

Department of Health Clean Water Branch Polluted Runoff Control Program

Quarterly Status Reporting Form
Clean Water Act 319(h) NPS Implementation Program

Quarterly Status Reports are required per contract terms. If no work was done during the reporting period, the CONTRACTOR must provide an explanation of the circumstances.

This Quarterly Status Report is for the period indicated below (**check only one and insert year**):

- ☐ January 1 – March 31, _____ (Due April 15th)
☐ April 1- June 30, _____ (Due July 15th)
☐ July 1 – September 30, _____ (Due October 15th)
☒ October 1 – December 31, 2021 (Due January 15th)

Project Title: Hakioawa Operations and Maintenance Plan 2021

Project Start/Completion Date: March 29, 2021 to September 30, 2022 (new 4-month extension)

Estimated % of Project Completed: 38%

Estimated % of Grant Funds Previously Requested: 9%

Quarterly Status Report Number: 3

Name, telephone number, and e-mail of person to be contacted for questions regarding this report: Lyman L. Abbott (808 243-5888 Work) (808 357-1640 Cell)

New email address; lyman.abbott@hawaii.gov

Please provide the following information for this reporting period. Additional sheets may be attached:

1. Progress/tasks started and/or completed as defined in the Contract's Scope of Services during **current** reporting period.

A. Summary of work completed (list all tasks and deliverables)

Task/Deliverable	Due Date	Date Task Completed/ Deliverable Submitted
Native out plantings (N = 2000)	October and November 2021	October 4-7 (250) and 25-28 (750), 2021, November 12-15 (500), and 15-18 (500), 2021

Task/Deliverable	Due Date	Date Task Completed/ Deliverable Submitted
Irrigation line inspection and repairs	December 2021	October and November 2021. Irrigation lines inspected and repaired as needed. Identified hose clamps in need of replacing
Gravel bags for fixing K1 road and Project Site road.	N/A	October 2021
Fix irrigation lines.	December 2021	November 2021
PV modules inspected for the solar pump on the Tank 3	December 2021	November 2021
Kiawe Wood Chipping	December 2021	TBD

B. GRTS Load Reductions

Pollutant	Estimated Load Reduction
Nitrogen (lbs/yr)	NA
Phosphorous (lbs/yr)	NA
Sediment (tons/yr)	0% (TBD)

C. Narrative Progress Report

2. Description of any major issues/problems encountered and/or resolved that may affect the CONTRACTOR's ability to complete the project as required (i.e., weather, personnel, equipment, etc.). If there is a change in the project timeline or budget, provide an explanation, revised timeline, budget, and completion schedule. (Please note that no-cost extensions must be applied for through the Department and will only be granted when the CONTRACTOR has demonstrated unforeseeable setbacks.)
3. The KIRC asked for a "no cost" extension on October 15, 2021. This extends the grant four months to September 30, 2022. This allows the KIRS II (Meghan Dunn) who was hired on October 1, 2021 to work one full year to September 29, 2022.
4. The wood chipper is on Kaho'olawe. However, due to unforeseen problems (starter battery dead) no chipping has occurred yet. The 4th quarter will see the chipper in action and producing kiawe chips for the plantings.

5. Description of any significant findings, results, or conclusions. If none, please indicate so.

A strong Kona Low arrived in Maui County on Sunday December 6, 2021 (Figure 1).

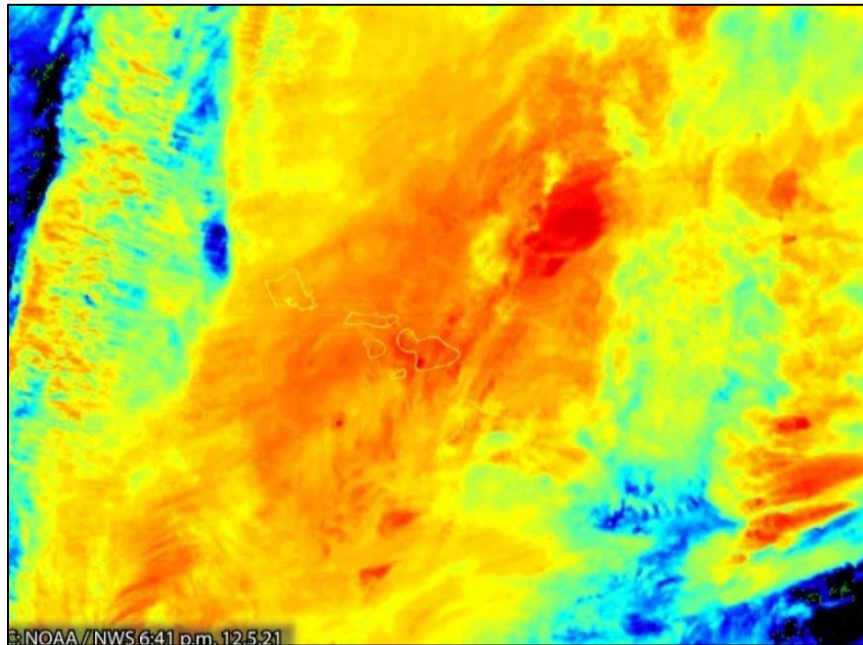


Figure 1. A Kona Low in the Hawaiian Islands December 5, 2021

The results of the excessive water flow on Kahoʻolawe from this significant rain event will be inspected during the access in January 2022.

Education and Outreach

Education and Outreach dates, audience, and participant numbers in third quarter are listed in Table 1.

Number	Date	Audience	# of Participants
1	October 4 to 7 2021	Maui Invasive Species Committee (M.I.S.C.)	5
2	October 26-29 2021	Kapa Sun Gear (Pacific Whale Foundation)	9
3	November 14, 2021	Trilogy Excursions (Maui Nui Seabird Recovery Project)	43
4	November 12-15 2021	Ka Ipu Kukui	8
5	November 15 to 18 2021	Montessori Middle School	7
		Total	72

Table 1 Education and Outreach for third Quarter of DOH grant

Due to continuing COVID-19 concerns, the volunteer groups on Kahoʻolawe island have become our main audience for disseminating information about the DOH grant to the public. We reached a total of 72 people this quarter through state agencies (M.I.S.C.), schools (Montessori Middle School, Maui) and small businesses on Maui (Kapa Sun Gear, including Pacific Whale Foundation).

- From October 4 to 7, 2021 the Maui Invasive Species Committee (M.I.S.C.) had 5 participants on Kahoʻolawe. Their description is as follows.

“The Maui Invasive Species Committee (MISC) is a project of the University of Hawai‘i- Pacific Cooperative Studies Unit. The committee is voluntary partnership of government, private and non-profit organizations, and concerned individuals working to prevent, control, or eliminate the most threatening invasive plant and animal species to protect Maui’s watersheds, ecological resources, agriculture, and community.”

They received information regarding Kahoʻolawe and the KIRC restoration program.

- From October 26 to 29, 2021 Kapa Sun Gear was on island and received information on the restoration work they were assisting with in the DOH Project Site. Kapa Sun Gear’s Core Mission is to;

Clean up our oceans and teach the next generation the importance of leading by example. Promoting less sunscreen usage for healthier seas. “Buy one, plant one” initiative, plants a native Hawaiian tree to help restore and preserve Kahoʻolawe.

One volunteer with the Kapa Sun Gear group was the Conservation Advocate with the Pacific Whale Foundation. She is responsible for coordinating policy advocacy efforts, assisting the Research program in scientific comments and testimonies, environmental outreach, and conservation messaging for the organization, and managing community marine debris research.

- On Sunday November 14, 2021, 43 passengers (including 5 members from a Maui Nui Seabird Recovery Project - MNSRP) on a Trilogy Excursions vessel made their way (via the Southern cliffs for a Hawaiian seabird survey) to Honokanai’a beach. They landed and walked around Base Camp learning of the ordnance on island and infrastructure supporting the services provided there (Motor Pool). A video is available on YouTube summarizing “Trilogy’s Huaka’i; Kahoʻolawe Circumnavigation”. (<https://www.youtube.com/watch?v=qAanflgooxU>).
- From November 12 to 15, 2021, eight (8) volunteers from Ka Ipu Kukui (Crucible of Light) were on Kahoʻolawe. That group develops emerging leaders and plan for Maui Nui’s future. They are a nonprofit community-based program created to identify and develop young leaders in Maui County. Our own Ocean Resources Manager, Dean Tokishi is a current active member. Our KIRC Boat Captain Lopaka White is also a former member.

- From November 15 to 18, 2021, Montessori Middle School (Maui) had 7 volunteers on island. They were given the current NPS Brochure and discussed the differences in infiltration rates in restored versus non restored areas on Kahoʻolawe.

ʻOhai (*Sesbania tomentosa*) Seedlings

ʻOhai seedlings growing in Native Nursery, LLC in Kula, Maui (Figure 2).



Figure 2 ʻOhai (from Kahoʻolawe stock) at Native Nursery in Kula December 2022

Initially collected on Puʻu Koaʻe (Figure 3) an islet off the southern cliffs of Kahoʻolawe, the seeds were germinated, propagated at nurseries on Maui and then out planted in the DOH Project Site (2018 to 2019).



Figure 3 Puʻu Koaʻe islet off the Southern Cliffs of Kahoʻolawe

A new generation of seeds, collected in 2020 from 'ohai plants growing in the DOH Project Site were given to Native Nursery in Kula, Maui for germination and propagation.

Based on the Scope of Services, a description of tasks expected to be completed in the next reporting period (Table 2).

	Task	Comment
1	2000 Native out plantings with soil amendments	February (N=1000), March (N=1000), 2022
2	Check dams	9 more to install (for a total of 20)
3	Replace hose clamps and 1 brown inline irrigation line	One brown irrigation with inline emitters to be replaced with a black poly line with 2.0-gallon per hour emitters. Replace hose clamps were needed.
4	Non native plant control	Crown Flower, Guinea grass, Koa Haole

Table 2. Tasks to be performed next quarter (January to March 2022)

Hose Clamp Replacements

An example of hose clamp replacement needed on a tee, and a replacement of two new hose clamps on a valve is shown in Figure 4a, b.

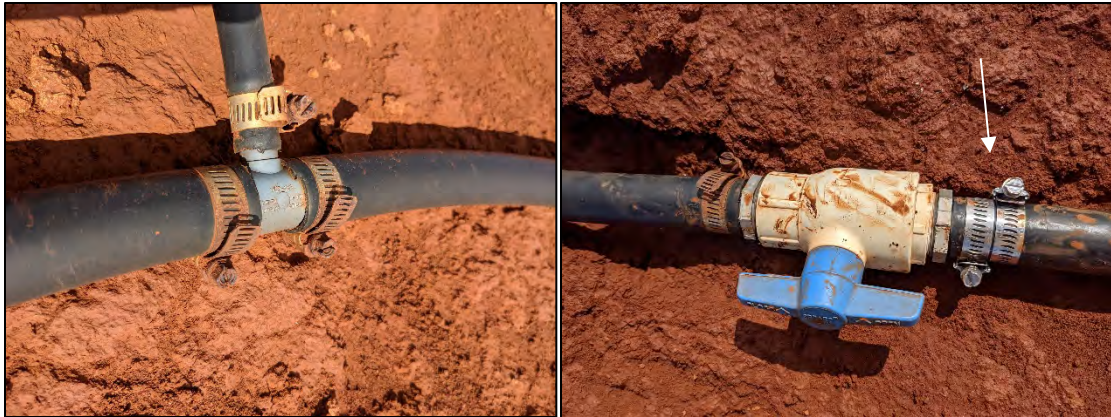


Figure 4a, b Hose clamp replacement needed on a tee and replacement of two new hose clamps on a valve

Drone Imagery

The Drone Deploy “Lite” software was finally acquired on December 10, 2021. New Drone images to be taken in 2022 (as per Scope of Services, B3 - Vegetation Monitoring) will be compared to the ones taken in 2018-2019 from the previous DOH Project in the same area.

The Drone Deploy “Lite” software will also generate orthomosaic maps of the Project Site which will be 3D, high definition, geo-referenced images imported into ArcGIS Earth.

Personnel Services (Staff/Volunteer Hours)

KIRC Staff Hours

Staff hours and percentages achieved for the grant are summarized in Table 3 in semi-monthly increments for the third quarter (October 1 to December 31, 2021).

A. Personnel Services (Staff)								
Weeks	Year	Period (3rd Qtr) October 1	Lyman	Jamie	Paul	Carmela	Maggie	Meghan
14	2021	October 1 to 15 2021	16	0	0	0	0	88
15	"	October 16 to 31 2021	0	0	2	0	0	80
16	"	November 1 to 15 2021	0	8	0	0	0	88
17	"	November 16 to 30 2021	20	12	0	0	0	88
18	"	December 1 to 15 2021	0	4	0	0	0	88
19	"	December 16 to 31 2021	0	6	0	0	0	96
		Total	36	30	2	0	0	528
		Percent Complete	57.7%	22.1%	100.0%	20.0%	0.0%	25.4%
		Sum Total Hours						596

Table 3 Staff Hours and percentages achieved for the grant from October 1 to December 31, 2021

In the third Quarter, KIRC Staff contributed 68 hours (Lyman - 36, Jamie - 30 and Paul - 2) towards "Matching Funds". Paul Higashino has finished his required ten (10) hours for the grant.

KIRS II New Hire

The new Kaho`olawe Island Reserve Specialist II (KIRS II) Meghan Dunn, hired on October 1, 2021, contributed a total of 528 hours towards "Grant Funds". In the third quarter, she worked on Kaho`olawe supporting the volunteer accesses and out planting. On Maui, she assisted with the logistics, purchasing, and repairing and operating the `Ohua. Her credentials and current experience are presented below.

In 2018, she acquired her 100 Ton U.S. Coast Guard Master Captains License, and a PADI Dive Certification. She is an arborist in training and Meghan is applying her unique skill set to the KIRS II position. She is being trained in KIRC procedures of logistics and purchasing in the State of Hawai'i procurement system.

Volunteer Hours

Twenty-seven (27) volunteers worked 136 hours in the Project Site for the third quarter (October and November only, 2021). The work included out planting 2000 plants (Table 4), and filling and placing gravel bags in repairing the main K1 road and the road in the DOH Project Site.

Quarter	Trip #	Date	Group Name	N Vol =	Hours/Vol	Total Hours	Area	Work	Comment
3rd	5	October 4-7 2021	M.I.S.C.	5	4	20	DOH 5	1st Planting (N=250)	into gulches
"	6	October 26-29 2021	Kapa Sun Gear	7	8	56	DOH 5	2nd Planting (N=750)	into planting corridors
"	7a	November 12 - 15 2021	Ka Ipu Kukui	8	4	32	DOH 5	3rd planting (N=500)	into planting corridors
"	7b	November 15-18 2021	Montessori Middle School	7	4	28	DOH 5	3rd Planting (N=500)	into planting corridors with Soil erosion pins
			Sum	27		136		2000	

Table 4. Summary of volunteer trips, dates, group names, number of volunteers, and hours

Dates, groups, and volunteer names are listed in Table 5 for the third quarter.

Number of volunteer	Trip #	Date	Group name	Volunteer Name
1	5	October 4 to 7 2021	M.I.S.C.	Kayani Singh
2	"	"	"	Danielle Higashi
3	"	"	"	Darrell Aquino
4	"	"	"	Tyler Gagnon
5	"	"	"	Megan Archibald
1	6	October 26 to 29 2021	Kapa Sungear	Amanda Padilla
2	"	"	"	Lee Okazaki
3	"	"	"	Jordon Padilla
4	"	"	"	Flor Armendariz
5	"	"	"	Sarina Padilla
6	"	"	"	Shelby Serra (Pac Whale)
7	"	"	"	Ashley Hechararria
1	7a	November 12 to 15 2021	Ka Ipu Kukui	Shayna Decker
2	"	"	"	Lori Teragawachi
3	"	"	"	Jessica Adkins
4	"	"	"	Rebecca Pang
5	"	"	"	Zaira Katsuda
6	"	"	"	Joe Imhoff
7	"	"	"	Kasie Takayama
8	"	"	"	Matt Bachman
1	7b	November 15 to 18 2021	Montessori Middle School	Jeffrey Freidman
2	"	"	"	Jamie Athearn
3	"	"	"	Arieanna Lawrence
4	"	"	"	Kahalawai Lawrence

Number of volunteer	Trip #	Date	Group name	Volunteer Name
5	7b	November 15 to 18 2021	Montessori Middle School	Mimi Ohad
6	"	"	"	Quinn Quinabo
7	"	"	"	Nico Santin

Table 5 List of 27 volunteers for the third quarter

B. Travel

Three 'Ohua round trips (at \$1000 per trip) were tallied in the third quarter. October had two trips and November had one for a total of \$3,000.

C. Operating Expenses and Supplies

Base Camp expenses presented as "Dawson" Invoices (at \$1000 per trip) were incurred for two volunteer access trips in October 2021 and one in November 2021 during the third quarter for \$3,000 total.

D. Equipment

Equipment purchased in the 3rd quarter includes 2000 native plants and Drone Deploy "Lite" software license for 1 year starting from December 10, 2021 to December 10, 2022 (Table 6).

F. Construction Materials and Supplies

Four hundred 400 gravel (sand) bags were purchased during the third quarter (Table 6).

G. Other Misc Expenses

State of Hawaii GE Tax was calculated at 4.166% throughout the billing cycle of the 3rd quarter (Table 6).

Qtr	Number	Date	Vendor	Description	Sub Total	Tax rate	Tax	Total	PCARD	Invoice #
3	1	10/1/2021	Native Nursery, LLC	Native Plants (N=250)	\$ 712.50	4.166%	\$ 29.68	\$ 742.18	961-224	5364
3	2	11/29/2021	Grainger	Gravel bags 26" x 14" (pkg/100)	\$ 218.28	4.166%	\$ 9.09	\$ 227.37	961-192	9134023887
3	3	10/25/2021	Native Nursery, LLC	Native Plants (N=750)	\$2,137.50	4.166%	\$ 89.05	\$2,226.55	961-225	5410
3	4	11/10/2021	Native Nursery, LLC	Native Plants (N=1000)	\$2,850.00	4.166%	\$118.73	\$2,968.73	961-232	5478
3	5	12/10/2021	Drone Deploy Limited	Drone Deploy "Lite" Software	\$1,188.00		\$ -	\$1,188.00	961-233	N/A
				Sub Total	\$7,106.28		\$246.56	\$7,352.84		

Table 6. Summary of - D. Equipment, F. Construction Materials and Supplies and G. Other Misc Expenses (GE Tax)

Note: No tax required from Drone Deploy Limited for the 1-year Drone Deploy "Lite" software license (December 10, 2021 to December 10, 2022).

Table 7 has the Summary of the Grant Funds and Matching Funds for the grant through the third quarter.

Summary - Grant Funds						
No.	Description	Original Contract Amounts	Contract Amount from Previous Quarterly Invoices	Amount Requested in this Invoice	Remaining Contract Amount	
A.	Personnel Services (KIRS II)	\$52,169.94	\$ -	\$13,243.14	\$38,926.80	
B.	Travel	\$10,000.00	\$ 4,000.00	\$3,000.00	\$3,000.00	
C.	Operating Expenses	\$10,000.00	\$ 4,000.00	\$3,000.00	\$3,000.00	
D.	Equipment (Native Plants, Drone Software)	\$15,884.00	\$ 325.64	\$6,888.00	\$8,670.36	
E.	Professional Services (N/A)	\$ -	\$ -	\$ -	\$ -	
F.	Construction Materials and Supplies (Sand Bags)	\$3,331.45	\$ -	\$218.28	\$3,113.17	
G.	Other Miscellaneous Expenses (Tax)	\$800.52	\$ 13.57	\$246.56	\$540.40	
Total:		\$92,185.91	\$ 8,339.21	\$ 26,595.98	\$57,250.73	
Summary- Matching Funds						
No.	Description	Original Contribution Amounts	Contribution Amount from Previous Quarterly Invoices	Contributions Submitted in this Invoice	Remaining Contribution Amount	
A.	Personnel Services (Vol and all other KIRC Personnel)	\$30,042.14	\$ 14,834.60	\$6,358.58	\$8,848.95	
B.	Travel	\$ -	\$ -	\$ -	\$ -	
C.	Operating Expenses	\$ -	\$ -	\$ -	\$ -	
D.	Equipment	\$ -	\$ -	\$ -	\$ -	
E.	Professional Services	\$ -	\$ -	\$ -	\$ -	
F.	Construction Materials and Supplies	\$ -	\$ -	\$ -	\$ -	
G.	Other Miscellaneous Expenses (GE Tax)	\$ -	\$ -	\$ -	\$ -	
Total:		\$30,042.14	\$14,834.60	\$6,358.58	\$8,848.95	
Total		\$122,228.05				

Table 7. Summary of Grant and Matching Funds through the third quarter

End of Third Quarter Status Report