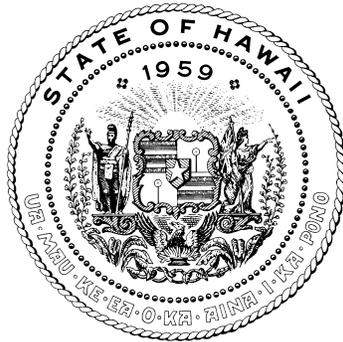


**REPORT TO THE TWENTY- FIFTH LEGISLATURE**

**REGULAR SESSION OF 2009**

**RELATING TO PUBLIC LAND LIABILITY**



**Prepared by**

**THE STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF FORESTRY AND WILDLIFE  
Na Ala Hele Trail and Access Program**

**In response to Section 4 of Act 82, Session Laws of Hawaii 2003 –**

**Honolulu, Hawaii  
November 2008**

## **RELATING TO PUBLIC LAND LIABILITY**

### **Purpose**

This report has been prepared in response to Section 4 of Act 82, Session Laws of Hawaii (SLH) 2003. Act 82, SLH 2003, 1) Established a risk assessment working group comprised of both state and county officials, and a person knowledgeable in signs, and 2) Required that a report be submitted with recommendations and of the consultation provided to the Board of Land and Natural Resources (Board), including a list of warning signs, devices, and systems on improved and unimproved public lands subsequently approved or disapproved by the Board, to the Legislature.

### **Timeline of Pertinent Actions**

- The members of the Risk Assessment Working Group (RAWG) reviewed ocean safety signs established through Act 190, SLH 1996 (relating to beach warning signs), as well as the most current warning sign standards from the American National Standards Institute (ANSI). Using the current ANSI guidelines, RAWG designed safety signs to address the following priority natural hazards: flash floods, falling rocks, hazardous cliffs, submerged hazards as well as ancillary uniform management signs (end of trail, end of road, area closed).
- In 2004, five public informational meetings were conducted statewide to solicit input on the proposed design of the signs. Comments were received and a few specific aspects related to sign design were revised accordingly.
- In 2004, the Department of Land and Natural Resources (Department) prepared the first draft of the proposed Hawaii Administrative Rules (HAR) for the Design and Placement of Warning Signs on Improved Public Lands (Chapter 13-8, HAR) mandated by Act 82, SLH 2003.
- In February of 2005, the Board approved the proposed HAR and the release of the draft document for public hearings.
- In May 2005, Governor Lingle approved the proposed HAR for public hearing.
- On August 23, 2005, the Department conducted a public hearing at the Kalanimoku Building, Oahu. Oral and written comments were received from the public and minor revisions proposed - there were no substantitive changes requested by the public.
- On November 18, 2005, the Board approved the staff's revision based upon public hearing comments and recommended approval of the proposed Chapter 13-8, HAR, to the Governor.

- On January 6, 2006, the Department of the Attorney General approved the proposed HAR as to form.
- On January 23, 2006, the Governor approved the proposed HAR and the finalized rule was filed on February 4, 2006.
- On February 9, 2007, the Board approved the design of the warning and ancillary management signs as required by rules.
- On February 23, 2007, the Board approved the placement of signs at Manoa Falls Trail on Oahu and at Kealakekua State Historical Park on the Island of Hawaii
- On August 10, 2007, the Board approved the placement of signs at Makena Beach State Park, Maui, and at Diamond Head and Kuilei Cliffs County Beach Parks on Oahu.
- A sign installation and inspection sheet has been prepared for use by the Department's staff for the installation and subsequent inspection of the respective signage.
- In September 2007, the Department's State Parks, Forestry and Wildlife and Engineering Divisions initiated a sign specification process based on the approved images and a process for sign production, appurtenant hardware and distribution based on a \$150,000 capitol improvement program (CIP) appropriation.
- On January 25, 2008, the Board approved warning signs for the Kauai County Bicycle Path.
- During 2008, Na Ala Hele staff / RAWG members provided guidance and technical support to the Department of Health (DOH) on the design of a new sign and appurtenant text for the Leptospirosis warning sign for fresh water areas frequented by the public. Leptospirosis is a prevalent bacteriological threat that can cause gastrointestinal problems, fever, and, in some severe cases, death. While DOH produces this sign as a public health service warning, they had concluded that following the design guidelines of the Chapter 13-8, HAR would provide a consistent design with the other warning signs. (Attachment #1)
- March 14, 2008, the Board approved the placement of warning signs at a variety of Division and Forestry Wildlife and Na Ala Hele trails on the Islands of Kauai (22), Maui (18) and Hawaii (11), for a total of 51 signs.
- A wildfire burned approximately 2,300 acres of public forest within Kula and Kahikinui Forest Reserves on Maui in 2007. In terms of size and intensity, this wildland fire event was one of the most devastating to have occurred for many decades in Hawaii. Although scores of hazard trees have been removed from along the access roads and trails, thousands of mature trees were burned and are

still standing, posing a potential hazard for users who deviate from the access roads and trails, such as hunters. This is a condition that will persist for many years to come. Due to the potential for years of constant mitigation, simply removing the hazard is not a tenable management action, unlike isolated hazard trees located along trails that can be simply removed expediently with existing staff.

Both Kula and Kahikinui Forest Reserves contain Na Ala Hele trails, while Polipoli State Park lies completely within the boundaries Kula Forest Reserve, and these features provide the majority of public land available for mauka recreation. The proposed warning signs are intended to warn of dangerous natural conditions related to hazard trees to members of the public who traverse roads and trails to access these areas, and for public hunters who retrieve game from the interiors of the forest reserves.

The Maui Na Ala Hele Trail and Access Advisory Council reviewed the new pictogram and a preliminary sign design on February 20, 2008 and determined that the image and verbiage were satisfactory. The sign design was circulated for additional public comment; via a March 28, 2008 press release. Sign designs were posted on the Division of Forestry and Wildlife website and comments were invited from the public from March 28 to April 10, 2008. The initial pictogram image was largely based on the previously approved “falling rocks” warning sign. Two public comments were received; one suggested a change in wording, which was incorporated into the design of the site-specific sign, and the other was inappropriate. The respective RAWG representatives were sent the sample design for review. A RAWG member suggested a minor change to the pictogram image for clarity and to make the image site specific for the Kula Forest Reserve Area.

- On May 23, 2008, the Board approved the new design (Attachment #1) and placement of 23 of the hazard tree signs in the Kula and Kahikinui Forest Reserves. Funds for sign production were made available via a Governor’s Emergency Proclamation relating to post-fire management. The cost of the sign was approximately \$4,000.
- On June 26, 2008, Department project number: F98C778A, Natural Hazard Warning Signs Statewide, was awarded to Safety Systems Hawaii Inc. for \$93,798.78 to produce signs for targeted locations (plus several sets of duplicates for replacement due to attrition, vandalism and signage decay) and ancillary posts and mounting hardware for the combined locations identified by the Divisions of State Parks and Forestry and Wildlife.
- On July 11, 2008, the Board approved an additional sign placement for the Kauai County Bicycle Path
- On August 22, the Board approved various locations at Kalalau Beach, Opaekaa Falls, Kauai; and Diamond Head, Pali Lookout and Sacred Falls, Oahu.

- Oahu Division of Forestry and Wildlife Na Ala Hele staff have surveyed and calculated that there are, including the previously Board approved Manoa Falls trail location, 18 Oahu trail locations that warrant the placement of 34 warning signs. A submittal to the Board is currently being prepared for approval of placement. These locations are included in the current CIP funded acquisition of signs.
- On October 21, 2008, the Department of Accounting and General Services processed the contract for production of signage.
- It is anticipated that in November of 2008, all of the currently identified signs will be completed and sent to the Division of Forestry and Wildlife base yards statewide for distribution among Na Ala Hele and State Park staff – and then installation plans will be initiated. The Division of Forestry and Wildlife has added new timesheet codes to calculate staff time spent investigating hazard locations, and also to document staff time spent installing and replacing signs.

### **RECOMMENDATION**

There is now a consistent process for natural hazard evaluation and appurtenant sign designs to clearly warn the public of exposure to five re-occurring natural conditions: flashfloods, falling rocks, submerged objects in streams, cliffs, and on a site specific location – hazard trees. HARs have been promulgated that eliminate ambiguity about the design and placement of warning signs. Both state and county governments have institutionalized this process.

There are 63 public locations across the State - comprised of state and county parks and Division of Forestry and Wildlife, Na Ala Hele Trails - that have been evaluated for potentially hazardous natural conditions and warrant Act 82, SLH 2003, signage. Public funds for the layout and production of signage and appurtenant installation hardware have been expended and signs will be installed at state parks and along Na Ala Hele Trails during the end of 2008 and into 2009. Kauai County and the City and County of Honolulu have identified locations at county parks and have installed warning signage.

The Department is creating a database for state trail and park warning sign locations. The Division of Forestry and Wildlife is tracking staff time costs via timesheet reports on natural hazard evaluation, and sign installation, inspection and replacement.

Act 82, SLH 2003, strikes a reasonable balance between the government's duty to warn of potential exposure to a hazardous natural condition – and the public's responsibility to heed that risk and make an informed choice to access the public land.

Therefore, it is recommended that the 2010 "sunset" date on Act 82, SLH 2003, be repealed, (as did the Legislature to Act 190, SLH 1996, relating to beach warning signs in 2008) and that Act 82, SLH 2003, be codified into the Hawaii Revised Statutes as permanent law.



## Attachment #2

### Hazard Signs Associated with the Potential Hazard of Falling Trees

*Hazard signs are intended to warn of potentially dangerous natural conditions and/ or modify public behavior*

1. Warning  
Falling Trees!  
This trail or area contains this hazard.  
If you proceed, be alert! Trees and branches may fall without warning causing serious injury or death.

*This is an entrance sign, which is to be posted at entry points to State lands or trails that contain the potential hazard of falling trees and branches.*



2. Warning  
Falling Trees!  
Trees and branches in this area may fall without warning causing serious injury or death.  
If you proceed, be alert!

*This is a site specific sign, which is to be posted in close proximity to the potential hazard of falling trees and branches, most notably when entering the burn unit itself.*

