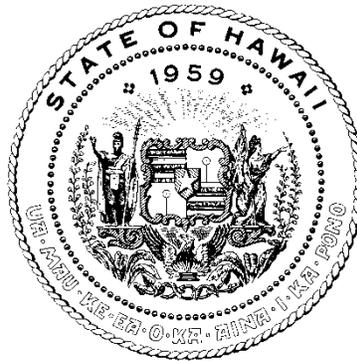


**REPORT TO THE THIRTIETH LEGISLATURE  
STATE OF HAWAII  
2020 REGULAR SESSION**

**HAWAII STATEWIDE TRAIL AND ACCESS SYSTEM  
“NA ALA HELE”**



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 198D-9, Hawaii Revised Statutes

Honolulu, Hawaii  
November 2019

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*Na Ala Hele Program Manager collecting trail inventory data on Oahu*

**PURPOSE**

Chapter 198D, Hawaii Revised Statutes (HRS), creates the Hawaii Trail and Access System, under the Department of Land and Natural Resources (DLNR). Pursuant to Section 198D-9, HRS, a report is required to highlight DLNR’s accomplishments in Fiscal Year (FY) 2019.

**INTRODUCTION**

The Hawaii Statewide Trail and Access Program, also known as Na Ala Hele, was established in 1988. Section 198D-2, HRS, directs DLNR to plan, develop, and acquire land or rights for public use of land, construct, restore, and engage in coordination activities to implement a trail and access system in Hawaii. The program is run by the DLNR, Division of Forestry and Wildlife. This report has four sections:

1. Program Needs
2. Program Summary
3. Funding Sources
4. Ancient and Historic Trails

**1. PROGRAM NEEDS**

According to the 2015 Hawaii State Comprehensive Outdoor Recreation Plan (SCORP), there are two areas regarding public hiking identified for improvement, (a) *demand for more trails or access to mauka lands* and (b) *the need for trail facilities and maintenance*. DLNR supports these goals and is dedicated to meeting the growing demand for statewide outdoor recreation, management, and expansion. Currently, LNR 804 Forest and Outdoor Recreation supports fourteen full-time civil service positions that work directly for the statewide Na Ala Hele Trail

and Access Program.

Encouraging responsible public use of Hawaii’s natural resources is part of the DLNR’s mission. There is a justifiable concern in being able to address and support the rising number of trail issues, many of which are associated with a significant increase in people wishing to access trails and the rise of social media. Keeping up with this demand is challenging with the resources currently available. However, DLNR is committed to providing safe outdoor recreation opportunities to the public.

DOFAW has a current statewide inventory of 1440 trail-and-road features spanning approximately over 2500 miles. Due to budget and staffing limitations, the level of maintenance on these features varies. Some high-use areas, such as Manoa Falls Trail on O’ahu, require frequent staff visits to address various issues associated with trail management.

Trailhead parking within small communities is a growing problem throughout the state. On Hawai‘i Island, Pololū lookout and trail has experienced a surge in interest in recent years, resulting in traffic congestion, and health and safety risks. Inadequate parking spots and no restrooms, results in vehicles parked throughout the highway and interfering with residential driveways.



*Pololū Parking/Overlook*



*Congestion of both vehicles and hikers on the highway leading to Pololū trailhead*

Locating suitable off-highway-vehicle (OHV) sites statewide that meet the needs of all OHV users, hikers, mountain bikers, equestrians, hunters, and dirt bikers is also a program challenge. Additionally, vandalism of signs and other infrastructure requires ongoing resources. Working to protect and expand legal access to trails and public rights-of-way is a high priority part of the Na Ala Hele trails program that requires specific legal and land disposition expertise.

With the dramatic increase in trail use, intensified by higher tourism numbers and exposure from social media, DLNR has an obligation to address all the needs listed above. However, the capacity to manage the program needs to be expanded to keep pace. More positions and funding

for operations would greatly improve the program’s ability to keep up with rapidly growing demand.

The photos below were captured on Wiliwilinui Trail. This is one of many high use summit trails leading to the ridgetop of the Ko`olau’s that reward hikers with panoramic views of Oahu.



*Wiliwilinui functional stairs*



*Deferred maintenance leading to design failure*

Lack of program funding and limited staff capacity has not allowed the Department to address many deferred maintenance tasks resulting in some design and specification failures, as seen in the upper right photo, which become safety concerns. Na Ala Hele trails are increasingly stressed, and maintenance cannot keep pace with the growing demand due to inadequate funding. The lack of funding to provide needed, routine maintenance threatens public access and could endanger the public safety if funding does not keep pace with public visitation.

## **2. PROGRAM SUMMARY**

The goal of the Na Ala Hele Program is to provide public outdoor recreation opportunities for hiking, biking, hunting, camping, equestrian and off-highway vehicle use, and trail use associated with natural resource management. In addition, the Na Ala Hele trails program is responsible for inventory and ownership documentation of historic trails and road alignments statewide.

Trails and unpaved access roads are critical resource management and recreational features that serve a multitude of access functions:

- Provide access for native flora, fauna, and watershed protection and management work;
- Monitor and remove invasive plant and animal species;
- Provide recreational opportunities, including hunting, hiking, biking, equestrian, and OHV activities;

- Control wildland fires;
- Protect Hawaiian cultural, ancient, and historic trails;
- Provide commercial trail opportunities to strengthen Hawaii's economy; and
- Assist county search and rescue efforts.

**Na Ala Hele Core Activities:**

- Implement statewide recreational trail and access-road management and maintenance for public use;
- Coordinate ancient and historic trail activities with DLNR divisions or other entities to protect ancient and cultural trail features;
- Manage commercial trail tour activity; and
- Assess and implement environmental risk assessments to improve public safety of program trails and access roads by identifying specific hazards and mitigating dangers through warning signs pursuant to Act 82, Session Laws of Hawaii (SLH) 2003.

Na Ala Hele statewide staff spends most of its time maintaining program trails and access roads to ensure public safety and to protect trail and historical values. The management specifications are explained in the Trail Design Guidelines of the 1991 NAH Program Plan. Trail and road management consists of the following activities:

- construction of access roads and trails;
- trail or access road surface improvements, including grading trails to avoid water damage;
- cutting back brush along trail and road corridors to meet standard specifications;
- removing downed trees that disrupt trail use;
- boardwalks may be installed in excessively boggy and sensitive environments;
- herbicide application to control noxious, non-native plant species that spread rapidly along trail and access road corridors;
- purchase, repair, and/or rental of vehicles, helicopters, chain saws, brush-cutters, herbicide, fuel, and other equipment, materials and supplies used to maintain trail/road features; and
- provide informational signs for public safety and user information.

A sustainable trail should have as little impact on the surrounding environment as possible; this is done with proper planning, design, construction and maintenance. Although some general principles of trail design guidelines have remained constant over the years, new methods of minimizing a trail's impact on the environment have been developed. Applying these sustainable trail design principles minimizes water damage to trails and decreases maintenance. Many of Hawaii's trails were developed from informal routes, and not properly laid out and constructed. Applying sustainable trail design principles, existing trails can be upgraded to modern standards.

The photographs below represent informal routes developed over time that have not received the application of trail design principles. Natural resource damage such as vegetation loss and soil erosion are the result, not to mention the elevated user safety risks.



*This shows a user created alignment with too steep of a grade, resulting in tread failure*



*Photo captures excessive vegetation and soil erosion*



*Deep rutting in the trail tread is apparent from over-use and lack of maintenance*

Update of the original 1991 NAH Program Plan to incorporate these modern trail design guidelines will provide the program with clearer direction on how to develop and maintain long-term sustainable trails. Proper funding and staffing levels to assist with implementing these guidelines would significantly improve the statewide trail network. These trail guidelines, if implemented, would save staff time and funding on future maintenance, and would provide for a safer experience for trail users.

Highlights of Statewide Na Ala Hele Trail Program Outdoor Recreation Projects

*FY 19 Accomplishments at a glance*

	<b>Kauai</b>	<b>Oahu</b>	<b>Maui-Nui</b>	<b>Hawaii Island</b>
Number of trails and roads maintained	17 trails 10 roads	42 trail and road features	53 trail and road features 274 miles total	22 road features 256 miles of trails 260 miles of road
Recreation facilities maintained including shelters, campgrounds, toilets and boot brush stations	30	18	33	43
Recreation and hunting signs installed and maintained	150	332	568	164
Community volunteer hours	500	1,668	2,768	782
Trail Advisory Councils Meetings	10	5	12	5

Administration: The Na Ala Hele trails program made improvements to our website ([hawaiitrails.hawaii.gov](http://hawaiitrails.hawaii.gov)) allowing easier navigation to trail information, public announcements, and vendor applications for commercial trail tour activity (CTTA). Authority was delegated to island District Managers to approve CTTA permits, streamlining the process for approval of commercial trail use. An on-line, day-use permit application was also launched for the Poamoho Trail. Researching improvements for public access and more trail opportunities statewide is ongoing.

Na Ala Hele trails program is working with the DOFAW hunting program to create a readily available and user-friendly mobile device application (app). The app would include detailed information about trails and access roads statewide, allowing the Department to post instant updates such as temporary closures or flash flood warnings as needed. The app will include a geo-referenced map that will show the users their location in real-time, even when they are off-line, or their device is set on airplane mode. The app will also include online hunter check-in stations that allows the agency to track hunter effort and success.

The program continues to offer expertise and involvement working with the Department’s Land Division to find a long-term lease for Waiale’e Off-Road Motorcycle Park formerly known as Kahuku Motocross Park. A Request for Interest for the lease, operation and management of the park was published, and in January 2019, the Board of Land and Natural Resources (BLNR) authorized their Chairperson to start the Request for Qualifications/Request for Proposals process.

A successful BLNR action allowed the Department, the National Park Service and Hawai‘i County to enter into a memorandum of understanding (MOU) to cooperatively manage the Ala Kahakai National Historic Trail on Hawai‘i Island.

O‘ahu: Oahu’s trails are utilized by over a million enthusiasts engaged in outdoor activities, and despite urban interface issues at several trailheads, the program feedback is overwhelmingly positive. Major work includes brushing, grubbing, tree/rock removal, herbicide application, trail head maintenance, sign installation/replacement, and rockwork. Other projects included trail grade reconstruction, armoring water diversions, installing educational signs, and out-planting native plants. The priority is to keep trails safe and user friendly by continued clearing of trail-side vegetation, removing large downed trees, and mitigating other potentially hazardous conditions. O‘ahu staff provided continued support of the Waiale‘e OHV Park.

Oahu’s program accomplished several trail projects with the assistance of military and civilian volunteers and AmeriCorps KUPU members to successfully mitigate trail hazards and keep Oahu’s trails open and safe for the public. Service projects conducted throughout the year included major bridge improvements, boardwalk expansion and vagrant camp removal. Trail management surveys are underway on all O‘ahu trails to identify island-wide trail objectives and priorities. The O‘ahu program was also awarded a Hawaii Tourism Authority Aloha Aina contract to implement improvements to the upper portion of Mānoa Falls Trail.



*Community volunteer work in the Makiki Trail network*



*Manoa Falls volunteer work party*

Maui: The Maui Na Ala Hele program purchased three automatic trail counters and have been rotating them among the different trails on Maui island. Each counter is left for a three-month period before being moved to another trail. Results show that the Waihe‘e Ridge Trail is the most heavily used trail on Maui, receiving up to 1,000 people/day during the Easter holiday break. Kahakapao Recreational Area in the Makawao Forest Reserve continues to be heavily utilized by the public and is the second most popular area on Maui.

Monthly inspections of the bicycle features, signs, and trail maintenance continue by staff funded by a federal Recreational Trails Program grant. Staff funded by state general funds completed routine standard trail maintenance procedures, including brushing, grading, water diversion maintenance, tree and brush removal, and sign maintenance to the following trails: Haleakalā Ridge, Ala Loa O Maui, Hoapili Trail, Lahaina Pali, Plum, Poli Poli, Tie, Redwood, Mamane, Upper Waiohuli, Boundary, Lower Waiohuli, Waiakoa Loop, Waihe`e Ridge, Waihou Spring, Waikamoi Ridge, Ohai Loop, Keanae Arboretum, and Hulopoe-Huawai fisherman's trail on the island of Lāna‘i. Maui staff has continued to provide maintenance support of the Maui

Motocross Track, including landscaping maintenance, removing rubbish and debris, hauling materials, and equipment maintenance. Because the Na Ala Hele federally funded positions are unable to administer cutting, digging, or spraying until environmental compliancy for Section 7 and Section 106 is finalized, projects are back-logged and staff are struggling to keep trails up to standard specifications designed to meet safety requirements.



*Photo of Maui Motocross Track*



*Trailhead signage at Lahaina Pali Trail*

Hawai‘i: The Kaulana Manu Nature Trail project, which is a popular native forest area off Daniel K. Inouye Highway where users can experience native plants and animals in a pristine setting, is developing into a visitor attraction. A Capital Improvement Project has begun construction on a new parking lot, bathrooms, and interpretive signage. Program staff have been working closely with private landowners near the Pololū trailhead to negotiate a land donation that would allow construction of a parking lot and restroom facility to service trail users flocking to the area. Capital Improvement Project funds (to be released in 2021) have been approved to develop plans for this project.

Na Ala Hele program staff continues to negotiate with private landowners; a key to allowing public access to public lands and trails that include Judd trail, Hōnaunau-Ho‘okena trail, Keauhou-Ka‘awaloa trails, and Keauhou trail. Staff has also been working with the Pu‘u Wa‘awa‘a Advisory Council to develop recreational goals that can be used as guidelines to expand and incorporate trails in Pu‘u Wa‘awa‘a and elsewhere. The program is working with the DOFAW Forestry Resource Management Section in the development of access to the Honua‘ula Forest Reserve in order to improve recreational opportunities.

Trail specialists on Hawai‘i Island are responsible for maintaining and expanding the Waiākea ATV and Dirt Bike Park, as well as maintenance of the Mauna Kea ATV riding area (roads R1, R10). Routine maintenance is ongoing, including minor grading, signage, and trash. Routine trail maintenance and improvements include ‘Āinapō trail and road, Mauna Loa Observatory Road, Manukā Loop trail, and trails at Kaheāwai, Humu‘ula, Pu‘u ‘Ō‘ō, Kaluakauka, Ala Kahakai, Pu‘u Huluhulu, Puna, Onomea, Kaūmana, Muliwai, and Pololū. Brushing, tree removal, sign maintenance, helicopter support, and reconstruction make up the bulk of the work. Maintenance is also done on facilities, including ‘Āinapo Cabin, halfway shelters along Muliwai trail, and Waimanu campsite, and various trailhead composting units. With the re-opening of the

Kahauale‘a Natural Area Reserve, the Kahauale‘a trail was also cleared and re-opened. Due to Rapid ‘Ōhi‘a Death affecting Hawai‘i Island, boot-cleaning stations installed at all trailheads are routinely cleaned and maintained, and program staff attended several outreach events to spread awareness of measures outdoor recreationalists can take to help protect forest health.



*Rapid Ohia boot brush station installed at all Hawaii Islands Na Ala hele trailheads*



*Na Ala Hele staff and volunteers flown in to Waimanu Valley for remote trail maintenance work*

**Kaua‘i:** The Kaua‘i Na Ala Hele Advisory Committee scheduled 10 meetings in FY 2019, with the priority focus to provide safe outdoor experiences through proper management and maintenance of Kauai’s trails and access routes. Repairing the Alaka‘i trail boardwalk has been a major undertaking: 15 hours of helicopter flight time was used removing old boards and flying in new boards to continue repairs to the boardwalk so the public can access the area without destroying the fragile native ecosystem. Routine maintenance on Awa‘awapuhi and Nu‘alolo trails included brush control and grubbing narrow sections. The sharp increase of use of these trails has prompted more maintenance than in years past. Trail personnel spent three weeks removing downed trees that fell across trails during strong winds in January. They also did hazard tree assessments to identify other trees that should be trimmed or removed for safety reasons.



*Na Ala Hele Staff constructing the Alaka‘i Swamp Boardwalk*



*View found at the end of Poomau Canyon Vista Trail, Kauai*

### **3. FUNDING SOURCES**

<b>Table 1: Na Ala Hele Trails Program Funding &amp; Revenue (Source)</b>	<b>FY 2019</b>
Special Funds – State fuel tax and CTTA appropriation used mostly to cover payroll	\$285,550
Federal Recreational Trails Program appropriation	\$950,859
LNR 804 General Fund appropriation used entirely to cover payroll. LNR 804 has a perennial salary shortfall, so no state general funds are available for operating expenses.	\$1,570,467

#### **Special Funds**

The Department’s DOFAW Na Ala Hele trails program currently has two different special fund revenue sources, the Liquid Fuel Tax (LFT) and Commercial Trail Tour Activity, deposited into the Special Land and Development Fund established pursuant to Section 171-19, HRS.

#### **Liquid Fuel Tax**

0.3% of the Liquid Fuels Tax (LFT) collected under Chapter 243, HRS, is deposited each fiscal year into the Special Land and Development Fund for management, maintenance, and development of trails and access routes established under Chapter 198D, HRS. The trails program cap for revenue from the LFT is \$250,000 per year, but revenue has been closer to \$200,000 the last two years. This income is used to offset the LNR 804 general fund shortfall for personnel funding for the program, leaving no money for operating expenses.

#### **Commercial Trail Tour Activity (CTTA)**

Act 106, SLH 1997, allows DLNR to use funding from fees for commercial use of Na Ala Hele program trails and access routes, which is commonly referred to as the Commercial Trail Tour Activity system. Commercial trail use is regulated by Chapter 13-130, Hawaii Administrative Rules. Revenues from CTTA fees go directly back into trail management and maintenance. In addition to the revenues CTTA contributes to the Na Ala Hele trails program, commercially led tours are intended to provide visitors with a safer and more enjoyable experience than if hiking alone. The CTTA system has a high potential for growth, providing additional revenues to the trails and access program.

The CTTA website reservation system ensures that commercial activities by multiple vendors do not exceed the daily capacities and/or number of groups established for CTTA trails and roads. The reservation system is managed by a contractor (HIC) who records the trail reservations and dates and calculates fees. There is an annual \$75 subscription fee for CTTA operators, with an additional ten percent fee on each reservation. CTTA fees are assessed per unit of use and thus designed to offset potential trail impacts by commercial users. DOFAW submits twenty percent of this revenue to the Office of Hawaiian Affairs. For a complete list of current CTTA operators, visit: <https://hawaiitrails.hawaii.gov/trails/#/vendors>

*CTTA Results:*

	<b>Kauai</b>	<b>Oahu</b>	<b>Maui-Nui</b>	<b>Hawaii Island</b>	<b>Statewide Total</b>
Commercial trail tour participants	823	7,134	441	2,225	10,623
Commercial trail tour vendors	11	4	8	9	32
Revenue generated	\$4,226	\$35,780	\$2,150	\$10,113	\$52,269

Federal Recreational Trails Program Allocation

Recreational Trails Program (RTP) is authorized under 23 USC 104(h) and 206. The Federal Highway Administration approves eligibility of RTP funds to DLNR DOFAW through set criteria, which require the state to: 1) develop a trail council consisting of motorized and non-motorized recreational users; 2) have a State Comprehensive Outdoor Recreation Plan; and, 3) comply with the Assured Access to Funds requirement - a minimum of thirty percent of the funding must be used for motorized trail use, thirty percent for non-motorized trail use, and forty percent for diversified or multiple-use trails. DLNR’s RTP allotment for FY 2019 was \$950,859.

LNR 804 Na Ala Hele General Funds

General funds of approximately \$1,570,467 were allocated in FY 2019. There is a persistent shortfall in payroll for LNR 804. To make up the shortfall, the NAH Program used federal grant funds and state special funds to cover payroll expenses. **There are no State general funds available to cover operating expenses for the Na Ala Hele trails and access program.** An increase in deferred trail maintenance of associated infrastructure and facilities continues to increase with no general fund operational budget. A recent analysis of all roads and trails versus roads and trails maintained each year shows the **Na Ala Hele trails and access program is only operating at 20% capacity** with the funding currently allocated.

**4. ANCIENT AND HISTORIC TRAILS**

Section 198D-3, HRS, requires an inventory of trails and access routes be maintained and recorded under the Na Ala Hele database. Na Ala Hele program has one full time staff position to research and document ancient and historic trails and old government roads for inclusion in the statewide trails inventory under the provisions of Section 264-1, HRS, as stated below:

*“(b) All trails, and other non-vehicular rights-of-way in the State declared to be public rights-of-ways by the Highways Act of 1892, or opened, laid out, or built by the government or otherwise created or vested as non-vehicular public rights-of-way at any time thereafter, or in the future, are declared to be public trails. A public trail is under the jurisdiction of the state board of land and natural resources unless it was created by or dedicated to a particular county, in which case it shall be under the jurisdiction of that county.”*

Na Ala Hele does research pertaining to the location and documentation of whether a historic road or ancient trail falls under the Highways Act of 1892. Abstracts of title help make this determination by historical research, maps, or other related media. Additionally, these types of legal determinations are processed through the Department of the Attorney General in identifying possible interest the State may claim in roads and/or trails situated within the boundaries of lands that are the subject of quiet title actions or Land Court applications. If public ownership is confirmed, access through roads or trails is documented and submitted before the Board of Land and Natural Resources for final approval. In FY 2019, the Na Ala Hele Program completed 75 abstracts and 14 Quiet Title Action reviews.

#### Summary of Ancient and Historic Trail Projects:

The Na Ala Hele Abstracting Section (consisting of a single employee) received 75 requests for abstracting assistance on trail and access issues from Na Ala Hele trail specialists statewide. In addition, requests were received from various programs within DOFAW, State Historic Preservation Division, Office of Conservation and Coastal Lands, Attorney General's Office, County of Hawai'i Planning Dept, County of Hawai'i Public Works Division, and private consulting firms. This represents a significant increase from the 56 requests received in the previous year. As agencies cope with demands for public access regarding possible historic, ancient or public trails crossing private property, the abstracting section is tasked with an increasing workload documenting public access features.

Abstracting work entails focused research through documents in the English and Hawaiian language, archival records, review of historic maps and field notes, and the ability to analyze complex land title records to produce written reports of research findings. These reports are subject to review by the public and other interested parties who may challenge the findings, requiring more time to investigate any and all claims or information provided. Some abstract files opened in 1999 remain open awaiting final disposition by either court adjudication, negotiations with private landowners or government approvals.

The responsibilities of this section include providing oral testimony in court proceedings as an expert witness for the state. Preparing for court appearances is a time-consuming effort that necessitates putting all other requests on hold.

Of the 75 files opened in the last year, about a third were done at the request of DOFAW staff regarding trail and access issues, a third from other agencies in reference to possible historic trails through private lands, and a third from the Attorney General's office for responses to civil actions.



*Ala Kahakai Trail*



*Stepping Stone Trail*

Top left photo is a segment of the Ala Kahakai on Hawai`i Island. An abstract has been complete for the segment and it is now recognized as a National Historic Trail. The trail is identified as a 175-mile corridor and trail network. Many segments of this historic route have not received a thorough abstract due to limited program funding and staff capacity. The Stepping Stone Trail seen in above is an example of a portion that has yet been abstracted therefore not adopted by Na Ala Hele trails program. Increased staff and funding would allow the program to better protect and manage these amazing cultural and historically significant trails statewide.