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)**:

- **X** January 1 – March 31 __2023____ (Due April 15th)
- ☐ April 1- June 30, _____ (Due July 15th)
- ☐ July 1 – September 30, _____ (Due October 15th)
- ☐ October 1 – December 31, _____ (Due January 15th)

Project Title: __**He'eia Watershed Ungulate-Exclusion Fencing and Erosion Control**____

Project Start/Completion Date: __**January 2021/December 2023**_____

Estimated % of Project Completed: ___**35**__%

Estimated % of Grant Funds Previously Requested: ___8___%

Quarterly Status Report Number: ___**#9/_04-23**____

Name, telephone number, and e-mail of person to be contacted for questions regarding this report: ___**Kim Falinski, kim.falinski@tnc.org, 808-206-6565**_____

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	Status
Conduct: Build community support for the project, including engaging local hunters and community leaders	Complete
Submit: Write and submit Project Effectiveness Monitoring Plan and Sample Analysis Plan for DOH approval	Complete
Conduct: Set up erosion pin plots, vegetation photopoints	Complete
Conduct: Submit permitting memos to OCCL	In progress
Conduct: Set up game monitoring cameras	In progress

Conduct: Establish vegetation plot photopoints, and continue photopoint monitoring every 3 months	In progress
Submit: Incorporate DOH revisions into Project Effectiveness Monitoring Plan and Sample Analysis Plan	Awaiting revisions
Conduct: Order water quality monitoring equipment including autosamplers, pressure sensors and Parshall flumes	In progress
Conduct: Monthly water quality grab sample monitoring	In progress
Conduct: Maintain autosamplers through battery maintenance and QA protocols	
Conduct: Site visit to estimate feral pig densities in the proposed area	Complete
Conduct: Site visit to begin planning process for proposed fence area	Complete
Conduct: Complete draft planning for proposed fence, including maps, materials needed and fence lengths	Complete
Conduct: Work with community to propose project and gather feedback	In progress
Conduct: Once permitting approval is received, finalize fence plans	
Conduct: Site visit to mark proposed fence boundaries	In progress
Conduct: Initiate bid process for fence building contract	
Conduct: Construct feral pig fence	
Conduct: Post-fence installation animal monitoring	
Conduct: Coordinate community hunters to begin removal efforts post pig fence construction	
Conduct: Measure erosion pins throughout project every six months	
Conduct: Analyze runoff data and present at conference	
Conduct: Fence checks	
Conduct: Final site visit to estimate feral pig densities and plan the next phases of project	
Submit: Draft report	
Submit: Final report	

B. GRTS Load Reductions

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

Load reductions will begin after the fence is installed.

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.)

Ungulate-exclusion fencing

During this reporting period from January 1 to March 31, 2023, The Nature Conservancy (TNC) continued to develop the details and logistics of the fence-building contract Scope of Work. Multiple contractors were identified that have experience and expertise in urban environments, with both the wet and steep terrain of the project area. The next step will be to solicit quotes from contractors with this set of qualifications.

We have also made progress on identifying the appropriate permits needed for the project. Aspects such as land ownership, the numbers of acres to be cleared, the project timeline, and the land zoning are being considered when determining the regulatory requirements. Thus far, we have identified that this parcel is zoned as conservation land, sub-zone general. Next, TNC will identify the best timeline for obtaining the permits; this could either be in phases that align with the work being proposed (five acres at a time) or one permit for the entire project, which will encompass more than 10 acres.

Vegetation and erosion monitoring

The very wet conditions this spring made vegetation sampling difficult, and we were unable to make further monitoring progress beyond the initial 10 plots that were established in the middle drainage last quarter. In the meantime, we have been continuing to work with and mentor graduate student Matthew Kaho'ohanohano, who is currently analyzing the data previously taken in collaboration with TNC.

Water quality sampling

From January to March 2023, we participated in water quality sampling at the nine sites established for long-term monitoring in the He‘eia watershed, including four sites downstream of the ungulate removal site. At these sites, we take samples to monitor nutrient and suspended sediment levels, in addition to physical parameters. In collaboration with the National Estuarine Research Reserve (NERR), we also sampled the groundwater springs throughout the watershed, including in the wetland. TNC staff joined NERR post-doctoral researcher Veronica Gibson to measure flow, nutrients, and radon (an indicator of groundwater) at 30 sites. The sampling team also included Henrietta Dulai, a professor in the Department of Earth Sciences at the University of Hawai‘i at Mānoa, who had conducted research in the area in 2013. This effort will continue through April 2023 and results will be forthcoming after lab analysis. We look forward to incorporating a portion of these data in our analysis of the effects of restoration on downstream water quality.

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

During the rain events in January 2023, we observed hydrologic connectivity from the target watersheds into the broader wetland restoration area. Similar to our last report, the ground in the target watersheds continues to be soft and highly erodible. We are excited to move forward with the next phase of work, making progress on the fencing contract, continuing our vegetation monitoring once field work conditions improve, and expanding our research partnerships to better understand water quality.

4. Based on the Scope of Services, a description of tasks expected to be completed in the next reporting period.

Tasks planned for the next reporting period, April 1 to June 30, 2023, are as follows:

- Move forward on the fencing contract, including completing the Scope of Work.
- Complete permitting requirements.
- Complete vegetation plots and estimate feral pig density with assistance from our terrestrial partners.
- Apply for a no-cost extension for this award to ensure sufficient time to accomplish all of our grant objectives and deliverables.

Summary of expenditures and in-kind contributions previously requested in comparison with the Contract's project budget and remaining funds. The summary must be actual cumulative amounts for each line item (i.e., personnel services, travel, operating expenses, equipment acquisition, construction materials, other, etc.) current as of this quarterly status report. Please see the example on Page 4 if necessary.

Grant Funds

No.	Description	Original Contract Amount	Contract Amounts from Preceding QSR	Expenditures during this Quarterly Reporting Period	Current Contract Amount (Remaining Funds)
A	Personnel Services	$ 75,957.00	$ 12,599.93	$ 1,310.14	$ 62,046.93
B.	Travel	$ 5,006.00	$	$	$ 5,006.00
C.	Operating Expenses	$	$	$	$
D.	Equipment	$	$	$	$
E.	Professional Services	$ 82,600.00	$	$	$ 82,600.00
F.	Construction Materials and Supplies	$ 5,600.00	$ 1,084.69	$ 512.94	$ 4,002.37
G.	Other Misc. Expenses	$ 41,771.10	$ 3,110.41	$ 408.37	$ 38,252.32
	TOTALS	**$ 210,934.10**	**$16,795.03**	**$2,231.45**	**$191,906.62**

In-Kind Contributions (Matching Funds)

No.	Description	Original Contribution Amounts	Contribution Amounts from Preceding QSR	Contributions during this Quarterly Reporting Period	Current Contribution Amount
A	Personnel Services	$ 18,989.00	$ 2,663.83	$ 327.54	$ 15,997.63
B.	Travel	$ 1,252.00	$	$	$ 1,252.00
C.	Operating Expenses	$	$	$	$
D.	Equipment	$	$	$	$
E.	Professional Services	$ 20,650.00	$	$	$ 20,650.00
F.	Construction Materials and Supplies	$ 1,400.00	$	$ 128.23	$ 1,271.77
G.	Other Misc. Expenses	$ 10,442.84	$ 613.18	$ 102.08	$ 9,727.58
	TOTALS	**$ 52,733.84**	**$ 3,277.01**	**$ 557.85**	**$ 48,898.98**