

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawai'i 96813

March 28, 2014

Chairperson and Members
Board of Land and Natural Resources
State of Hawai'i
Honolulu, Hawai'i

SUBJECT: REQUEST FOR APPROVAL OF THE DIVISION OF FORESTRY AND WILDLIFE PLACEMENT OF ACT 82, WARNING AND MANAGEMENT SIGNS AT WAIHEE RIDGE TRAIL AND WAIHOU SPRING TRAIL ON THE ISLAND OF MAUI, HAWAII.

AND

REQUEST APPROVAL TO EXEMPT THE PLACEMENT OF ACT 82 SIGNS FROM CHAPTER 343 HRS, ENVIRONMENTAL COMPLIANCE REQUIREMENTS.

BACKGROUND:

Act 82, 2003 Session Laws Hawaii, relating to Public Land Liability allows the State and Counties conditional protection from liability arising from the inherent risks on public lands. Risk management can reduce public exposure to hazardous conditions. In general, this Act provides protection to individuals and establishes procedures for assessing State and County risks on improved public lands when the requirements of this Act are met.

Pursuant to Act 82, the Board of Land and Natural Resources (Board) has authority to review and approve the design and placement of these signs on improved public lands. Back in January 23, 2006, the Board and the Governor approved the Department of Land and Natural Resources (Department) Hawaii Administrative Rules, Chapter § 13-8 HAR for the "Design and Placement of Warning Signs on Improved Public Lands. The following are excerpts from Hawaii Administrative Rules.

Chapter 13-8 Hawaii Administrative Rules: Sign Placement Criteria

§ 13-8-9 HAR. Public use and exposure. (a) Traffic patterns and managed access points of people accessing the improved public lands shall be considered when placing signs. (b) The type,

frequency, and location of incidents or potential public exposure relating to specific dangerous natural conditions when known on the improved public lands shall be considered when placing signs.

§ 13-8-10 HAR. Placement. Sign(s) shall be placed at or near access points; i.e., along vehicle and pedestrian traffic corridors in clearly visible locations placed as close as possible to the potentially dangerous natural conditions on improved public lands and at managed and designated entrances where the signs will be seen as users enter improved public lands. View sheds, aesthetics, and feasibility of installation shall be considered in the placement of the signs. Signs shall be installed with consideration for the average adult line-of-sight but outside of the general path of travel to avoid physical contact with the signs. Signs maybe attached to posts or by any other method of installation depending on the nature of the location and terrain.

RAWG Review:

On November 21, 2013 Roger Imoto, DLNR, Division of Forestry and Wildlife Administrator requested RAWG review and/or approval of the warning sign list for Waihee Ridge Trail and Waihou Spring Trail on the island of Maui. The memo identified: 1) members of RAWG, 2) what is being requested, 3) background information of Act 82 and the sign placement criteria, and 4) background information of DOFAW's Act 82 Warning Sign Program (Exhibit A).

Based on these specific Act 82 requirements, DOFAW staff on Maui carefully assessed and identified specific dangerous natural conditions on DOFAW improved lands. Numerous hazardous areas were identified in DOFAW management areas and warning signs were selected for these locations on Maui – Waihee Ridge Trail (hazardous cliffs) and Waihou Spring Trail (hazardous cliffs).

Hazard Sign Data Sheet of Waihee Ridge Trail:

Station MA00082 - **Warning** Hazardous Cliffs Site, Station MA00083 - **Warning** Hazardous Cliffs Site, Station MA 00084 - **Warning** Hazardous Cliffs Entrance (Exhibit B).

Brief Narrative, Description and Location Map of Signs on Waihee Ridge Trail:

Beginning at 1,000' elevation, this trail ascends the windward slope of west Maui through a brushy guava thicket, a young stand of planted trees, and wet native scrub forest. Views of Waihee Gorge and Makamakaole Gulch are part of the hiking experience. At the peak, is a panoramic view of Wailuku and central Maui, the Kahakuloa slopes, and Mount Eke. Weather at the summit varies from clear to overcast with showers.

Hazardous cliff signs support the hazardous conditions of this trail as it runs along a narrow ridge with an extreme drop on the South face into Waihee Valley and a moderate drop on the north side of this trail. The first sign is located at the trail head (MA00084). Following a half-mile climb, the trail rises through a narrow ridge where Station MA00083 is located. This Station also warns hikers about a known social trail that detours approximately twenty feet from the main trail to a steep-edged cliff.

The third and last station (MA00082) is located at the plateau or upper terminus of the trail warning hikers of steep drops on all sides of this area (Exhibit C).

Hazard Sign Data Sheet of Waihou Spring Trail:

Station MA00085 - **Danger** Hazardous Cliffs Entrance, Station MA00086 – **Danger** Hazardous Cliffs Site, Station MA00087 – **Danger** Hazardous Cliffs Site, Station MA00088 - **Danger** Hazardous Cliffs Site, Station MA00089 - **Danger** Hazardous Cliffs Site (Exhibit B).

Brief Narrative, Description and Location Map of Signs on Waihou Spring Trail:

The lower portion of the trail that descends from the upper loop trail to the spring in the gulch has been closed since February 4, 2013 following a fatal accident at the site. District staff completed a review and assessment of the switch-back trail down to the spring focusing on the hazard and improving trail safety of users traversing this steep section of the trail. Following an intensive assessment of this trail section, District staff placed several large decadent trees at two points of the switch-back that descends near a cliff. The trees will provide safety barriers for trail users at this cliff site. In addition, several sections of the switch-back were widened by shaving the back slope of the trail. Other safety measures include: bench-cuts, grade reversals, and step areas as needed. DOFAW staff recognizes the severe hazards of this popular trail and decided to replace all five Warning signs to Danger signs as recommended by State Park staff. These safety measures will be implemented pending the availability of manufacturing the Danger signs. With these corrective measures to Waihou Spring trail in place, District staff reopened this popular trail on October 1, 2013.

The Danger cliff signs support the hazardous conditions (cliff) along this steep faced switchback. Stations MA00085, MA00086, MA00087, MA00088 and MA00089 mark the danger conditions of this trail. **Please note: the pictures showing the station signs will be replaced with Danger from Warning (Exhibit D).**

DOFAW has reviewed the Department of Health, Chapter 343, HRS and Chapter 11-200, HAR (§ 11-200-8 (A).(5.) HAR) requirement for placing warning signs at these locations on the island of Maui. In addition, DLNR, Division of State Parks filed its Exemption List with the Environment Council, December 4, 1991 and has exempted the placement of safety signs according to (Exemption Class 3, #10).

DOFAW has consulted with OEQC staff and State Parks staff in applying this Exemption to placing Act 82 warning signs along Waihee Ridge and Waihou Spring Trails. DOFAW believes that the signs will protect its citizens from harm and will have minimal or no significant impact on the environment and therefore, the sign placements are exempt from preparing an environmental assessment.

RECOMMENDATION:

That the Board:

1) Approve the placement of DOFAW's warning signs on Maui – Waihee Ridge Trail and Waihou Spring Trail as shown in Exhibit C and Exhibit D.

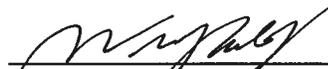
2) Approve that the placing of the warning signs on DOFAW management areas will have minimal or no significant impacts on the environment and is therefore, exempted from preparing an environmental assessment under Chapter 343, Hawaii Revised Statutes, Chapter-200, Hawaii Administration Rules, and filed docket Exemption List for DLNR, Division of State Parks.

Respectfully submitted,



fn _____
LISA J. HADWAY
Administrator

APPROVED FOR SUBMITTAL:



WILLIAM J. AILA JR., Chairperson
Board of Land and Natural Resources

Exhibit A

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
1151 Punchbowl Street, Room 325
Honolulu, Hawaii 96813

November 21, 2013

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ESTHER KIA'AINA
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVIYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL ZONES
CONSERVATION AND RESOURCES DEVELOPMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

To: Risk Assessment Working Group Members:

Caron Inagaki, Deputy Attorney General
Dan Quinn, DSP Administrator
William Aila, DLNR, Chairperson
Tom Fake, National Park Service
County of Maui, Hawaii, Kauai, Oahu

FR: Roger Imoto, DOFAW Administrator *RI*
Department of Land and Natural Resources

RE: Amended Review of Act 82, Session Laws Hawaii (SLH), 2003, and the Placement of Warning and Management Signs along designated Department of Land and Natural Resources, Division of Forestry and Wildlife Program features on the Island of Maui.

State Parks staff requested that DOFAW provide additional information regarding placing new warning signs at Waihou Spring Trail. The additional information and amendment is provided on page 3 describing Waihou Spring Trail information. DOFAW apologize for the inconvenience this amendment may have caused to RAWG members.

Due to changes in County Administrations and staff, this memo is being sent to the Counties for actions related to Act 82, SLH 03, and to clarify the County's role in its implementation. Pursuant to Act 82 and Chapter 13-8 Hawaii Administrative Rules (HAR), DLNR requests that each County select a representative to participate on the Risk Assessment Working Group (RAWG). The risk assessment working group shall consist of the following members, who shall serve without compensation. 1) Chairperson of the board, or designee i.e. Chairperson, William Aila Jr., 2) the mayor of each county, or designee, normally it is the representative of the respective counties, 3) the administrator of the department's division of forestry and wildlife, Roger Imoto, and division of state parks, Dan Quinn, or their designees, 4) the attorney general, or designee, and 5) a person appointed by the chairperson of the board knowledgeable in warning sign design, Tom Fake, National Park Service.

DLNR requests that RAWG review and approve the attached Act 82 sign and management placements for the Division of Forestry and Wildlife.

Background Information on Act 82, 2003 Session Laws of Hawaii, Relating to the Public Land Liability.

Act 82, SLH 03 established a process for installing and maintaining warning signs on improved public lands, and provides the State and Counties with protection from liability for damages caused by dangerous natural conditions. Pursuant to Act 82, the Board of Land and Natural

Resources (Board) approves the design and placement of these warning signs. Although Act 82 will sunset in 2014, DLNR will request to the legislature continuance of the protection afforded to DLNR on its improved lands and remove the sunset date to allow this Act to become law.

On January 6, 2006, the Board following the recommendations of RAWG, reviewed and approved a series of sign design in compliance with Chapter 13-8, HAR. All subsequent sign placement by the Department and County are reviewed by RAWG and approved by the Board.

Sign Placement Criteria: Pursuant to Chapter 13-8, HAR, the following guidelines are used to determine the placement of warning signs:

§13-8-9 Public use and exposure. (a) Traffic patterns and managed access points of people accessing the improved public lands shall be considered when placing signs. (b) The type, frequency, and location of incidents or potential public exposure relating to specific dangerous natural conditions when known on the improved public lands shall be considered when placing signs.

§13-8-10 Placement. Sign(s) shall be placed at or near access points; i.e., along vehicle and pedestrian traffic corridors in clearly visible locations placed as close as possible to the potentially dangerous natural conditions on improved public lands and at managed and designated entrances where the signs will be seen as users enter improved public lands. View sheds, aesthetics, and feasibility of installation shall be considered in the placement of the signs. Signs shall be installed with consideration for the average adult line-of-sight but outside of the general path of travel to avoid physical contact with the signs. Signs may be attached to posts or by any other method of installation depending on the nature of the location and terrain.

Background Information on DOFAW Act 82 Warning Sign Program

Previously, the Division of Forestry and Wildlife (DOFAW) received Board of Land and Natural Resources approvals in 2007, 2008, and 2012. The Division is requesting approval in 2013 to place hazard warning and management signs on improved DOFAW lands on Maui.

DOFAW's Request

This request will add to the current Act 82 warning and management sign inventory for the island of Maui. The strategic placement of warning and management signs follows §13-8 Subchapter 3 "Standards for Sign Placement," §13-8-10 Placement. Hawaii Administrative Rules and will alert hikers of specific dangerous natural conditions on DOFAW improved lands on Maui. DLNR, Division of Forestry and Wildlife staff have carefully assessed and identified these specific dangerous natural conditions and installed appropriate warning and management signs at these locations.

Act 82 sign inventory by type (warning description), location (station number), and DOFAW feature on Maui is attached for your review and approval.

Narrative and Data of Waihee Ridge and Waihou Spring Trails

Waihee Ridge Trail: Station MA00082 - Warning Hazardous Cliffs Site, Station MA00083 - Warning Hazardous Cliffs Site, Station MA 00084 - Warning Hazardous Cliffs Entrance.

Beginning at 1,000' elevation, this trail ascends the windward slope of west Maui through a brushy guava thicket, a young stand of planted trees, and wet native scrub forest. Views of Waihee Gorge and Makamakaole Gulch are part of the hiking experience. At the peak, is a panoramic view of Wailuku and central Maui, the Kahakuloa slopes, and Mount Eke. Weather at the summit varies from clear to overcast with showers.

Hazardous cliff signs support the hazardous conditions of this trail as it runs along a narrow ridge with an extreme drop on the South face into Waihee Valley and a moderate drop on the north side of this trail. The first sign is located at the trail head (MA00084). Following a half-mile climb, the trail rises through a narrow ridge where Station MA00083 is located. This Station also warns hikers about a known social trail that detours approximately twenty feet from the main trail to a steep-edged cliff. The third and last station (MA00082) is located at the plateau or upper terminus of the trail warning hikers of steep drops on all sides of this area.

Waihou Spring Trail: Station MA00085 - **Danger** Hazardous Cliffs Entrance, Station MA00086 - **Danger** Hazardous Cliffs Site, Station MA00087 - **Danger** Hazardous Cliffs Site, Station MA00088 - **Danger** Hazardous Cliffs Site, Station MA00089 - **Danger** Hazardous Cliffs Site.

The lower portion of the trail that descends from the upper loop trail to the spring in the gulch has been closed since February 4, 2013 following a fatal accident at the site. District staff completed a review and assessment of the switch-back trail down to the spring focusing on the hazard and improving trail safety of users traversing this steep section of the trail. Following an intensive assessment of this trail section, District staff placed several large decadent trees at two points of the switch-back that descends near a cliff. The trees will provide safety barriers for trail users at this cliff site. In addition, several sections of the switch-back were widened by shaving the back slope of the trail. Other safety measures include: bench-cuts, grade reversals, and step areas as needed. DOFAW staff recognizes the severe hazards of this popular trail and decided to replace all five Warning signs to Danger signs as recommended by State Park staff. These safety measures will be implemented pending the availability of manufacturing the Danger signs. With these corrective measures to Waihou Spring trail in place, District staff reopened this popular trail on October 1, 2013.

The Danger cliff signs support the hazardous conditions (cliff) along this steep faced switchback. Stations MA00085, MA00086, MA00087, MA00088 and MA00089 mark the danger conditions of this trail. **Please note: the pictures showing the station signs will be replaced with Danger from Warning.**

These amendments to Waihou Spring Trail will be made and we ask your favorable approval. Prior to the Land Board Submittal the said amendments will be clarified and amended for the Land Board members for their approval in 2014.

Approval

Following your approval, DLNR, Division of Forestry and Wildlife will seek final approval to the Board of Land and Natural Resources at its next meeting.

Questions, please call Nelson L. Ayers at (808) 587-4175 or email: Nelson.L.Ayers@Hawaii.Gov

Please place an X on the following:

Approved:

Not Approved

William J. Ate Jr.
Print RAWG Member Name

12/4/13
Date


Government Agency

Please fax (808) 587-0160 or email this page to Nelson L. Ayers at: Nelson.L.Ayers@Hawaii.Gov by **December 5, 2013**.

Attachments: Maui – Hazard Data Sheet, Pictures of Station Signs and Hazards.

Approval

Following your approval, DLNR, Division of Forestry and Wildlife will seek final approval to the Board of Land and Natural Resources at its next meeting.

Questions, please call Nelson L. Ayers at (808) 587-4175 or email: Nelson.L.Ayers@Hawaii.Gov

Please place an X on the following:

Approved:

Not Approved

Daniel S. Quinn

Dec. 10, 2013

Print RAWG Member Name

Date

State Parks

Government Agency

Please fax (808) 587-0160 or email this page to Nelson L. Ayers at: Nelson.L.Ayers@Hawaii.Gov by **December 5, 2013**.

Attachments: Maui -- Hazard Data Sheet, Pictures of Station Signs and Hazards.

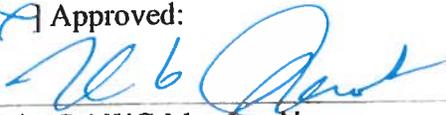
Approval

Following your approval, DLNR, Division of Forestry and Wildlife will seek final approval to the Board of Land and Natural Resources at its next meeting.

Questions, please call Nelson L. Ayers at (808) 587-4175 or email: Nelson.L.Ayers@Hawaii.Gov

Please place an X on the following:

Approved:



Print RAWG Member Name

Not Approved

12/5/13
Date

DOFAW

Government Agency

Please fax (808) 587-0160 or email this page to Nelson L. Ayers at: Nelson.L.Ayers@Hawaii.Gov by **December 5, 2013**.

Attachments: Maui – Hazard Data Sheet, Pictures of Station Signs and Hazards.

Approval

Following your approval, DLNR, Division of Forestry and Wildlife will seek final approval to the Board of Land and Natural Resources at its next meeting.

Questions, please call Nelson L. Ayers at (808) 587-4175 or email:

Nelson.L.Ayers@DLNR.Hawaii.gov

Please place an X on the following:

Approved:

Not Approved

THOMAS FAKE
Print RAWG Member Name

11/21/2013
Date

NATIONAL PARK SERVICE
Government Agency

Please fax (808) 587-0160 or email this page to Nelson L. Ayers at:
Nelson.L.Ayers@DLNR.Hawaii.gov by December 5, 2013.

Attachments: Maui – Hazard Data Sheet, Pictures of Station Signs and Hazards.

Approval

Following your approval, DLNR, Division of Forestry and Wildlife will seek final approval to the Board of Land and Natural Resources at its next meeting.

Questions, please call Nelson L. Ayers at (808) 587-4175 or email: Nelson.L.Ayers@Hawaii.Gov

Please place an X on the following:

Approved:

Not Approved

SCOTT Knowles

12-3-13

Print RAWG Member Name

Date

County of Hawaii
Government Agency

Please fax (808) 587-0160 or email this page to Nelson L. Ayers at: Nelson.L.Ayers@Hawaii.Gov by December 5, 2013.

Attachments: Maui – Hazard Data Sheet, Pictures of Station Signs and Hazards.

Approval

Following your approval, DLNR, Division of Forestry and Wildlife will seek final approval to the Board of Land and Natural Resources at its next meeting.

Questions, please call Nelson L. Ayers at (808) 587-4175 or email: Nelson.L.Ayers@Hawaii.Gov

Please place an X on the following:

Approved: Not Approved
Gerald Estenro 12/4/13
Print RAWG Member Name Date

County of Kauai
Government Agency

Please fax (808) 587-0160 or email this page to Nelson L. Ayers at: Nelson.L.Ayers@Hawaii.Gov by December 5, 2013.

Attachments: Maui – Hazard Data Sheet, Pictures of Station Signs and Hazards.

Exhibit B

**DLNR Division – DOFAW
Hazard Sign Data Sheet**

Island: Maui

Trail Name: Waihee Ridge Trail

Natural Condition Exposure: Cliffs

Entrance Hazard Signs:
Station: MA00084

Warning
Hazardous Cliffs

Acronym
WHCE

Site Specific Hazard Signs:
Station: MA00083
MA00082

Warning/Danger
Hazardous Cliffs
Hazardous Cliffs

Acronym
WHCS
WHCS

Management Signs:
Station:

Notice

Acronym

**DLNR Division – DOFAW
Hazard Sign Data Sheet**

Island: Maui

Trail Name: Waihou Spring Trail

Natural Condition Exposure: Cliffs

Entrance Hazard Signs:
Station: MA00085

Danger
Hazardous Cliffs

Acronym
DHCE

Site Specific Hazard Signs:
Station: MA00086
MA00087
MA00088
MA00089

Danger
Hazardous Cliffs
Hazardous Cliffs
Hazardous Cliffs
Hazardous Cliffs

Acronym
DHCS
DHCS
DHCS
DHCS

Exhibit C

MAUI



Sign Station



Waihee Ridge Trail

N

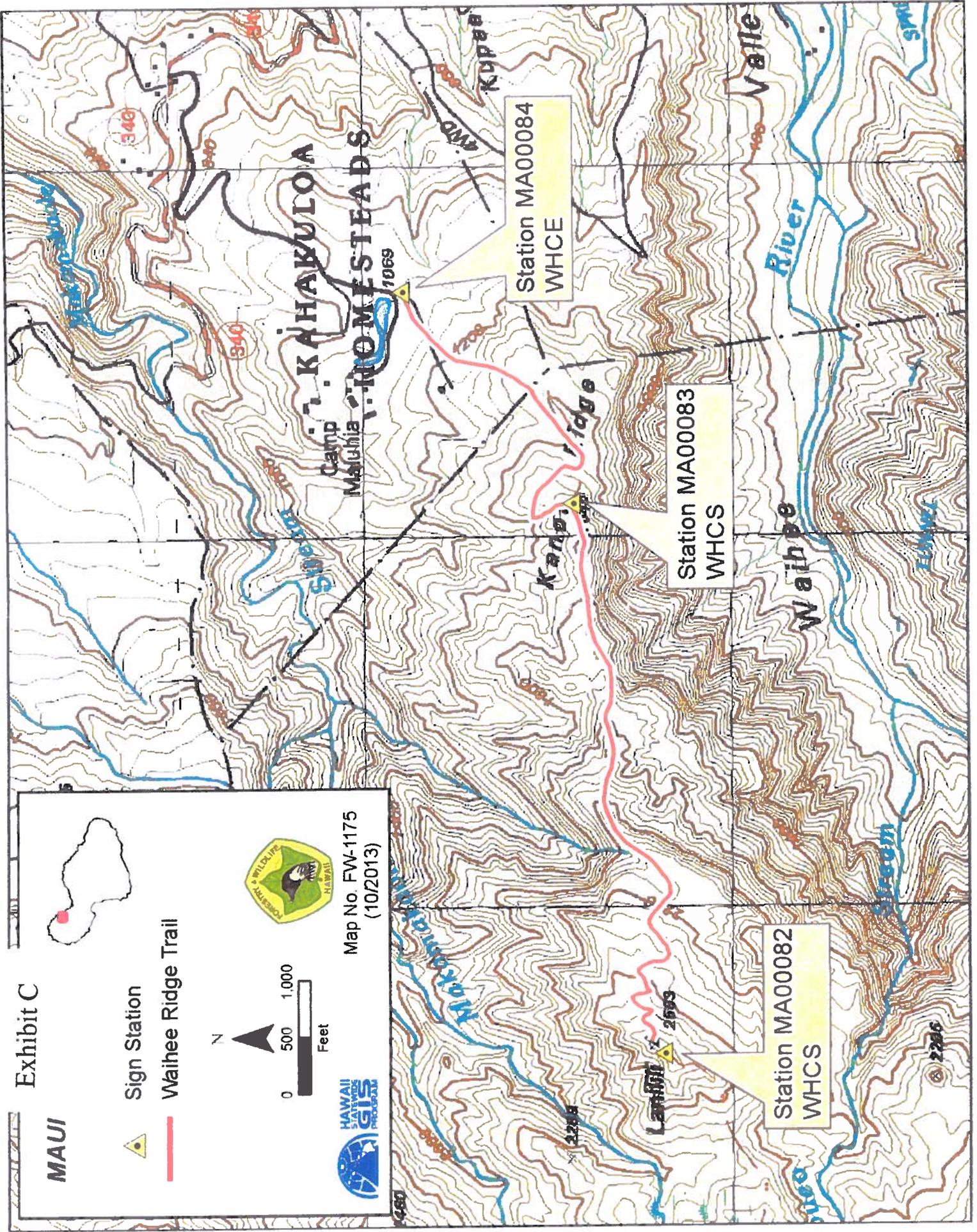


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Feet

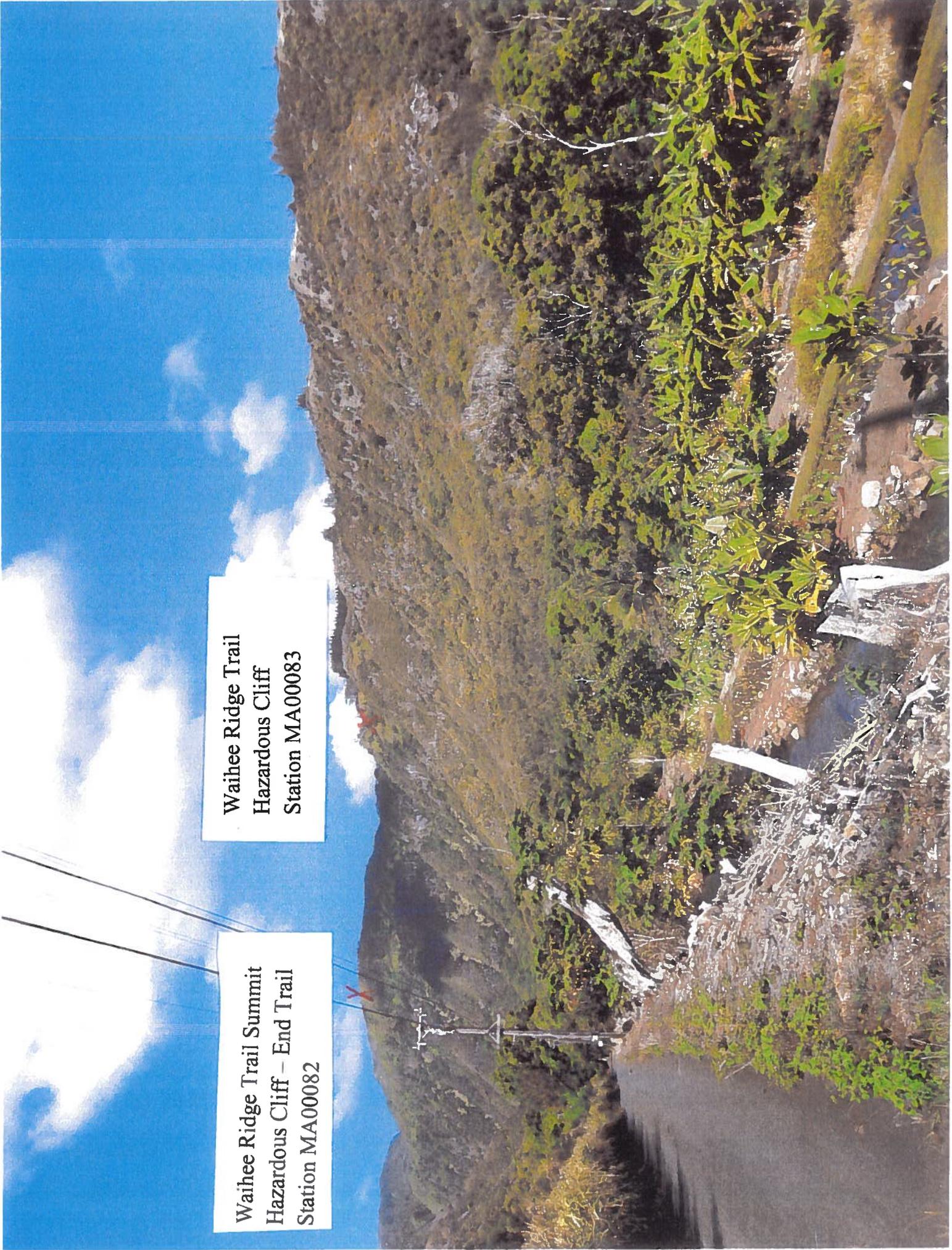


Map No. FW-1175
(10/2013)

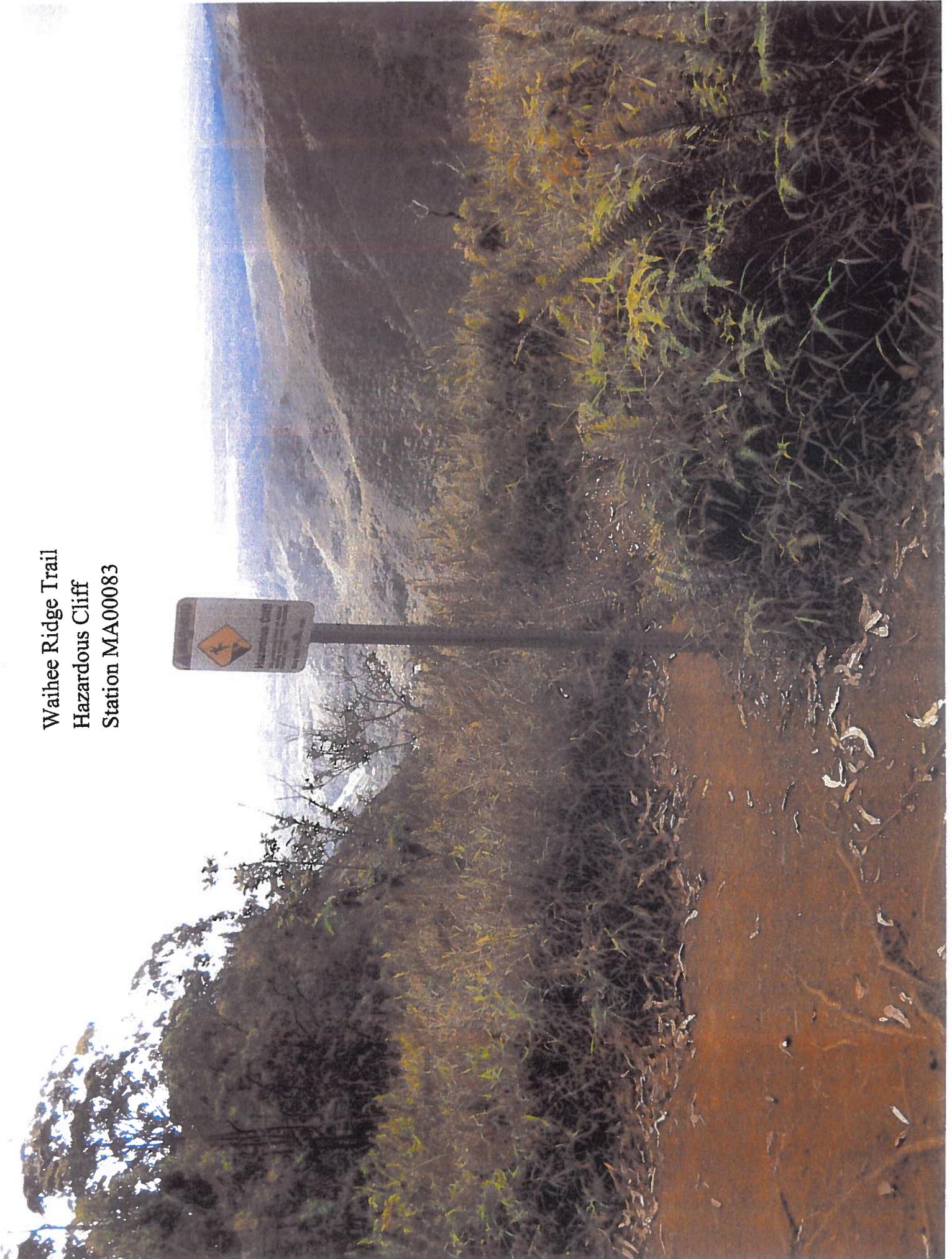


Waihee Ridge Trail Summit
Hazardous Cliff – End Trail
Station MA00082

Waihee Ridge Trail
Hazardous Cliff
Station MA00083



Waihee Ridge Trail
Hazardous Cliff
Station MA00083



Waihee Ridge Trail
Hazardous Cliff – End Trail
Station MA00082



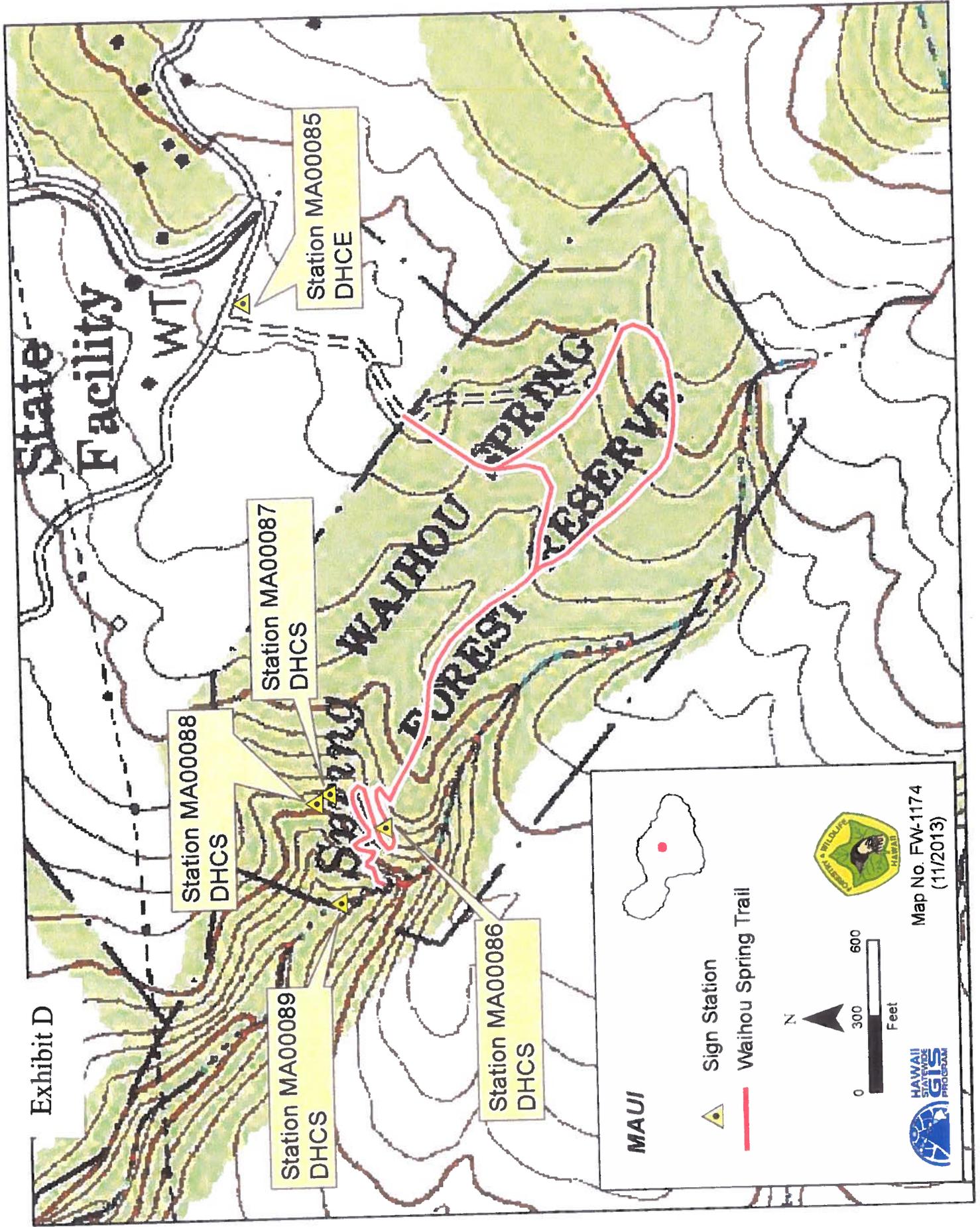
Hazardous Cliff!

The ground may break off without warning and your child be seriously injured or killed.

Stay back! Don't touch ledge.



Exhibit D



MAUI

▲ Sign Station

— Waihou Spring Trail

N

0 300 600
Feet



Map No. FW-1174
(11/2013)



Waihou Spring Trail
Station MA00086
Top of Spring Trail Switchback

A WARNING



Hazardous Cliff!

Spring Trail





**Waihou Spring Trail
Hazardous Cliff
Switchback down to the Spring**



Waihou Spring Trail
Station MA00089
View at bottom of trail.



Waihou Spring Trail
Face of 30-40 foot drop where trail
descends near the cliff