

**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCE**  
**OFFICE OF CONSERVATION AND COASTAL LANDS**  
**Honolulu, Hawaii**

180-Day Exp. Date: Nov 20, 2013

November 8, 2013

**Board of Land and  
Natural Resources  
State of Hawaii  
Honolulu, Hawaii**

**REGARDING:** Conservation District Use Application (CDUA) HA-3674: Old Plantation Spring Pipeline

**APPLICANT:** Kuahiwi Ranch

**LANDOWNER:** The Nature Conservancy

**AGENT:** Michelle Galimba, Corporate Officer, Kuahiwi Contractors, Inc.

**LOCATION:** Kaiholena, Ka'ū, Hawaii

**TMKs:** (3) 9-7-001:001, 004, and 016

**AREA OF USE:** 4560 ft<sup>2</sup> (pipeline length = 18,241 feet)

**AREA OF PARCEL:** 2620 acres

**SUBZONE:** Protective and Resource

**DESCRIPTION OF AREA AND PROPOSED USE**

The applicant proposes to install and maintain a 2" pipeline to conduct water from "Plantation Spring" to agriculture lands makai of the source, in the same ahupua'a. The spring is on parcel (3) 9-7-001:004, which comprises The Nature Conservancy's Kaū Preserve. It is in the Protective Subzone of the State Land Use Conservation District. The proposed pipeline route will pass through the State-owned parcels (3) 9-7-001:001 and 016, which are part of the Ka'ū Forest Reserve and are in the Resource Subzone of the State Land Use Conservation District.

The line will terminate on ranchlands in the State Land Use Agriculture District. The proposed land uses in the Agriculture District are not a subject of this application or report.

The "Plantation Spring" is a horizontal well that was dug into the cliff face during the plantation era. The water was previously used in a flume system to transport water for the sugar cane fields. Local sources report that the flume system stopped being used

sometime in the 1950s. No water was being taken out of the system by 1987, when the State Water Code was established.

The tunnel source is at 3680 feet elevation, and the pool is 70 meters due south of this at 3480 feet. The water now falls freely into a catchment pool at the cliff base. The pool is approximately 3.5 feet deep, with a surface area of 50 square feet. It flows from there into an intermittent stream bed for 50 to 250 yards before being absorbed into the ground.

The applicant predicts a minimal amount of ground disturbance for the project. A 2" pipe will be placed in the catchment pool at the base of the cliff face, with a small filter box at the intake. Water will be obtained passively and transported by gravity flow.

The pipe will be unrolled by hand, and no grubbing, grading, or tree removal is anticipated. Pipe-line will be tied to tree trunks at six intermittent stream crossings. The trunks will be wrapped and padded to prevent damage.

Due to the remoteness of the location, parts will be flown in by helicopter. Maintenance will be conducted on foot, and access will be via existing roads and hunters' trails.

Per the application, water from the system will be distributed to ranches and farms within the watershed through an existing informal agricultural water network / cooperative. As use expands beyond the existing farms there are plans to establish a formal agricultural water cooperative. All water will be used for agriculture, and will stay in the watershed. Approximate low capacity for a 2" pipe under gravity / low pressure conditions is 3300 gallons per hour, although actual flow might be below this due to the uneven terrain.

Current members of the water cooperative include Walter Andrade (16,000 gallons per day (gpd)), Phil Becker (700 gpd), Richard Johansen (2000 gpd), Phil Becker (700 gpd), and Kirk Derasin (300 gpd).

These ranchers currently rely on water from the Mountain House / Department of Water Supply overflow. The available overflow water has been extremely variable as a result of the extreme drought conditions of the past four years.

The water will be stored in agricultural reservoirs, with a portion used by the Nature Conservancy to stock a dip-tank.

The spring lies in a wet `ōhi`a forest, which covers a large portion of the southwest portion of the forest reserve. The forest is dominated by `ōhi`a and hāpu`u tree fern. Steep areas are dominated by more stunted `ōhi`a with an uluhe fern understory.

There are no existing structures in the project area. The only developments are a 4-wheel drive access road and some hunters' trails.

The following exhibits have been included with this report:

- Conservation District Map
- Existing Access and Topography
- Site Photos
- Rare Plant Points
- Invasive Species Protocol

## ACCEPTANCE

After reviewing the application, the Department notified the applicant that:

1. The proposed use was an identified land use in the Resource Subzone of the Conservation District, pursuant to §13-5-22, Land Uses in the Protective Subzone, P-13 LAND AND RESOURCE MANAGEMENT, (D-3) *Water systems*. This use requires a permit from the Board of Land and Natural Resources, who have the final authority to grant, modify, or deny any permit.
2. Pursuant to §13-5-40 of the HAR, HEARINGS, (a) *Public hearings shall be held (3) on all applications requiring a board permit in the protective subzone*, a public hearing would be required.
3. In conformance with Chapter 343, Hawai'i Revised Statutes (HRS), as amended, the project can be considered *exempt* from requiring an environmental assessment pursuant to §11-200-8 EXEMPT CLASSES OF ACTION, 3) *Construction and location of single, new, small facilities or structures*, and 4) *Minor alterations in the conditions of land, water, or vegetation*. OCCL based this exemption on the fact that the source of the water is man-made, that the proposed water system involves passive intake and transport, the small size of the pipe, the fact that the pipe can be installed by hand with no grubbing or grading or tree removal, and the fact that a larger flume system once utilized this spring.
4. It is the applicant's responsibility to comply with the provisions of Hawaii's Coastal Zone Management law (HRS Chapter 205A) pertaining to the Special Management Area (SMA) requirements administered by the various counties.

## SUMMARY OF COMMENTS

The application was referred to the following agencies for their review and comment: Office of Hawaiian Affairs; DLNR – Land Division, Historic Preservation Division, Division of Forestry and Wildlife, Division of Conservation and Resource Enforcement, Division of Aquatic Resources, and Commission on Water Resource Management; the County of Hawai'i Department of Planning; and the Nature Conservancy.

In addition, the application was available for review on OCCL's website and at the Na'alehu Public Library. Notice of the application was published in the June 8, 2013 edition of the *Environmental Notice*.

A public hearing was held on Monday, August 12, 2013 at the Na'alehu Community Center. Notice of the hearing was published in the The Ka'ū Calendar.

Responses were received and have been summarized from the following agencies:

### DLNR – Land Division

No comments

DLNR – Historic Preservation Division (HPD)

Records indicate that no archaeological inventory survey has been conducted in the project area. As the project will not involve any ground-altering activities beyond temporary impacts to the vegetation, SHPD believes that no historic properties will be affected; the division has no immediate concerns regarding the project.

DLNR – Division of Forestry and Wildlife (DOFAW)

DOFAW supports the project in principal, particularly if there are provisions to allow the use of the water for fire suppression if the need arises.

DOFAW has concerns regarding the routing of the pipeline. The application shows that the pipe will run through the forest and over a cliff. DOFAW would prefer that the pipeline run along existing trails and roads in order to minimize disturbance to the native ecosystems in the forest reserve.

*Applicant's Response*

*The applicant met with DOFAW, and adjusted the pipeline route in light of staff's suggestions.*

DLNR – Conservation and Resource Enforcement

No comments

The Nature Conservancy (TNC)

TNC has no objections to the proposal. They provided the applicant with an endangered species prevention protocol that they asked be followed.

*Applicant's Response*

*The applicant plans to work under the guidance of the TNC's Hawai'i Island crew as well as with DOFAW to prevent the introduction of new weeds into the Ka'ū Forest Reserve and TNC preserve.*

County of Hawai'i Planning Department

No part of the project is in the Special Management Area, and the County has no comments or objections to the proposal.

*OCCL received the following comments after the public comment period:*

Native Tenant Protection Council

Tenants in the ahupua`a have rights to the water that are not mentioned in the application.

TNC and Olsen Trust falsely claim that they own the subject property. They do not own the land or the water. They have made illegal business deals while the original inhabitants have been left homeless and destitute, which violates national and international laws.

There is a concern that the diversion will reduce water flow to the coastal springs, and also impact the availability of drinking water.

The original diversion was illegal. Restoration of the nine ahupua`a of Ka`ū will begin with the return of the water, not with another diversion. As such, the Native Tenant Protection Council opposes the proposal.

Living Heirs of Leleiohoku under Keawa-awe-Makali`i

Surface water and ground water are connected. Running streams in Hīlea are now rare. This water might go underground to feed the springs, wetlands, and estuaries in Kaū. The lands were droughted by sugarcane diversion. The water systems should be returned and restored. This diversion will only compound the problem.

There is no clear title to the lands of Hīlea. It is false to say that The Nature Conservancy owns the land. The true heirs are the heirs of Kapuahiwa, a.k.a. King Kamehameha.

The application does not list the water rights of the native tenants within the ahupua`a.

The Living Heirs anticipate the timely return of their property and resources. Proper management and sharing of water resources among the people is vital.

The Living Heirs understand the need for water for ranches and agriculture, but this project's land base is in a state of fraud.

Public Hearing

A public hearing was held on Monday, August 12 at the Na`alehu Community Center

OCCL staff called the meeting to order at 5pm, with approximately a dozen people in attendance. Present were representatives from the ranch, one local family, three other community members, and representatives from Olsen Trust and the Nature Conservancy.

I gave a brief introduction, pointed out the sign in sheet, and noted that this was an information gathering meeting, and a chance for the community to offer their mana`o. Staff encouraged people to provide written comments. Staff repeated this many times over the course of the night, as the crowd grew larger.

Michelle Galimba gave a five minute overview of the project, and then staff opened the floor up to comments.

Kyle Soares

This is a travesty. You cannot take land that water rights belong to. No one owns water or dictates rights per the US Constitution. TNC's pattern is to buy land and restrict water rights world wide.

The water rights here were supposed to be distributed to everyone, not one ranch. This is the monopolization of water.

We are supposed to have cooperative structures in place. Water is held in trust for all the people.

Frank Robes

Under Kamehameha III there were fourteen families in Hilea. The water rights go to the last descendants of these families.

Unknown

US government needs to abide by international law. This violates international law.

Chris Manfredi

This application is about a pipeline, not water rights. This is about raising food for people. Don't waste resources while people argue. We need to repurpose our old plantations for economic development.

*At this point the crowd had grown to about fifty people. Staff re-iterated that this hearing was on the pipeline, not water rights - that people would be free to raise any issues, but OCCL could only focus on the application for the pipeline. Staff again encouraged people to put their concerns in writing. At this point individuals in the audience began interrupting the speakers, saying "everything is connected & you can't separate them," and "this meeting is illegal, we demand that it be shut down." The interruptions would continue for the rest of the evening.*

Olsen Trust Representative

This is the driest area of the plantation. The Makena tunnel source is not enough. We need to support the application so that we can start to get more water down from the mountains. This way there will be more to share.

*At this point not every speaker identified themselves, and more and more comments were directed at other members of the meeting. Staff continued to try to redirect the energy and focus towards the front and on the pipeline.*

Other points that were raised:

- Will there be an easement to follow the waterline into the mountains? People use the water routes to navigate by. How will they know the routes into the backcountry if the water doesn't flow?

- There is no clear title to this land. Or this water. People in Ka`ū never had a chance. The State took their land through quiet title and court actions. Olsen Trust didn't pay the Hawaiian people for their land.
- The roads into the mountain are not supposed to be locked. People are being denied access to the mountain along the old right-of-way.
- There are other springs up there. The kūpuna know the sources of water, but are denied access.
- If the water is diverted from the spring, then it will have a negative impact on the estuary. It will hurt the water table.
- DLNR staff might be a member of (name?) Development Corporation.
- This meeting isn't being recorded and therefore it is an illegal meeting and must be shut down.

*Many of the comments from here on out repeated the concerns regarding Native Hawaiian water rights, the ability or right to 'own' water, and questions of land ownership.*

*Approximately 70 minutes into the meeting a fight almost broke out between two attendees. Staff and community members were able to keep them separated, but the calls from attendees Hanalei Fergerstrom and Abel Simeone Lui to shut down the meeting became more frequent. Staff continued to attempt to listen to speakers, but the remaining speakers continued to focus on water rights and land-use conflicts, and not on the proposed pipeline itself.*

*Staff called an end to the meeting at 6:20, and reiterated that people should follow up in writing with any of their concerns.*

#### Notes from meeting with Commission on Water Resource Management (CWRM)

Permits that are required through CWRM include:

- new wells: well construction permits (HRS §174-C-84)
- new pumps: pump installation permits, and water use permits (§174-C-84)
- designated water management area: water use permit (§174C-41)
- stream diversion: Stream Channel Alteration Permit (SCAP)

OCCL notes that the current application will reestablish a prior system; it does not involve the construction of a new well, the use of pumps, or any stream diversion. Nor is the existing spring a "feeding stream." The area is also not currently one of the State's designated water use management areas. Therefore, none of the above permits are applicable.

## ANALYSIS

The following discussion evaluates the merits of the proposed land use by applying the criteria established in Section 13-5-30, HAR.

1. *The proposed land use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

Water systems are considered an identified land use in the subject area of the Conservation District; as such, they are subject to the regulatory process established in Chapter 183C, HRS and detailed further in Chapter 13-5, HAR.

The proposal will re-establish a water system that has fallen into disrepair. The water in the new system will be enclosed and run in pipes along the surface of the ground rather than in open flumes. This new system will provide for a more efficient, less wasteful use of the resource than the original flume system.

2. *The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur.*

The objective of the Protective Subzone is *to protect valuable natural and cultural resources in designated areas such as restricted watersheds, marine, plant, and wildlife sanctuaries, significant historic, archaeological, geological, and volcanological features and site, and other designated unique areas.*

The objective of the Resource Subzone is *to ensure, with proper management, the sustainable use of the natural resources of those areas.*

The Ka`ū Forest Reserve is composed of a wet `ōhi`a forest containing a number of native plant communities. The project will not involve the removal of any trees, nor require any landscaping, grubbing, or grading. The landowner, The Nature Conservancy, will have the applicant follow a strict regimen to limit the potential for the introduction of invasive species.

There are no perennial streams in the ahupua`a, and the spring water currently returns to the aquifer. Community members expressed concern that the pipeline would impact the coastal estuary by depriving it of water.

OCCL staff note that landowners have the right to “a reasonable beneficial use” of resources on their land, as defined in the City Mill Case of 1929, provided that the use does not interfere with other ‘reasonable uses.’

The U.S. Environmental Protection Agency estimates that the average household consumes 400 gallons of water per day for indoor use, and 320 gallons per day for outdoor use. Using this as a metric, the *maximum* amount of water that the

pipeline could transport would be the equivalent of 110 “average American families<sup>1</sup>”

Given that there are no other wells or water systems on the 2620-acre subject parcel, nor on the much larger State-owned neighboring parcels, OCCL staff feel that this proposal represents a reasonable use that will not interfere with other uses.

3. *The proposed land use complies with provisions and guidelines contained in Chapter 205, HRS, entitled "Coastal Zone Management," where applicable.*

The County of Hawai'i Planning Department confirmed that the project area is not in the Special Management Area.

OCCL staff finds that the project is consistent with the following §205A objectives:

**Recreational resources:** Access to hunting and recreational areas will remain unchanged.

**Historic resources:** There are no known historic resources in the project area.

**Scenic and open space resources:** The project will have a minimal impact on open space, and will not impact any important view planes.

**Coastal Ecosystems:** The spring is approximately six miles from the shore. The water will stay in the ahupua`a of Hilea, and its use on the ranches is not expected to have an impact on the coastal estuaries.

4. *The proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community, or region.*

The wet upland area contains the relatively impermeable areas of pāhala ash, which trap pockets of high elevation groundwater. This perched groundwater creates high level springs and aquifers that have been tapped for water. These sources have little storage capacity, and are highly responsive to fluctuations in rainfall. They nonetheless supply the majority of water in Ka`ū. The Ninole volcanic flows, by contrast, are highly permeable; this layer carries fresh water at sea level and perched water above the ash layer.

Despite the large amount of rainfall in the upland forests of Ka`ū, the water is absorbed quickly by the permeable layers, and the region does not contain any perennial streams. The spring lies approximately 1000 meters from Hilea Gulch, which contains the most significant intermittent stream in the area.

The 2” pipeline will only capture a small percentage of water available from the source; the majority will return to the aquifer.

---

<sup>1</sup> [www.epa.gov/WaterSense/pubs/outdoor.html](http://www.epa.gov/WaterSense/pubs/outdoor.html) and [www.epa.gov/WaterSense/pubs/indoor.html](http://www.epa.gov/WaterSense/pubs/indoor.html)

The landowner has established a series of best management practices to prevent the introduction of invasive species into the area; the applicant has agreed to follow these.

5. *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding area, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

The pipeline will run along the ground, following the natural contours of the terrain, through a remote area that is not accessible to the general public. It will have a much smaller visual and environmental footprint than the original flume system.

There will be no landscaping, grubbing, or grading required. There will be no new trails or roads established to build or maintain the pipeline.

Staff is of the opinion that the pipeline is appropriate to the physical conditions of the parcel.

6. *The existing physical and environmental aspect of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

The pipeline will have a minimal footprint, and the majority will become naturally covered by the local vegetation shortly after installation. The natural beauty and open space of the parcel will not be significantly affected.

7. *Subdivision of the land will not be utilized to increase the intensity of land uses in the Conservation District.*

No subdivision of land is proposed for this project.

8. *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

The water will be used in the same ahupua`a, by ranchers who are currently suffering from the on-going drought and the lack of agricultural infrastructure such as water systems. The pipeline will be a direct benefit to them, and indirectly to the Ka`ū economy.

Staff has seen no evidence that the pipeline will be detrimental to anyone's health, safety, or welfare.

## **DISCUSSION**

The applicant proposes to install a 2" pipeline to carry water from the "Old Plantation Spring" to makai ranchlands in the same ahupua`a.

The spring was originally a horizontal well that was excavated into the cliff face during the plantation era. The flume system that transported the water fell into disrepair

sometime in the 1950's. The new pipeline will partially restore the water system, re-establishing it in a more efficient manner and on a much smaller scale.

Pursuant to Hawai'i Administrative Rules (HAR) §13-5-7 NONCONFORMING USES AND STRUCTURES, the state *shall not prohibit the continuance, or repair and maintenance, of nonconforming land uses and structures as defined in this chapter.* The rules also state that (d) *If a nonconforming structure is damaged or destroyed by any means (including voluntary demolition) to an extent of more than fifty percent of its replacement cost, it shall not be reconstructed except in conformity with the provisions of this chapter, except as provided under §13-5-22 (P-8),* and (e) *Repairs or maintenance of a nonconforming structure shall not exceed the size, height, or density of the structure which existed on October 1, 1964 or at the time of its inclusion into the conservation district.*

While the spring might be considered non-conforming, the flume system has fallen into complete disrepair, and OCCL processed the application as a new permit pursuant to §13-5-22, Land Uses in the Protective Subzone, P-13 LAND AND RESOURCE MANAGEMENT, (D-3) *Water systems.* We do note that the new system is smaller in scope than the original flume system, and that the 2" pipeline will only capture a small percentage of the water that is available at the source.

There was a significant amount of opposition to the proposal, however, much of the opposition revolved around conflicts between the lineal descendants of the original families of Hilea and the current landowners. These issues are outside of OCCL's jurisdiction, and will not be addressed in this analysis.

There were also concerns regarding the equitable distribution of water. OCCL understands that the State is planning to develop water easements that will be leased to the Agricultural Development Corporation. Easements will then be transferred to a master cooperative. Users of the system will be responsible for maintaining the system. OCCL hopes that the development of these easements will address many of the concerns raised in the community about the equitable distribution of water.

However, we note that this is a work in progress, and that the drought is a real and present disaster. As one resident stated in the community meeting, "we know there is water up in the mountains, we just need to find ways to bring it down." OCCL notes that this project will not preclude the development of long-range plans, does not prevent a single land owner from applying for their own well permit, and can possible serve as a model to other farmers and ranchers in the area.

There was a concern that using the spring water would have a negative impact on the coastal estuaries and ponds downstream. OCCL notes that the potential impact here is hard to quantify. However, given the large size of the aquifer, the relatively small scale of the water use, the fact that all water will remain in the ahupua'a and the fact that much larger water systems have been approved for much drier parts of the State, OCCL does not anticipate any adverse impacts.

Given that there are no other wells or water systems on the 2620-acre subject parcel, nor on the much larger State-owned neighboring parcels, and that the 2" pipeline will only draw a small fraction of what the original plantation-era system drew, OCCL has

concluded that this proposal represents a reasonable use that will not interfere with other uses, not have a significant impact on the coastal estuaries six miles makai of the spring.

A question was raised during the community meeting regarding the use of water routes to navigate to back country areas. OCCL notes that the water from the spring currently only flows 250 yards from the source before being reabsorbed into the ground. It does not form a route that would help navigate in the backcountry, and so no impact is predicted on this issue.

Both the Division of Forestry and Wildlife and The Nature Conservancy (TNC) recommended that best management practices be followed to reduce the potential for introducing invasive species into the forest. The applicant has agreed to follow TNC's recommendations, which are attached to this report.

OCCL has also concluded that the proposal is consistent with the intent of the state water code, pursuant to HRS §174C-2 DECLARATION OF POLICY, (c) *The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.*

OCCL believes that the project will provide a clear beneficial use to Ka'ū ranchers, and that it will not adversely impact traditional and customary Hawaiian rights, nor the ecology or scenic beauty of the area.

Based upon the above analysis, staff feels that the proposal is consistent with the State's Conservation Criteria. As such, OCCL recommends that the Board approve the application for the pipeline.

#### **RECOMMENDATION**

Based on the preceding analysis, Staff recommends that the Board of Land and Natural Resources APPROVE this application for the Old Plantation Spring Pipeline as described in CDUA HA-3674 located at Kaiholena, Ka'ū, Hawai'i, TMKs (3) 9-7-001:001, 004, and 016, subject to the following conditions:

1. The applicant shall comply with all applicable statutes, ordinances, rules, regulations, and conditions of the Federal, State and County governments;
2. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim or demand for property damage, personal injury or death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors and agents under this permit or relating to or connected with the granting of this permit;

3. The permittee shall obtain appropriate authorization from the department for the occupancy of state lands, if applicable;
4. The permittee shall comply with all applicable department of health administrative rules;
5. The permittee shall provide documentation (e.g., book and page or document number) that the permit approval has been placed in recordable form as a part of the deed instrument, prior to submission for approval of subsequent construction plans;
6. Before proceeding with any work authorized by the department or the board, the permittee shall submit a copy of the final route and construction plans and specifications to the chairperson or an authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Plan approval by the chairperson does not constitute approval required from other agencies;
7. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and shall be completed within three years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is completed;
8. All representations relative to mitigation set forth in the application for the proposed use are incorporated as conditions of the permit;
9. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;
10. In issuing the permit, the department and board have relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;
11. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;
12. Obstruction of public roads, trails, lateral shoreline access, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, lateral beach access, or pathways acceptable to the department;
13. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;
14. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;

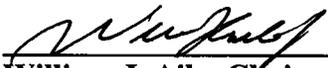
15. The permittee will follow the Invasive Species Prevention Protocol established by The Nature Conservancy;
16. Other terms and conditions as may be prescribed by the Chairperson; and
17. Failure to comply with any of these conditions shall render this Conservation District Use Permit null and void.

Respectfully submitted,



Michael Cain, Staff Planner  
Office of Conservation and Coastal Lands

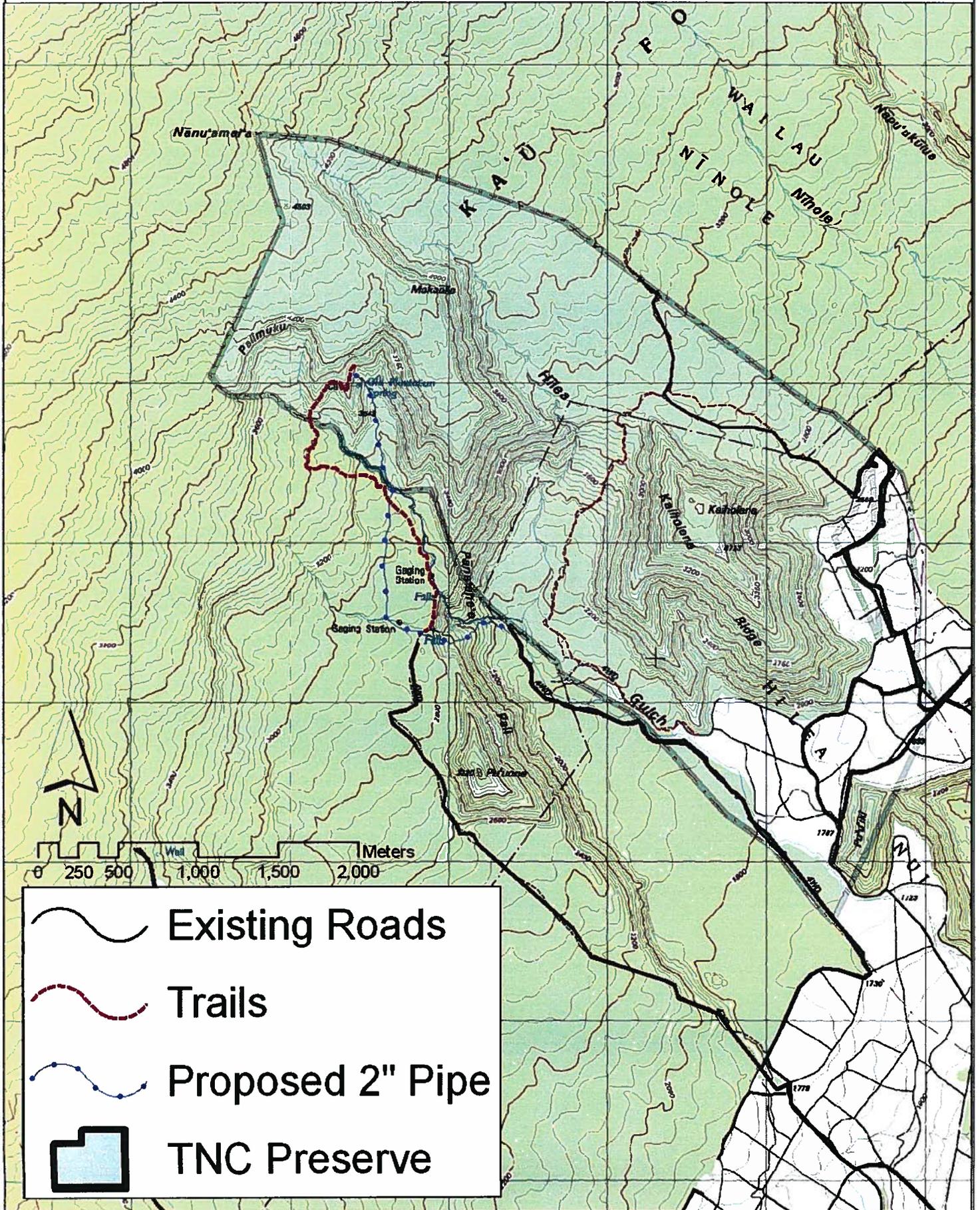
**Approved for submittal:**

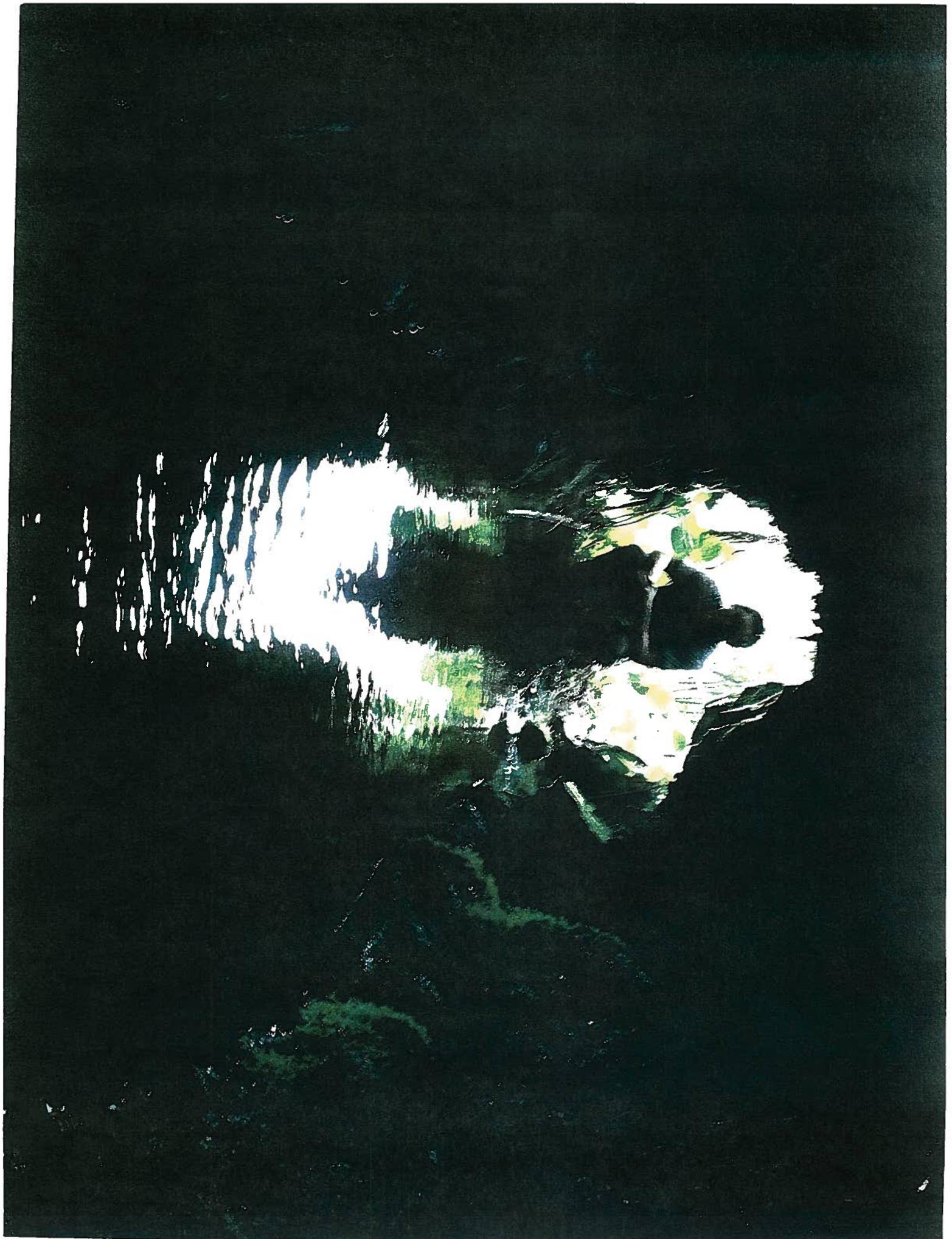


---

**William J. Aila, Chairperson**  
**Board of Land and Natural Resources**

# Existing Access



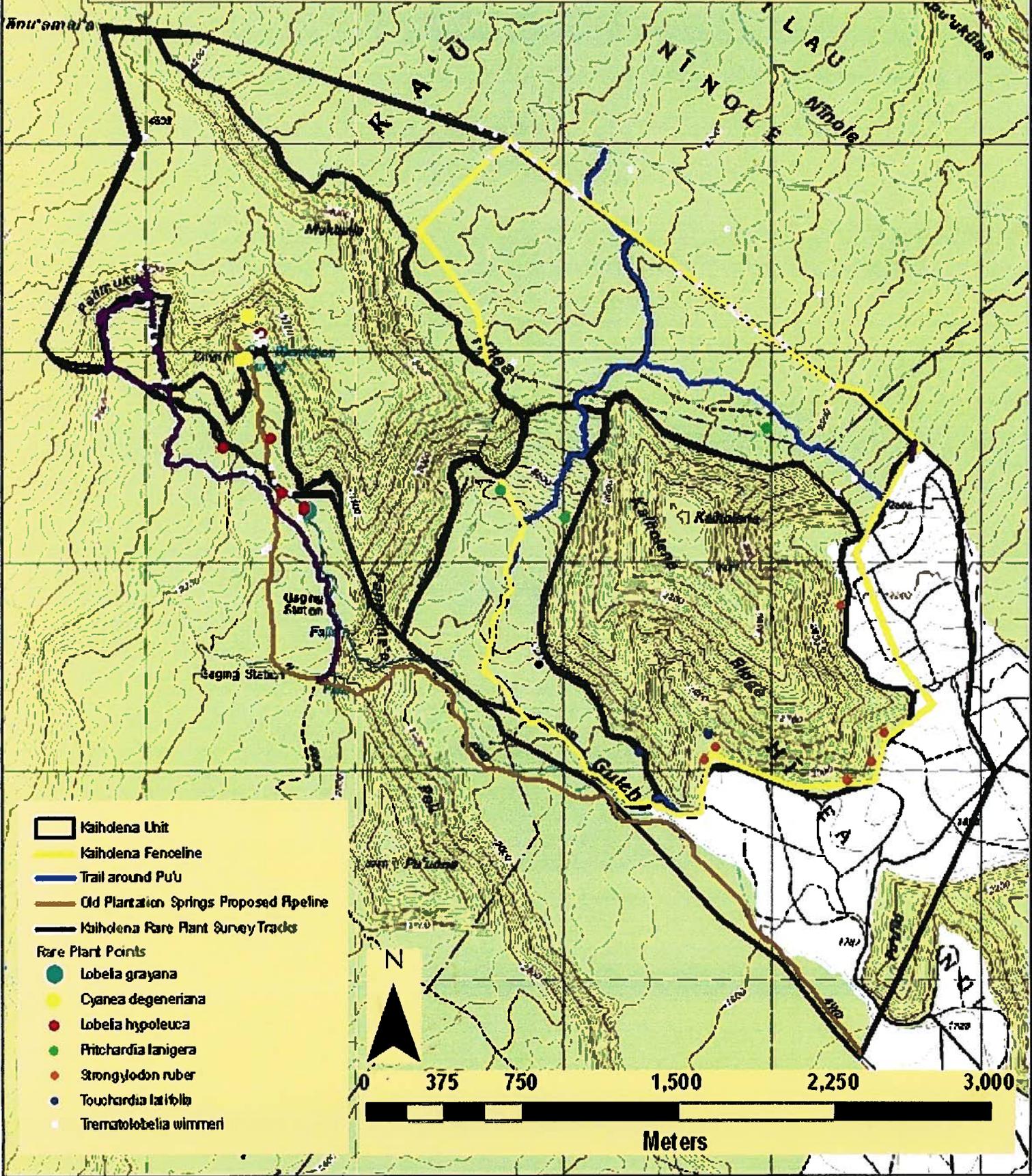








# Rare Plant Points in TNC's Kaiholena Unit and Ka'u Forest Reserve for Proposed Old Plantation Springs Pipeline



- Kaiholena Unit
- Kaiholena Fence line
- Trail around Pu'u
- Old Plantation Springs Proposed Pipeline
- Kaiholena Rare Plant Survey Tracks
- Rare Plant Points
  - Lobelia grayana
  - Cyanea degeneriana
  - Lobelia hypoleuca
  - Pritchardia lanigera
  - Strongylodon ruber
  - Touchardia latifolia
  - Trematolobelia wimmeri

