

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawaii 96813

September 11, 2009

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

Aloha Land Board Members:

SUBJECT: ANNUAL PROGRESS BRIEFING TO THE BOARD OF LAND AND NATURAL RESOURCES REGARDING IMPLEMENTATION OF THE MANAGEMENT PLAN FOR THE AHUPUA'A OF PU'U WA'AWA'A AND THE MAKAI LANDS OF PU'U ANAHULU

BACKGROUND:

On July 25, 2003, the Board of Land and Natural Resources approved in concept the *Management Plan for the Ahupua'a of Pu'u Wa'awa'a and the Makai Lands of Pu'u Anahulu* ("Management Plan"), a ten year plan developed jointly by the Divisions of Forestry and Wildlife and State Parks. In approving this Management Plan, the Board directed DOFAW and SP to provide the Board with annual updates through the following recommendation:

"3) Require annual reports from staff that identify progress and the effectiveness of the public and private sector involvement in implementing the Management Plan."

This submittal provides a status report on implementation of the Management Plan from 2003-2009, with accomplishments over the past year indicated in bold font at the end of each Objective.

Status of the Pu'u Wa'awa'a Advisory Council (PAC): The PAC is a group of volunteers who represent diverse areas of expertise relevant to the implementation of the Management Plan. Members represent the *Hui 'Ohana mai Pu'u Anahulu a me Pu'u Wa'awa'a* (2 – Ku'ulei Keakealani, Clayton Tremaine), Cultural expert (1 – *vacant*), Neighboring Landowner (1 – Robby Hind), Natural Resource Specialists (3 – Michael Tomich, Susan Cordell, Jon Giffin), recreation use specialists (3 – Bob Okawa, Frank Sayre, Alan Nakagawa), business/ecotourism specialist (1 – *vacant*), 2 grazing management specialists (2 – Corky Bryan, Mark Thorne), and 1 grant writing/coastal zone specialist (1 – Carolyn Stewart). **In June 2009, DOFAW solicited applications to fill the 2 vacancies for the Cultural Resources and Business/ecotourism seats. No qualifying applications were received and another solicitation will be issued this**

fall. The PAC has met three times between the last Board submittal update, and numerous subcommittee meetings have been held covering the various subject areas of the Management Plan. The next meeting is scheduled for October 4, 2009.

The progress to date toward implementing *The Management Plan for the Ahupua'a of Pu'u Wa'awa'a and the Makai Lands of Pu'u Anahulu* by Subject Area and Objective is as follows:

Administrative Priorities:

Objective 1. Initiate legislation for establishment of a special fund

Achieved, 2007. On October 17, 2007 as Pu'u Wa'awa'a was officially set-aside as a Forest Reserve (PWW), which has an associated Special Fund.

Objective 2: Develop a Master Plan for the proposed Kīholo State Park

Initiated, expected end date 2012. On December 31, 2007, Governor Linda Lingle released funds to develop a Master Plan and Environmental Assessment for Kīholo. **State Parks planners anticipate the planning process to begin later in 2009, with involvement by Hui Aloha Kīholo, and 501(c)(3) community group that represents Kīholo on the PAC.**

Objective 3. Develop new DLNR administrative rules for land areas not covered under present DLNR rules

Achieved, 2007. This Objective has been addressed through Forest Reserve rules, as indicated under Objective 1.

Objective 4. Fund and hire a Management Plan Coordinator

Achieved 2004, 2007. Position was funded and hired under the LNR 407 Program in 2007. The initial priority under this Objective, to establish or identify an existing 501(c)(3) partner organization, has been accomplished under a formal agreement with Ka 'Ahahui o Ka Nahelehele in 2007, a group incorporated in early 2007 with the mission to assist public and private land managers in the general stewardship of native dryland forests. Other non-profits have also served in partnership roles for specific functional areas of the Management Plan.

Fire Management:

Objective 5. Increase public fire hazard awareness through educational programs

Ongoing, no end date. Signs have been posted along Highway 190, and Coordinator produced an informational brochure in 2006 about Pu'u Wa'awa'a and surrounding dryland forest areas. In 2008, coordinator prepared a grant proposal that was funded by the American Hiking Society to construct an informational kiosk informing visitors about the area, including the wildfire hazard risk. **A 2009 grant was awarded for the**

development of an Educational Resource Guide that includes wildfire threat to the natural resources in the dryland forest as well as to public safety. Wildfire education is an ongoing theme during outreach events and field trips in Pu‘u Wa‘awa‘a.

- Objective 6. Reduce fire hazard at Pu‘u Wa‘awa‘a using prevention measures**
Ongoing, no end date. Fire and fuel breaks have been established and maintained along Highway 190 as well as throughout the high fire hazard areas within critical habitat at Pu‘u Wa‘awa‘a. Fine fuel loading across the general landscape has also been managed within the existing grazing areas through Right-of-Entry permits. Access to Pu‘u Wa‘awa‘a beyond the safety zone continues to be restricted during extreme dry conditions to reduce the potential for human-related fire starts. **Federal stimulus funds have been earmarked for a project at Pu'u Wa'awa'a to expand the fire break system. A North Kona Wildfire Management Plan, that includes Pu'u Wa'awa'a and Pu‘u Anahulu, is being developed for the Three Mountain Alliance by a private contractor.**
- Objective 7. Provide fire pre-suppression management for conservation units**
Ongoing, no end date. Coordinator has basic wildland fire training and participates in refresher courses. Re-lining of the Lake House Reservoir has been completed and filled; “green break” has been maintained along Highway 190; 20,000-gallon water tank in the remote western end of the ahupua‘a has been installed. **Fire break signage system to expedite wildfire suppression has been designed and installation will begin in the fall. Management plans for each conservation unit are currently being prepared. In process are the Forest Bird Sanctuary Plan and the Henahena Mauka Plan.**
- Objective 8. Effectively suppress fire in the event that a wildland fire does occur at Pu‘u Wa‘awa‘a**
Ongoing, no end date. Wildfire preparedness and prevention actions have helped to reduce and minimize impacts of fire starts over the past few years. Fortunately, the last fire in Pu'u Wa'awa'a was in August of 2006, which was limited to 3 acres of degraded land.

Natural Resource Management:

- Objective 9. Fence the best remaining sections of native forest and remove ungulates from these conservation units on a priority basis**
Initiated, anticipated end date: 2013. Of the 12 conservation units indicated in the Management Plan, four have been constructed to date: the Waihou Unit Phase I (204 acres), the Upper Kipuka Oweowe Unit (10 acres), the Pu‘u Wa‘awa‘a Cinder Cone Unit (70 acres), and the Pu‘u Wa‘awa‘a Forest Bird Sanctuary (“FBS,” 3,806 acres). Kipuka Oweowe, Waihou 1, and the Cone Unit are ungulate-free. The trap-and-release

project for the FBS was initiated in February of 2007, with over **1,100 feral pigs removed to date**. Maintenance of these fence enclosures, alien plant removal, and native outplantings has been conducted by the NARS field crew and volunteer efforts. **Funds have been secured to construct the next enclosure, the Henahena Unit, which will protect approximately 700 acres of mid-elevation remnant forest and numerous lava tube systems. This will bring the total protected area within Pu'u Wa'awa'a to 4,790 acres, with another 2,297 to be protected by the other units proposed in the Management Plan.**

Objective 10. Protect native flora and fauna by controlling non-native predators
Ongoing, no end date. A routine predator control program for rats, cats, mongoose and wild dogs has been conducted since late 2004.

Objective 11. Control invasive weeds that suppress native plant populations
Ongoing, no end date. The Pu'u Wa'awa'a Volunteer Work Program was initiated and conducted on a monthly basis by the Coordinator since December of 2004, and one of the main tasks is invasive weed removal, targeting populations within and outside of established conservation units. **Weed control work has been addressed by the DOFAW wildlife staff, DOFAW field crews, NARS field crews, the PWW Volunteer Program, and special groups like the Youth Conservation Corps by targeting critical areas for particularly aggressive species such as banana poka, fire weed, Spanish needle, tree tobacco, and others.**

Objective 12. Protect isolated occurrences of rare and endangered species
Initiated, ongoing. Implemented a paddock-by-paddock plan for fencing individual endangered species using own fieldwork time and individual and group volunteer efforts. Instead of a 60-plus acre enclosure as indicated for the proposed 'Aiea unit under Objective 9 above, individual fences have been installed around these endangered trees. This has reduced material costs, will reduce maintenance needs, and facilitate fuels management between trees. **The fencing plan for isolated rare trees in the 'Ohia and Waihou paddocks is ongoing, it is anticipated that spot fencing of rare flora will continue well beyond the 10-year life of the Management Plan.**

Objective 13. Restore native plant populations including rare and endangered species
Ongoing, no end date. Outplantings have been organized by NARS staff and the Coordinator, and have been conducted by staff, special groups, and the Volunteer Work Program in all four main conservation units as well as several smaller units throughout Pu'u Wa'awa'a. **To date, nearly 70,000 common and rare plants have been planted previous to and during rainy seasons, and follow-up watering and weed management has been conducted by the field crews and volunteers.**

Objective 14. Develop a resource management and monitoring program

Initiated, ongoing. The Hawaii Permanent Plot Network (HIPNET) has established a ten hectare plot in the Forest Bird Sanctuary through the Hawaii Experimental Forest, which will monitor changes in the upper forest areas on a long term basis.

Objective 15. Create a native plant seed orchard at the Pu'u Wa'awa'a Meeting House

Initiated, expected end date 2011. This project was initiated in September of 2006 with the establishment of a 7,000 square-foot enclosure between the Meeting and Lake Houses, with nearly 150 plantings to date representing 2 dozen species. **The 50-acre reservoir paddock ("Hauaina Enclosure") re-fencing project was completed in August 2009, and will serve as a nene habitat restoration project as well as a large-scale native plant and tree seed orchard.**

Objective 16: Preserve and protect unique native invertebrate populations at Pu'u Wa'awa'a and the makai lands of Pu'u Anahulu

Initiated, no end date. Administering research permits for the study of native bee populations, and coordinated the withdrawal of commercial bee keepers from Pu'u Wa'awa'a, who have been operating in conflict with native bee habits for over 70 years. Worked with game managers to relocate bee keeping activities to Pu'u Anahulu. **The proposed Henahena Unit will protect and enhance invertebrate populations present in the numerous cave systems in this area.**

Objective 17: Protect and enhance native bird populations and their habitat

Ongoing, no end date. The fencing and ongoing predator control programs for the Pu'u Wa'awa'a Forest Bird Sanctuary is a first step in the protection and future enhancement of native bird populations in the upper forest reaches at Pu'u Wa'awa'a. Research projects related to forest bird behavior and habitat are ongoing. Once ungulates are removed from the FBS, known forage trees and plants will be outplanted to improve habitat. **The Lake House Reservoir has been relined, and the Hauaina Enclosure project will enhance 50 acres of degraded landscape for nene, stilt and coot habitat, a project funded in part by NRCS over the next 3 years.**

Objective 18. Manage Fisheries Resources at Kiholo Bay

Initiated, no end date. This is a near-term priority for *Hui Aloha Kiholo* community partner, who has already drafted a bill that would ban any net fishing in the inner bay area, a habitat essential for juvenile marine life for the greater coastal region. **This proposed rule change is still pending. Master Planning will address near-shore resource management.**

- Objective 19. Continue sea turtle protection and research in the Kīholo Bay Area**
Ongoing, no end date. Hawaii Preparatory Academy and National Marine Fisheries Service continue their ongoing sea turtle research in Kīholo Bay.
- Objective 20. Protect anchialine pool resources in the coastal regions of Pu‘u Wa‘awa‘a and Pu‘u Anahulu**
Ongoing, no end date. **Master Planning will address anchialine pool protection and management. Maintenance of weeds at Waialepī, the largest anchialine pool on State land at Kīholo, is ongoing.**
- Objective 21. Control feral ungulate populations makai of the Queen Ka‘ahumanu Highway**
Ongoing, no end date. **The trap-and-relocation of these animals in a nearby game management area is ongoing. It is anticipated that feral goat ingress makai of Queen Ka‘ahumanu Highway will continue indefinitely.**
- Objective 22. Protect biological cave resources**
Ongoing, expected end date 2013. Since 2004, the research permits have been issued to Douglass Medville of the National Speleological Society to survey caves in the Kīholo and greater Pu‘u Wa‘awa‘a region. Maps of surveyed caves are provided to the state at no cost. **Mr. Medville and his team continue to work pro bono in Pu‘u Wa‘awa‘a under a Right-of-Entry permit. Maps are archived in the Coordinator’s office for use in a future Cave Management Plan for Pu‘u Wa‘awa‘a.**
- Objective 23. Provide areas for scientific research supporting restoration efforts**
Achieved, 2007. Coordination with USFS and the development of the Hawaii Experimental Tropical Forest is ongoing.
- Objective 24. Fund and hire permanent field staff to implement natural resource management objectives**
Ongoing, expected end date 2013. **Seeking and retaining qualified individuals to serve on the field crew has been problematic. The long commute distances and field crew pay scale has limited retention and field work productivity. With the current economic situation, funds secured for a North Kona field crew under the TMA have been diverted to extending existing positions in TMA in east Hawaii.**

Grazing Management:

- Objective 25. Continued use of grazing as a means to control fine fuels build up along Highway 190, and at both existing and future conservation units**
Ongoing, no end date. Permitted grazing for fine fuels control along Highway 190 has been facilitated and overseen by the Coordinator since March 2005. Expanding the water system and an finalized Grazing

Management Plan will improve the effectiveness of permitted grazing at Pu'u Wa'awa'a.

- Objective 26. Develop and implement a long-term grazing plan supporting the diverse objectives of the Pu'u Wa'awa'a management plan**
Initiated, expected end date 2009. **A draft of the Grazing Management Plan is pending.**

Public Hunting Program:

- Objective 27. Continue to provide a safe and quality hunting environment**
Ongoing, no end date. The public hunting program continues at Pu'u Wa'awa'a, and Coordinator provides information on upcoming hunts to related individuals and organizations, as needed.
- Objective 28. Provide sustainable public hunting opportunities**
Ongoing, no end date. The public hunting program is integrated with other aspects of Management Plan implementation.
- Objective 29. Enhance game habitat in selected areas of Pu'u Wa'awa'a**
Ongoing, no end date. **Several game bird guzzlers have improved the availability of water in several areas within the GMA. As stated in the Pittman-Robertson Plan for Hawaii Island, mitigation measures are implemented to offset habitat loss due to game animals.**
- Objective 30. Utilize public hunting to reduce feral ungulate pressure on remaining native plant resources in proposed conservation unit areas**
Ongoing, expected end date 2013. This was done in the FBS as part of a phased ungulate removal plan. All constructed conservation units are ungulate-free or are approaching ungulate-free status. Public hunting continues in areas proposed as conservation units.
- Objective 31. Promote youth hunter programs**
Pending, initiate with approval of new hunting rules, 2009. Youth hunting program has been discontinued until changes in the hunting statutes and rules will authorize youth hunting seasons.
- Objective 32. Promote disabled hunter access programs**
Pending, initiate with approval of new hunting rules, 2009. Program will not be reinstated until changes in the hunting rules allow hunting especially for persons with disabilities.
- Objective 33. Determine hunting seasons for feral sheep, goats and pigs based on monitoring their movement, population trends, and habitat conditions**

Initiated, expected end date 2009. The Habitat Conservation Plan (HCP) for Pu'u Wa'awa'a and Pu'u Anahulu has been ongoing since 2003, and will be final pending the hiring of a new project coordinator.

Objective 34. Expand predator control program

Ongoing, no end date. This has taken place with the initiation of predator control in the FBS and Waihou units, and the FBS program has expanded to small mammals in addition to feral pigs, sheep and goats.

Objective 35. Develop game bird guzzlers

Ongoing, expected end date 2013. Wildlife staff has constructed several units over the past 4 years.

Objective 36. Establish dove flights in Pu'u Wa'awa'a by establishing forage plots

Not initiated, startup date to be determined by Hunting Subcommittee of the PWWAC.

Objective 37. Increase game bird hunting opportunities

Not initiated, expected startup date 2011. Habitat has not improved to the point where additional game bird hunts can be scheduled. Special hunts or additional opportunities cannot be scheduled until changes in the hunting statutes and rules are implemented to allow this objective to be pursued.

Objective 38. Manage pasture vegetation via grazing to provide game bird habitat

Ongoing, no end date. Pasture vegetation is being managed per Objective 25.

Objective 39. Encourage game species research within Pu'u Wa'awa'a

Ongoing, no end date. The current HCP involves game species research.

Objective 40. Develop a bird dog training area within Pu'u Wa'awa'a

Achieved, 2005. Three bird dog training areas have been designated within Pu'u Wa'awa'a by Wildlife staff in 2005. Since then, there have been no inquiries from the hunting public to utilize these training areas.

Objective 41. Fund and hire one permanent position to implement management objectives for hunting management within Pu'u Wa'awa'a

Not initiated, expected end date 2013.

Trails, Access and Ecotourism:

Objective 42. Survey and develop historic trails within and adjacent to the ahupua'a for public use

Ongoing, expected end date 2013. All known historic trails have been surveyed and some are open through the Na Ala Hele Program, however use of certain historic trails is not encouraged due to the lack of staff to

maintain and provide oversight of these trails over remote State lands. Old bulldozer paths that have become overgrown are cleared as appropriate to provide public access as trails and provide the basis for the public hiking program at Pu‘u Wa‘awa‘a, which currently features **about 10 miles of trails in the hunting Safety Zone**. Coordinator has directed volunteer efforts to clearing trails, and has developed signs and a trail map/brochure for the system.

Objective 43. Document Current Public Use of the Kīholo Bay Area

Achieved, 2007. Document: *Kīholo State Park Reserve: A Social Assessment*. Elizabeth Pickett, May 2007. The Kīholo State Park Master Plan will update public use information through its development process.

Objective 44. Construct new trail segments as needed

Ongoing, no end date. Currently, existing bulldozer paths are utilized for the trail system as stated above in Objective 42. There are enough of these existing surface disturbances within the hunting Safety Zone to develop a system that can be open through hunting seasons routing visitors through the dryland forest and away from sensitive flora as needed. Existing 4-wheel drive roads outside of the Safety Zone will provide seasonal access for hiking to the more remote areas and campgrounds on a permit basis at which time the management capacity of the program is adequate to do so.

Objective 45. Provide public access to Pu‘u Wa‘awa‘a on selected roads

Achieved, 2004. Vehicular access is limited to the Safety Zone, as vehicle-related fire starts were historically responsible for several wildfires in Pu‘u Wa‘awa‘a, and for the potential conflict with ranching and other Plan Objectives. Here, roads will be maintained so that 2-wheel drive cars can be safely driven to trailheads, gathering places and to other points of interest for visitors to the Forest Reserve.

Objective 46. Manage short- and long-term commercial ecotourism activities

Not initiated, expected end date 2013. The Departmental policy on commercial activities provides for adequate protection of the resource and non-fee use by the public prior to development of commercial use, and therefore it is premature to develop ecotourism activities at Pu'u Wa'awa'a at this time.

Objective 47. Fund and hire permanent field staff to implement management objectives for trails and access projects and the proposed Kīholo State Park, and support enforcement within for both ahupua‘a

Not initiated, expected end date 2013.

Cultural and Archeological Resources:

Objective 48. Conduct a comprehensive cultural and archaeological survey of Pu‘u Wa‘awa‘a and the makai portion of Pu‘u Anahulu

Not initiated, expected end date 2010. Funding was not approved for this objective in 2008. Other funding sources are currently being sought.

Objective 49. Protect and Restore Cultural Sites

Not initiated, expected end date 2010. Pending the completion of Objective 48 above.

Objective 50. Establish protocol for sustainable traditional and cultural gathering

Initiated, expected end date 2010. The Advisory Council subcommittee on Cultural Resources is in the process of developing this protocol.

Cultural and Environmental Education Program Development:

Objective 51. Fund and hire an education center staff to initiate education and volunteer programs

Initiated, expected end date 2010. A proposal is under review to fund this position. Education and volunteer programs are ongoing and currently under the direction of the Coordinator.

Facilities and Infrastructure:

Objective 52. Upgrade and maintain Structures B3, B4, B5, B6, B8, B10, B12, B13, B14 and B15 to support Management Plan operations and objectives

Ongoing. B3, B10, B14, and B15 upgrades are complete with maintenance ongoing; B4, B5, B6, and B8 upgrades are in process, expected end date 2011; and structures B12 and B13 will be demolished as the old quarry site has been selected for the new Hawaii Experimental Tropical Forest facilities, expected end date 2011.

Objective 53. Upgrade Structures B1, B2 and B9 for use by livestock permittee

Achieved, 2004. These structures have been maintained and are in use by the livestock permittee and DOFAW staff.

Objective 54. Establish an education center at Structure B7

Initiated, expected end date 2011. This structure has been utilized by various groups for education-related purposes regularly over the past five years, but requires extensive renovations. A fund administered by non-profit partner has been dedicated to renovations to Structure B7 as an interim education center, until which time a permanent facility is established in partnership with the HETF at the old quarry site.

- Objective 55. Demolish and remove Structure B11**
Achieved, 2006.
- Objective 56. Upgrade Cultural and Environmental Education facilities**
Initiated, expected end date 2012. See Objective 54. A non-profit partner group, Hui Aloha Kiholo, is working toward securing funds needed to upgrade structure B16. **This will also be addressed in the Kiholo Master Plan (Objective 2).**
- Objective 57. Repair water reservoirs and tanks at three existing sites**
Ongoing, expected end date 2013. **Re-lining of the meeting house reservoir is complete. Catchment adjacent to Po‘o Ho‘oho‘o reservoir has been cleared and funds are being sought to re-line this reservoir. Re-lining the Hale Piula catchment has not been initiated.**
- Objective 58. Install seven new water catchment tanks in Pu‘u Wa‘awa‘a**
Initiated, expected end date 2013. Three catchment tanks have been installed: Kipuka Oweowe, Waihou 1, and Pu‘u Wa‘awa‘a Cone Units. The other four are pending completion of the proposed conservation units per Objective 9.
- Objective 59. Upgrade and expand existing waterline system**
Initiated, expected end date 2011. Negotiations with an adjacent landowner to establish a utility right-of-way to bring water from Hawaii County’s Kaloko tank were unsuccessful. **The 4-acre Po‘o Ho‘oho‘o catchment surface has been cleared to provide water to Po‘o Ho‘oho‘o and the Lake House Reservoir. Funds are being for a waterline between the two reservoirs.**
- Objective 60. Repair and maintain existing roads within Pu‘u Wa‘awa‘a**
Ongoing, no end date. **The main paved road was repaired in March of 2009. Several unimproved roads were re-graded through and around the Safety Zone in 2009. The main unpaved roads across the mauka and makai lands have been mowed or sprayed to manage vegetation to reduce fire starts.**
- Objective 61. Maintain the airplane landing strip**
Achieved, ongoing, no end date. The airstrip is maintained as an emergency landing facility.
- Objective 62. Develop a Public Shooting Range**
Deferred, 2004. The public shooting range is now located outside of the Management Plan project area and is being developed by a working group of interested staff and citizens.

Funding summary for FY09:

In-kind Contributions

Grazing Permittees – cattle, water, fencing, labor, equipment, fuel	\$300,000
Volunteers – weeding, planting, seed collection, trail work (3,500 hrs)	<u>\$ 73,500</u>
	\$373,000

Partner/Grant Funding

NRCS Grant – 2009 allocation	\$ 45,157
HTA Grant – Fire Sign Network Project	\$ 19,500
HTA Grant – Education Resource Guide	\$ 30,000
HTA Grant – Trailhead Kiosk, Trail Expansion, Volunteer Support	\$ 10,000
Section 6 USFWS Funds	\$ 14,000
Kiholo State Park Master Planning (from FY08)	\$500,000
State Watershed Funds – Fence materials (Henahena, field equipment)	<u>\$ 75,000</u>
	\$693,657

Revenue

Cell Tower lease fee – Pu‘u Anahulu	\$ 18,400
Collection Permits	<u>\$ 2,200</u>
	\$ 20,600

TOTAL FY09 **\$1,087,257**

Respectfully submitted,



PAUL J. CONRY
Administrator

Attachment

APPROVED FOR SUBMITTAL:



LAURA H. THIELEN, Chairperson
Board of Land and Natural Resources

Objective	Percent Complete (0-100%)							End Date
1								2007
2								2012
3								2007
4								2004
5								None
6								None
7								None
8								None
9								2013
10								None
11								None
12								None
13								None
14								None
15								2006
16								None
17								None
18								None
19								None
20								None
21								None
22								None
23								2007
24								2013
25								None
26								2009
27								None
28								None
29								None
30								None
31								2009
32								2009
33								2009
34								None
35								2013
36								2013
37								2013
38								None
39								None
40								2005
41								2013
42								2013
43								2007
44								None
45								2004
46								2013
47								2013
48								2010
49								2010
50								2010
51								2010
52								2011
53								2004
54								2011
55								2006
56								2012
57								2013
58								2013
59								2011
60								None
61								None
62								Deferred

Implementation Progress by Objective for the Management Plan for the Ahupua'a of Pu'u Wa'awa'a and the Makai Lands of Pu'u Anahulu, 2003.