

Pu`uwa`awa`a Recreation Goals

Pu`uwa`awa`a Advisory Council's
Recreation, Education & Volunteers (REV) Subcommittee
Draft May 31, 2019

Acronyms Used:

- CIP = Capital Improvement Project
- BLNR = Board of Land and Natural Resources
- DLNR = Department of Land and Natural Resources
- DOFAW = Division of Forestry and Wildlife
- HETF = Hawai'i Experimental Tropical Forest
- HTA = Hawai'i Tourism Authority
- MOA = Memorandum of Agreement
- PAC = Pu`uwa`awa`a Advisory Council
- PATH = People's Advocacy for Trails Hawai'i
- PWW = Pu`uwa`awa`a Ahupua`a
- REV = Recreation, Education & Volunteers

I. Introduction

A. Purpose of the Recreation Goals

This internal guidance document contains recommended goals and actions to guide and prioritize management efforts at Pu`uwa`awa`a (PWW) related to recreation in the following areas: trails, public access, ecotourism, cultural and environmental education, and related facilities and infrastructure. It is meant to be an adaptive document and revised as better information, findings, input and management guidance is received.

B. Relationship to the Management Plan for the Ahupua`a of Pu`uwa`awa`a and the Makai Lands of Pu`uanahulu ("Management Plan")

These Recreation Goals were developed to complement the Management Plan by providing more in depth recommendations that contribute towards fulfilling the recreation related management objectives in the Management Plan. Following are the specific management objectives related to recreation that these goals draw from:

1. **Trails, Access and Ecotourism Objectives**
Management Plan Section VII Objectives 42, 44, 45, 46 and 47 on pages 35 – 38.
2. **Cultural and Environmental Education Program Development Objectives**
Management Plan Section IX Objective 51 on pages 41-42.
3. **Facilities and Infrastructure Objectives**
Management Plan Section X Objectives 52, 54 and 56 on pages 43-46.
4. **Note on Public Hunting Objectives**
A separate Hunting Management Plan for PWW is being developed by DOFAW and thus is not included here. It should be noted however that some of the recommended improvements to trails and access in this document may also be beneficial to hunters.

C. Administration of the Recreation Goals

1. **Existing Management Structure Lacking**

Existing staff time at PWW is devoted primarily to the high priority Fire and Natural Resource Management objectives of the Management Plan. Recently a temporary Pacific Cooperative Studies Unit employee was hired to coordinate outreach and education activities, though future funding for this person is uncertain. There is very little staff time available in the present management structure to work on the recreation goals in this document, though at times PWW staff and DOFAW work crews may be able to assist with trail maintenance.

2. **Na Ala Hele Trail and Access Program Involvement Recommended**
It is recommended that the DOFAW Na Ala Hele Program be utilized at PWW to help realize the trail related goals in this document. Though the Na Ala Hele Program also suffers from lack of manpower and funding, their trail expertise, signage, rules, community partnerships and trail information website will be very beneficial in helping to develop, maintain and provide information to the public about these trails at PWW.
3. **“Recreation Specialist” Staff Member Recommended**
For the long term, it is recommended that a “Recreation Specialist” position be established under the supervision of the PWW Coordinator, in order to achieve the full recreation potential of this unique reserve. Depending on work load, this position could possibly be shared and given other responsibilities, for example, working with cattle owners on strategic fire fuels reduction in the reserve.

II. Near Term Recreation Goals Focus Areas

A. *Recommended Na Ala Hele Trails*

The following sections list the recommended trails to consider developing as Na Ala Hele Program trails, incrementally in order of priority. These trails could be hiking, biking or equestrian trails as deemed appropriate by DOFAW management. Exceptions on the types of trails the PAC considers inappropriate for an area are noted below. Motorized/ATV trails are not recommended by the PAC in the PWW Forest Reserve.

1. First Increment of Trails

Currently there are three established hiking trails with trail maps in PWW: 1) the Halapepe Trail, a 1.1 mile loop by the Hiker Check-in Station, 2) the `Ōhi`a Trail, a 3.2 mile loop mauka of the Hiker Check-in Station, and 3) the Cone Trail to the summit of the PWW cone, a 6.2 mile round trip hike when started from the Hiker Check-in Station. The following two trails are recommended for Na Ala Hele.

a) `Ōhi`a Trail

This trail provides a nice hike through predominantly `ōhi`a forest with bird watching opportunities. Due to the somewhat rough terrain, it is recommended for hiking only.

b) Cone Trail

This trail ascends the PWW cone and is recommended for hiking and possible equestrian use. A potential reroute of the Cone Trail has been identified to improve the overall hiking experience. The portion of this trail on the Cone is

not recommended for mountain biking due to cultural, biological and geological sensitivities.

2. Second Increment of Trails

If required, a more in depth planning process should be pursued such as an Environmental Assessment, when proposed new trails or recreational activities may cause a significant increase in access or usage of the forest reserve leading to significant cumulative impact on the environment. There are also many cultural and historical sensitive areas in the reserve, and consultation with the Hui `Ohana mai Pu'u Anahulu a me Pu'u Wa'awa'a (Hui `Ohana) should also be pursued when investigating possible new trails. Following are recommended new trails to be investigated and established if approved in the PWW Forest Reserve.

a) Selected Ranch Roads

Identify ranch roads that lend themselves to new hiking, equestrian or biking trails. For example, a trail that circles the PWW cone, a trail that includes the reservoir area (Hauaina Conservation Unit), and a trail along or near the old runway could be possibilities. The trails might pass through normally locked ranch road gates and thus will require pedestrian access gates. Many of the ranch roads are also lacking names, so appropriate Hawaiian, historical or culturally based place names for these unnamed roads will need to be developed for signage and trail map purposes.

b) Reservation Trail

This hiking trail was initially established by the prior PWW Coordinator and is a loop trail that starts and ends on the east side of the PWW cone. The trail has never been officially opened to the public. A reconnaissance of this trail was done in 2014 including GPS tracks, photographs and location of native plants along the trail. The trail offers scenic vistas, shady rest areas and a pleasant stroll through forested areas on mostly level terrain. A ranch gate that is normally locked prevents access so a pedestrian gate plus signage and trail map are needed if this trail is approved to be opened to the public.

c) Mountain Biking Trails

Informal biking is already being done in the Forest Reserve and it is recommended that formal biking trails be designated for the public. Two possible biking loop trails, one mauka and one makai of the highway, have been identified, checked out by PATH (People's Advocacy for Trails Hawai'i) mountain bikers, and informally approved by DOFAW.

However both loops need signage, access gates and maps to become fully operational and public access on the makai side of the highway is not currently allowed. In the short term, it is recommended that the mauka trail be expanded (e.g. around the Cone) and formalized, then clearly designated through signage and trail information. DOFAW is encouraged to explore additional biking trails, preferably separate from hikers and equestrians where trail width is a concern, and with adequate rules and signage guiding safe and appropriate use.

d) Equestrian Trails

There is a rich history of equestrian use in the reserve due to the historical sheep and cattle ranching at PWW, which began in the 1890s with Eben Parker Low and Robert Hind. The families of the Hui `Ohana mai Pu`u Anahulu a me Pu`u Wa`awa`a have been involved in this ranching since it began to present day. They are the experts when it comes to potential equestrian trails at PWW and the logistics for horse trailer parking. Their involvement is strongly recommended to help identify potential equestrian trails and related logistics at PWW.

3. Third Increment of Trails

This last increment of potential Na Ala Hele trails is considered more complex to develop and thus may take longer to realize.

a) Kīholo – Pu`uwa`awa`a (Makai–Mauka) Trail – links PWW Forest Reserve with the Kīholo State Wilderness Park

This trail is estimated at 9.7 miles one way from Kīholo Bay to the PWW Cone Summit, but is an important historic trail linking the makai and mauka portions of the PWW Ahupua`a. The major issue with this trail is how to cross the Queen Ka`ahumanu Highway safely. There may be a culvert under the highway that could offer a safe way across below the highway, and this needs to be investigated with the highway authorities. If no safe way to traverse the highway can be determined, the trail may need to be segmented and end at the highway.

b) Historical Trails

It is not fully known what historical trails exist in PWW, though several historical trails have been identified. During discussions at a PWW Advisory Council meeting, it was recommended that work begin with the Na Ala Hele Trails Program to conduct a review of the historical trails present in PWW. The Pu`uwa`awa`a - Keamuku Trail is one such trail recommended to include in this review. Once this inventory is completed, consultation with Hui `Ohana and the PAC should be made to see if any of these trails might be designated as Na Ala Hele Program Trails, bearing in mind the need to protect sensitive cultural and historical sites.

B. Improve User Safety and Access to Trails

When the existing Cone Trail was first opened up to the public, parking to access this trail was available near the Quarry and the round trip distance to the summit was 3 miles instead of the current 6.2 miles. Due to the public safety concerns of the Quarry (falling rocks, unstable slopes and footing, etc.) as well as potential asbestos concerns in a nearby building, an old buried diesel tank, and hazardous materials in and around the old hunter Quonset hut, parking was no longer allowed in this area and was moved back to the Hiker and Hunter Check-in Stations. The longer trail has made this hike less accessible to a broader spectrum of the general public. In order to improve public safety and trail access, the following are recommended.

1. Mitigate the Safety Hazards around the Quarry

The hazards mentioned above are safety concerns that the State should address to protect the public. The effort to mitigate all these hazards is currently beyond the means of the on-site PWW staff and may be best handled in cooperation with the DLNR Land Division and/or DLNR Engineering staff. It is recommended that DOFAW pursue funding so these public safety concerns are addressed in a timely manner.

2. Add Pedestrian Gates Where Needed

As potential new trails have been identified and approved, surveys should be conducted to determine where pedestrian gates are needed for access when trails cross locked ranch gates. Self-closing and latching pedestrian gates are recommended for conservation units in order to keep ungulates out. Simpler cattle exclusion gates could be used elsewhere where controlling cattle movement is the main concern. Funding for these improvements should be sought from funds such as State Capital Improvement Projects (CIP), grants like HTA and/or hunting funds administered by the Wildlife and Sport Fish Restoration Program provided under the Pittman-Robertson Federal Act, since hunters may also benefit from them.

3. Improve PWW Forest Reserve Information, Road and Trail Signs

Improvements to information signs have been made regarding the PWW Forest Reserve's rules, hiker registration and parking and these should continue to be improved as needed. Some information, such as dog rules, need to be addressed since the current trail maps erroneously indicate that dogs are only allowed on the Halapepe Trail. This is likely a hold-over from before the designation of the PWW Forest Reserve in 2007 when the land was unencumbered state land. Many of the roads and trails have little or no signs to help the public navigate the Forest Reserve, and improvements are needed.

a) PWW Forest Reserve Information Signs

PWW was added to the State of Hawai'i Forest Reserve System in 2007 and as such lacks infrastructure appropriate for this designation. Signs that show PWW is a designated State Forest Reserve with list of rules should be installed at key points throughout the area. Some of these signs have recently been installed, but they should be placed at other main access points. More specific signs listing rules and guidelines (e.g. Rapid 'Ōhi'a Death, biking restrictions, etc.) should be placed in areas where they are needed. Signs should be added that make it clear to hikers that dogs are allowed in the Forest Reserve, but must be leashed at all times. (Note – When the Reserve is opened up for hunting, hunting dogs may be allowed off leash beyond the Safety Zone by permitted and licensed hunters, but must be within voice control.)

b) Trail Signs

Trail signs point the way for users and help them stay on the trail. It is recommended to survey existing and new trails and add signs and arrows where needed to clearly show trailheads and pathways.

c) Road Names and Signs

As mentioned earlier, many of the roads in the Forest Reserve are unnamed and road signs are nonexistent, thus making it difficult to reference maps and navigate the Reserve. It is recommended that these roads be appropriately named using either Hawaiian and/or historically related place names for these roads that honor the historical and/or cultural use of the lands. Once the proposed road names are approved, install road signs and update Forest Reserve maps accordingly.

4. Investigate Public Parking Closer to the Cone

It is recommended that a suitable parking area be investigated that is closer to the Cone to allow broader public access to summit the PWW Cone. For example, parking near the Hauaina Conservation Unit with a trail along the base of the Cone, or a parking area near the lower trailhead of the Reservation Trail might be possibilities. Several other trails recommended in Section II A might also benefit from a new parking area closer to the Cone, with ideally several trailheads available to the public from this location.

C. Improve Cultural & Environmental Educational Material

The existing trail map brochures contain a small amount of information on the history, culture, biota and geology of the Reserve. Recently UH Manoa developed an informative geographical pamphlet on Pu`uwa`awa`a. There are also some informational posters at the Hiker Check-in Station. There is more information that could be shared regarding cultural, historical and environmental aspects that would help the public learn about and better appreciate these “Crown lands” and its native ecosystems.

1. Research and Gather Material

There is quite a bit of existing material on the flora, fauna, geology, and cultural and historical aspects of the land. Much of this material exists in the PWW Base Yard Office or on the website http://www.hetf.us/page/puu_waa_waa/, but an effort should be made to reach out and gather other pertinent material, e.g., from the Hui `Ohana, Kona Historical Society, Paniolo Preservation Society, etc. The State should look into creating a repository for information about Pu`uwa`awa`a that would make it accessible to the public such as a website.

2. Trail Map Brochures

Existing trail map brochures have not been updated in over ten years and some of the foliage and signs discussed in the brochures are no longer there. These need general updating and the new approved trails will also need trail map brochures developed. Once developed, it is recommended to add these brochures to the Na Ala Hele website and posted at the Hiker Check-in Station.

3. Public Educational Material

Develop or acquire educational posters, brochures, interpretive signs, wayside exhibits, etc. on the flora, fauna, geology, cultural and historical information of the Forest Reserve, for public availability or viewing at the Hiker Check-in Station, the PWW Education Center (aka Meeting House) and other key locations. The Hauaina Conservation Unit where the Education Center is located is being restored to dryland forest with interpretive trails that lend themselves to more

permanent educational signage to help the public learn about and fully appreciate this native ecosystem.

4. Website

Move the content from the old puuwaawaa.org website to the DLNR website on Pu`uwa`awa`a Forest Reserve. Update the website information on PWW, including trail maps, educational materials, etc. Utilize the Na Ala Hele trail website to also convey trail and forest reserve educational material.

5. Continue Improving the PWW Education Center

The Meeting House at the main PWW reservoir has been designated as an Education Center in the Management Plan. Extensive updating of this facility as well as the Lake House is being undertaken by the USDA Forest Service as part of the HETF program. The public educational material discussed in paragraph 3 above is an important resource for the Education Center area as this location is used for many volunteer and educational gatherings. Educational kiosks and learning stations are also recommended as envisioned in the Management Plan.

D. Public Field Excursions and Commercial Ecotourism

The Forest Reserve provides the backdrop for many possible free public field excursions and commercial ecotourism activities. DOFAW is currently in the process of promulgating rules to allow for expansion of the types of commercial permits that they will be able to issue, including commercial use permits for low impact, commercial ecotourism. A major benefit of this effort is that the majority of the revenue derived from the commercial activity will be put back into forest reserves, thus provide an important funding source for needed improvements.

The following types of free public field excursions or commercial ecotourism have strong educational and conservation merit, and could commence relatively quickly to provide more public opportunities to learn about and better appreciate the historical, cultural and natural resources in the Pu`uwa`awa`a Forest Reserve.

1. Guided Bird Watching

A free bird watching excursion was offered in PWW in 2016 and more excursions like this are encouraged. The PWW Forest Reserve is also listed on the 90 mile Hawai`i Island Birding Trail map, which will likely raise public interest in bird watching here and may open up commercial ecotourism bird watching opportunities.

2. Historical Tours

There is rich history in the lands of PWW, and several years ago The Kona Historical Society led a historical tour by jeep through PWW. Additional tours of this nature should be explored for offer to the public. (Note – a DLNR commercial use permit will be required if compensation is involved.)

3. Other Commercial Ecotourism

Several commercial ecotourism companies exist on Hawai`i Island which may be interested in conducting ecotourism in PWW. The types of commercial ecotourism that are encouraged include educational and conservation focused

tours such as wildlife, botany, ecosystems, geology, ecological restoration, historical or cultural based tours, and which have low cumulative environmental impact on the forest reserve. The privilege to access the summit of the PWW Cone by vehicle, which is in a Conservation District Resource (R) subzone, may be allowed but should require 4 wheel drive vehicles to minimize impact to the environment. Commercial ecotourism operators are encouraged to consider ways to make their tours more affordable for Hawai`i residents.

III. Longer Term Potential Recreation Activities

The goals and activities listed above in Section II are recommended as higher priority items. There are additional longer term recreation activities, mentioned in the Management Plan Objective 46 related to commercial ecotourism, which will require additional time to thoroughly address potential impacts of the activities. These longer term commercial ecotourism activities include:

A. Camping

Opening up the Forest Reserve for camping by the general public will take a lot of thoughtful consideration, investigation, planning, BLNR permitting and resources. Rules, requirements, location, emergency provisions, fire concerns, facilities such as composting toilets, designated parking, cooking pits and picnic tables, labor for check-in, monitoring, emergencies and maintenance and campground reservations are among the items needing to be determined.

B. Commercial Horseback Riding

Activities involving horseback riding including trail rides, overnight pack trips with horses, ranch or “dude activities”, etc. are other areas mentioned as possibilities under long-term commercial ecotourism in the Management Plan Objective 46. Although horses are used in PWW for cattle grazing management, offering these activities to the general public would have to be done by a commercial operator, and will require additional planning, requirements and resources to be put in place.

IV. Recreation Activities Not Included

In the past, the following recreation activities have been asked about by the public for possibility at PWW. None of these activities are included as recreation possibilities in the Management Plan, and are considered incompatible with the overall Management Plan or not allowed by Forest Reserve rules unless with a permit from BLNR.

A. Paragliding and Hang Gliding

The cliffs and pu`u's in the Forest Reserve are tempting launch points for paragliding and hang gliding, but these activities are not allowed by Forest Reserves rules without a permit from the BLNR or an authorized representative.

B. ATV and 4 Wheeling

Habitat destruction, ecological sensitivities, noise pollution and safety are some of the concerns for not including these activities.

C. Spelunking

Safety, fragile and ecologically sensitive resources, monitoring and emergency response are the primary concerns for not including this activity.

D. Use of Drones

The use of drones by the public without a permit from the BLNR or an authorized representative is not allowed.

V. Funding Mechanisms

The following funding mechanisms are possibilities to help achieve the recreation goals recommended in this document.

A. Grants

Since the recreation activities discussed above are also sought out by tourists, the Hawai'i Tourism Authority is one possible source of grant funding to help pay for the labor and material needed to accomplish these goals. The Hawai'i Community Foundation also offers a number of potential grants that might aid with funding requirements. Several nonprofits are listed in Section VI as possible partners that may be willing to assist with pursuing grant funding, and the REV subcommittee is also willing to assist in this effort.

B. DOFAW Budget

To the extent possible, the DOFAW budget for PWW and Na Ala Hele Trail Program should be supplemented for expenses which are ongoing in nature, such as repair and maintenance of the Education Center, replacement of signs, brochures, trail maps, etc.

C. State CIP Funding

Capital improvement projects at PWW may be able to be funded through submission to the annual State CIP budgeting process.

D. Hunting Funds

Since several of the recommendations may also assist with hunting access, funding sources such as the Pitman-Robertson (Wildlife and Sport Fish Restoration Program) fund could also be investigated.

E. Friends of PWW

Investigating the possibility of forming a "Friends of PWW" nonprofit is recommended to help with fund raising, taking in donations, and leading recreation, education and volunteer activities at PWW. If enough interested people can be found to actively participate in this Friends group, then the Friends of Hakalau Forest National Wildlife Refuge is a good starting point for guidance in developing this organization. When a Friends of PWW nonprofit is formed, it is recommended that an MOA with DLNR be established that fully describes their planned activities and fundraising at PWW, including other nonprofits with whom they plan to partner.

VI. Suggested Partnerships

Strong community partners are essential to accomplish the various recommendations outlined here. Following in no particular order are some of the partnerships that could help bring these goals to fruition. Many of these partners have already provided support to PWW in the past as described below.

A. PATH (People's Advocacy for Trails Hawai'i)

PATH is the nonprofit partner for the annual "Run for the Dry Forest" event at PWW with the mission to safely connect people and places on Hawaii Island with pathways and

bikeways. An MOA similar to the one PATH has at the Honua`ula Forest Reserve for trail building and maintenance could be pursued.

B. Hui `Ohana mai Pu`u Anahulu a me Pu`u Wa`awa`a (Hui `Ohana)

The Hui `Ohana represents the lineal descendants of Hawaiian families that have been part of the lands in PWW and Pu`u Anahulu for many generations. They have invaluable knowledge of the land, its history and cultural importance, and share this information at many educational and volunteer gatherings in PWW. Consultation with the Hui `Ohana is strongly encouraged in moving forward the recreation goals.

C. Hui Aloha Kīholo

This nonprofit is dedicated to protecting and preserving the Kīholo Bay area and includes lineal descendants of the PWW ahupua`a. They are a valuable resource historically, culturally and environmentally for the lands encompassing the entire ahupua`a, and may be willing to help with leading public tours and providing historical and cultural information.

D. E Mau Na Ala Hele

This nonprofit helped to establish the existing trails in PWW and acquired the funding for the Hiker Check-in Station. They may be willing to assist with new trail development and maintenance through an MOA similar to PATH, or assist in acquiring grant funding for trail related improvements.

E. Kona Historical Society

In the past, the Kona Historical Society hosted historical tours in PWW, and contact could be made to determine their interest in conducting future tours. A DLNR commercial permit will be required if compensation is involved.

F. Ka`ahahui `O Ka Nāhelehele

This dry forest nonprofit in the past acquired grant funding for conservation unit fencing and improvements to the PWW Education Center, and could assist with pursuing grant funding for specific dry forest related projects.

G. Aloha Sports Kona

The mission of this sports promotion company is to bring to the Big Island of Hawaii a renewed focus on promoting and bringing to the athletic community new and more varied off-road running and biking events, thus promoting a healthy lifestyle. Besides hosting events and raising funds for nonprofits, they could also help coordinate volunteers for trail maintenance and educate trail users on applicable rules.

