which  
is fully automatic to send to or receive from either Group I,  
Group II, or Group III.

Hill and Knowlton/Communications-Pacific, Inc.  
International Public Relations Counsel  
820 Mililani Street, Suite 400  
Honolulu, Hawaii 96813  
Telephone: 808-521-5391  
Facsimile: 808-537-6836

September 14, 1989

TO: Chuck Freedman

FROM: Steve Okino  
Karl Kiyokawa

RE: WORLD BANK/INTERNATIONAL MONETARY FUND ANNUAL MEETING

As discussed with the Environmental Protection Institute (EPI) and the Friends of the Earth (FOE), a non-governmental organization (NGO) conference will be held concurrently with the World Bank (WB) and International Monetary Fund (IMF) Annual Meeting. Both are scheduled for Monday, September 25 through Friday, September 9 in Washington D.C. The following summarizes our conversation with EPI:

- NGO is made up of organizations representing approximately 60 countries. Those organizations include (all are U.S. based unless otherwise noted):

Bank Information Center  
Cooperacion de Defensa de la Vida (Ecuador)  
Development Group for Alternative Policy  
Environmental Defense Fund  
Environmental Policy Institute  
Friends of the Earth  
Forum on Debt and Development (Netherlands)  
International NGO Forum on Indonesia (Netherlands)  
International Rivers Network  
Natural Resource Defence Council  
National Wildlife Federation  
Rainforest Alliance  
Rainforest Action Network  
Union of Indigenous Nations (Brazil)  
World Wildlife Fund

- The EPI has recently merged with the FOE. EPI/FOE will be holding their first annual meeting the week prior to the WB/IMF Annual Meeting.

September 14, 1989  
World Bank/International  
Monetary Fund Annual Meeting  
Page 2

- NGOs have been pressuring the World Bank for five to six years on the environmental/social front. Campaign efforts have been "moderately successful." The WB has begun to address environmental implications of projects it funds. An additional mission of NGOs is to pressure the IMF to begin evaluating its projects for environmental impacts.
- The NGO conference has been held annually for three years, concurrently with WB/IMF Annual Meetings. Last year's conference was in Belgium.
- The primary mission of the conference is to lobby the WB and IMF to consider the global environmental implications of project funding requests.
- NGOs are broadening their criticism to include concerns of socio-economic impacts of WB and IMF-funded projects.
- While conference organizers claim their focus is on projects outside the U.S., this is not an ironclad rule. The agenda for the opening day's plenary session includes a review of "press strategy" for the conference, implying specific efforts will be made to publicize conference proceedings.
- The NGO conference includes scheduled meetings with World Bank and IMF officials, as well as presentations, panel discussions, and plenary sessions for NGO conference attendees. Each session is moderated by a representative from the organizations previously listed.
- Of specific interest is the workshop scheduled for Thursday, September 28, from 2:00 - 4:00 p.m., entitled, "Should There Be a Tropical Boycott?" The workshop is moderated by Randy Hayes, Rainforest Action Network, and Ivan Ussach, Rainforest Alliance.
- The Rainforest Alliance, based in New York, is a separate organization from the Rainforest Action Network, based in San Francisco, with similar goals.

SUNDAY, SEPTEMBER 24

LOCATION: NATIONAL WILDLIFE FEDERATION, KIMBALL CENTER  
1400 16th Street, N.W.

11:00-12:00 Meeting for finalizing Agenda Chairperson: Lori Udall (EDF)

PLENARY SESSION 1:00-5:00 Chairperson: Chad Debsen (BIO)

- 1) Introductions
  - 2) Orientation/Logistics
  - 3) Update on World Bank Reform Campaign (status of environmental and social reforms, World Bank/NGO relations, establishment of basic economic and ecological framework for analysis): David Wirth (NRDC), Doug Hallinger (DGAP), Ailton Krenak (UNI)
  - 4) Update on IMF Reform Campaign: Jim Barnes (EPI)
  - 5) Review of press strategy: Gayle Smith (DGAP)
  - 6) Drafting committee for common statement and resolutions: Peter Van Tuijl (INCI)
  - 7) Introduction of themes and objectives for integrated socio-economic/environmental analysis: Doug Hallinger (DGAP)
- 5:00-6:00 WORKSHOP: How to Lobby World Bank Delegations  
Moderators: James Barnes (EPI), Brent Blackwelder (EPI)
- 5:00-6:00 WORKSHOP: Detailed Analysis of MDB Operations, Environmental Reforms, and Pressure Points for Change  
Moderator: Bruce Rich (EDF)
- 7:00-8:30 Welcoming Cocktail Party at National Wildlife Federation, Kimball Center, 1400 16th Street N.W.

MONDAY SEPTEMBER 25

Chairperson: Pat Adams (PROBE - Canada)

LOCATION: RAYBURN HOUSE OFFICE BUILDING ROOM 2172

I. Africa Moderator: John Clark (Oxfam - UK)

9:00-9:45 Africa Presentations (Including Ghana and Sudan)

9:45-10:15 Panel Discussion

10:15-11:15 Open Plenary Session

II. Asia Moderator: Lori Udall (EDF)

11:15-12:00 Asia Presentations (Including India and Indonesia)

12:00-12:30 Panel Discussion

12:30-2:00 LUNCH (No Host)

2:00-3:00 Asia Open Plenary Discussion

III. Latin America Moderator: Atherton Martin (DGAP)

3:00-3:45 Latin America Presentations (Including Brazil, Bolivia, Jamaica, and Costa Rica)

3:45-4:15 Panel Discussion

4:15-5:15 Open Plenary Discussion

IV. Synthesis Moderator: Doug Hellinger (DGAP)

5:15-5:45 Preliminary discussion of cross-cutting issues in Africa, Asia, and Latin America

TUESDAY, SEPTEMBER 26

LOCATION: 110 Maryland Avenue NE  
Conference Room 1 and 2

1:00-2:15 Discussion with Kenneth Piddington, Director of World Bank  
Environment Department (20 minute presentation  
followed by Q & A) Moderator: Chad Dobson (BIC)

2:30-5:30 Plenary session to develop a common analysis, strategy, and agenda  
related to Bank and Fund lending. Direction given to drafting  
committee for common declaration. Moderator: Doug Hellinger  
(DGAP)



**WEDNESDAY, SEPTEMBER 27**

Please Note: Throughout the day there will be individual meetings with Bank Staff, Executive Directors, and Country Delegations which will overlap with the workshops.

**LOCATION:** Capitol Hill United Methodist Church  
Fifth and Pennsylvania, S.E.

**9:00-11:00 WORKSHOP:** The World Bank and Large Dams  
**Moderators:** Phillip Williams (IRN) and Owen Lammers (IRN)

**9:00-11:00 WORKSHOP:** Should the IDA-9 Replenishment be Supported?  
**Moderator:** David Wirth (NEDC)

**9:00-11:00 WORKSHOP:** Debt (Part 1)  
The Debt Crisis: Where is it going? Options for Relief  
**Moderator:** Barbara Bramble (WWF)

**2:00-4:00 WORKSHOP:** Indigenous People and the World Bank: Issues Related to Bank-Funded Development Projects in Ecuador, Brazil & the Philippines  
**Moderators:** Chip Fay (Survival International/EPI), Juan Aulestia (Oxfam - U.S.)

**2:00-4:00 WORKSHOP:** The Effects of World Bank and IMF Lending on Women  
**Moderators:** Ngozi Mary Awa, Yassine Sy, and Yabne Sangarey of the African Women's Consultant Association

**2:00-4:00 WORKSHOP:** Debt (Part 2)  
Debt and the Environment: Swaps and other Options  
**Moderators:** Ron Rote (FONDAD), David Reed (WWF)

**2:00-4:00 WORKSHOP:** Environmental Law in Ecuador: CORDAVI vs. CONECCO: Protecting Wafuni National Park  
**Moderator:** Marciela Enriquez (CORDAVI)

**THURSDAY, SEPTEMBER 28**

Please Note: Throughout the day there will be individual meetings with Bank Staff, Executive Directors, and Country Delegations which will overlap with the workshops.

LOCATION: Capitol Hill United Methodist Church  
Fifth and Pennsylvania, S.E.

- 9:00-12:00 **WORKSHOP:** NGO/World Bank Consultation regarding the World Bank draft Operational Directive on Bank policy and procedures for the Bank's Environmental Assessment Process  
**Moderator:** Yoke Ling Choo (FOE - Malaysia)
- 2:00-4:00 **WORKSHOP:** Japan: Financing Ecological Destruction  
**Moderators:** Richard Forrest (NWF), Yukao Tanaka (FOE-Japan), and Kaseu Sumi (Yokohama City University)
- 2:00-4:00 **WORKSHOP:** Should There Be a Tropical Timber Boycott?  
**Moderators:** Randy Hayes (RAN), Ivan Ussach (RA)
- 2:00-4:00 **WORKSHOP:** World Bank Energy Policy  
**Moderator:** David Wirth (NRDC), Brant Blackwelder (EPI)

FROM: HILL AND KNOWLTON/COMMUNICATIONS-PACIFIC, INC.  
820 Mililani Street, Suite 400  
Honolulu, Hawaii 96813  
Steve Okino (Ph: 808-521-5391)

RE: GEOTHERMAL COMMUNICATIONS ACTION STEPS

1. Develop central messages and back-up data supporting those messages regarding the State's activities on:
  - Preservation and conservation
  - Benefits of geothermal development, including environmental benefits
  - Environmental issues in general (air, water, etc.)
  - Matters in direct response to Rainforest Action Network concerns
2. Monitor Non-Governmental Organizations (NGO) meetings held in conjunction with World Bank/IMF meetings.
  - Media coverage (Hawaii, Washington, national)
  - Discussions in tropical boycott workshop
3. Select and prepare spokesperson in Washington for State interests (with preparation assistance from Hill and Knowlton Washington).
4. Prepare media strategy (with assistance of Hill and Knowlton, Washington)
  - Advisability of pre-meeting contacts?
  - Means to respond to issues raised in meeting?
  - Availability of State spokesperson for responses?
  - Need to stage news conference or news event?
5. Local (Hawaii) strategy
  - State spokesperson (selection and preparation)
  - Messages
  - Media strategy: proactive or reactive?
6. Letter to TIME in response to rainforest cover story?

+ /

(Intro to whomever..)

Increasing Hawaii's energy self-sufficiency and the preservation of Hawaii's forests are important and separate issues.

Approached reasonably and done well, the people of Hawaii will achieve real progress with each.

## THE BASICS - ENERGY SELF-SUFFICIENCY

1. Hawaii's state goal is to reduce our dependence on oil.
2. Energy conservation programs have made us more energy efficient. Since 1980 we have achieved an impressive 21 percent reduction in per-capita energy demand and a 26 percent reduction in energy demand per dollar of gross product.
3. Private and public sector action makes us world leaders in the variety of renewable energy sources we use....From ocean thermal, to biomass, to wind, to photovoltaic, to solar, to geothermal.
4. Yet the people of Hawaii are the most oil-dependent in the United States, with 90% of our energy oil based.
5. Geothermal energy is our only renewable energy resource which can supply our baseload need.
6. Geothermal power is cleaner than oil or coal. Oil-generating plants emit 13 times as many gasses and particulates as geothermal plants. Coal plants emit 40 times as much. QUOTE FROM NATIONAL SIERRA CLUB
7. Short description of current process. Master planning and EIS.
8. (Summary statement) We must reduce our dangerous dependency on oil, improve our air quality and strengthen our economy through continued energy conservation, research and development of all renewable energy resources and the use of geothermal energy to meet our baseload needs.

THE BASICS - OUR FORESTS AND MORE