

**GRANT AGREEMENT FOR PU'U KUKUI WATERSHED PRESERVE
MANAGEMENT AND PROTECTION BETWEEN THE COUNTY OF MAUI AND
TRI-ISLE RESOURCE CONSERVATION AND DEVELOPMENT COUNCIL, INC.**

THIS AGREEMENT made and entered this 3 day of October, 2016, by and between the COUNTY OF MAUI, a political subdivision of the State of Hawaii, through its Department of Water Supply, (hereinafter "County" or "DWS"), whose principal place of business and mailing address is 200 South High Street, Wailuku, Maui, Hawaii 96793, and TRI-ISLE RESOURCE CONSERVATION AND DEVELOPMENT COUNCIL, INC., a Hawaii non-profit corporation, (hereinafter "RC&D"), acting through its Maui office, whose principal place of business is 244 Papa Place, Suite 210, Kahului, Hawaii 96732 and mailing address is P. O. Box 338, Kahului, Hawaii 96733.

WITNESSETH:

WHEREAS: Pu'u Kukui means "Hill of Enlightenment". Pu'u Kukui Watershed Preserve (PKWP) at over 8,600 acres is located on the northwest side of Mauna Kahalawai and stretches at about 480 feet elevation at Honokohau Stream to the Pu'u Kukui Summit;

WHEREAS: PKWP, one of the wettest spots on earth, was established in 1988 to protect watershed forest and associated native plants and animals;

WHEREAS: the primary sources of water for the DWS Mahinahina Water Treatment Facility via the Honokohau Ditch System are the watersheds of Honokohau and Honolua, the headwaters of which, are both within the PKWP;

WHEREAS: it is home to plant and animal species that exist nowhere else in Hawai'i, let alone, the rest of the world;

WHEREAS: Maui Land & Pineapple Company, Inc. works with The Nature Conservancy of Hawaii and the State Natural Area Partnership to protect the vital watershed lands of the West Maui mountains. This partnership ensures protection of a crucial water resource for the community, as well as the rare and endangered species of plants and animals; and

WHEREAS: Pu'u Kukui is a natural watershed wherein most of the West Maui community relies on water. Consumers of water from the water delivery systems of the DWS stand to benefit from the protection and restoration of the subject lands.

NOW THEREFORE, IT IS HEREBY AGREED, by and between the DWS and the RC&D that the proposal attached as Exhibit "A" is incorporated hereto, made a part hereof, and shall be implemented as follows:

I. Responsibilities of Parties:

A. DWS Responsibilities:

1. DWS shall contribute grant funds for the implementation of the proposal attached as Exhibit "A", and shall provide payment of up to \$300,000.00 to RC&D for services rendered as described in the attached proposal and summarized in I. B. below.
2. DWS staff shall consult on and provide information, as needed, to assist in the implementation of the proposal attached as Exhibit "A".

B. RC&D Responsibilities:

RC&D shall implement the proposal attached as Exhibit "A", and shall exert the care and consideration necessary to implement the proposal in a safe and responsible manner. Deliverables under this Agreement include:

1. Ungulate Control
 - a. Complete the construction and installation of five hundred (500) meters, eight (8) feet axis deer fence in the Phase 2 and Phase 4 projects.
 - b. Inspect one hundred percent (100%) of preserve fence and conduct maintenance as needed.
 - c. Inspect four (4) transects (over 32,000 meters) quarterly for ungulates and data collection for analysis and eradication efforts.
 - d. GIS data recording and database entry.
2. Invasive Plant Control
 - a. Conduct four (4) weed transect monitoring.
 - b. Inspect fence for priority weeds.
 - c. Compile data of weed populations every month.
 - d. Conduct aerial survey for incipient weed species in and adjacent to the Preserve.
3. Biodiversity Protection and Research
 - a. Check rain gauges every month.
 - b. Collect and report rainfall and stream data to DWS.
 - c. Collect and analyze stream samples.
 - d. Continue protection of biodiversity by mapping various species of both flora and fauna.
4. Public Outreach and Education
 - a. Provide four (4) rain gauge hikes with volunteers every quarter.
 - b. Organize volunteer service trips for planting one hundred (100) trees and seed gathering. Conduct one thousand (1,000) volunteer hours.
 - c. Conduct two (2) public outreach events.

II. Notices:

In the event that any party wishes to initiate cancellation or changes to provisions of this Agreement, notice shall be provided to the other party in writing. Any notice by any party to the other shall be in writing and shall be personally delivered or sent by certified or registered mail as follows:

David Taylor, Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Maui, HI 96793

Gilbert S.C. Keith-Agaran, President
Tri-Isle Resource Conservation & Development Council, Inc.
P O Box 338
Kahului, Hawaii 96733

III. Payment:

- A. Payment shall be made by DWS to RC&D in four installments, upon submission of invoices (and supporting documentation) for expenses incurred. All requests for payment shall include both programmatic and financial progress reports.
- B. The first request for payment shall be invoiced no earlier than 90 days from the date of the Notice to Proceed and shall not exceed 20 percent of the total grant amount.
- C. The second request for payment shall be invoiced no earlier than 180 days from the date of the Notice to Proceed and combined with the first request for payment shall not exceed 50 percent of the total grant amount.
- D. The third request for payment shall be invoiced no earlier than 270 days from the date of the Notice to Proceed and combined with the first and second requests for payment shall not exceed 75 percent of the total grant amount.
- E. The fourth and final request for payment shall be made upon satisfactory completion of the Project and shall include the balance of funds due. The final request for payment shall be made no earlier than 365 days and no later than 455 days from the date of the Notice to Proceed. Should a six (6) month no cost extension be granted, final request for payment shall be invoiced no later than thirty (30) days after the extension period. The final report shall include a disk with copies of the map layers generated by the Project, and any other work deliverables as indicated in the proposal.
- F. RC&D shall retain copies of documentation for a period of three (3) years after completion of this Agreement required to substantiate all expenditures and shall make such documentation available to DWS for inspection or audit upon request.
- G. Expenditures shall be made in accordance with the budget for the project contained in Exhibit "A", and shall apply to the work items summarized above in I.B.

IV. Indemnification:

RC&D shall be responsible for all damages, injury, or death caused by the RC&D officers, employees, volunteers and agents, in the course of their services and activities under this Agreement. To the extent permitted by law, RC&D shall indemnify, defend, release, and hold harmless the County, its officers, agents, and employees, from and against any and all actions and claims arising either directly or indirectly, out of or resulting from the

errors, omissions, or acts of RC&D, its officers, employees, volunteers or agents, occurring during or in connection with the performance of the RC&D's services or activities under this Agreement. RC&D shall reimburse the County for any judgments, costs, and expenses, including attorney's fees, incurred in connection with the defense of any such claim, or incurred by the County in enforcing this Agreement. The RC&D's obligations under this section shall survive and shall continue to be binding upon the RC&D notwithstanding the expiration, termination or surrender of this Agreement. This indemnification agreement is intended to be as broad and inclusive as permitted by the laws of the State of Hawaii and if any portion is held invalid, the balance shall notwithstanding continue in full force and effect.

V. Time of Completion

Work under this Agreement shall be performed within twelve (12) months from the date of the Notice to Proceed. Should there be extenuating circumstances (i.e. weather, seasonal, etc.), RC&D shall be given an extension not to exceed six (6) months. Request for extension shall be submitted to DWS in writing 90 days prior to the end of the project period.

VI. Rights and Responsibilities

The rights and responsibilities of each party described herein shall remain in force and effect until such time as each party's project responsibilities are completed.

VII. Successors and Assignees

All terms, conditions, provisions, warranties and covenants contained herein shall apply to and bind the respective successors and assignees of the parties hereto.

VIII. General Terms and Conditions:

The General Terms and Conditions attached hereto as Exhibit "B" shall be incorporated and made a part of this Agreement.

IX. Agreement Voluntary:

It is hereby expressly understood and agreed that this Agreement has been freely and voluntarily entered into by the parties and this Agreement cannot be altered, amended, modified or otherwise changed except in writing executed by a duly authorized representative of each of the undersigned.

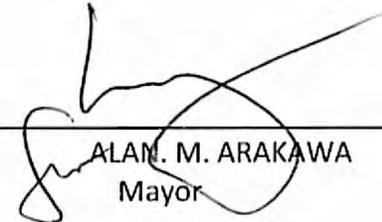
X. Exhibits:

Exhibits "A" and "B" are attached hereto and incorporated herein by this reference:

"A" - FY 2017 Proposal from Pu'u Kukui Watershed Preserve - RC&D

"B" - General Terms and Conditions - DWS Grants

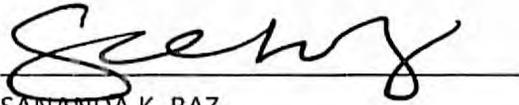
COUNTY:
COUNTY OF MAUI

By  _____
ALAN. M. ARAKAWA
Mayor

GRANTEE:
TRI-ISLE RESOURCE CONSERVATION AND
DEVELOPMENT COUNCIL, INC.

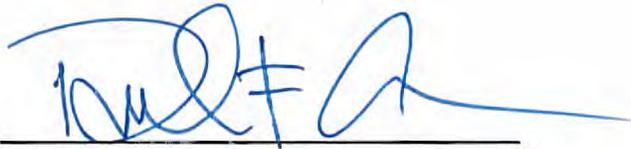
By  _____
GILBERT S.C. KEITH-AGARAN
President

APPROVAL RECOMMENDED:



SANANDA K. BAZ

Budget Director



DANILO F. AGSALOG

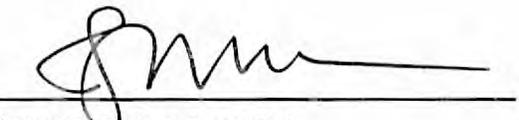
Director of Finance



DAVID TAYLOR

Director of Water Supply

APPROVED AS TO FORM AND LEGALITY:



JENNIFER M.P.E. OANA

Deputy Corporation Counsel

County of Maui

STATE OF HAWAII)
) SS.
 COUNTY OF MAUI)

On this 26th day of October, 2016, before me appeared ^{Keith A. Regan} ~~ALAN M. ARAKAWA~~, ^{acting} Mayor of the County of Maui, a political subdivision of the State of Hawaii, and that the seal affixed to the foregoing instrument is the lawful seal of the said County of Maui, and that the said instrument was signed and sealed in behalf of said County of Maui by authority of its Charter, and the said ^{Keith A. Regan} ~~ALAN M. ARAKAWA~~ acknowledged the said instrument to be the free act and deed of said County of Maui.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.



Notary Public, State of Hawaii

Keli P. Nahooikaika

Print Name KELII P. NAHOOIKAIKA

My commission expires: 4-30-18

NOTARY PUBLIC CERTIFICATION			
Doc. Date:	<u>10-3-16</u>	# Pages:	<u>47</u>
Notary Name:	<u>KELII P. NAHOOIKAIKA</u>	Judicial Circuit:	<u>2nd</u>
Doc. Description:	<u>grant agreement for puu kukui watershed preserve management and protection between the County of Maui and tri-isle resource conservation + development Council</u>		
Notary Signature:	<i>Keli P. Nahooikaika</i>		
Date:	<u>10-26-16</u>		



[Stamp or Seal]

STATE OF HAWAII)
) SS.
 County of Maui)

On this 3 day of October, 2016, before me personally appeared Gilbert S.C. Keith-Agaran, to me personally known, who, being by me duly sworn or affirmed, did say that such person executed the foregoing instrument as the free act and deed of such person, and if applicable, in the capacity shown, having been duly authorized to execute such instrument in such capacity.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.



Lianne S. Suzuki
 Notary Public, State of Hawaii

Print Name: Lianne S. Suzuki
 My commission expires: 5/23/2017

NOTARY PUBLIC CERTIFICATION			
Doc. Date:	<u>Oct. 3, 2016</u>	# Pages:	<u>47</u>
Notary Name:	<u>Lianne S. Suzuki</u>	Judicial Circuit:	<u>2nd</u>
Doc. Description:	<u>Grant Agreement for Pu'u Kukui Watershed Preserve Mangement and Protection between the County of Maui and Tri-Isle Resource Conservation and Development Council, Inc</u>		
Notary Signature:	<i>Lianne S. Suzuki</i>		
Date:	<u>Oct. 3, 2016</u>		



Pu'u Kukui Watershed Preserve Management & Protection



Rain falling on the lush forest of Pu'u Kukui Watershed Preserve overlooking Ka'anapali district and Mahinahina Water Treatment Plant below

A. PROJECT BACKGROUND

The 8,600 acre Pu'u Kukui Watershed Preserve located on the north west side of Mauna Kahalawai (West Maui Mountain) is a significant water source for residents on the west side of Maui and the West Maui Mountains Aquifer which also supplies other parts of Maui. The pristine intact watershed provides maximum aquifer recharge and clean running surface water that ensures an adequate supply of water is available for drinking and domestic uses from Mahinahina Water Treatment Plant and future proposed county wells such as the Kahana well currently under construction. The Mahinahina Water Treatment Plant receives 100 percent of its water from Pu'u Kukui Watershed Preserve in the form of surface water via Honokohau Ditch and has an average daily production of 2.4 million gallons per day. The Mahinahina Water Treatment Plant is located just at the foot of the Pu'u Kukui Watershed Preserve and provides drinking water to residents in areas of Honokohau, Napili, Alaeloa, Kahana, Wahikuli and Lahaina.

The proposed active management and protection of the native forest of the Pu'u Kukui Watershed Preserve will ensure the Department of Water Supply's mission to provide clean water efficiently by continuing to utilize the natural process that developed over thousands of years to capture water in the form of rain and fog drip in the native dominated ecosystems. The native biodiverse flora and fauna also assist in the filtering process to provide clean surface water and aquifer recharge. The conservation portfolio for West Maui includes the continuous perennial stream natural community of Honokōhau which runs through Pu'u Kukui Watershed Preserve in figure 1 below. Failure to preserve and protect the pristine upper watershed of PKW would result in the decrease of the availability of fresh drinking water in perpetuity to current users and future generations.



Figure 1. The 8,600 acre Pu'u Kukui Watershed Preserve represented in green

The Pu'u Kukui Watershed Preserve (also known as Pu'u Kukui Watershed or PKW), is one of the wettest spots on Earth averaging nearly 400 inches of rain annually and was established in 1988 to protect watershed forest and associated native plants and animals. At over 8,600 acres, the Pu'u Kukui Watershed began management programs under a management agreement with The Nature Conservancy of Hawai'i (TNCH). The Nature Conservancy continues to assist the PKW Preserve Manager to implement its programs, and act as a consultant to the project on an ad-hoc basis. In 1992, PKW entered into a six-year contract with the State of Hawai'i as a participant in the Department of Land & Natural Resources (DLNR) Natural Area Partnership Program (NAPP). The current Pu'u Kukui Watershed Preserve contract and management plan was renewed in 2012 for State Fiscal Years 2012-2018. The management agreement describes the goals, objectives, scope of work, deliverables and phasing plan which is provided below in Appendix A.

B. PROJECT GOALS AND OBJECTIVES

The goal of the Pu'u Kukui Watershed Preserve is to actively manage and maintain the native biodiversity of both flora and fauna that make up the intact native forest to provide current and future drinking water source and supply for the Maui County Department of Water Supply.

- Maintaining a fully functional upper watershed ecosystem will not only provide for current demands but allow for on-going daily recharge to the aquifer for future use. Given the current climate change projections by NOAA of drought conditions on the horizon (rain may decrease by 50 percent during El Nino years), it becomes even more important to protect these higher recharge areas such as Pu'u Kukui

Watershed for future use.

- The goals and objectives of protecting the Pu'u Kukui Watershed Preserve are clearly defined to address specific threats to the watershed such as ungulate management, invasive plant control and prevention of large landscape alteration that affect recharge potential. Approval by the Department of Water Supply of these goals and objectives have been supported in the past demonstrated by the funding of PKW watershed protection efforts. Nevertheless, annual proposals and appropriations seem to ensure that all funded activities continue to be in line with DWS mission. PKW continues to have open communication and regular meetings inclusive of site visits to discuss new threats, project approaches and other hydrological matters. Checking with DWS staff on new initiatives beforehand ensures that PKW continues in the right direction and consistently be in line with the DWS mission. PKW clearly understands and supports the mission of DWS to provide future drinking water source and supply for the Maui County because of our relationship with the Mahinahina Water Treatment Plant, Honokohau ditch and Preserve location.
- The approach utilized by PKW to achieve the goal listed below in bullet form stems from 27 years of demonstrated effective management of the preserve. This efficacy and high endemism is authenticated as Pu'u Kukui Watershed in considered to be one of the most pristine upper watershed areas in the state by the conservation community inclusive of DLNR and quantified by hydrologist by annual rain gauge readings by the PKW crew and automated gauges of USGS.
 - Protect over 8,600 acres of watershed and native habitat within and adjacent to Pu'u Kukui Watershed Preserve by removing all ungulates and preventing ingress.
 - Maintain large native dominated core areas within Pu'u Kukui Watershed by preventing the spread of habitat modifying weeds, which is the highest priority in the weed management plan.
 - Protect 15 terrestrial natural communities that vary from lowland shrub lands to montane forests and bogs. One of these communities is considered rare, as it occurs in fewer than 20 sites worldwide: 'Ohi'a (Metrosideros) mixed Montane Bog. These bogs also allow for a maximum water recharge on Mauna Kahalawai (West Maui Mountain).
- It is difficult to quantify finite resources because as the demand grows and the supply diminishes, the result is a higher value set. Looking to the native Hawaiians who thrived on Maui for hundreds of years and reflecting on their value system "Water is life" and life is difficult to quantify. Nevertheless, in an attempt to quantify and put a value set on the work proposed as requested, we shall use actual figures of \$1.90 for water use charges published by DWS for 2016 per 1,000 gallons for the use of 0-5,000 gallons on a single family dwelling with 5/8" meter. Given that the Pu'u Kukui Watershed Preserve directly feeds one hundred percent of the 2.4 million gallons a day to the Mahinahina Water Treatment plant which then services the West Maui areas an equation may look somewhat like the following: **(2,400,000 gpd/1,000 gallons = 2,400gpd x \$1.90 = \$4,560 per 2,400 gpd x 365 days = \$1,664,400)**. This is a measurable figure but doesn't include additional wells currently being constructed below the preserve to pump water

from the aquifer in the very near future. The proposed work also proposes to leverage DWS funds from Federal, State and Private funds for the proposed fiscal year. Leveraging funds for conservation efforts for PKW assist in offsetting costs from the county and promotes a higher percent of hydrological success and resiliency towards climate change and other non-controllable circumstances.

- PKW exemplifies best management practices and results by planning, implementing and having on going assessments for both short term and long term goals outlined in a phasing plan over an annual time frame and six-year time frame for each scope of work (ungulate management, weed management, etc.) This indicated in the 2012-2018 management plan in Appendix A.
 - *The short term goal* is to maintain the ability to supply fresh water to Maui County Department of Water Supply Mahinahina Treatment Plant and future proposed wells in the area such as the New Mahinahina and Kahana wells. This will be accomplished by continuing to reduce ungulate activity, which has been underway for the past 22 years, and continuing the prevention of axis deer intrusion into the Preserve. Monitoring for ungulate activity and weed distribution will be maintained via utilization of the four existing transects, as well as informal survey via air and on the ground. Creation of 8 ft. deer-proof fencing and retrofitting of existing 4 ft. pig fencing with 4 ft. mesh will be a priority throughout the preserve.
 - *The long-term goal* for each management program is listed below in the scope of service and listed in priority, followed by a brief description of the program strategies of Ungulate Control, Weed Control, Rare Plants and Research, Water Quality Testing and Community Outreach. The outcome would be to:
 - Increase groundwater recharge ability to West Maui through protection and enhancement of native canopy and ground cover of natural flora and fauna.
 - Protection of important headwaters for major streams in the West Maui Watershed.
 - Protection of listed endangered and threatened flora and fauna through the protection of intact native ecosystem at Pu`u Kukui.
 - Continue to support and assist on going monitoring research efforts that will enable a better understanding and protection of the natural resources (both biological and physical) of Pu`u Kukui Watershed Preserve.
- PKW fosters innovation by first continuing to work with many other inter-agency conservation partners and institutions using innovative technologies or approaches in conservation such as the Department of Land and Natural Resources, Haleakala National Park, Maui Invasive Species Committee, The Nature Conservancy, East and West Maui Mountains Watershed Partnership, United States Fish and Wildlife Service, O`ahu Army Natural Reserve Program just to name a few to identify and utilize technological advances already being utilized or currently tested by agencies with much larger budgets and also not having to fund them or request funding from

DWS. Secondly, PKW fosters innovation by promoting research within the Preserve that will assist in our conservation efforts some by PKW staff and others with research entities or partners. Such work may include but are not limited to automated weather stations, solar radiation monitoring, the use of forward looking infrared devices to track down ungulates, use of drones for canopy cover assessments, email sending camera devices for monitoring purposes, gps and tablet units for data collection, seed sorting devices and hydro-mulch machines to restore denuded areas.

- PKW plans to produce quantifiable results by tracking field work progress on a regular basis and assessing them quarterly in a quarterly report to DWS. Database output also produces graphs to illustrate time spent, productivity and resources utilized. PKW also utilizes a new data entry tool called “effective conservation” that we been working on with the state DLNR over the past couple of years that allows both agencies to see real time the impact and efficacy of one’s conservation practice. Ex. If a fence is built around a certain valley the effective conservation tool shows the amount of acreage protected behind the fence. This allows for easier quantification of the work as well as critical decision making and resource management in real time without having to wait for a quarterly or final report on progress. PKW proposes to show this to the DWS and incorporate its use in fiscal year 2017 if agreeable to DWS.
- PKW also plans to continue our public outreach program. Raising awareness of our watershed efforts and mission also helps to leverage in kind labor for planting and weeding efforts, assists people to recognize the source of their water and most importantly promotes water conservation practices and watershed protection. PKW recruit 100 volunteers, produce 1,000 volunteer hours = \$21,000 in volunteer time towards watershed preservation and conduct 3 public awareness events such as Rain Gauge hikes, weed eradication and native tree planting.

C. LOCATION AND SIZE OF PROJECT AREA



Mahinahina Water Treatment Plant is located at the foot of the Pu'u Kukui Watershed Preserve

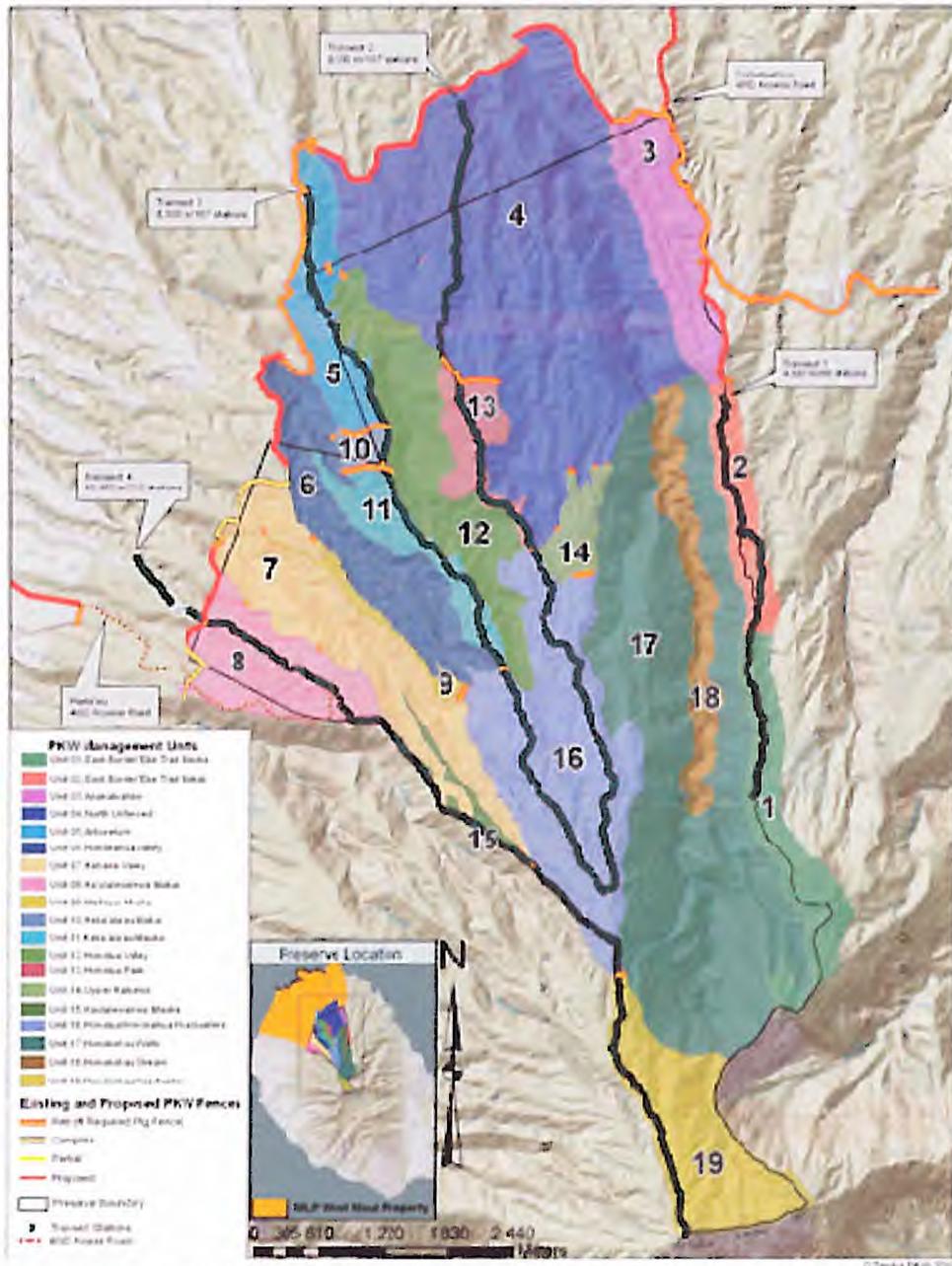
- The Pu`u Kukui Watershed Preserve at over 8,600 acres is located on the north west side of Mauna Kahalawai (West Maui) from Mahinahina to Nakalele, and stretches from about 480 feet elevation at Honokohau stream to the Pu`u Kukui Summit – the highest point on Mauna Kahalawai (West Maui) at 5,788 feet elevation. The rain forest, shrub lands, and bogs of the Pu`u Kukui Watershed Preserve serve as a large native sponge that provide aquifer recharge and adequate supply of surface water to the area.
- The primary source of surface water for the Mahinahina Water Treatment Facility via the Honokohau Ditch System is the watersheds of Honokohau and Honolua. The headwaters of Honokohau and Honolua are both within the Pu`u Kukui Watershed Preserve.
- Many of the natural plant communities of PKW are found and based on elevation, moisture, and physiognomy regimes. Each of these stabilizes the inversion layer and promotes rain and aquifer recharge. Hawaiians refer to this with an ‘olelo no’eau “Hahai no ka ua I ka ulu la’au” which translated means “the rain follows after the forest”.
- Management Unit Descriptions: The Pu`u Kukui Preserve is divided into 19 Management Units defined by topographical and biological features (Figure 2). This increase in Management Units from 10 units to 19 units is included in the FY2012-2018 Management Plan. It gives a more accurate depiction of management needs based on recorded ungulate activity levels and current fence placement. Descriptions of the units’ resources and threats to these resources are indicated in the management plan in Appendix A.
- Each unit is identified with its acreage, type of ungulate threat level and fence status, weed identification and forest type. For example, unit 17: Honokohau Falls *“The 1675 acre Honokohau Walls unit covers the near vertical slopes of upper Honokohau Valley wall from the 1,000’ elevation at Honokohau Stream to the 5,000’ elevation of the back bowl of Honokohau Valley. Consisting mostly of montane wet forest and shrub land communities, the formerly heavy pig damage has been reduced to zero except for intermittent activity restricted to the lowest reaches of the unit near Honokohau Dam. Tibouchina herbacea and Clidemia hirta are the priority weed invasions.”*

D. SCOPE OF WORK

PKW proposes to support the DWS mission of supplying fresh drinking water for current and future use by protecting the PKW Preserve’s intact native forest in four overarching efforts:

Ungulate Control, Invasive Plant Control, Biodiversity Protection & Research and lastly is Public Outreach and education.

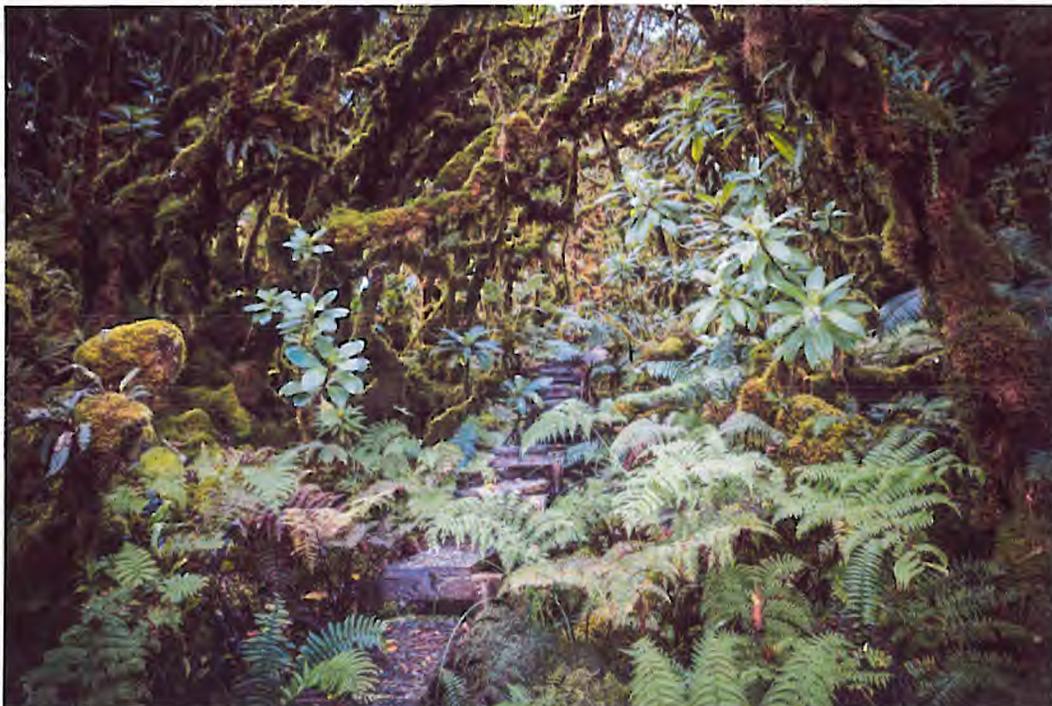
The Pu'u Kukui Watershed Preserve and the PKW crew is highly respected in the conservation arena both locally and around the world. The Preserve is home to various



Pu'u Kukui Watershed Preserve 19 Management Units

unique plant and principal community types and hosts numerous native species of flora and fauna. Experts of various disciplines often come to PKW to research and share their knowledge as well as ask PKW crew numerous questions as to their site specific observations, species monitoring and watershed protection efforts. Beyond the diverse number of duties performed by the PKW crew to maintain the large landscape areas, occasionally one might find PKW staff in the preserve with researchers such as

Dr. Rosemary Gillespie of UC Berkeley and Essig Museum who is the spider expert studying the morphology and adaptive radiation of spiders in Hawai'i, or accompanying Dr. Norine Yeung malacologist at UH zoology and Bishop Museum, or discussing rainfall and climate conditions with NOAA senior hydrologist Kevin Yamada or checking on rare plant species with Hank Oppenheimer coordinator of the Maui Nui plant extinction prevention program (PEPP). All of this insight learned assists in making better informed decisions to protecting the rich biodiversity of the Pu'u Kukui Watershed Preserve. The interdependence of both flora and fauna go together like a hand and glove to produce a healthy multilayered forest structure with pollinators to maintain the delicate balance. This unique relationship is what keeps the watershed so healthy and able to provide ample supply of water to DWS.

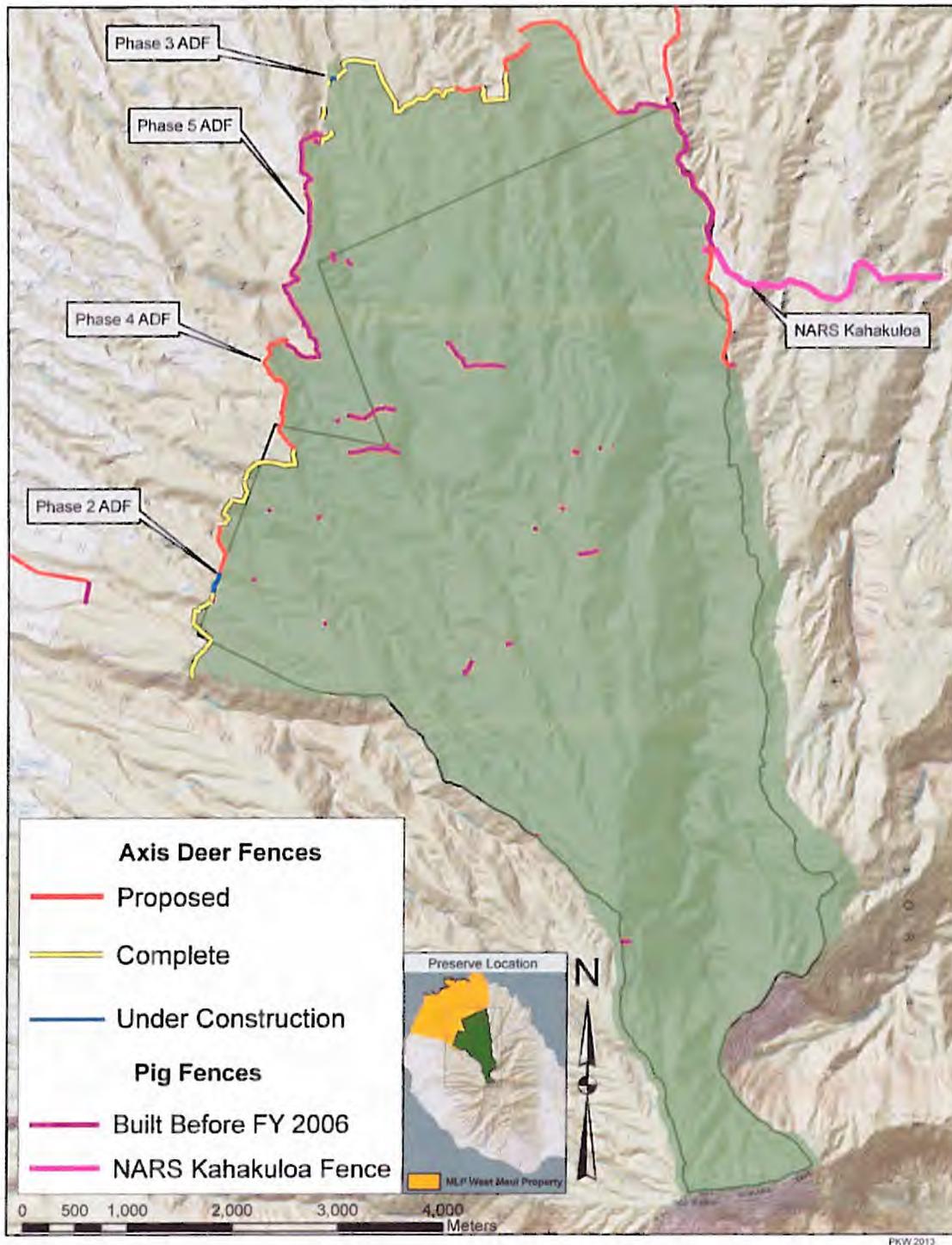


1) Ungulate Control

Excluding ungulates (hooved animals such as pigs, goats, deer, etc.) from the watershed is a priority because of the efficiency and extent of damage they are capable of causing. Ungulate populations can grow rapidly if not controlled and can permanently alter landscapes as vectors for non-native species. For example, feral pigs can uproot large areas of forest understory and the bare soil increases erosion and run-off, potentially carrying diseases via waterways. Disturbed areas become sites where non-native plant species become established reducing the amount of water that percolates through the soil down to the aquifer.

PKW staff control ungulates primarily through fencing and trapping. Fencing is the main line of defense, preventing ungulates from entering the preserve and damaging the watershed. PKW staff is currently constructing a perimeter fence along the lower elevations of the preserve boundary to stop ingress. The Perimeter fence is 8 feet tall with an

additional apron to effectively exclude all ungulates.



PKW Perimeter Fence phasing map



PKW crew constructing fence on steep slope to exclude ungulates from entering the preserve

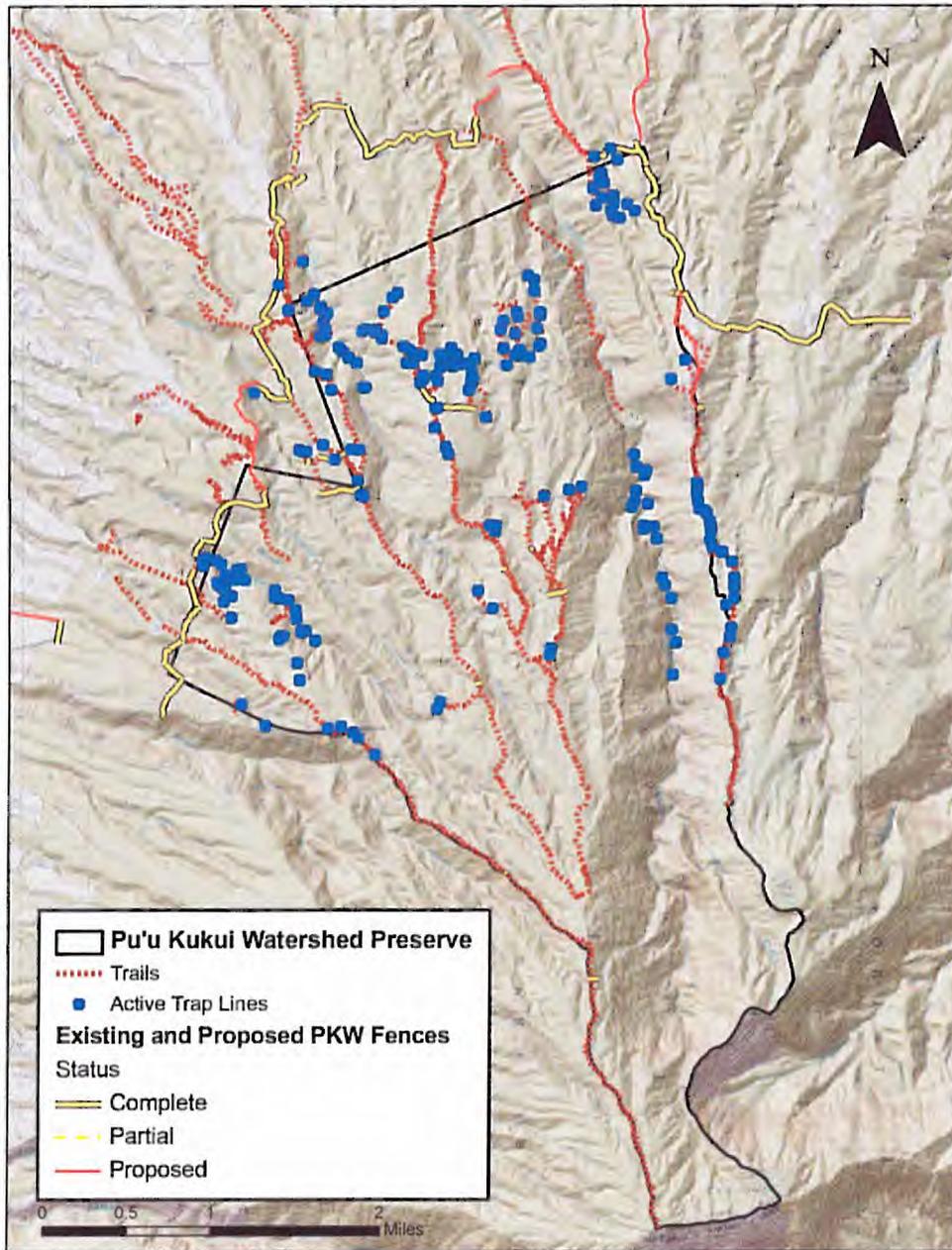
Maintaining the integrity of the fence line requires inspections at regular intervals. If the fence has been breached or damaged the necessary repairs or reinforcement are done immediately.

Trapping is the second method of controlling ungulates. Approximately 2,400 traps are maintained in the preserve. Traps are checked at regularly timed intervals to ensure the traps continue to be effective. PKW staff responds accordingly to new signs of ungulate activity by increasing the number of traps in the management unit. Collecting data and maintaining a database of traps enables us to track ungulate activity and captures. All trap locations and captures are mapped.

To protect the core watershed areas from ungulates, PKW staff survey vast tracts on foot for ungulate presence. The four major transects completed annually total more than 32,000 meters (19 miles) surveyed in the upper watershed. Any ungulate presence in the watershed is recorded and responded to immediately

2.) Invasive Plant Control

One of the greatest threats to the watershed is invasive plants. Aggressive, non-native plant species can greatly impact the watersheds. Invasive plant species take substantial amounts of water from the soil compared to native plants in their natural ecosystems.



PKW trails, active trap lines and fence status

In order to decrease the establishment and proliferation of these harmful plant species PKW utilizes a combination of tactics. Prevention is the first step, PKW follows strict protocols for decontamination of all gear and tools entering the preserve to prevent the spread of weed species. PKW also focus efforts on preventing incipient weed species from becoming established. In the top-down approach staff opportunistically

removes target weeds from the more pristine areas at higher elevations. PKW staff removes incipient weeds such as *Tibouchina herbacea* in areas adjacent to the preserve to prevent the establishment of target species inside the preserve.



Photo: Priority targeted invasive weeds (Tibouchina herbacea)

Pro-active surveys for incipient species are essential to forming a practical methodology for managing invasive plant species and prioritizing the threats each one poses. Four weed transects are monitored annually, totaling more than 32,000 meters (19 miles) in the upper watershed. PKW staff survey for non-native plant species during all activities.



4 weed transects monitored by the PKW crew

3. Biodiversity Protection and Research

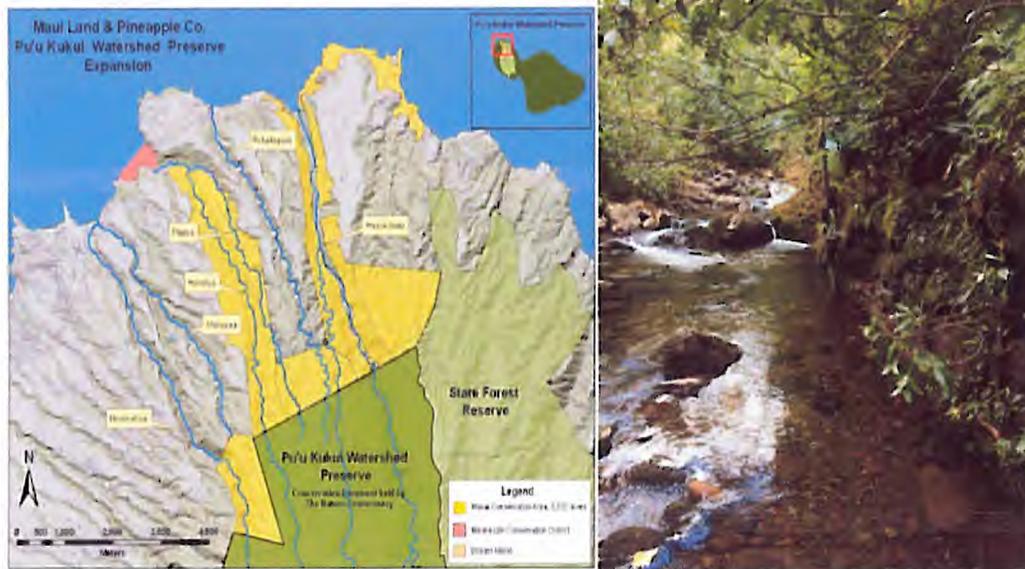


Photo: Left =PKW crew monitoring flora & fauna Right: checking rain gauge

- ML&P/Pu'u Kukui Watershed Preserve staff have been collecting rainfall data for over eighty years. Prior to the formation of Pu'u Kukui Watershed as a department of Maui Land & Pineapple Company Inc., the ML&P Co. collected rainfall data from the watershed for over 90 years. ML&P/PKW contain some of the most consistent rain gauge data in the State.
- Pu'u Kukui Watershed Preserve staff check three rain-gauges, monthly, at three different elevations in collaboration with USGS inside the preserve. Rainfall data collected support analysis for available and projected/potential water resources. Rainfall data also supports the importance of our watersheds in the vast collection of rainwater efficiently transferred to accessible surface and groundwater.
- Biodiversity and rare species Protection is an important objective in preserving our current aquifer recharge in Hawaii. The prominence and abundance of rare species and the intact ecosystems and habitats required are central to various government and private agencies that support our efforts such as the University of Hawai'i, Department of Land and Natural Resources, United States Fish & Wildlife Service and the Bishop Museum just to name a few.
- Research Collaborators include State DLNR, County of Maui DWS, USFW, USGS, and Ridge to Reef – Coral Reef task force.
- Pu'u Kukui Watershed Preserve actively supports research, providing logistical assistance, data, and often act as field guides to locate target species. Supporting research is vital to improving management strategies and gaining more knowledge of the resources within the preserve. As climate change continues to alter conditions in the world, research is vital to assist management decisions and protection efforts.

Water Quality and Testing

PKW staff will conduct coliform bacteria testing to gather data to assist the DWS in providing the public with data that demonstrates efficient use of funds to provide the public with clean water.



Pu'u Kukui Watershed Preserve existing stream flows

Honolua Stream

Presence of coliform bacteria in drinking water is an indicator that hazardous pathogens may be present; ungulates are vectors for coliform bacteria. Construction of fences to exclude ungulates from the Pu'u Kukui Watershed is vital to protecting the source of Hawai'i's drinking water. Testing for coliform bacteria above and below the watershed management fences is one method to provide evidence that ungulate presence directly correlates to the presence of coliform

PKW staff will collect samples of surface water above and below the watershed management fences, and test for coliform bacteria presence using LaMotte Coliform Test Kits with a minimum detection of 20 cells per 100 ml samples.

4. Public Outreach and Education

- PKW offer's educational and volunteer opportunities through reforestation efforts as a chance to increase both community stewardship and awareness of conservation efforts throughout ML&P lands.
- PKW conducts volunteer service trips to support the ma uka to ma kai initiative. On these excursions PKW staff interact with community members while planting natives or eradicating invasive species to encourage stewardship of our natural resources. Raising public awareness of conservation initiatives, issues, and support needed, is the key to making



Photo: PKW host Kupu Hawaii Youth Conservation Corps

conservation initiatives, issues, and support needed, is the key to making progress. Communicating the importance of our watersheds and how they directly correlate to our water supply benefits everyone in the community. The impacts and changes that occur ma uka in our upland forested watershed directly correlates to impacts and users downstream, all the way ma kai, to our coastal areas and ocean. Rain gauge hikes are open to the public and provide a first-hand experience of our majestic rainforest and fragile ecosystems that took thousands of years to evolve on West Maui.

- Community group excursions inclusive of Maui Preparatory Academy, Lahaina Luna High School, Sacred Hearts Academy, Kamehameha Schools and various volunteers from the community that participate in planting on Arbor Day, Earth Day and other events that promote mālama ‘aina. Volunteers range from residents, school student, naturalists and conservationist who want to learn more about Pu’u Kukui Watershed’s efforts.
- Assist in community partnership groups or venues that address water issues on Mauna Kahalawai (West Maui). These efforts include collaboration with West Maui Mountains Watershed Partnership, Department of Land & Natural Resources (Natural Area Reserve, USGS, County of Maui – DWS,

NOAA, DOH, EPA, USFS, MISC, TNC, Hunter Education, Ua'u Kani wedge tailed shearwater protection, Forestry Stewardship, The Rain follows the Forest, Ridge to Reef, Na Alahele, Aquatic resources) Honolua Coalition, Surf Rider Foundation, Aha Moku Council, West Maui Fire Prevention Task Force, West Maui Soil & Water Conservation District, Hawaii Island Land Trust and Na Pili Foundation.

- Provide Hawaiian cultural stewardship practice workshops to the community based on the Hawaiian value of waiwai (water = wealth), the cornerstone of all resources.

E. TIMELINE

Description of each deliverable	Expected amount of time to complete deliverable (# Months/# Weeks)	Time frame (include expected months)
Ungulate Control	12 months/ 3 weeks per month	October - September
Invasive Plant Control	4 months / 1 week per month	May - July
Biodiversity Protection & Research	2 months/ 1 week per month	January & September
Public Outreach and Education	4 months/ 4 day per month	February, March, April, August
	Weather Permitting	

F. PROJECT DELIVERABLES

Goal/Objective 1: Ungulate Control		
Task	Deliverable	Measure of Success
Acquire Fence material Obtain quotes, invoices and material order and submit check request	Fencing materials purchased in the 1st quarter	•500 meters of fence materials will have been purchased by end of 1st quarter to start fence project
Ungulate Fence Construction of 8ft Axis Deer Fence Decontaminate of weed seeds, transport material via helicopter into field and commence construction	Ungulate 8ft axis deer fence installation and construction	•1 week per month, ungulate fencing will be constructed and installed to complete 500 meters of fence in the phase 2 and phase 4 project.
Inspect 100 percent of preserve fence and conduct maintenance as needed	Inspect ungulate fence and ungulate traps within Preserve	•Quarterly fences check will be conducted with traps.
Inspect 4 transects for ungulates and data collection for data analysis and eradication efforts	Transect check	•1 major transects will be will be conducted quarterly for a total of 4 transects checked in one grant year. More than 32,000 meters will be monitored.
Continue public hunting program to reduce ungulate pressure off the Preserve fence. Conduct 1 annual hunting meeting with local hunters.	Public Hunting Program	State permit hunters will aid in alleviating ungulate pressure on boundary fence by decreasing the populations. # of ungulate removed reported quarterly
GIS data recording and database entry	GIS data recording	GIS data collections will be recorded on a quarterly basis. Ungulate presence in the watershed is recorded and responded to immediately.
Goal/Objective 2: Invasive Plant Control		
Task	Deliverable	Measure of Success
Conduct 4 weed transect monitoring	Monitor 1/4 transect a quarter	All 4 weed transects monitored
Inspect fence for priority weeds	Priority weed control on fence	2 priority weed checks on fence line annually

Compile data of weed populations	Record GPS locations of weeds	Update weed database monthly
Aerial survey for incipient weed species in Preserve and adjacent to the Preserve	Conduct aerial survey and gather quantitative data to assist in eradication	Complete 2 surveys and compile data
Goal/Objective 3: Biodiversity Protection & Research		
Task	Deliverable Monthly check of 3 rain gauges	Measure of Success
Check Rain-gauge meters in Preserve	3 rain gauge meters will be checked at different elevations of the preserve	Monthly rain gauge checks will be collected to support analysis for available records data for projected/potential water resources
Report Rainfall & stream data to DWS	Rainfall data will be transferred for watershed accessibility	Transferred data will support watershed for collection of surface and ground water quarterly
Collect and analyze stream sample	Collect stream data monthly	H2O sample above and below
Continue protection of Bio-diversity	Continue mapping of various species of both flora and fauna	Mapping will be collected annually to identify species location
Goal/Objective 4: Public Outreach and Education		
Task	Deliverable	Measure of Success
Allow access into watershed to raise awareness	Take volunteers on a rain gauge hike up the boardwalk	Provide 4 rain gauge hike with volunteers 1 per quarter
Organize volunteer service trip for planting and seed gathering	Recruit 100 individuals to assist with planting and seed gathering	Plant 100 trees and conduct 1,000 volunteer hours
Conduct large public outreach event	Coordinate and implement public outreach events (ex. Arbor day, Earth Day)	Raise awareness of conservation efforts at 2 information events (school classroom or community events)

G. BUDGET SUMMARY



County of Maui
 Department of Water Supply
**Watershed Protection Grant
 Program**
 Fiscal Year 2017
Project Budget Summary

FORM 4.2

Organization Name Tri-Isle Resource Conservation and Development Council, Inc., Pu`u Kukui Watershed Preserve

Expense Categories	Amount Requested	Matching Funds	Total Budget
A. Personnel (Payroll taxes & fringes)	\$113,300.00	\$170,000.00	\$283,300.00
B. Transportation (e.g. fuel, etc.)	\$14,400.00	\$14,400.00	\$28,800.00
C. Contractual (e.g. helicopter)	\$61,500.00	\$19,500.00	\$81,000.00
D. Utilities (e.g. telephone/cell, water electricity, etc.)	\$2,020.00	\$2,020.00	\$4,040.00
E. Travel	\$0	\$6,000.00	\$6,000.00
F. Field crew costs	\$10,930.00	\$29,015.00	\$39,945.00
G. Supplies, materials & equipment	\$52,000.00	\$39,065.00	\$91,065.00
H. A&O Costs (12% of total grant amount)	\$36,000.00	\$0	\$36,000.00
I. Other Costs	\$9,850.00	\$20,000.00	\$29,850.00
Total	\$300,000.00	\$300,000.00	\$600,000.00



County of Maui
 Department of Water Supply
Watershed Protection Grant Program
 Fiscal Year 2017
Project Budget Summary

A. PAYROLL COSTS

Organization Name Tri-Isle Resource Conservation and Development Council, Inc. Pu'u Kukui Watershed Preserve

Position Name/Title List by position and % of 40-hour week	Salary	Amount Requested
1 FTE Field Technician I 100% of 40-hour week	\$33,000.00	\$33,000.00
1 FTE Program Operation Supervisor 100% of 40-hour week	\$45,000.00	\$45,000.00
1 FTE Kupu – EIP yearlong intern	\$13,000.00	\$13,000.00
2 Kupu Summer Frontier interns \$1,000 ea. @ 8 weeks ea.	\$2,000.00	\$2,000.00
Payroll Taxes		
Fringes and Benefits	FT1 - \$8,600.00 FOS - <u>\$11,700.00</u> Total \$ 20,300.00	\$20,300.00
Total	\$113,300.00	\$113,300.00

Narrative Description (project responsibility by position/title)

1 FTE 100% Field Technician I @ 40 hours per week. The Field Tech I is responsible for the preservation, conservation and maintenance of plantation watershed capacities and natural resources. This is accomplished by involvement in programs of feral ungulate control, weed control, small mammal & invertebrate control, public (e.g. hunter) awareness & access, research and monitoring.

1 FTE 100% Program Operation Supervisor @ 40 hour per week.
 Provides daily administrative support to the PKW Conservation Manager and handles the

Program operations in the office and in the field periodically. Supervises interns in the field and ensures that equipment and personal protective equipment is worn by personnel. The Program operations supervisor assist Manager and Field supervisor with all duties upon request both in the field and in the office to ensure safety and adequate supervision of lower staff and volunteers. Performs variety of duties which includes, but limited to handling department's mainline phone calls, handling incoming/outgoing inter-office/external mail, making travel arrangements, training room reservations/related logistics, filing, photocopying, scanning, handling new hire processing for interns and casual hires. Maintains and organizes all office supplies. Performs clerical functions, including word processing, typing, answering phones, and other duties associated with efficient office operations. Prepares all online payment and purchasing documents for vendor payments, equipment, and supplies. Assists in arranging meetings and other events, deliveries/pick-ups, run errands, etc. Assist Conservation Manager with grants, reports and proposals.

Assist in field operations, flight follow for helicopter operations, daily deliverables, scheduling field trainings, baseyard operations, bi-weekly timesheets, supervise interns and casual hires, schedule volunteer service trips and outreach events and activities for all conservation work projects for the Pu`u Kukui Watershed Preserve.

1 FTE 100% KUPU – EIP year-long Intern @ 40 hours per week. The EIP-Intern is responsible for the preservation, conservation and maintenance of plantation watershed capacities and natural resources. This is accomplished by involvement in programs of feral ungulate control, weed control, small mammal & invertebrate control, public (e.g. hunter) awareness & access, research and monitoring. Earning an educational award for successfully completing the 1,700 required hours of community service.

2 SEASONAL 100% KUPU – Frontier summer interns @ 40 hours per week. The Frontier Summer Intern is responsible for the preservation, conservation and maintenance of plantation watershed capacities and natural resources. This is accomplished by involvement in programs of feral ungulate control, weed control, small mammal & invertebrate control, public (e.g. hunter) awareness & access, research and monitoring. Earning an educational award for successfully completing the 1,700 required hours of community service.



County of Maui
 Department of Water Supply
Watershed Protection Grant Program
 Fiscal Year 2017

B. TRANSPORTATION COSTS

Organization Name Tri-Isle Resource Conservation and Development Council, Inc.,
Pu`u Kukui Watershed Preserve

Breakdown of Expense	Amount Requested
Fuel for PKW Field Vehicles	\$9,600.00
Tires (8 x 600 ea.)	\$4,800.00
Total	\$14,400

Narrative Justification - Fuel and tires for the operations of the field vehicles allows the PKW staff to spilt up and work indifferent areas of the preserve to meet deliverables of field projects. This makes the work time more efficient to get the projects completed. Fuel and Tires are essential to the operations of the program.

Fuel – provides adequate fuel to operate PKW vehicles to and from baseyard, to and within the preserve, to pick up materials and for volunteer service trips.

Tires – Off-road tiers to transport staff, volunteers and gear to remote areas of the preserve for field work.



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C. CONTRACTUAL SERVICES
 (e.g. helicopter, etc.)

Organization Name Tri-Isle Resource Conservation and Development Council, Inc.,
Pu'u Kukui Watershed Preserve

Breakdown of Expense	Amount Requested
Helicopter Utilities	\$49,500.00
(45 hrs. flight time x \$1,100 per flight hr.)	
LZ Platform – Rebuild and Repair	\$12,000.00
Total	\$61,500.00

Narrative Justification – Helicopter utilities is a necessity for all remote fence projects, transect checks, Areal survey’s, etc. providing access to the remote areas that would otherwise be inaccessible due to the rugged terrain.

Helicopter utility is a necessary component of watershed management. Helicopters provide access to remote areas that would otherwise be inaccessible due to the rugged terrain.

LZ Platform – to construct 1 safe landing platform in the Honokahua area. A strategic landing zone for PKW operations but due to the incline there is no safe landing area for the helicopter. This will allow crew to load and offload safely.



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D. UTILITIES

Organization Name Tri-Isle Resource Conservation and Development Council, Inc.,
 Pu`u Kukui Watershed Preserve

Breakdown of Expenses	Amount Requested
Telephone (Land line)	\$0.00
Telephone (cell)	\$500.00
Water	\$320.00
Electricity	\$1,200.00
Total	\$2,020.00

Narrative Justification

Telephone (cellphone line) are being used for baseyard operations and outside field communication. No landline exists as PKW field crew use cell phones and radios.

Water will be used for baseyard and field operations inclusive of drinking water, toilets and green house plants for volunteer out plantings, and cleaning of vehicles to be weed free from one area of the preserve to another

Electric: will be used to assist in sustaining baseyard operations for PKW which includes, computers, Data servers, green house, seed storage equipment, and electronic field equipment necessary to implement the DWS grant.



County of Maui
 Department of Water Supply
Watershed Protection Grant Program
 Fiscal Year 2017
F. FIELD CREW COSTS

Organization Name Tri-Isle Resource Conservation and Development Council, Inc.,
 Pu`u Kukui Watershed Preserve

Breakdown of Expenses	Amount Requested
Boots (4 pairs x \$250 per boots)	\$1,000.00
Camp gear	\$3,680.00
Flight Suits (7 x \$450)	\$3,150.00
Back packs (7 x \$142.85)	\$1,000.00
Tents (8 x \$225)	\$1,800.00
First Aid supplies	\$300.00
Total	\$10,930.00

Narrative Justification - Field Crew gear and equipment allow them to access, camp and relocate flora, fauna in remote areas. Ungulate controls require all of the following to consistently and must be maintained or replaced periodically due to harsh weather conditions.

Field Hiking Boots are a necessity and part of the crew's personal protective equipment. They are a vital to accessing remote fence sites and the day to day field operations.

Camp Gear required for camping in remote locations, items including but not limited to rain gear, tool boxes, tarps, cots, sleeping pads, parachute cord and carabiners for rigging loads

Flight Suits - required helicopter flights suits to fly to remote working areas of the preserve (7 x \$450)

Back packs (7) - to carry necessary tools and equipment into the field

Tent (8) are for overnight camping projects.

First Aid supplies - essential for outdoor activities. Each vehicle will have a First aid kit for wilderness at all times in the vehicle when in the field.



County of Maui
 Department of Water Supply
Watershed Protection Grant Program
 Fiscal Year 2017

G. SUPPLIES, MATERIALS & EQUIPMENT

Organization Name Tri-Isle Resource Conservation and Development Council, Inc.,
 Pu'u Kukui Watershed Preserve

Breakdown of Expenses	Amount Requested
Fence Material	\$40,000.00
Snares	\$7,000.00
Rappel Gear	\$2,000.00
Tipper Gauge	\$3,000.00
Total	\$52,000.00

Narrative Justification - Supplies and Materials to build 500 meters of fence projected for the FY17 year

Fence Material: 500 meters of 8 ft. Axis deer fencing will be used to prevent feral animal ingress into the preserve.

Snares: are the primary means the field crew uses to remove feral pigs from the preserve.

Rappel Gear: (ropes, webbings, etc.) to assist crew accessing steep areas on valley walls and for safety when constructing fence in steep areas.

Tipper Gauge to measure rain fall in various locations in the preserve to assist in quantitative data.



County of Maui
 Department of Water Supply
Watershed Protection Grant Program
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H. ADMINISTRATIVE & OVERHEAD COSTS

Organization Name Tri-Isle Resource Conservation and Development Council, Inc.,
Pu'u Kukui Watershed Preserve

Breakdown of Expenses	Amount Requested
Tri_Isle RC& D Administrative Cost	\$36,000.00
Total Administrative & Overhead Costs	\$36,000.00

Narrative Justification - Tri-Isle RC&D's Administrative fee @ 12% of total grant award



County of Maui
 Department of Water Supply
Watershed Protection Grant Program
 Fiscal Year 2017

I. OTHER

Organization Name Tri-Isle Resource Conservation and Development Council, Inc.,
Pu`u Kukui Watershed Preserve

Breakdown of Expenses	Amount Requested
ArcGIS & Computer Software & License x 2	\$2,000.00
GPS handheld units' x 3	\$1,050.00
Chain Saw x 2	\$1,600.00
Brush Cutters x 2	\$1,500.00
Fence tools	\$1,200.00
Office Supplies	\$1,300.00
Outreach Materials and Supplies	\$1,200.00
Total Other Costs	\$9,850.00

Narrative Justification

ArcGIS & Computer Software & License for Desktop Standard is the second licensing level for ArcGIS Desktop software.

ArcGIS for Desktop Basic is the first licensing level. ArcGIS for Desktop Standard expands the capabilities of ArcGIS for Desktop Basic by providing a set of tools to create, edit, and ensure the quality of GIS data within a multiuser editing environment. Desktop Standard

GPS handheld units (3 x \$350) - communication devises for remote area work

Chainsaw – for clearing fence lines and maintaining roadways

Brush Cutters - (2 x \$750) – for brushing fence lines and clearing overgrown roadways

Fence tools to build ungate fencing

Office Supplies allows the staff to work efficiently. General office supplies for program operations = \$1,300.

Outreach and Volunteer Materials for informational and educational outreach events.

GENERAL TERMS AND CONDITIONS – DWS GRANTS

In consideration of grant COUNTY funds, GRANTEE agrees to the following conditions in the use and administration of COUNTY funds. In the event the following conditions conflict with any term, provision, condition and/or covenant contained in the body of the Grant Agreement, the terms, provisions, conditions and/or covenants contained in said body shall prevail.

PAYMENTS

1. GRANTEE shall submit to the COUNTY written Request for Payment. Each request shall be authenticated as to accuracy by the GRANTEE, and verified by the designated COUNTY departmental officer. Each request shall include the following:
 - a. Certification by the GRANTEE that the work for which payment is requested was performed in accordance with the terms of this Agreement;
 - b. Certified payroll records for the applicable time period or phase for which payment is being requested; and
 - c. Copies of all contracts, bills, invoices and purchase orders which support the request shall:
 - i. Be of certified copy of the original document.
 - ii. Be on the letterhead of the respective contractor or subcontractor requesting payment.
 - iii. Be signed by an authorized official of the GRANTEE.
 - iv. Identify the Project, the nature of the work or materials provided, and the specific phase of the Project for which the work or materials were provided.
2. The COUNTY may withhold any or all payments to the GRANTEE if the amount of payment as requested is, in the COUNTY'S determination, unreasonable or does not comply with the terms of this Agreement.
3. GRANTEE shall not alter SCOPE OF WORK which provided the justification for the grant without first obtaining the prior written consent of COUNTY. GRANTEE shall inform COUNTY of any proposed changes to the budget allocations or project description or schedule outlined herein.

RECORDS AND REPORTING

4. GRANTEE shall keep records and prepare reports, including detailed, separate financial records relating to ALL GRANT FUNDS. All accounts shall be prepared and maintained according to generally accepted accounting principles and as otherwise provided by law. GRANTEE shall maintain such accounts and documents as will serve to permit expeditious determination to be made at any time of the status of funds within the award, including the disposition of all

monies received from COUNTY and the nature and amount of all charges claimed to be against such funds.

5. Unless otherwise required in the Agreement or in related application submittals, GRANTEE shall supply COUNTY with a copy of its audited annual financial statements, prepared by its Certified Public Accountant(s). GRANTEE shall, upon request of COUNTY or State of Hawaii, provide COUNTY and State of Hawaii full access to inspect or audit GRANTEE'S records, report books, files, and other financial records and documents to allow COUNTY and State of Hawaii to determine compliance with the terms of this Agreement, measure program effectiveness, and assure proper expenditure. GRANTEE shall cooperate fully and assist the COUNTY and State of Hawaii in any such audit or inspection.
6. GRANTEE shall provide COUNTY written quarterly narrative progress reports regarding the Project and the use of grant funds within thirty (30) calendar days following the end of each report quarter. GRANTEE'S quarterly status reports shall contain the following information: summary of program status in relation to goals; objectives and scheduled action steps outlined in the grant proposal; numbers and descriptions of people or businesses served; financial status report of COUNTY funds used; and narrative report, including progress in meeting performance standards and economic self-sufficiency, if appropriate.
7. GRANTEE shall comply with all requests of the State of Hawaii for information and reports regarding the Project and GRANTEE'S operations.

GRANT AWARD RESTRICTIONS

8. GRANTEE shall not use grant funds to compensate its employees more than the wages then prevailing in the State of Hawaii for employees with similar skills and abilities.
9. GRANTEE shall not use grant funds for lobbying purposes or activities.
10. GRANTEE shall not use any grant funds for purposes of entertainment or perquisites. For purposes of this Agreement, "perquisites" means a privilege provided or service rendered by GRANTEE to an employee, officer, director, or member of GRANTEE to reduce that individual's personal expenses.
11. Grant funds shall not be used to recruit or convert a person to a new faith, institution, or cause.

NON-COMPLIANCE, SUSPENSION AND TERMINATION

12. GRANTEE'S failure to faithfully perform any part of this Agreement or any of the additional Conditions herein shall constitute noncompliance, and:
 - a. If the noncompliance continues for thirty (30) days after written notice

- thereof is delivered to GRANTEE or mailed to its last known address; or,
- b. if such noncompliance cannot be reasonably cured within thirty (30) days, but GRANTEE has failed to commence to cure such noncompliance and has failed to continue to diligently use its best efforts to cure such noncompliance; or,
 - c. if GRANTEE shall become bankrupt; or,
 - d. if GRANTEE fails to perform any of the terms of this Agreement or abandons or substantially suspends any part of this Agreement Scope of Work, the COUNTY may, at its sole discretion, take any one or more of the following actions:
 - i. Withhold grant fund payments pending correction of the noncompliance by the GRANTEE;
 - ii. Disallow all or part of the cost/expense of the work, activity or action not in compliance;
 - iii. Suspend or terminate, wholly or partially, the current award of this Agreement with the GRANTEE;
 - iv. Withhold additional award(s) to the GRANTEE; and
 - v. Terminate this Agreement without service or notice or legal process and without prejudice to any other remedy or right of action for breach of contract.

Upon termination of this Agreement, all finished or unfinished documents, data, studies, and reports purchased or prepared by the GRANTEE pursuant to this Agreement shall be transferred to the COUNTY.

13. Any costs incurred by the GRANTEE resulting from any obligations incurred by GRANTEE during suspension or after termination of this Agreement are not allowable unless the COUNTY authorizes such costs in the Notice of Suspension or Termination issued to the GRANTEE. The determination of eligible costs shall be made by the COUNTY in its sole discretion.

Further, the COUNTY may terminate this Agreement without cause by giving written notice to the GRANTEE thirty (30) calendar days before the effective date of such termination.

OTHER GRANT REQUIREMENTS

14. GRANTEE shall give the COUNTY and, if applicable, the State of Hawaii appropriate recognition in all grant-funded programs and printed materials.
15. GRANTEE shall comply with its articles of incorporation and/or bylaws and all relevant COUNTY, State and/or Federal rules and regulations concerning its policies and operations.
16. GRANTEE shall not discriminate either in the hiring of staff, use of volunteers,

use of facilities, or delivery of client services on the basis of sex, sexual orientation, national origin, age, race, color, religion or disability. GRANTEE shall comply with all applicable federal and state laws prohibiting discrimination.

17. GRANTEE shall comply with all applicable federal, state and COUNTY licensing requirements and with all applicable accreditation and other standards of quality generally accepted in the field of GRANTEE'S activities.
18. If GRANTEE is a nonprofit organization, GRANTEE shall establish and be governed by bylaws or policies which shall include provisions relating to nepotism and management of potential conflict-of-interest situations, as required by Section 3.36.040(c) of the Maui County Code.

TERMINATION OF GRANT AGREEMENT (GRANT CLOSEOUT)

19. GRANTEE shall not dispose of any real or personal property acquired with grant funds received under this Agreement without first receiving prior written consent of the COUNTY. Should GRANTEE cease to use any real or personal property acquired with grant funds for purposes described in this Agreement, GRANTEE shall either:
 - a. Pay the COUNTY the current fair market value of the asset; or
 - b. Transfer the control of the asset to the COUNTY.
20. Upon expiration or termination of this Agreement, the GRANTEE shall transfer to the COUNTY:
 - a. Any COUNTY funds on hand at the time of termination;
 - b. Any account receivables attributed to the use of COUNTY funds; and
 - c. Any real and/or personal property acquired or improved in whole or in part with COUNTY funds.
21. **FINAL REPORT** - Within thirty (30) days after expiration of the time of performance, GRANTEE shall submit to COUNTY a final Project report in a form satisfactory to COUNTY documenting GRANTEE'S efforts toward meeting the requirements of this Agreement, an inventory of all equipment costing individually \$500.00 or more acquired with funds provided under this Agreement, and a list of expenditures incurred in the performance of this Agreement.

GRANTEE'S final project report shall contain information which will be completed using the template below (Final Report Template - Form 4.4).



County of Maui
 Department of Water Supply
Watershed Protection Grants
 Fiscal Year 2017

Reimbursement Request Form

Organization Name _____

Expense Categories	Grant Amount	Payment #1	Payment #2	Payment #3	Final Payment	Balance
Personnel (Payroll Taxes & Fringes						
Transportation						
Contractual (e.g. helicopter)						
Utilities (e.g. telephone/cell, water Electricity, etc)						
Travel						
Field Crew Costs						
Supplies, Materials & Equipment						
Administrative & Overhead Costs (not to exceed 10% of total grant amount						
Other costs						
Total						

Sample Format for Quarterly Reporting

1. Background (only needed for first report)

2. Tasks Completed during the period: (as applicable)
 - a. Animal Control
 - i. Miles of fences surveyed
 - ii. Number of animals removed (number or %)
 - b. Weed Control
 - i. Acres surveyed (number)
 - ii. Number of weeds removed (%)
 - c. Invasive Species
 - i. Acres surveyed (number)
 - d. Invasive Species Removed (%)
 - i. Monitoring results
 - ii. Number of Aalii/Koa planted
 - iii. Installed exclosures
 - iv. Number of Volunteers recruited; number of volunteer hours

3. Budget Summary – expenses should be in accordance with the approved Grant Agreement budget, if revision is needed, please see guidelines in Item #4.
 - a. Justification for delay in the performance of deliverables (e.g. weather, under staff, season for planting, etc.)

 - b. Expenses incurred during the performance period (please attach copy of receipts)

4. Budget Revision Guidelines
 - a. Budget deviations of **less than 20%** per budget item are allowed without a formal budget revision
 - b. Budget deviations of **more than 20%** per budget item require a written budget revision request submitted in **advance**.
 - c. Moving 10% of costs between “Payroll” and “Other Costs” budget categories is **NOT** permitted
 - d. Budget revision request (s) can be submitted anytime during the project period prior to the end of the 3rd quarter.
 - e. The **Request for Grant Budget Revision** form must be used to make changes which do not require a contract amendment. Budget Revision Table should reflect entire budget, including items with no changes.

FINAL REPORT TEMPLATE

BACKGROUND

Complete a description of how your program achieved the goals, objectives and scheduled action steps outlined in grant proposal.

GOALS/OBJECTIVES

Provide a list of the goals and objectives from your grant application.

BENEFITS to MAUI COUNTY

Describe how your project/program has benefited the people of Maui County in relation to the goal of the DWS (providing clean water more efficiently). Keep in mind that Maui County DWS manages approximately 36,000 services on Maui and Molokai, and that the funds provided to you are from their revenues, not the general fund (tax base for all of the residents and businesses of Maui County). Include the numbers and descriptions of people and/or businesses served (please include an Excel table).

TASKS COMPLETED FOR FY 17

Provide in detail what tasks you have completed per your grant application (and any additional tasks as appropriate). Please include maps, geospatial data, photos and other documentations as appropriate.

STAFF EMPLOYED

Include the number of Full Time Employees (FTEs) as paid by these grant funds; total number of hours worked during the fiscal year, and total amount of grant funds spent in salary (including benefits and fringe).

INVENTORY OF EQUIPMENT (costing individually \$500 or more acquired with DWS grant)

Equipment Item (name and brand)	Value when purchased	How used	When acquired

AMOUNT OF FUNDING LEVERAGED

Please include an Excel table that identified the amount of funding you received from DWS, amount received from other sources. Please identify all sources by name, and state/federal/county government and or private, nonprofit entity. (PLEASE USE FORM 4.6)

FUNDING NEEDED AND WHAT YOU COULD DO IF THERE WAS MORE FUNDING

Provide an explanation of how you would spend additional grant funds if you had them. Please include whether or not new initiatives could be started, if these would include additional outreach opportunities, new equipment to be purchased and or if you had additional revenues whether it may impact amount of potential revenues to be leveraged.

CONSEQUENCES OF A DECREASE IN FUNDING

If, during the course of budget, there was to be a decrease in funding available for watershed programs-how would this impact your program/project? Please describe and if possible provide documentation as to whether you would lose staff, amount of time previously spent on specific activities would have what type of detrimental effect? How would a decrease in funding impact any leveraging activities (funds and/or resources from other sources)?



County of Maui
 Department of Water Supply
Watershed Protection Grants
 Fiscal Year 2017

Leveraged Funds – FY 2016

Grantee: _____

SOURCE OF FUNDS	Type of Entity (government/ private/ nonprofit)	Amount of Funds Leveraged	
		Cash	In-Kind

**County of Maui
Department of Water Supply
Water Resources and Planning Division**

REQUEST FOR GRANT BUDGET REVISION

Grantee _____ Contract # _____

Revision Requested for: ___ 1st Qtr ___ 2nd Qtr ___ 3rd Qtr Revision # _____

	APPROVED BUDGET	CHANGE + / (-)	REVISED BUDGET	JUSTIFICATION (ATTACH ADDITIONAL SHEET IF NEEDED)
Personnel (Payroll Taxes & Fringes)				
Transportation				
Contractual (e.g. helicopter)				
Utilities (e.g. telephone/cell, water, electricity, etc)				
Travel				
Field Crew Costs				
Supplies, Materials & Equipment				
Administrative & Overhead Costs (not to exceed 10% of total grant amount)				
Other costs				
Total Budget				

Print Name and Title Signature Date

DWS USE	Date Received:	<input type="checkbox"/> Approved	<input type="checkbox"/> Denied	WRPD Manager:	Date Approved: