

Clean Water Act Section 319
Annual Report
Federal Fiscal Year 2021



Hawai'i State Department of Health
Clean Water Branch
Polluted Runoff Control Program



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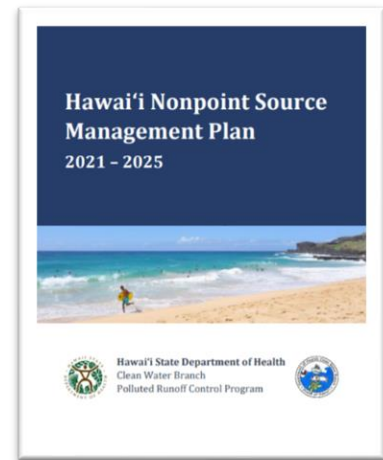
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I. Introduction

In 1987, Congress enacted Section 319(h) of the Clean Water Act (CWA), establishing a national program to control nonpoint source (NPS) pollution, also known as polluted runoff. Administered by the U.S. Environmental Protection Agency (EPA), the CWA §319(h) program provides funding to implement state NPS programs. The State of Hawai'i Department of Health (DOH) Clean Water Branch (CWB) Polluted Runoff Control Program (PRC) administers the state's NPS program to protect and improve the quality of Hawai'i's water resources by preventing and reducing NPS pollution. The PRC and its partners implement the [Hawai'i Nonpoint Source Management Plan \(NPS Plan\)](#), which includes implementation of NPS pollution control projects and watershed planning activities.



The purpose of this report is to track the progress the State has made in achieving the *NPS Plan* objectives and milestones in Federal Fiscal Year 2021 (FY21; October 1, 2020 – September 30, 2021) and to fulfill the annual reporting requirements of CWA §319(h).

II. Major Program Accomplishments & Highlights

- A. **Nonpoint Source Pollution Control rules adopted** – [Chapter 11-56](#) (Nonpoint Source Pollution Control), Hawai'i Administrative Rules (HAR) was adopted in June 2021. The rules codify the majority of the Coastal Nonpoint Pollution Control Program's (CNPCP) management measures for Agriculture, Forestry, and Marinas and Recreational Boating. The rules primarily apply to publicly owned lands. Subject landowners must register with DOH and develop water pollution protection plans to control NPS pollution from their properties/facilities. These plans must incorporate applicable NPS pollution management measures, specify BMPS that will be implemented, and provide a description of BMP monitoring and inspection methods. Annual reports from subject landowners are required to demonstrate that the water pollution protection plan is being implemented and controlling NPS pollution.
- B. **DOH Surface Water Protection Branch (NPS Branch) established** – The proposed NPS Branch was approved by the Governor and established in October 2021. The NPS Branch will formalize voluntary and regulatory NPS management programs and provide a more comprehensive approach to addressing polluted runoff and improving water quality statewide. The new branch includes the PRC Program and six new positions to implement the newly adopted NPS rules (HAR Chapter 11-56).
- C. **CNPCP management measures approved** – The New Development Management Measure was approved by EPA and NOAA in May. (*Update: The Management Measure for Planning, Siting, and Developing Roads and Highways and the Management Measure for Bridges were approved by NOAA and EPA on October 7, 2021.*)

D. **Revised Hawai'i NPS Management Plan approved** – The revised *NPS Plan* was approved by EPA in March 2021. The updated plan identifies new priority watersheds in South Kohala for restoring waters and expands the State's efforts to leverage partnerships to restore, protect, and monitor the State's waters.

E. **Pollutant load reductions** – The following load reductions were achieved by projects implemented in FY21:

TSS (lb/yr)	Sediment (ton/yr)	Nitrogen (lb/yr)	Phosphorus (lb/yr)	Enterococcus (CFU)
42,342	1,324	9,162	7,353	2x10 ¹⁵

F. **Sixteen NPS projects implemented across 34 watersheds** – The combined 319 grant awards and match for these projects are \$4,038,612 and \$1,461,799, respectively (Table 1). Information, including the status and current balance, on these projects can be found in Appendix A, and a map showing watersheds with projects can be found in Figure 1.

G. **Three projects completed** – Three projects were completed in FY21, including a watershed coordinator and two agricultural NPS mitigation projects. Two of these projects were implemented via partnerships. The total 319 project funds spent on these projects were \$441,717 and the total match provided by partners/grantees was \$122,087.

1. The **West Maui Ridge to Reef Watershed Coordinator** was funded in collaboration with the Department of Land and Natural Resources (DLNR) Division of Aquatic Resources (DAR). The Watershed Coordinator conducted and coordinated a total of 65 outreach events, including community events and workshops, and assisted in coordinating water quality improvement and monitoring efforts across several state, local, and federal agencies in West Maui.
2. The **Pelekane Grazing Improvement Project** was completed in January and implemented through a collaboration with the DLNR Division of Forestry and Wildlife (DOFAW). The project's goal was to reduce turbidity, nitrogen, and phosphorous inputs into Pelekane Bay by implementing grazing BMPs across 2,052 acres of agricultural land.
3. The **Waimanalo Stream Restoration and Community Outreach Phase 3** project's goal was to reduce turbidity, TSS, nitrogen, and phosphorus inputs into Waimanalo Stream. As a result of this project, seven new conservation plans were completed, agricultural BMPs were implemented on nine farms, 700 feet of the Waimanalo streambank were restored, and NPS-related outreach and education events were held. Load reductions resulting from the project include 204 tons/year of sediment, 473 lbs/year of nitrogen, and 204 lbs/year of phosphorus.

H. **Five projects awarded in FY21**

1. Two new restoration projects were awarded in November (via the RFP held in FY20) for spending a portion of the FY20 Grant:

Table 1. Fiscal Year 2021 watershed-based plan (WBP) implementation project information

CWA 319 WBP IMPLEMENTATION PROJECTS						Load Reductions				
Project Status & Type	No. Projects	No. Partnerships	No. Watersheds	319 Funds*	Match	TSS (lb/yr)	Sediment (ton/yr)	Nitrogen (lb/yr)	Phosphorus (lb/yr)	Enterococcus (CFU)
IMPLEMENTED	16	9	33	\$4,038,612	\$1,461,799	42,342	1,324	9,162	7,353	2x10 ¹⁵
Coordinator	3	2	23	\$446,962	\$96,451					
Monitoring	1	1	5	\$38,536	\$10,049					
Protection	2	2	2	\$398,648	\$101,147	2,342	1	48	9	
Restoration	10	4	19	\$3,154,466	\$1,254,151	40,000	1,323	9,114	7,344	2x10 ¹⁵
AWARDED*	3	1	4	\$721,158	\$200,016		1,798	300	150	
Protection	1	1	1	\$234,000	\$58,500					
Restoration	2	0	4	\$487,158	\$141,516		1,798	300	150	
Grand Total	19	10	34	\$4,759,771	\$1,661,815	42,342	3,122	9,462	7,503	2x10 ¹⁵

*Includes the ORCD project that received its NTP 9/30/21 and did not achieve any load reductions or spend any of its 319 grant award; does not include DOFAW projects selected in 9/2021

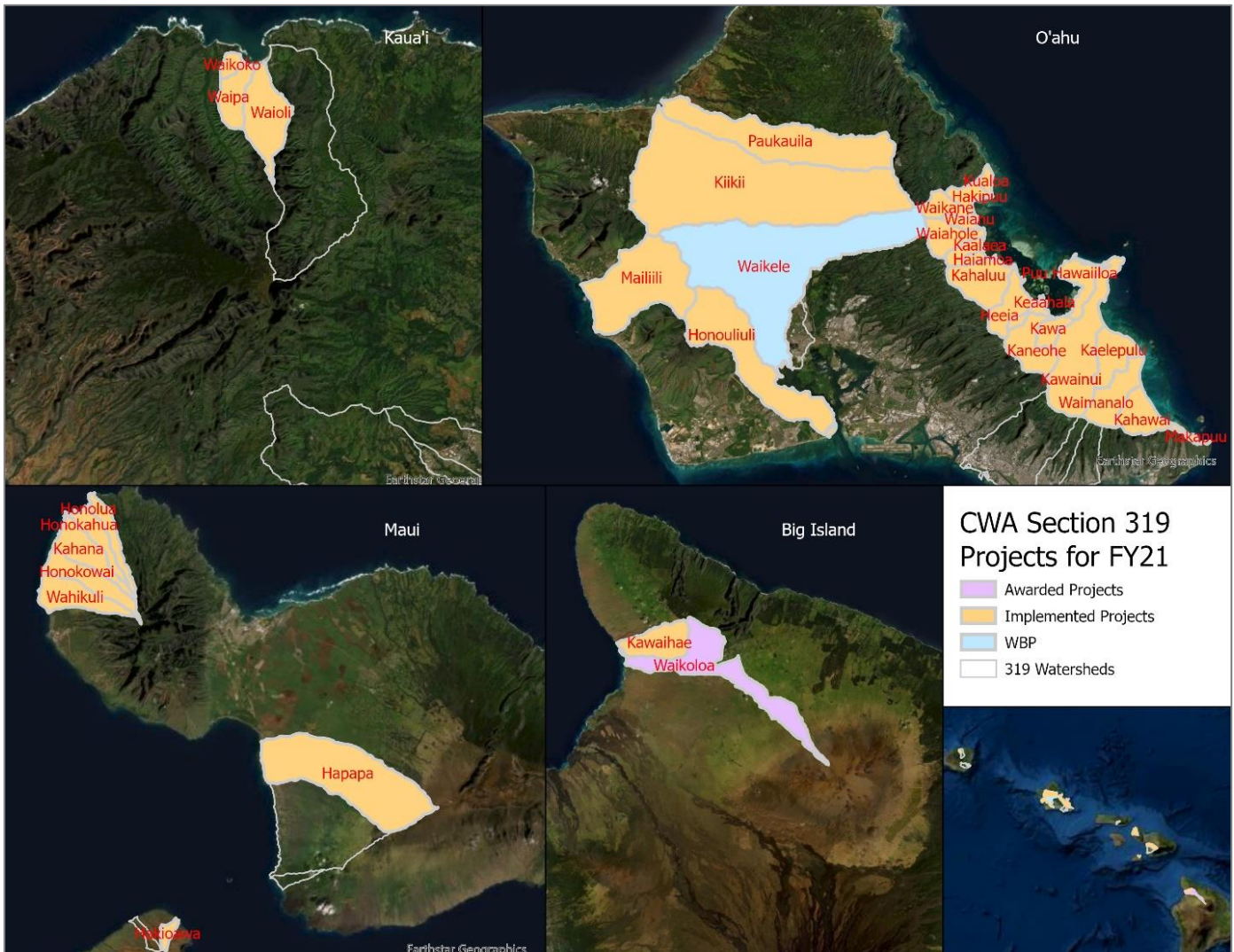


Figure 1. Watersheds in which CWA §319 projects were implemented and awarded in Fiscal Year 2021

- a. Mitigating Erosion in Pelekane (\$257,125 in FY20 Grant funds)
 - b. Agricultural Stewardship and Stream Restoration in Ki'iki'i and Paukauila Watersheds (\$230,04 total grant funds; \$176,270 in FY20 Grant funds)
2. Two projects were awarded 319 funds during DOFAW's Watershed Partnerships Program Grant (WPPG) RFP process in late September. (Note: These projects are not reflected in tables or figures because they have not been finalized and will be paid for with the FY21 Grant.) DOFAW will subcontract Mauna Kahalawai Watershed Partnership (\$209,951) and Ko'olau Mountains Watershed Partnership (\$15,793) to conduct ungulate control and planting activities to control erosion/sediment runoff in West Maui and O'ahu.
 3. After a year-long project development process, DOFAW's Sustaining the Source Waters of Kawaihae Watershed was awarded \$234,000 in 319 funds to protect source waters in Kawaihae watershed, a new priority watershed for NPS pollution management.
- I. **Priority watershed projects and load reductions** – Nine 319 projects were implemented in priority watersheds and accounted for 62% of 319 grant funds spent on projects across all open grants (Table 2). The majority of funds/projects were invested in the five priority watersheds of West Maui to address turbidity impairments in seven waterbodies (table 3), coordinate NPS control efforts among partners, monitor water quality, and conduct outreach. Load reductions achieved for priority watershed projects were as follows:

TSS (lb/yr)	Sediment (ton/yr)	Nitrogen (lb/yr)	Phosphorus (lb/yr)
2,342	803	724	216

- J. **Restoring impaired waters** – Twenty impaired waterbodies and 34 impairments were addressed by 10 restoration projects in FY21 (Tables 1 and 3). Nine of these projects addressed 17

Table 2. Fiscal Year 2021 priority watershed project information

PRIORITY WATERSHEDS					Load Reductions				
Project Status & Type	No. Projects	No. Partnerships	319 Project Funds*	Match	TSS (lb/yr)	Sediment (ton/yr)	Nitrogen (lb/yr)	Phosphorus (lb/yr)	
IMPLEMENTED	9	6	\$2,492,505	\$1,013,937	2,342	803	724	216	
Heeia	2	1	\$517,396	\$123,839	2,342	540	208	9	
Protection	1	1	\$306,462	\$71,105	2,342	-	48	9	
Restoration	1	0	\$210,934	\$52,734	-	540	160	-	
South Kohala	1	1	\$90,000	\$22,500	-	-	-	-	
Restoration	1	1	\$90,000	\$22,500	-	-	-	-	
West Maui	6	4	\$1,885,109	\$867,598	-	263	516	207	
Coordinator	2	2	\$296,402	\$48,325	-	-	-	-	
Monitoring	1	1	\$38,536	\$10,049	-	-	-	-	
Restoration	3	1	\$1,550,170	\$809,224	-	263	516	207	
AWARDED	2	1	\$491,125	\$122,797	-	1,648	-	-	
South Kohala	2	1	\$491,125	\$122,797	-	1,648	-	-	
Protection	1	1	\$234,000	\$58,500	-	-	-	-	
Restoration	1	0	\$257,125	\$64,297	-	1,648	-	-	
Grand Total	11	7	\$2,983,630	\$1,136,734	2,342	2,451	724	216	

waterbodies with turbidity impairments (Table 3). Turbidity is the State's most common waterbody impairment (2020 Integrated Report). Honolulu Bay was restored for total phosphorus in FY21 (see Section 4, Objective 2 milestones for more information.)

- K. **Protecting waters** – There were two protection projects implemented in FY21 (Tables 1 and 4), including one protecting He'eia Fishpond from sediment and nutrients in order to sustain habitat for aquatic life and cultural practices.

Table 3. Impaired waterbodies targeted by CWA 319 projects implemented in Fiscal Year 2021

RESTORING WATERS			No. 319 Projects Implemented	Current-ly Monitored?	Monitoring Entity	No. Impairments Addressed by Projects								
Watershed & Waterbodies	Waterbody Type	Grantees				Assessed	TSS	Turb.	TN	TP	Ent	NO3+ NO2	NH4	Chl
PRIORITY WATERSHEDS			5			0	8	2	1	0	0	0	0	11
He'eia			1			0	0	1	0	0	0	0	0	1
Heeia Stream	Stream	TNC	1	2018	Yes	DOH/TNC	A	A	1	A	-	N	-	1
South Kohala			1				0	1	1	1	0	0	0	3
Pelekane Bay			1	2014	No	None	-	1	1	1	A	N	N	3
West Maui			3				0	7	0	0	0	0	0	7
Fleming Beach (North)	Coastal	MLP	1	2020	Yes	DOH	-	1	A	A	A	N	N	1
Hanaka'o'o Beach Co. Park	Coastal	CORAL	1	2020	Yes	DOH/HOKWO	-	1	A	A	A	N	N	1
Honokowai Stream			2	<1998	No	None	-	1	-	-	-	-	-	1
Honolua Bay			1	2020	Yes	HOKWO	N	1	A	A	N	N	N	1
Kaanapali Shoreline			1	2020	Yes	HOKWO	-	1	A	A	A	N	N	1
Kahana Stream			1	<1998	No	None	A	1	A	A	-	N	A	1
W. Maui Coast-Kaopala Bay			1	2004	Yes	HOKWO	-	1	N	-	-	N	N	1
OTHER 319 WATERSHEDS			5				1	9	4	5	4	0	0	23
Hanalei Bay (Waioli Beach)			1	2020	Yes	DOH	-	1	-	-	A	-	-	1
Kahaluu Stream			1	2016	No	None	A	1	A	A	N	N	-	1
Kaiaka Bay			1	2012	No	None	-	N	1	-	N	N	N	1
Kihei Coast-Lipoa-South			1	2004	Yes	DOH/HOKWO	-	1	-	-	-	-	N	1
Waihee Stream			1	2016	No	None	-	N	1	1	N	N	-	2
Waikoko Estuary			1	2014	Yes	DOH/Waipua	-	1	1	1	1	N	N	4
Waimanalo Stream			1	1998	No	None	1	1	1	1	-	N	-	4
Waioli Estuary			1	2014	No	None	-	1	A	1	1	N	N	3
Waioli Stream			1	2020	Yes	DOH/Waipua	A	1	A	A	1	A	-	2
Waipua Estuary			1	2020	Yes	DOH/Waipua	-	1	A	1	1	A	N	3
Waipua Stream			1	2006	Yes	DOH/Waipua	A	1	A	A	-	A	-	1
Grand Total			10				1	17	6	6	4	0	0	34

Key			
TSS	Total suspended solids	DOH	Department of Health
Turb	Turbidity	TNC	The Nature Conservancy
TN	Total nitrogen	HOKWO	Hui O Ka Wai Ola
TP	Total phosphorus	Waipua	The Waipua Foundation
Ent	Enterococcus	DOFAW	Division of Forestry and Wildlife
NO3+NO2	Nitrate + nitrite	MLP	Maui Land & Pineapple Co., Inc.
NH4	Ammonium	ORCD	Oahu Resource Conservation and Development Council
Chl	Chlorophyll a	CTAHR	College of Tropical Agriculture and Human Resources
-	Not assessed	CORAL	Coral Reef Alliance
1	Impairment targeted by 319 projects		
A	New WQS attainment in 2020 and targeted by 319 projects		
A	Attains WQS but not targeted by 319 projects (bold indicates change in impairment status from most recent assessment)		
N	Does not attain WQS and not targeted by 319 projects (bold indicates change in impairment status from most recent assessment)		

Table 4. CWA 319 protection projects implemented in Fiscal Year 2021

PROTECTING WATERS				Pollutants Targeted/Reduced			
Watershed & Waterbody	No. 319 Projects	Currently monitored?	Monitoring Entity	TSS	Turbidity	Nitrogen	Phosphorus
Hakioawa							
Nearshore waters	1	No	None	1	1	1	1
He'eia							
He'eia Fishpond	1	Yes	DOH/UH	1	1	1	1

- L. **Two watershed coordinators (WCs) active in 23 watersheds** – The PRC Program partnered with DAR to continue funding a WC to implement the West Maui Ridge to Reef Initiative (WMR2R) among federal, state, and local partners in the West Maui priority watersheds. In addition, the Ko’olaupoko Moku WC conducted outreach, held stakeholder meetings, and gathered/consolidated water quality and NPS pollution-related data across the 18 Ko’olaupoko watersheds. The Ko’olaupoko WC’s efforts and information will be utilized to update the Ko’olaupoko Watershed Restoration Action Strategy (KWRAS), the region’s watershed-based plan (WBP).

M. Environmental and Water Quality Improvements

1. The State set a goal to improve water quality in at least one priority watershed annually. According to the final 2020 Integrated Report published in November, water quality improved in two priority watersheds. In Honolulu watershed, Honolulu Bay met water quality standards (WQS) for total phosphorus, and in Wahikuli watershed, Hanaka’o’o Beach met WQS for *Enterococcus* (Table 3). While *Enterococcus* was not the focus of NPS projects, sediment was the main focus of projects implemented in Honolulu. Because phosphorus can be retained by soil, sediment load reductions may have reduced phosphorus loads and contributed to the reduction in total phosphorus documented in Honolulu Bay.
2. For projects completed in FY21, the following environmental improvements were achieved:
 - a. 700 feet of streambank were restored to reduce sediment runoff and improve habitat;
 - b. Grazing BMPs were implemented on 2,052 acres of agricultural lands to reduce erosion and fuel loads; and
 - c. 15,129 feet of cattle fencing was installed, repaired, or retrofitted to reduce erosion.
3. For active projects implemented in FY, progress was made towards the following outcomes:
 - a. Replacing four out of five cesspools in the Waioli, Waipa, and Waikoko watersheds, which reduced nutrient, *Enterococcus*, and BOD levels;
 - b. Restoring 6 acres of riparian areas to reduce sediment and nutrient delivery to adjacent streams;
 - c. Restoring 96 acres of (mostly) agricultural lands by implementing various BMPs/conservation practices that reduce nutrient and sediment loads; and
 - d. Installing, repairing, and retrofitted 9.3 miles of feral ungulate fencing to reduce erosion, restore native forests, and protect drinking water sources.

III. Section 319 Grant Administration

- A. **FY20 Grant (C9-96978720-0)** – EPA awarded DOH/PRC \$1,265,000 for the FY20 Grant (to be spent in FY21). PRC spent/encumbered approximately \$1,194,426 of this grant (Table 5). The total non-federal match for the FY20 Grant was \$904,104. (DOH provided approximately \$717,192 in matching funds through general-funded salaries of personnel supporting NPS management, and the remaining \$186,821 was provided by a 25% match requirement for grantees implementing WBPs.) In total, approximately \$2,098,440 was spent on CWA 319-funded NPS pollution mitigation projects in FY21. FY20 Grant expenditures will be finalized in the financial report submitted to EPA in December 2021; see Table 5 and Appendices B and C for more information on grant spending.
1. PRC spent/encumbered \$621,395 of its \$632,500 Project Fund allocation and spent/encumbered approximately \$573,031 of its \$632,500 Program Fund allocation. The Project Fund unliquidated obligation (ULO) will be spent on FY22 projects. Staff vacancies (caused by hiring freezes due to COVID-related budget cuts) and other COVID-19 related restrictions and cancellations (e.g., travel, trainings, conferences) resulted in underspending of Program Funds. A portion of Program Funds were spent on projects (Table 5). PRC plans to use the remaining Program Fund ULO on the KWRAS update scheduled to begin in FY23 and on FY22 projects.
- B. **Open CWA 319 Grants (FY15 – FY20)** – In the past year, the PRC Program managed six EPA CWA §319(h) grants (FY15, FY16, FY17, FY18, FY19, and FY20). PRC received a one-year extension due to pandemic-related delays to spend the FY15 grant by September 2021. The FY15 grant closed with a ULO of \$454. The FY16 grant also closed in September, with a ULO of \$18. For more detailed accounting by grant year, see Appendix C. For more information on project funding by grant, see Appendix D. Project descriptions can be found in Appendix A.

Table 5. Fiscal Year 2020 Grant Spending (in Fiscal Year 2021)

FY20 Grant (C9-96978720-0) Activity	319 Program Funds Subtotal	319 Project Funds Subtotal	319 Funds Total	Match	Total Spending
Personnel, fringe, supplies, indirect, other*	\$519,067	\$	\$519,067	\$717,192	\$1,236,259
<i>Watershed-based plan implementation</i>					
MLP (NTP 5/2019)	\$53,964	\$	\$53,964	\$4,853	\$58,817
ORCD - Kaiaka Bay (NTP 9/2021)	\$	\$176,270	\$176,270	\$59,172	\$235,442
Queen Emma - Pelekane (NTP 11/2021)	\$	\$257,125	\$257,125	\$64,297	\$321,422
DOFAW - Eke (NTP 11/2021)	\$	\$188,000	\$188,000	\$58,500	\$246,500
TOTAL	\$573,031	\$621,395	\$1,194,426	\$904,014	\$2,098,440
Unliquidated Obligation**	\$59,469	\$11,105	\$70,574		

*Includes Waikiki Aquarium event (\$10,000); does not include watershed-based plan planning or implementation projects

**Based on \$632,500 allocation to each fund proposed in the original budget

- C. **Supplemental Environmental Projects (SEP)** – The PRC Program also managed a SEP fund (received by DOH from the City & County of Honolulu (CCH) as part of a settlement agreement for CWA violations), which was awarded to Hui Ku Maoli Ola in 2015 (Notice to Proceed (NTP) received in February 2016) to implement a restoration project in Ma‘ili‘ili watershed. There were significant delays in obtaining the permits to conduct the project, and the project was canceled before it was implemented because it could not be extended beyond five years per State procurement law. A new SEP-funded project will be selected by PRC via an RFP in FY22.
- D. **FY21 Grant** – DOH received the FY21 CWA 319(h) grant of \$1,299,000 from EPA in September. PRC is currently conducting an RFP to spend the grant and in late September received five proposals requesting approximately \$940,000 in funds. The RFP will conclude in November when grant awards are announced. A portion of the FY21 grant (approximately \$225,000) will fund DOFAW’s watershed protection and restoration projects in West Maui and O‘ahu.

IV. Milestones and Progress Towards Achieving Goals & Objectives

In the first half of FY21, the State continued to implement the 2015-2020 *NPS Plan*. In April, the State began implementing the updated 2021-2025 *NPS Plan*, which was approved by EPA in March. Therefore, this year’s annual report provides information on progress toward meeting milestones and goals and objectives from both plans, which overlap in several instances. (Section II highlights the major milestones achieved from implementing both versions of the *NPS Plan*.) For simplicity, this section will provide the status of implementing the 2021-2025 *NPS Plan*, whose primary objectives are listed in Table 6. A detailed description of milestones achieved for FY21 based on the 2015-2020 *NPS Plan* can be found in the PRC’s Workplan Progress Report in Appendix E.

Table 6. The State’s primary NPS goal and objectives set forth in the Hawai‘i NPS Management Plan (2021-2025)

Goal	To achieve and maintain water quality standards and designated uses of State waters by implementing a comprehensive NPS pollution control program that conducts watershed-based restoration and protection
Objective 1	Develop WBPS or acceptable alternatives to guide effective NPS pollution control projects
Objective 2	Restore and protect WQ
Objective 3	Utilize partnerships and cooperate with other agencies to leverage resources available for NPS management
Objective 4	Expand the NPS management program to include regulatory activities and additional watershed planning support
Objective 5	Develop and implement the CNPCP
Objective 6	Conduct and support WQ monitoring

A. Objective 1 Milestones – WBP Development

1. **The Waikele WBP/TMDL Implementation Plan** has been drafted by PG Environmental; nearly all required nine elements have been completed. A large focus of the planning effort has been on 1) ensuring that the loads and sources are consistent with the Waikele TMDL (2019), 2) ensuring that management measures and BMPs specific to the watershed are identified and load reductions are included in STEPL, and 3) conducting outreach with landowners to ensure that stakeholder recommendations, concerns, and priorities are considered in the plan's development. PRC, PG Environmental, and PG's sub One World One Water met bimonthly in FY21 to discuss the plan's status. The final plan is scheduled for completion in May 2022.
2. **KWRAS update** – Data and outreach for the KWRAS update are currently being collected by the Ko'olaupoko Moku Watershed Coordinator. In addition, the State will use the Ka'elepulu TMDL data and He'eia National Estuarine Research Reserve (NERR) monitoring data to inform the KWRAS update scheduled to begin in FY23. Finally, the Forest Service's recently completed STEWMAP for Oahu will provide additional information for the KWRAS update.
3. The GIS layer for watersheds with approved WBPs was created this year and shared with partners. PRC will look into requirements for submitting the layer to the State's GIS Program for wider public availability in FY22.

B. Objective 2 Milestones – Restoring and Protecting Waters

1. Restoring Waters – Projects

- a. In FY21, DOH (and partners) implemented 10 restoration projects, reducing TSS by 40,000 lb/yr, sediment by 1,323 ton/yr, nitrogen by 9,114 ton/yr, phosphorus by 7,344 lb/yr, and *Enterococcus* by 2×10^{15} CFU (Table 1).
 - i. Five restoration projects were implemented in priority watersheds, including three in West Maui (Table 2). These projects address the pollutants causing impairments in these watersheds, particularly sediment (turbidity) in West Maui and South Kohala and nutrients in all priority watersheds.
- b. Restoration projects funded through the annual CWA 319 RFP – In November 2020, PRC awarded two restoration projects, including one in a priority watershed (South Kohala) that will address turbidity impairments in Pelekane Bay and Kawaihae Harbor. The FY21 RFP is currently in process. PRC anticipates funding at least one restoration project (awards to be announced in November 2021).
- c. Looking ahead, PRC will be meeting with He'eia NERR partners to develop a project to implement in FY23 that will reduce (dry season) total N and nitrate + nitrite in He'eia Stream and make progress towards removing He'eia Stream entirely from the the 303(d) list. The He'eia NERR management plan is currently being updated by partners in the estuary and will help guide potential N reduction projects.

2. Restoring Waters – Water quality improves annually in at least one priority watershed

- a. **Honolua Bay (Honolua watershed) attains WQS for total phosphorus** (2020 Integrated Report, approved in November 2020) – DOH has two projects, West Maui Ungulate Fencing (implemented by DOFAW; Figure 2) and Treatment Train (implemented by MLP; Figure 3) in Honolua watershed that aim to reduce sediment and phosphorus loads in Honolua Stream and Honolua Bay. Based on the timing of the Treatment Train project’s implementation (May 2019 – April 2024) relative to the Integrated Report call for data deadline (November 2019), it is unlikely this project, which aims to reduce phosphorus by 207 lb/yr, contributed to the delisting. However, the West Maui Ungulate Fencing Project has been actively retrofitting 11,500 ft of fencing in the Honolua watershed since 2018, and may have contributed to a reduction in phosphorus concentrations via substantially reducing sediment transport (40 tons annually) to surface waters.
- b. Hanaka’o’o Beach Co. Park, a coastal waterbody in Wahikuli watershed in West Maui, attained WQS for *Enterococcus* in the 2020 Integrated Report, but the active 319 projects in that watershed target sediment and therefore likely did not play a role in reducing *Enterococcus* CFU.

3. Protecting waters

- a. There were two protection projects implemented in FY21 (Tables 1 and 4), including one protecting He’eia Fishpond from sediment and nutrients in order to sustain habitat for aquatic life and cultural practices. UH is collecting water quality data in the Fishpond; water quality will be assessed at the conclusion of the project, when the project BMPs are completed. The other protection project is in Hakioawa watershed on Kaho’olawe, where a series of 319 projects have been

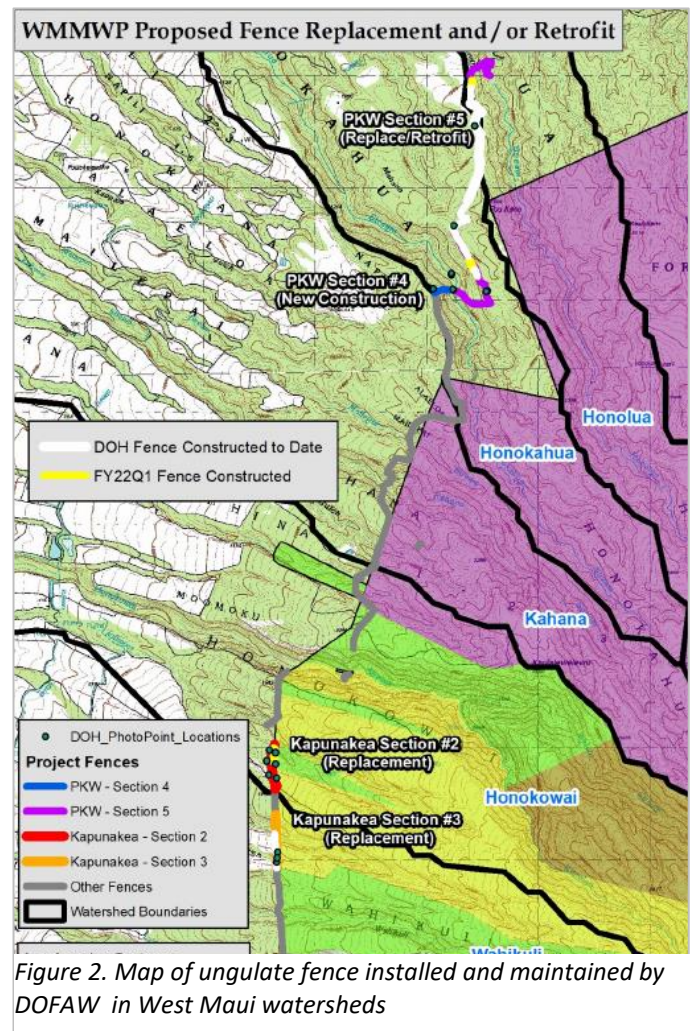


Figure 2. Map of ungulate fence installed and maintained by DOFAW in West Maui watersheds

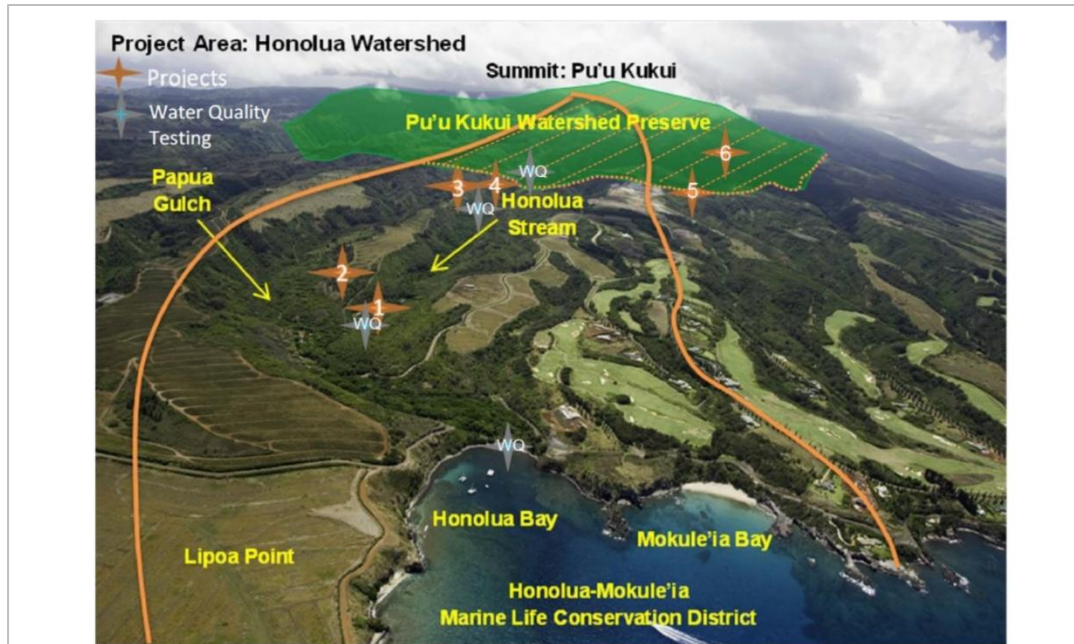


Figure 3. MLP project sites relative to receiving waters in Honolua watershed in West Maui

implemented for over 10 years to reduce erosion. None of the waters of Kaho'olawe have been assessed.

b. New protection projects in priority watersheds

- i. DOFAW and PRC continued to develop a protection project (Sustaining Source Waters of Kawaihae) in South Kohala, which is in the contract development phase and will begin implementation in FY22.
- ii. DOFAW held its WPPG RFP from July through September. PRC participated on the evaluation committee and selected two projects for protection, including one in West Maui that will control ungulates and conduct planting activities. DOH also will provide funding for the Ko'olau Mountains Watershed Partnership to conduct planting activities in two (DLNR high priority) watershed areas. These projects have not been finalized yet with DOFAW, but DOH and DOFAW anticipate MOAs for these projects to be executed in early 2022.

4. Implement Priority Initiatives

- a. **Sustainable Hawaii Initiative** – Under the [Watershed Protection 30x30 goals](#), the State aims to protect 30% (approximately 253,000 acres) of priority watershed areas by 2030. A total of 140,000 acres of high priority watersheds were protected through 2021, primarily through installing and maintaining fencing.

- i. DLNR continues to construct new fencing (~11 miles) and maintain fencing (~424 miles) to control ungulates and the negative impacts they have on native ecosystems and water quality. More information about ungulate control can be found in [DOFAW's Report to the Legislature for the 2021 Session](#).
 - ii. In FY21, DOH and DLNR continued to implement its West Maui ungulate fencing project, installing 1,200 ft of new fencing and retrofitting/maintaining approximately 15,000 ft of existing boundary fences to protect the high priority watershed area of Pu'u Kukui Watershed Preserve (PKW). DOH is also funding the Treatment Train project in West Maui that includes feral ungulate management in PKW. Two additional projects with DLNR (Sustaining Source Waters of Kawaihae Watershed, Mauna Kahalawai Watershed Partnership) that involve ungulate management within high priority fenced areas were awarded in FY21.
- b. **National Water Quality Initiative (NWQI)** – There are currently three regions in the NWQI readiness phase: Hilo Bay, Pelekane/South Kohala, and West Maui. No new NWQI watersheds were added in FY21.
- i. **Hilo Bay** – The focus of NWQI this year was completing the Hilo Bay watershed assessment so that Hilo Bay can go from the readiness phase to the implementation phase and be eligible for EQIP funds. DOH and NRCS met several times to discuss watershed selection for Hilo Bay (some watersheds were removed from, and at least one additional watershed (Hakalau) was added to, the Hilo Bay NWQI), which pollutants/impairments to target, and water quality monitoring. NRCS plans to complete the watershed assessment by the end of 2021. In FY23 (or possibly in FY22, as NRCS and DOH funds allow), DOH will begin water quality monitoring several streams in Hilo Bay and will assess the data in the 2024 Integrated Report. PRC plans to work with CWB to ensure an inland QAPP is approved, meet with potential monitoring partners on the Big Island such as UH Hilo, and work out monitoring logistics and lab analysis costs.
 - ii. The **Pelekane/South Kohala** NWQI watershed assessment is also wrapping up. DOH assisted partners in the Pelekane / South Kohala watersheds by reviewing and providing feedback on the NWQI watershed assessment they prepared for NRCS. DOH will likely start inland water quality monitoring in South Kohala (e.g., Wai'ula'ula Stream), along with the Hilo Bay streams in FY23.
 - iii. **West Maui** NWQI watershed assessments are still in progress and are expected to be completed in 2022.
- c. **WMR2R** – In addition to DOH-funded projects in West Maui, there are several ongoing water quality improvement / pollution control projects being implemented in the region:

- i. Protecting Ka'opala's critical coastal infrastructure through flood management design (Kahana watershed; funded by the National Fish and Wildlife Foundation);
 - ii. Enhancing the Effectiveness of Restoration in Honokowai and Kapunakea Preserve (Honokowai Watershed; funded by NOAA and implemented by Ridge to Reefs, The Nature Conservancy (TNC), Coral Reef Alliance, and other partners); and
 - iii. Gulch Restoration to Increase Reef Resilience (Wahikuli watershed; funded by NOAA and implemented by Coral Reef Alliance).
5. **Annual CWA 319 Grant RFP reflects new priorities for NPS management** – The FY21 RFP included climate change-related criteria, including how proposed project BMPs will mitigate climate change related impacts and/or be resilient to the effects of climate change. Within the past few years, record-setting rainfall accompanied by flooding, as well as wildfires, have provided challenges for NPS pollution control. Looking ahead, in the FY22 RFP, PRC will most likely include environmental justice (EJ) criteria based on EPA's EJ memo ("Near-term Actions to Support Environmental Justice in the Nonpoint Source Program"), the EPA's EJSCREEN mapping tool, and 2020 Census data for Hawai'i.

C. Objective 3 Milestones – Partnerships

1. **Projects** – PRC and its partners funded nine of the 16 NPS projects implemented in FY21 (Table 1). The majority of these partnership projects were in priority watersheds. PRC also participated in DOFAW's WPPG evaluation committee in September and selected two watershed protection projects to jointly fund.
2. **Events** – PRC, CCH, UH, and Waikiki Aquarium jointly sponsored the month-long 14th Annual Mauka to Makai Virtual Environmental Expo to celebrate Earth Day. The event promoted the importance of keeping Hawai'i clean and free of pollution, from the mountaintops to the ocean, through keiki activities, educational videos, and more. The virtual event drew 4,443 visitors to its website—approximately the same number of visitors that have attended the in-person event in previous years. While most of the event was virtual, there were drive-through activities at the aquarium that included native plant prizes. The Expo was featured

on two TV newscasts, three print newspaper articles, and six online media publications.

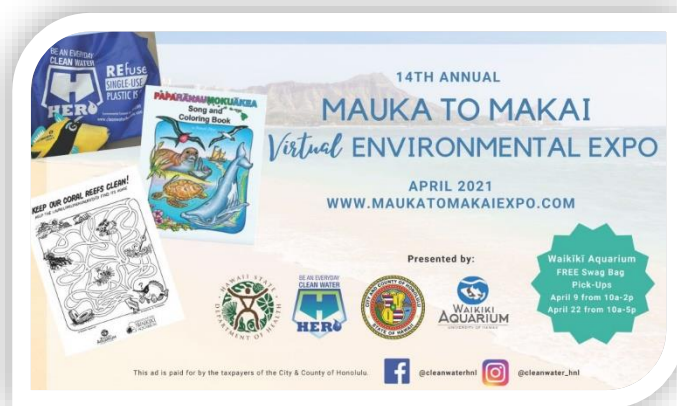


Figure 4. The annual Mauka to Makai event in April was sponsored through a partnership between DOH, UH, CCH, and Waikiki Aquarium

3. **New partnerships** – DOH/PRC joined the South Kohala Coastal Partnership (SKCP) and the Ala Wai Watershed Collaboration (AWWC) this fiscal year to work with a large network of partners to protect and restore these watersheds. The South Kohala watersheds are new priority watersheds for DOH and will also be NWQI implementation watersheds once preliminary watershed assessments are completed and approved by NRCS. DOH also became more active with the Office of Planning and Sustainable Development's (OPSD) Ocean Resources Management Plan (ORMP) implementation, which involves working with several partners on the ORMP Council and reporting on metrics that include annual pollutant load reductions and the number of impaired waterbodies.
4. **Cesspool Conversion Work Group (CCWG)** – The CCWG continued to develop the Cesspool Conversion Plan, which will be completed in 2022. Members of the CCWG include representatives from the DOH Wastewater Branch (WWB), Safe Drinking Water Branch (SDWB), county wastewater agencies, the wastewater industry, the financial/banking industry, UH Hawai'i Institute of Marine Biology, the UH Water Resources Research Center, the Hawai'i Association of Realtors, Surfrider Foundation, the State House, and the State Senate. In FY21, the CCWG completed reports on financing cesspool conversions and wastewater system technologies to guide the State's development and implementation of the Cesspool Conversion Plan:
 - a. [Cesspool Conversion Finance Research Summary Report](#)
 - b. [Cesspool Conversion Technologies Research Summary Report](#)
5. **Coastal Zone Management Program (OPSD-CZM)** – DOH and OPSD-CZM met monthly to discuss strategies for meeting CNPCP management measure requirements. Most of the meetings were held to discuss Operating Onsite Disposal Systems (OSDS) Management Measure strategies, including potential bills, rule amendments, outreach, funding, and other strategies. DOH and OPSD-CZM also discussed implementing an outreach project alongside a septic tank pilot pump-out project within the next two fiscal years.

D. Objective 4 Milestones – NPS pollution regulation

1. **Nonpoint Source Pollution Control rules adopted** – Chapter 11-56 (Nonpoint Source Pollution Control), HAR was adopted in June 2021. The rules codify the majority the CNPCP management measures for Agriculture, Forestry, and Marinas and Recreational Boating. The rules primarily apply to publicly owned lands. Subject landowners must register with DOH and develop water pollution protection plans to control NPS pollution from their properties/facilities. These plans must incorporate applicable NPS pollution management measures, specify BMPS that will be implemented, and provide a description of BMP monitoring and inspection methods. Annual reports from subject landowners are required to demonstrate that the water pollution protection plan is being implemented and controlling NPS pollution.

During the public notice process prior to adoption, which included a public hearing in February, Chapter 11-56 received eight public comments, which were all in support of the proposed rules.

2. **DOH Surface Water Protection Branch (NPS Branch) in final approval stage** – The proposed NPS Branch will formalize voluntary and regulatory NPS management programs and provide a more comprehensive approach to addressing polluted runoff and improving water quality statewide. The proposed branch includes the PRC/Section 319 Program and six new positions to implement and enforce the newly adopted NPS rules (HAR Chapter 11-56). The proposed NPS Branch survived this year's State legislative session budget cuts, underscoring the need for more NPS pollution control across the state. After over a year spent in the reorganization process required for new branches, the NPS Branch/DOH reorganization proposal package is currently with the Dept. of Budget and Finance (B&F). Once approved by B&F, the package goes to the Governor for approval. *(Update: The NPS Branch/reorganization package was approved by Governor Ige in October. The new branch is requesting approval from the Director to fill the vacant six new positions and hopes to be operational by mid-FY22.)*

E. Objective 5 Milestones – Develop and Implement the CNPCP

1. Management measures submitted in FY21 and approved:
 - a. New Development
 - b. Planning, Siting, and Developing Roads and Highways
 - c. Bridges
2. CNPCP management measures/administrative elements submitted to EPA and NOAA in FY21 and not approved:
 - a. Monitoring and Tracking Techniques – Monitoring methods passed muster, but the tracking component will need to be revised. It was difficult for EPA and NOAA to determine whether the proposed tracking methods were sufficient because not all management measures have been submitted or approved. PRC will revise components that EPA and NOAA commented on as other management measures are submitted and approved, and will finalize its tracking methods after the remaining MMs are approved (by 2023).
 - b. Operation and Maintenance for Roads and Highways – EPA and NOAA require extra documentation on enforceable mechanisms and policies for O&M of local roads.
3. **Operating OSDS** – DOH and OPSD-CZM have developed and discussed various strategies to meet this management measure's inspection requirement. Activities have included drafting a bill for septic system pump-outs, meeting with UH to discuss septic system data and develop a septic system pump-out prioritization tool, developing an outreach plan, and drafting amendments to HAR Chapter 11-62 (Wastewater Systems). The final strategy

agreed upon by DOH and OPSD-CZM is to amend HAR 11-62 to require septic tank pump-outs every five years for septic systems located in sensitive areas. These areas will be determined using UH’s cesspool prioritization tool that will also include State septic system data and additional prioritization criteria specific for septic systems. DOH will submit a detailed version of this strategy, with proposed HAR 11-62 amendments and tracking mechanisms, to EPA and NOAA by the end of 2021. The rule amendment process will begin in 2022.

4. **Approved management measures implemented:** Twelve projects implemented multiple CNPCP management measures in FY21 (Table 8). Wetlands/Riparian Areas were the most common management measures implemented. All 12 projects were also monitored for effectiveness, including 5 projects that conducted WQ monitoring as part of their scope of work.

Table 7. CWA 319 projects by Coastal Nonpoint Pollution Control Program category

319 PROJECTS BY CNPCP CATEGORY					Load Reductions					
Management Measure Category	No. Projects	Water-sheds	319 Funds Spent	Total Spent (319 Funds + Match)	TSS (ton/yr)	Sediment (ton/yr)	Nitrogen (lb/yr)	Phosphorus (lb/yr)	Enterococcus (CFU)	
Agriculture	4	11	\$1,592,365	\$2,332,470	-	382	7,170	6,861	-	
Forestry*	2	6	\$827,347	\$1,041,389	-	41	-	-	-	
Riparian	6	9	\$1,133,403	\$1,534,553	42,342	901	1,992	492	2x10 ¹⁵	
Grand Total	12	26	\$3,553,114	\$4,908,412	42,342	1,324	9,162	7,353	2x10¹⁵	

**Includes conservation-related forest practices not tied to commercial forestry operations*

F. Objective 6 Milestones – Water quality monitoring

1. **Community-based water quality (WQ) monitoring** – DOH is implementing a project with County of Maui to support local WQ monitoring efforts in West and Southwest Maui. The subcontractor, Hui O Ka Wai Ola (HOKWO), conducts and coordinates marine sampling with DOH. (See Appendix A for more information on this project.) DOH also began discussing local monitoring in South Kohala with partners as part of the SKCP.
2. **Water quality information remains updated and available through the DOH website and CWB System** – The CWB System is updated regularly with water quality-related notifications, including sewage spill advisories and brown water advisories. In addition, the CWB began developing a GIS layer of 303(d) impaired waters in FY21.
3. **New inland waters monitored by 2024**
 - a. **Ka’elepulu Stream** (Ka’elepulu watershed) – The CWB continued to collect WQ data for Ka’elepulu Stream, which will be the first time it will be assessed in the Integrated Report using quantitative data that meet current CWB data acceptance requirements. (The current impairments for Ka’elepulu Stream are based on visual assessments conducted prior to 2000.)

- b. DOH explored options to expand inland WQ monitoring. In partnership with DOFAW, DOH will begin monitoring at least one high quality stream in South Kohala as part of a protection project, with the goal of assessing the stream(s) in the 2024 Integrated Report.
- c. NWQI monitoring – DOH and NRCS discussed stream monitoring in Hilo Bay, where the NWQI will resume implementation in FY22, and South Kohala (Waikoloa watershed). PRC plans to sample 10 to 14 streams to collect the required number of samples (30) by October 2023 for assessment in the 2024 Integrated Report. (The data collection period is Nov. 2021 – Oct. 2023). PRC will either contract out the sampling or work with a partner in the area, such as UH Hilo. PRC and NRCS may develop its own stream QAPP for Hilo Bay and South Kohala in FY22, if the South Kohala inland waters QAPP Hawaii Wai Ola submitted to CWB cannot be applied to NWQI-related WQ monitoring.

4. Water quality monitoring and data coordination

- a. **Ke'ehi Lagoon** (Moanalua watershed)
 - i. Beginning in July 2021, CWB began collecting recreational water quality samples to assess Ke'ehi Lagoon. Data from a recent UH study indicate there may be a potential to delist Ke'ehi Lagoon for enterococci. Land use changes in the surrounding area may have contributed to the removal of the possible source. CWB executed a contract with UH to deploy three continuous monitoring sensors to collect WQ data in Ke'ehi Lagoon for one year (until 9/2022). The data for these monitoring efforts will be used in the 2022 Integrated Report and will provide data for the Ke'ehi Lagoon TMDL. UH will make available to CWB continuous physical water quality data.
 - ii. A contract with UH and TNC is currently being negotiated for a probabilistic nearshore and offshore monitoring study of Ke'ehi Lagoon. (This study is separate from the current lagoon monitoring with UH in subsection i.)
 - iii. CWB is also actively working with CCH to establish and implement a probabilistic stream sampling strategy for Moanalua and Kalihi Streams, the main inland water sources of Ke'ehi Lagoon.
- b. **He'eia** – PRC continues to discuss and coordinate WQ monitoring with He'eia NERR partners. He'eia Stream sampling has not yet begun as part of the 319-funded ungulate fencing project being carried out by TNC. The He'eia NERR management plan, which is currently being updated, will reflect monitoring priorities in the NERR.
- c. PRC has been working with the Monitoring Section to find additional WQ data and become more involved in WQ monitoring efforts by other agencies, such as UH Hilo and the National Park Service. PRC has been working with partners (e.g., the SKCP, NRCS) to find additional data that can be potentially assessed in the Integrated

Report. PRC has also initiated discussions with EPA's Office of Water along with CWB Monitoring to update the Recovery Potential Screening tool to help with EPA's Healthy Watersheds Program.

5. TMDLs

- a. **Ka'elepulu TMDL** – The initial assessment of Ka'elepulu Stream was completed in January 2021 and presented to the Kailua Community, including representatives from the Enchanted Lake Residents Association, in February 2021 and again during a Kailua Neighborhood Board meeting in March 2021. CWB is currently collaborating with major stakeholders to utilize an existing watershed model of Ka'elepulu to potentially inform the TMDL. CWB is also currently negotiating a contract for the adaption of an existing Hydrologic Simulation Program – FORTRAN (HSPF) model of the Ka'elepulu watershed. The model will estimate the current pollutant loads from existing sources within the watershed. The Ka'elepulu TMDL may be ready for EPA approval 5-6 months after the completion of the model.
- b. **Ke'ehi Lagoon TMDL** – The Ke'ehi Lagoon TMDL for *Enterococcus* is currently in its initial phase, in which the lagoon is being monitored to collect baseline data. Additional monitoring of the lagoon and its stream sources is currently being explored (see section 4a). No completion date for the TMDL has been set yet, but the earliest completion date would be at least two years after the deployment of the continuous monitoring sensors (section 4a) – the sensors will need to collect data for at least one year in order to account for seasonal variation, and a model will need to be built to estimate pollutant loading.

Appendix A – Projects

Clean Water Act Section 319 Projects Implemented and Awarded in Fiscal Year 2021

Projects Overview

Grantee	Project Title for Tracking	Status	End Date	319 Grant Award	Expended	Balance
Central Maui Soil and Water Conservation District	Keokea	Active	1/8/22	\$49,999	\$37,933	\$12,065
Coral Reef Alliance	Wahikuli Gulch	Active	11/10/23	\$215,011	\$46,428	\$168,583
County of Maui	Maui WQ Monitoring	Active	8/20/22	\$38,536	\$0	\$38,536
DLNR/DAR	WMR2R Coordinator	Completed	11/13/20	\$192,402	\$192,402	\$0
DLNR/DAR	WMR2R Coordinator	Active	6/27/23	\$104,000	\$0	\$104,000
DLNR/DOFAW	Pelekane Grazing	Completed	1/31/21	\$90,000	\$90,000	\$0
DLNR/DOFAW	West Maui Fencing	Active	1/29/22	\$735,161	\$735,161	\$0
DLNR/DOFAW	Eke	Awarded	TBD	\$234,000	\$0	\$234,000
Hui o Ko'olaupoko	Ko'olaupoko Coordinator	Active	6/23/22	\$150,559	\$55,499	\$95,060
Kaho'olawe Island Reserve Commission	O&M for Hakioawa	Active	5/28/22	\$92,186	\$4,000	\$88,186
Maui Land and Pineapple Co., Inc.	Treatment Train	Active	4/30/24	\$599,999	\$214,287	\$385,712
O'ahu Resource Conservation & Development Council	Waimanalo Phase 3	Completed	6/4/21	\$247,716	\$247,716	\$0
O'ahu Resource Conservation & Development Council	Buffers and BMPs	Active	5/10/22	\$304,726	\$274,999	\$29,727
O'ahu Resource Conservation & Development Council	Ag Stewardship - Kaiaka	Active*	9/29/23	\$230,034	\$0	\$230,034
PG Environmental, LLC	Waikele WBP	Active	5/14/22	\$149,985	\$60,677	\$89,308
Queen Emma Land Company	Mitigating Erosion in Pelekane	Awarded	TBD	\$257,125	\$0	\$257,125
The Nature Conservancy	He'eia Fencing	Active	11/22/23	\$210,934	\$1,986	\$208,948
The Waipa Foundation	Waipa Phase 2	Active	3/19/22	\$350,998	\$304,362	\$46,636
University of Hawai'i - Sea Grant College Program	He'eia Fishpond Phase 2	Active	9/29/23	\$306,462	\$33,616	\$272,846
University of Hawai'i - CTAHR	Soil Management	Active	8/11/22	\$349,923	\$172,822	\$177,101
TOTAL				\$4,909,756	\$2,471,888	\$2,437,868

*Received its NTP on the last day of FY21; categorized as "Awarded" in the Annual Report

COMPLETED PROJECTS

West Maui Ridge to Reef Priority Watershed Coordinator

Grantee:	Dept. of Land & Natural Resources (DLNR) Div. of Aquatic Resources (DAR)
Project Duration:	11/14/16 - 11/13/20*
Watershed:	West Maui
Project Type:	Coordinator
CNPCP Category:	N/A
319 Grant Amount:	\$192,402
Award Balance:	\$0
Match:	\$22,325

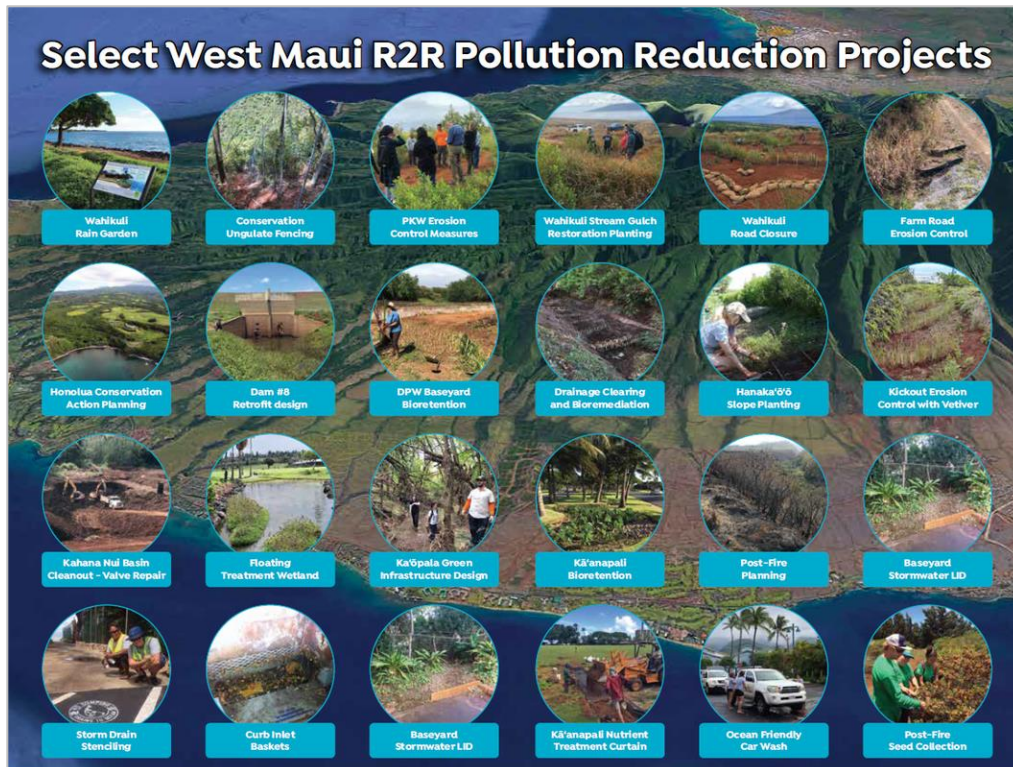
*Included a two-year, \$104,000 extension



Project Description & Status

The Watershed Coordinator (WC) conducted educational forums and outreach presentations and coordinated various water quality improvement projects among partners in West Maui (see the [West Maui Ridge to Reef Initiative \(WMR2R\) website](#) maintained by the WC, below). The WC conducted and coordinated a total of 65 outreach events, including community events and workshops. Other outreach activities consisted of press releases for events and water quality improvement projects, social media campaigns, targeted email announcements, and regular updates to the WMR2R website. The WC also assisted PRC and other organizations with coordinating restoration projects with partners in West Maui.

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/29/details/view>



COMPLETED PROJECTS

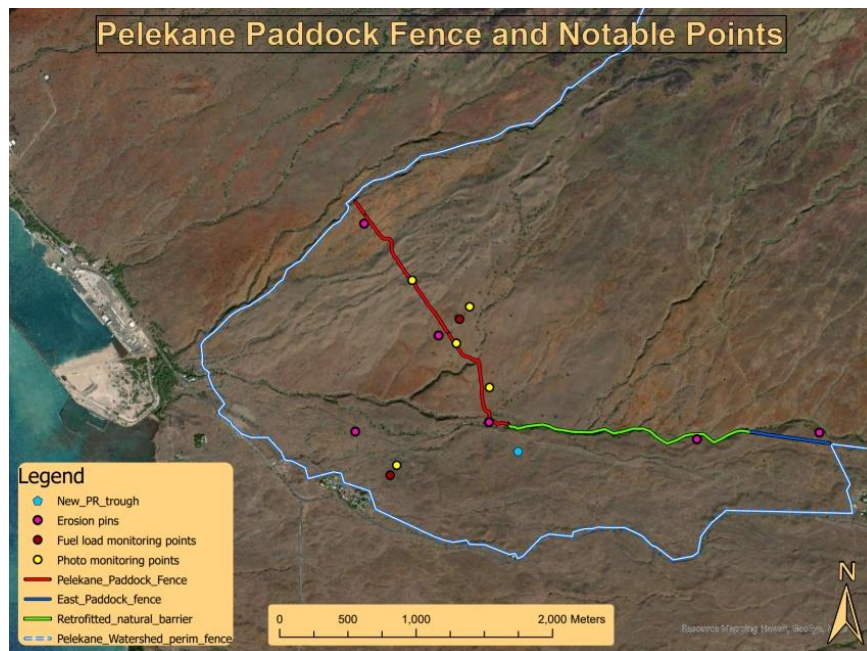
Pelekane Grazing Improvement Project

Grantee:	DLNR Division of Forestry and Wildlife (DOFAW)
Project Duration:	1/31/18 - 1/30/21*
Watershed:	Kawaihae
Project Type:	Restoration
CNPCP Category:	Agriculture
319 Grant Amount:	\$90,000
Award Balance:	\$0
Match:	\$22,500

*Included a no-cost, 12-month extension



Project Description & Status



DLNR implemented agricultural BMPs in Kawaihae watershed to reduce sediment, total nitrogen, and total phosphorous. Activities included 1) repairing 7,785 ft of damaged paddock fence; 2) retrofitting 7,014 ft of older paddock fence; 3) installing a new 330 ft paddock fence to create a lower paddock and upper paddock for rotational grazing; and 4) installing a new trough away from Mekeahua Stream to reduce the use of the existing trough near

Mekeahua Stream. In addition, two virtual events were helped to share and discuss BMPs.

303(d) Waterbodies and Impairments Addressed

- Pelekane Bay: Turbidity, TN, TP

Outcomes

- 15,129 feet of total fencing installed, repaired, or retrofitted, reducing erosion caused by cattle
- 2,052 acres of rotational grazing established in two paddocks, decreasing erosion and fuel loads
- New trough located away from the Mekeahua Stream reduced cattle activity near the stream, thereby reducing degradation of riparian areas and sediment and nutrient inputs into the stream.

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/32/details/view>

COMPLETED PROJECTS

Waimanalo Stream Restoration and Community Outreach – Phase 3

Grantee: O’ahu Resource Conservation & Development Council (ORCD)

Project Duration: 12/4/18 - 6/3/21*

Watershed: Waimanalo, Kahawai

Project Type: Restoration

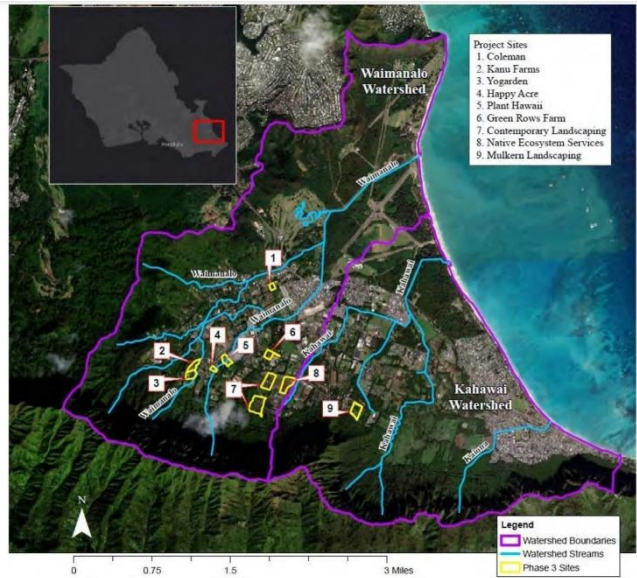
CNPCP Category: Agriculture

319 Grant Amount: \$247,716

Award Balance: \$0

Match: \$73,587

**Included a no-cost, 6-month extension*



Project Description & Status

ORCD developed seven new conservation plans and established a BMP Investment Fund that administered cost-share grants to implement BMPs/ NRCS conservation practices on nine farms. In addition, 700 ft of Waimanalo streambank was restored. ORCD also evaluated the long-term effectiveness of BMPs previously implemented (in Phases I and II) and

provided updated load reductions. ORCD hosted a field day in November 2019 that featured presentations on agricultural BMPs designed to reduce NPS pollution and a community workday in August 2020 to restore portions of the streambank. Other NPS-related education and outreach activities were also conducted throughout the watershed.



Critical area planting with native carex sedge on slopes with propensity to erode

Pollutant Load Reductions

- Sediment: 203.8 ton/year
- Nitrogen: 472.8 lb/year
- Phosphorus: 203.8 lb/year

303(d) Waterbodies and Impairments Addressed

- Waimanalo Stream: Turbidity, TSS, nitrogen, phosphorus

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/34/details/view>

ACTIVE PROJECTS

Polluted Runoff Control Project for West Maui

Grantee:	DOFAW
Project Duration:	1/30/18 - 1/29/22*
Watershed:	West Maui
Project Type:	Restoration
CNPCP Category:	Forestry
319 Grant Amount:	\$735,161
Award Balance:	\$0
Match:	\$184,000

*Includes a no-cost, 12-month extension

Project Description & Status

DOFAW plans to prevent feral ungulate ingress into two native forest preserves in priority watershed areas by 1) installing 1,200 ft of new 8' axis deer fence in Honokahua watershed (Section 4), 2) retrofitting or replacing 3,340 ft of existing boundary fences by raising fence heights to 8' in Wahikuli and Honokowai watersheds (Sections 2 and 3), and 3) retrofitting approximately 11,500 ft of existing boundary fences in Honokahua and Honolua watersheds (Section 5).

As of September 2021, approximately 68% of the project has been completed.

Pollutant Load Reductions

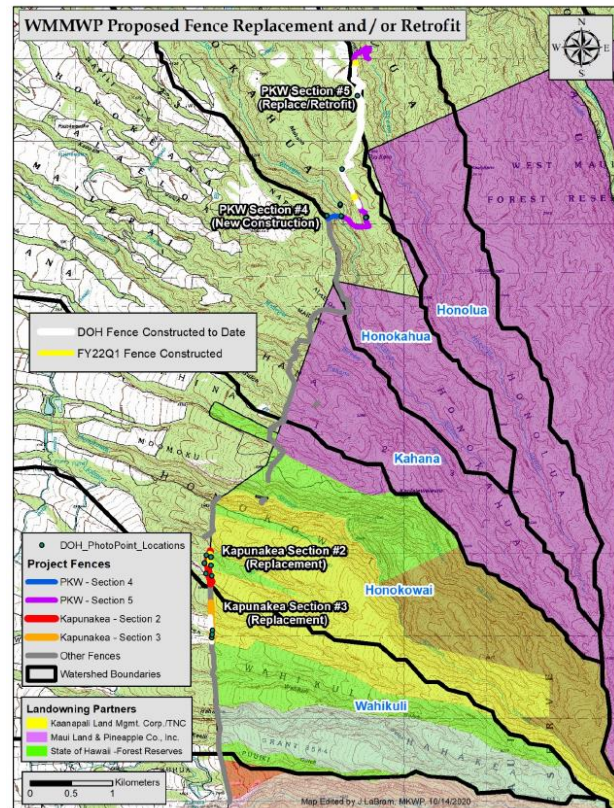
- Sediment: 40 ton/year

303(d) Waterbodies and Impairments Addressed

- Kahana Stream: Turbidity
- Honokowai Stream: Turbidity
- Coastal waters: Turbidity

Anticipated Outcomes

- Completion of contiguous ungulate exclusion fencing from Honokowai valley (southern end) to the northern end of Honolua will reduce the substantial disturbance and erosion caused by feral ungulates
- Improvement in surface water quality (turbidity) and coral reef habitat, especially in Honokahua and Honolua watersheds



Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/33/details/view>

ACTIVE PROJECTS

Watershed Implementation Project for the Ahupua'a of Waipa – Phase 2

Grantee:	The Waipa Foundation
Project Duration:	3/20/19 - 3/19/22*
Watershed:	Waipa, Waioli, Waikoko
Project Type:	Restoration
CNCP Category:	Riparian Areas
319 Grant Amount:	\$350,998
Award Balance:	\$46,636
Match:	\$110,375

*Includes a no-cost, 12-month extension

Project Description & Status

The Waipa Foundation is building upon its Phase 1 project by: 1) replacing 5 cesspools with alternative onsite systems; 2) continuing its feral ungulate removal program; 3) restoring 1 acre of the lower Waipa Stream riparian corridor and areas of the stream that were damaged by the April 2018 floods; 4) implementing taro lo'i management practices; and 5) maintaining BMPs installed in Phase 1. This project is approximately 75% completed. Four cesspools have been replaced and BMPs and monitoring continue to be implemented. This contract is currently being modified (approval expected by 1/2022) to eliminate the remaining cesspools in this region.



Blue Lines - Streams, Black Lines - Roads/Trails, Yellow Lines - Watersheds

Pollutant Load Reductions

- Nitrogen: 160.9 lbs/year
- Phosphorus: 80.5 lbs/year
- TSS: 40,000 lbs/year
- Enterococcus: 2x10¹⁵ CFU/year
- BOD: 2011.7 lbs/year

303(d) Waterbodies and Impairments Addressed (waters monitored for this project and assessed in the Integrated Report in *italics*)

- *Waipa Stream: Turbidity*
- *Waipa Estuary: Enterococcus, turbidity, TP*
- *Waioli Stream: Enterococcus, turbidity*
- *Waioli Estuary: Enterococcus, turbidity, TP, TN*
- *Hanalei Bay (Waioli Beach): Turbidity*
- *Waikoko Estuary: Enterococcus, turbidity, TP, TN*

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/49/details/view>

ACTIVE PROJECTS

Buffers and BMPs for Windward O'ahu

Grantee:	ORCD
Project Duration:	4/11/19 - 5/10/22*
Watershed:	Kahalu'u, Haiamoa
Project Type:	Restoration
CNPCP Category:	Riparian Areas
319 Grant Amount:	\$304,726
Award Balance:	\$29,727
Match:	\$78,770

*Includes a no-cost, 7-month extension

Project Description & Status

ORCD will develop 5 new conservation plans for local farmers in the Kahalu'u and Haiamoa watersheds and will assist farmers in implementing BMPs from the plans that improve water quality. ORCD will also restore 300 feet of riparian buffer along the Kahalu'u and Waihe'e streams.

This project is approximately 64% completed. ORCD has completed brush management, micro-irrigation, land smoothing, tree/shrub establishment, and vegetative barrier BMPs; they are still installing cover in critical areas.

ORCD co-sponsored a field day with the Ko'olau Mountains Watershed Partnership in November 2019 in Waihe'e valley to demonstrate successful riparian restoration techniques. In December 2020, ORCD held a forest restoration community field day to highlight weed control BMPs and groundcover/erosion control from a participating farmer.

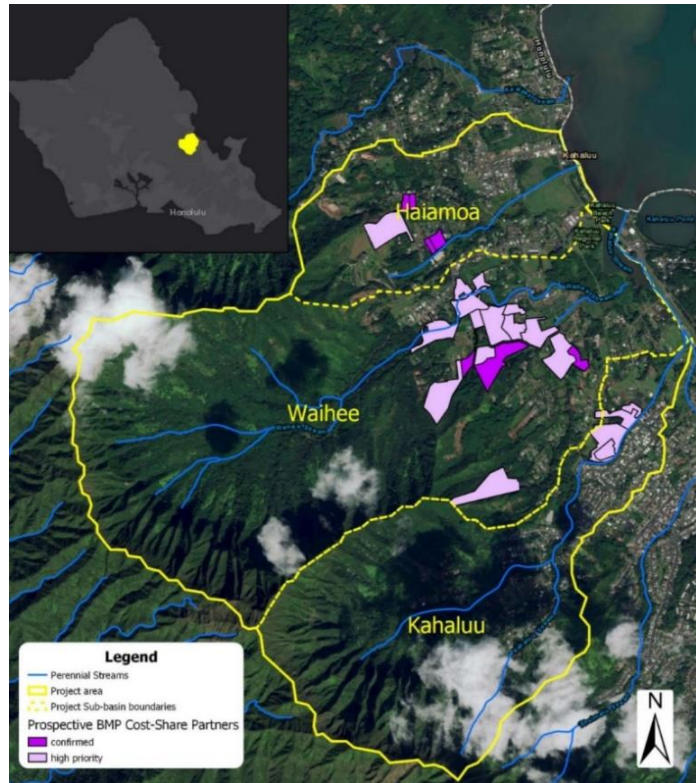
Pollutant Load Reductions

- Sediment: 162 ton/year
- Nitrogen: 300 lb/year
- Phosphorus: 150 lb/year

303(d) Waterbodies and Impairments Addressed

- Kahalu'u Stream: Turbidity
- Waihe'e Stream: TN, TP

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/52/details/view>



ACTIVE PROJECTS

Treatment Train: An Ahupua'a Approach to Watershed BMPs in West Maui

Grantee:	Maui Land & Pineapple Co., Inc. (MLP)
Project Duration:	5/1/19 - 4/30/24*
Watershed:	Honokahua, Honokowai, Honolulu, Kahana
Project Type:	Restoration
CNPCP Category:	Agriculture
319 Grant Amount:	\$599,999
Award Balance:	\$385,712
Match:	\$549,557

*Includes a no-cost, 2-year extension



Figure 1 Aerial view of the Honolua Watershed project area and Preserve spanning four Priority Watersheds. Dashed lines indicate Conservation Fencing and Ungulate Control in the area of the Preserve cover under this proposal.

Project Description & Status

MLP is implementing a series of BMPs strategically placed for a sequential, multi-layered approach (treatment train) to reduce NPS pollution in the Honolua, Honokahua, Kahana, and Honokowai watersheds of West Maui. The following activities will be conducted (see the map on next page for locations):

- 1 acre of push pile stabilization along Honolua Stream and Papua Gulch;
- 6.7 acres of landscape restoration of former pineapple fields with native vegetation;
- 5 acres of streambank and gulch restoration (Honolua Stream and Papua Gulch);
- 1 acre of lo'i restoration to minimize sediment and nutrient runoff into Honolua Stream; and
- 10,000 meters of conservation fence maintenance to prevent feral ungulates from entering Pu'u Kukui Watershed Preserve (PKW);
- Feral ungulate management, including inspection of 2,400 snares in PKW; and
- Invasive plant management, totaling 32,000 meters of invasive plant surveys in PKW annually.

MLP will also be establishing a native plant nursery and seed bank for its restoration efforts and will be conducting sediment (erosion pin) monitoring, vegetation monitoring, photo point monitoring, and marine and inland water quality monitoring. The project is approximately 25% completed.



Pollutant Load Reductions

- Sediment: 178 ton/year
- Phosphorus: 207 lb/year
- Nitrogen: 516 lb/year

303(d) Waterbodies and Impairments Addressed and Monitored

- Honolua Bay: Turbidity (2020 delisting for TP; not listed for TN)
- Fleming Beach (North): Turbidity (not listed for TN or TP)
- West Maui Coast-Kaopala Bay: Turbidity, TN (not listed for TP)
- Kaanapali Shoreline: Turbidity (not listed for TN or TP)

Other Water Quality Monitoring

- Honolua Stream: Turbidity, nitrates, temperature, pH, DO

ACTIVE PROJECTS

Treatment Train: An Ahupua'a Approach to Watershed BMPs in West Maui (continued)



Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#/project/48/details/view>

ACTIVE PROJECTS

Implementing Soil Management Strategies on O'ahu

Grantee:	Univ. of Hawai'i (UH) College of Tropical Agriculture & Human Resources (CTAHR)
Project Duration:	8/12/19 - 8/11/22
Watershed:	Honouliuli, Ma'ili'ili, Ki'iki'i, Paukauila
Project Type:	Restoration
CNPCP Category:	Agriculture
319 Grant Amount:	\$349,923
Award Balance:	\$177,101
Match:	\$94,461



Project Description & Status

This project will improve water quality by implementing nutrient and soil management strategies on six farms in the Honouliuli, Ma'ili'ili, and Kaiaka Bay watersheds. UH will utilize nitrate and phosphate technologies to reduce the amount of fertilizer applied on these farms, and will apply appropriate soil amendments. The contractor will also conduct education and outreach on soil and nutrient management by providing one-to-one training to participating farmers, conducting training workshops to interested farmers, and developing two training video presentations.

As of September 2021, the project is approximately 70% completed. UH continues to monitor soil nitrate status and assess fertilizer reduction effects on yields. Results so far indicate that, for certain crops, farmers can maintain yields with 25-30% reduction in nitrogen application and sometimes without phosphorus application.

Pollutant	Estimated Load Reduction
Nitrogen (lbs/yr)	<p><u>Tolentino Farm (new eggplant crop planted):</u></p> <ol style="list-style-type: none"> 1. ¼ FP (750 lbs N/ac= 250 lb N reduction) 2. ½ FP (500 lbs N/ac= 500 lb N reduction) 3. ¼ FP (250 lbs N/ac= 750 lb N reduction) 4. ¼ FP (125 lbs N/ac= 875 lb N reduction) <p><u>Kahumana Farm:</u></p> <ol style="list-style-type: none"> 1. FP - 225 lbsN/ac as bone meal 2. 225 lbs/ac as feather meal 3. 0 lbs untreated (250 lbs N/ac reduction) 4. 112 lbs N/ac as bone meal (113 lbs N/ac reduction) 5. 112 lbs N/ac as feather meal (113 lbs N/ac reduction) <p><u>Aloun Farm:</u></p> <ol style="list-style-type: none"> 1. FP: 350 lbsN/ac 2. FP-pre-plant: 290 lbs/ac (60 lbs N reduction) 3. FP - P: 290 lbs/ac 4. N1: 200 lbs N/ac (150 lbs N/ac reduction) 5. N2: 175 lbs N/ac (175 lbs N/ac reduction) <p><u>MA'O Farm:</u></p> <ol style="list-style-type: none"> 1. Farmer practice = 175 lb N/ac 2. ½ Farmer practice = 87 lb N/ac 3. Feather meal (12-0-0) = 175 lb N/ac 4. ½ Feather meal (12-0-0) = 87 lb N/ac

Pollutant Load Reductions

- Nitrogen: 6,181 lb/year
- Phosphorus: 6,450 lb/year

303(d) Waterbodies and Impairments Addressed

- Kaiaka Bay: TN (not listed for TP)

Project Details: [CWB System \(hawaii.gov\)](http://hawaii.gov/cwb)

Nitrogen application and resulting nitrogen load reductions on several of the farms participating in the project

ACTIVE PROJECTS

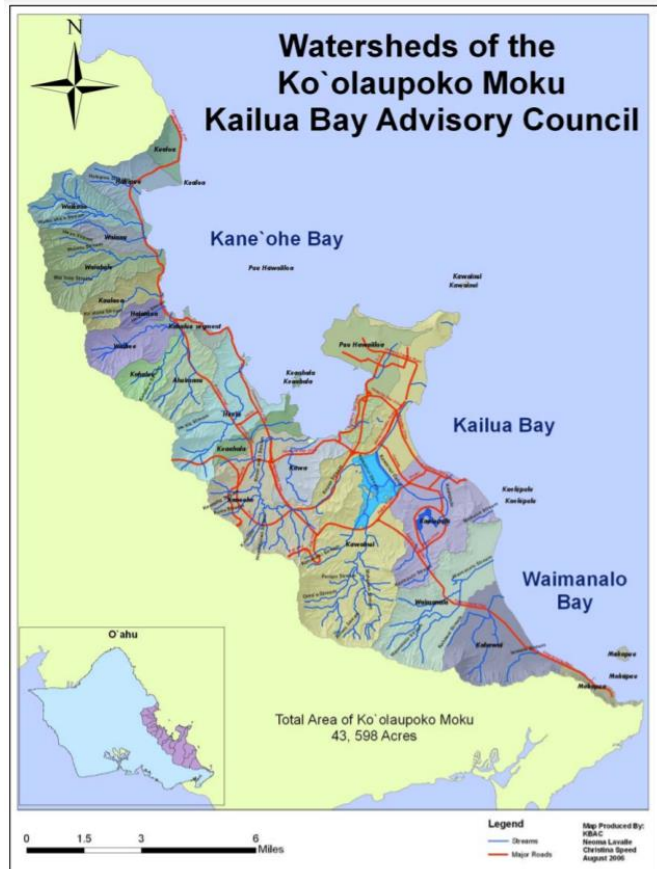
Ko'olaupoko Moku Watersheds Coordinator

Grantee:	Hui o Ko'olaupoko
Project Duration:	12/24/19 - 6/23/22
Watershed:	Ko'olaupoko moku watersheds
Project Type:	Coordinator
CNCP Category:	N/A
319 Grant Amount:	\$150,559
Award Balance:	\$95,060
Match:	\$48,126

**Includes a no-cost, 7-month extension*

Project Description & Status

The Ko'olaupoko Moku Watersheds Coordinator (KMWC) will collect data and complete reports on past and current monitoring projects, implementation projects, and outreach efforts/projects in Ko'olaupoko moku, which encompasses 18 watersheds, to provide information for the Ko'olaupoko Watershed Restoration Action Strategy (KWRAS) update. The KMWC has collected data on water quality improvement and monitoring projects in the region. They also developed and are in the process of implementing an outreach plan to establish stakeholder support for the KWRAS update. The KMWC also conducted four community meetings in April and May 2021 and has four more community meetings scheduled for September and October 2021.



Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/58/details/view>

ACTIVE PROJECTS

Expanding Water Quality Improvement Projects in He'eia Fishpond

Grantee:	UH Sea Grant
Project Duration:	3/31/20 - 9/29/23*
Watershed:	He'eia
Project Type:	Protection
CNCP Category:	Wetlands/Riparian Areas
319 Grant Amount:	\$306,462
Award Balance:	\$33,616
Match:	\$71,105

*Includes a no-cost, 18-month extension

Project Description & Status

UH Sea Grant, in partnership with Paepae o He'eia and Hui Kū Maoli Ola, will remove 5.25 acres of invasive red mangrove and hau from He'eia Fishpond and install raingardens in front of two storm drain outlets to reduce nutrient and sediment concentrations in He'eia fishpond. In addition, UH Sea Grant will monitor water quality and circulation to determine the project's impact on pollution reduction in He'eia's waterways. Outreach efforts will educate local stakeholders and community members on the connection between a healthy, invasive-free ahupua'a system and improved water quality.



This project is approximately 20% completed. UH Sea Grant has removed 3 of 5.25 acres of invasive plant species detrimental to the fishpond.

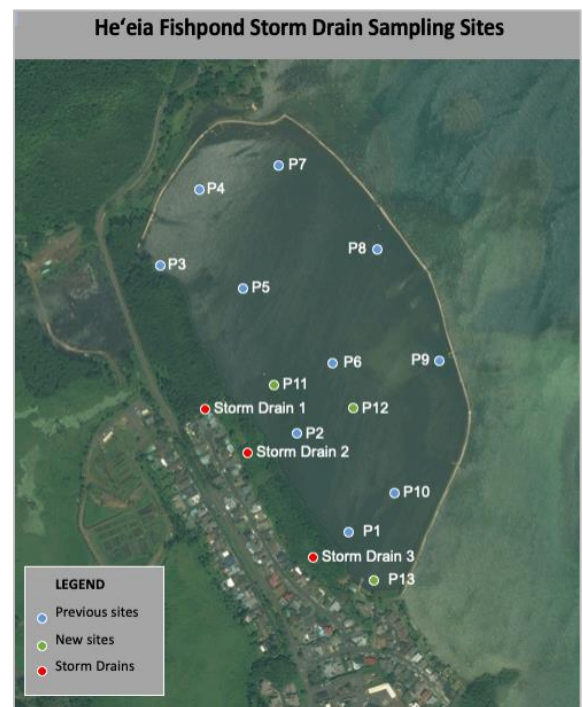
Pollutant Load Reductions

- TSS: 2,342 lb/year
- Phosphorus: 8.7 lb/year
- Nitrogen: 47.7 lb/year

Waterbodies Addressed and Monitored:

- He'eia Fishpond – temperature, salinity, pH, nitrate, nitrite, phosphorus, TSS, *Enterococcus*, *Bacteroidales*, *Catelllicoccus marimmaliam*, mass-flux, volume change

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/62/details/view>



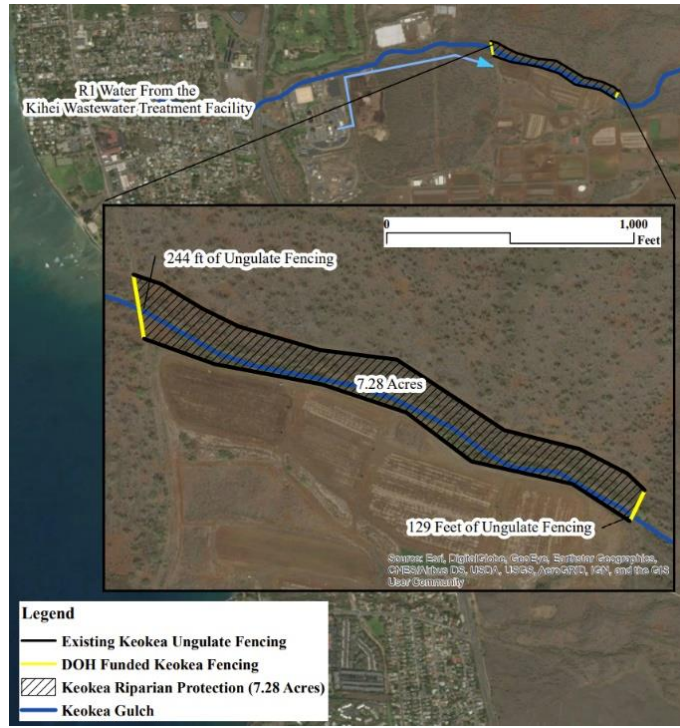
ACTIVE PROJECTS

Keokea Riparian Rehabilitation

Grantee:	Central Maui SWCD
Project Duration:	7/9/20 - 1/8/22
Watershed:	Hapapa
Project Type:	Restoration
CNCP Category:	Riparian Areas
319 Grant Amount:	\$49,999
Award Balance:	\$12,065
Match:	\$12,500

Project Description & Status

This project will establish a protected riparian corridor that will reduce the amount of sediment and nutrients discharged from Keokea Gulch. The Central Maui SWCD will install approximately 373 feet of ungulate fencing to complete a 7.28-acre ungulate-free pen that will act as a sediment filter for sheet flow from adjacent lands into Keokea Gulch. They will also remove non-native plants, and install approximately 6,400 native plants such as a'alii, pili grass, and mao.



As of September 2021, this project is 80% completed. Video status of restoration can be viewed here: [Sept 2021 Drone - YouTube](#)



Pollutant Load Reductions

- Sediment: 154 ton/year
- Phosphorus: 253 lb/year
- Nitrogen: 1,323 lb/year

303(d) Waterbodies and Impairments Addressed

- Kihei Coast-Lipoa-South: Turbidity (not listed for TN or TP)
- May impact Kalama Beach Co. Park (turbidity, TN) and Waipulani (turbidity, TN) DOH monitoring sites

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/68/details/view>

ACTIVE PROJECTS

Expanding Stream Gulch Restoration Actions in Wahikuli, West Maui

Grantee:	Coral Reef Alliance
Project Duration:	11/11/20 - 11/10/23
Watershed:	Wahikuli
Project Type:	Restoration
CNCP Category:	Riparian Areas
319 Grant Amount:	\$215,010
Award Balance:	\$168,583
Match:	\$75,667

**Project Description & Status**

The Coral Reef Alliance (CORAL) will implement a multi-phase BMP installation project along a steep and highly erosive gulch to reduce sediment. Approximately 30 BMPs will be installed, including vetiver sediment traps, native grass sediment traps, check dams, and coconut coir corridors. CORAL will monitor sediment loss from the project site, sediment accumulation at each BMP, sediment grain size, rainfall, and water quality monitoring. The project is approximately 27% completed.

Pollutant Load Reductions

- Sediment: 45 ton/year

303(d) Waterbodies and Impairments Addressed

- Hanaka'o'o Beach Co. Park: Turbidity

Waterbodies Monitored

- Wahikuli Gulch (not assessed), above and below the project area: Turbidity and stream velocity

Anticipated Outcomes

- 60 acres restored with BMPs that will reduce sediment loads by 90 tons
- 10% increase in coral cover within 10 years of project completion (coral data will be collected by DLNR)

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/65/details/view>

ACTIVE PROJECTS

He'eia Watershed Ungulate-Exclusion Fencing and Erosion Control

Grantee:	The Nature Conservancy (TNC)
Project Duration:	11/23/20 - 11/22/23
Watershed:	He'eia
Project Type:	Restoration
CNPCP Category:	Wetlands/Riparian Areas
319 Grant Amount:	\$210,934
Award Balance:	\$208,948
Match:	\$52,734

**Project Description & Status**

This project will focus on reducing sediment, total nitrogen, and total suspended solids in He'eia watershed by installing an ungulate fence in a 22-acre area above the He'eia estuary. TNC will coordinate with community partners to remove feral ungulates in the fenced area and restore native vegetation. The project is 5% completed. TNC worked with partners to develop the project's monitoring plan, obtain permits for project activities, and conduct outreach to hunters.

Pollutant Load Reductions

- Sediment: 540 ton/year
- Nitrogen: 160 lb/year

303(d) Waterbodies and Impairments Addressed

- He'eia Stream (dry season): Total N (not listed for turbidity of TSS)

Monitoring

- Sediment: 20 erosion pins at 6 sites (to be compared to three control sites)
- Photo point (quarterly): pre- and post-photos of understory vegetation
- Feral pigs (monthly): 3 game cameras at high priority locations
- Fence checks for holes/breaches (biweekly); walk-throughs in fenced area (monthly)

Water Quality Monitoring for He'eia Stream

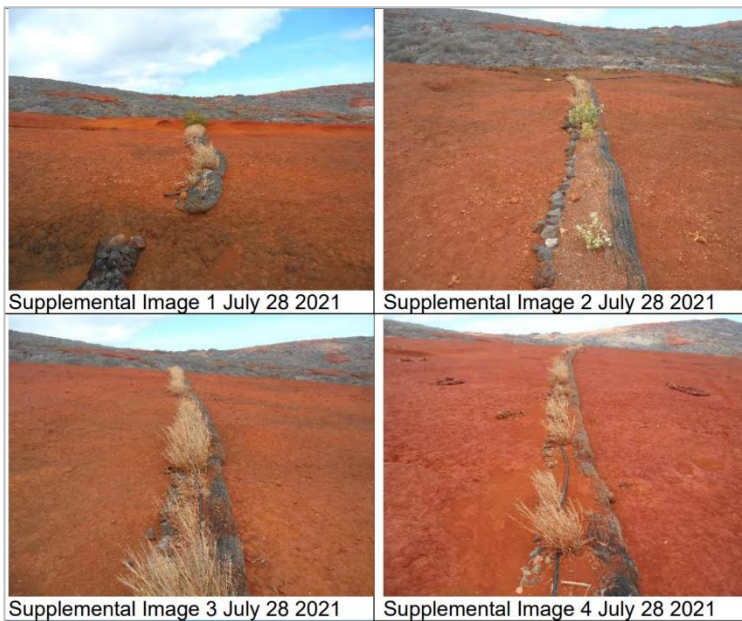
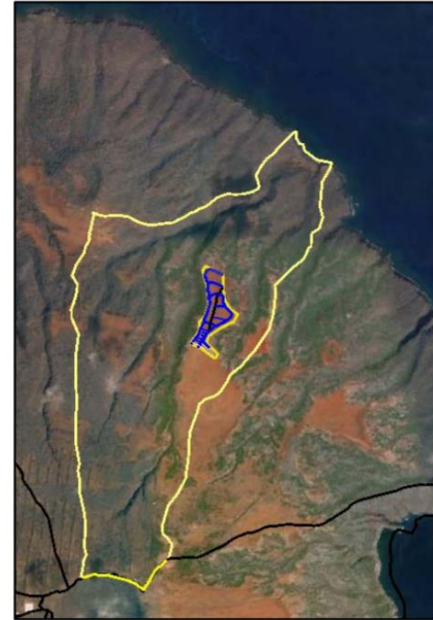
- Monthly: grab samples at 2 sites (one above and one below the restored area): Total dissolved N, nitrate + nitrite, phosphate, total P, TSS
- Monthly: grab samples at 4 stations downstream (from stream to reef): Total dissolved N, nitrate + nitrite, phosphate, total P, TSS
- Flood events: Total N, TSS
- Continuous: 3 sites downstream and 1 site upstream: DO, pH, salinity, turbidity, temperature

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/64/details/view>

ACTIVE PROJECTS

Operations and Maintenance Plan for Hakioawa Watershed

Grantee:	Kaho'olawe Island Reserve Commission
Project Duration:	3/29/21 - 5/28/22
Watershed:	Hakioawa
Project Type:	Protection
CNPCP Category:	Forestry
319 Grant Amount:	\$92,186
Award Balance:	\$88,186
Match:	\$30,042



Project Description & Status

The Kaho'olawe Island Reserve Commission (KIRC) will maintain the infrastructure and BMPs installed during its previous \$319(h) project (Reducing Excessive Sedimentation and Habitat Restoration in the Hakioawa Watershed – Phase 2) and install approximately 5,000 additional native plants in previously

established corridors. As of September 2021, this project is 9% completed. The contractor recently hired a KIR specialist to provide additional support for this project.

Pollutant Load Reductions

- Sediment: 0.6 ton/year

303(d) Waterbodies and Impairments Addressed

- Coastal waters off Hakioawa (not assessed)

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/74/details/view>

ACTIVE PROJECTS

Coastal Water Quality Monitoring in West Maui and Southwest Maui Watersheds

Grantee:	County of Maui
Project Duration:	6/21/21 - 8/20/22
Watershed:	West & Southwest Maui
Project Type:	Monitoring
CNPCP Category:	N/A
319 Grant Amount:	\$38,536
Award Balance:	\$38,536
Match:	\$10,049

**Project Description & Status**

The County of Maui will conduct coastal water quality monitoring at nine locations in support of watershed-based plan implementation in five watersheds in West and Southwest Maui. The County of Maui will work with [Hui O Ka Wai Ola](#), a local water quality monitoring organization, to regularly collect and analyze water samples, assess trends, and monitor the effectiveness of current polluted runoff control projects on water quality. All waterbodies monitored are on the 303(d) list for nitrate + nitrite and turbidity, with eight of the waters listed for additional nutrient and chlorophyll *a* impairments.

Sampling Locations (Watershed)

- Oneloa Bay Beach (Honokahua)
- Kapalua Beach (Kahana)
- Napili Bay (Kahana)
- Kahana Village (Kahana)
- Pohaku (Honokowai)
- Hanaka'o'o Beach Co. Park (Wahikuli)
- Waipuilani (Hapapa)
- Kihei Coast-Lipoa-South (Hapapa)
- Kalama Beach Park (Hapapa)

Monitoring Parameters

- Temperature, salinity, DO, DO saturation, pH, turbidity, total N, total P, phosphate, silicates, nitrate + nitrite, ammonium

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb#!/project/76/details/view>

ACTIVE PROJECTS

West Maui Watershed Coordinator

Grantee:	DAR
Project Duration:	6/28/21 - 6/27/23
Watershed:	West Maui
Project Type:	Coordinator
CNPCP Category:	N/A
319 Grant Amount:	\$104,000
Award Balance:	\$104,000
Match:	\$26,000



Project Description & Status

The Watershed Coordinator (WC) will conduct education and outreach and coordinate various water quality improvement projects among partners in the West Maui watersheds, particularly those that are part of the West Maui Ridge 2 Reef Initiative. Some of the WC responsibilities include:

- Coordinating and/or participating in a minimum of 12 outreach events;
- Coordinating with community water quality monitoring groups and DOH’s partners to ensure that sufficient water quality monitoring is conducted;
- Identifying water quality trends and concerns and potential management practices to address these concerns;
- Sharing water quality monitoring outcomes;
- Collaborating with community organizations to improve water quality; and
- Providing stats updates on the progress of 319-funded projects in West Maui.

This project is essentially an extension of the West Maui Ridge to Reef Priority Watershed Coordinator position funded from 2016 to 2020. Due to State procurement laws, the existing contract could not be extended, and a new contract had to be developed.

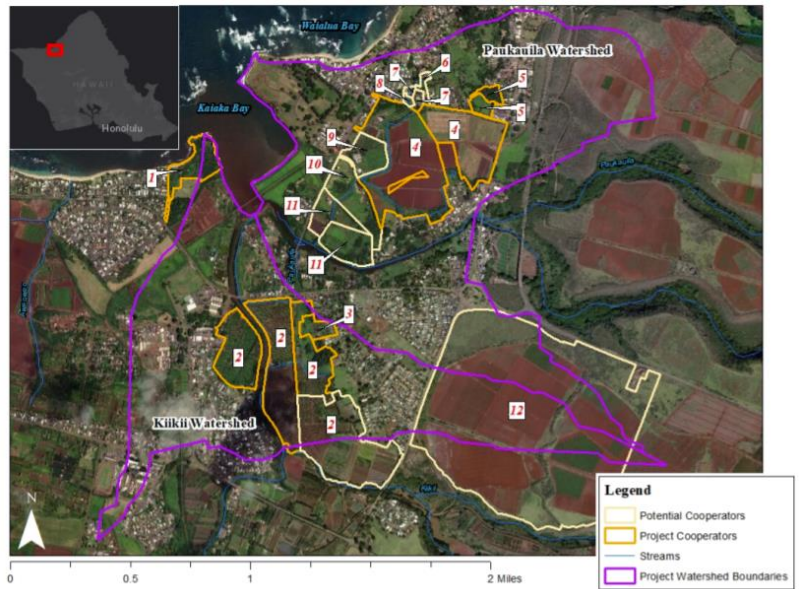
Project Details: <https://eha-cloud.doh.hawaii.gov/cwb#!/project/77/details/view>

WMR2R Projects: <https://www.westmauir2r.com/r2r-projects.html>

ACTIVE PROJECTS

Agricultural Stewardship and Stream Restoration in Ki'iki'i and Paukauila

Grantee:	ORCD
Project Duration:	9/30/21-9/29/23
Watershed:	Ki'iki'i, Paukauila
Project Type:	Restoration
CNCP Category:	Agriculture
319 Grant Amount:	\$230,034
Award Balance:	\$230,034
Match:	\$77,220

**Project Description & Status**

ORCD will develop five new conservation plans, implement agricultural BMPs that minimize sediment and nutrients delivered to surface and ground waters, restore 300 linear feet of native vegetation in critical watershed areas (riparian buffers), and conduct education and outreach activities

(with the goal of engaging approximately 200 stakeholders at 2 on-farm field days and 1 community forum) that encourage NPS pollution reduction and foster long-term community engagement.

Pollutant Load Reductions

- Sediment: 45 ton/year
- Nitrogen: 300 lb/year
- Phosphorus: 150 lb/year

303(d) Waterbodies and Impairments Addressed

- Kaiaka Bay: Turbidity, TN (not listed for TP)
- Paukauila Estuary: Turbidity, TN, TP
- Poamoho Stream: Turbidity, TN, TP

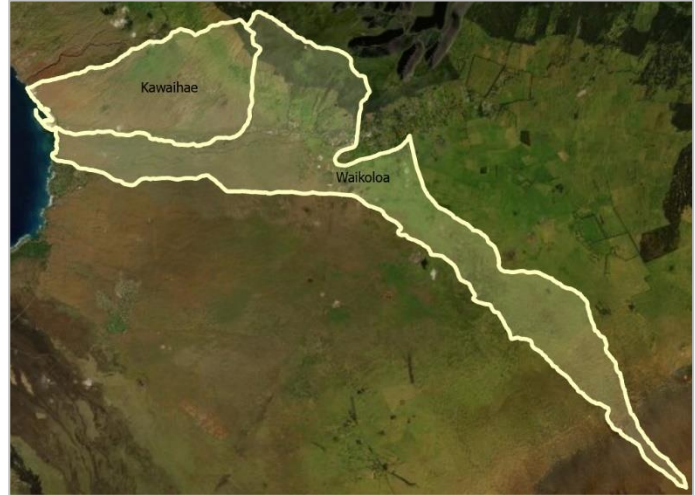
Project Details: <https://eha-cloud.doh.hawaii.gov/cwb#!/project/73/details/view>

AWARDED PROJECTS

Mitigating Erosion in the Pelekane Watershed Using Ungulate and Wildfire Management

Grantee:	Queen Emma Land Co.
Project Duration:	11/2021 - 11/2026*
Watershed:	Kawaihae, Waikoloa
Project Type:	Restoration
CNPCP Category:	Agriculture
319 Grant Amount:	\$257,125
Award Balance:	\$257,125
Match:	\$64,297

*Anticipated; awarded 11/6/2020

**Project Description & Status**

This project seeks to implement landscape-scale strategies to 1) restore groundcover by excluding ungulates from an existing 180-acre denuded, erosion hotspot; 2) minimize wildfires within the watershed's dry lowlands through managed grazing to reduce fuel loads, improved fire infrastructure, a network of fuel breaks established during 4.5 miles of road improvements, and increased fire-fighting access and water availability for fire suppression; and 3) maintain 6,500 goat-free acres through monitoring and repairing fencing.

Pollutant Load Reductions

- Sediment: 45 ton/year

303(d) Waterbodies and Impairments Addressed

- Pelekane Bay: Turbidity
- Kawaihae Harbor: Turbidity

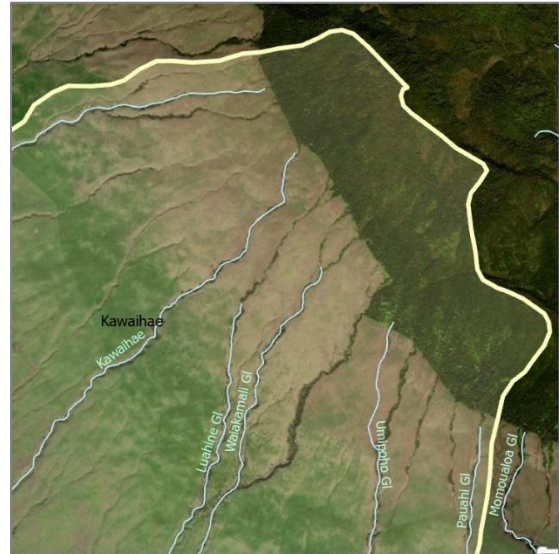
Project Details: <https://eha-cloud.doh.hawaii.gov/cwb#!/project/72/details/view>

AWARDED PROJECTS

Sustaining the Source Waters of Kawaihae Watershed

Grantee:	DOFAW
Project Duration:	11/2021 - 11/2025*
Watershed:	Kawaihae
Project Type:	Protection
CNPCP Category:	Forestry
319 Grant Amount:	\$234,000
Award Balance:	\$234,000
Match:	\$58,500

*Anticipated

**Project Description & Status**

DOFAW will implement an ungulate removal program that aims to eradicate 100% of the feral pig population within the 'Eke Unit (a fenced area located in the upper, forested region of the Kawaihae Watershed). Ungulate removal within the unit will protect native ground cover and reduce erosion and sediment loads in streams that feed into Pelekane Bay. DOFAW will also conduct education and outreach activities, including planting, weeding, and seed collection, to build stewardship and raise public awareness about NPS pollution.

303(d) Waterbodies and Impairments Addressed

- Waikamali'i Stream (not assessed)

Monitoring

- Pre- and post-ungulate removal water quality and sediment monitoring
 - Stream flow, temperature, turbidity, and TSS (will include a QAPP to ensure data collected meet CWB's data assessment criteria for the Integrated Report)
- Ungulate abundance and distribution: pre-installed game cameras (quarterly), hunting, live traps, snaring, and transect surveys
- Vegetation cover
 - Annual vegetation relevé surveys to identify plant species and estimate plant cover
 - Annual weed belt transect surveys to identify non-native plant species and estimate their cover, abundance, richness, distribution, and potential impact on water quality
 - Annual photo point monitoring to examine vegetation and ecosystem changes
- Kilo: monthly observations of lani, honua, and mea ola

Anticipated Outcomes

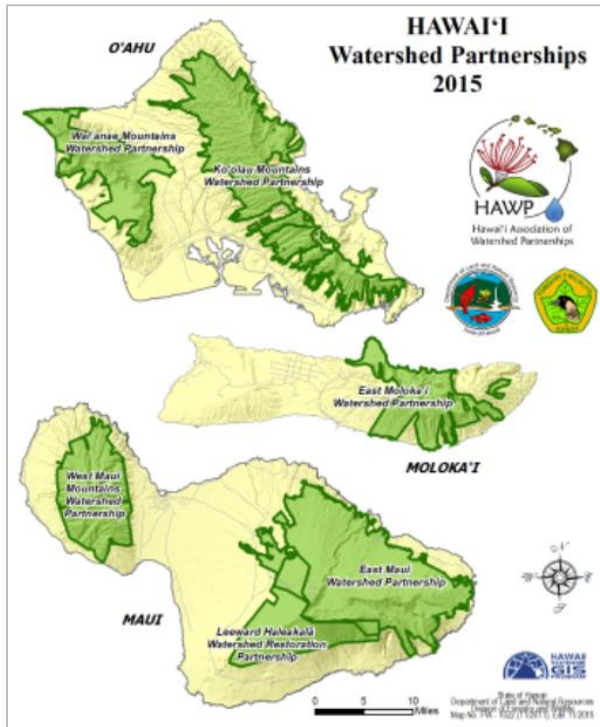
- Removal of 100% feral pigs from the unit
- Improvement in water quality achieved by reducing sediment loads (Waikamali'i Stream, when assessed by DOH, does not exceed the turbidity water quality standard)
- Increased abundance and biodiversity of native plant species

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb/#!/project/80/details/view>

AWARDED PROJECTS

Watershed Protection in Mauna Kahalawai and the Ko'olau Mountains

These projects were selected during DOFAW's Watershed Partnerships Program Grant evaluation process in September 2021. Details of these projects are still being finalized with DOFAW.



Mauna Kahalawai Watershed Partnership (MKWP)

Grantee:	DOFAW
Project Duration:	6/2022 - 6/2024*
Watershed:	West Maui
Project Type:	Restoration/Protection
CNCP Category:	Forestry
319 Grant Amount:	\$209,951
Award Balance:	\$209,951
Match:	TBD

*Anticipated

Project Description & Status

This project will control ungulates and restore bare areas with native vegetation in forested areas of the West Maui watersheds (primarily Wahikuli and Honokowai).

Ko'olau Mountains Watershed Partnership (KMWP)

Grantee:	DOFAW
Project Duration:	6/2022 - 6/2024*
Watershed:	Ala Moana, Waihe'e
Project Type:	Protection
CNCP Category:	Forestry
319 Grant Amount:	\$15,793
Award Balance:	\$15,793
Match:	TBD

*Anticipated

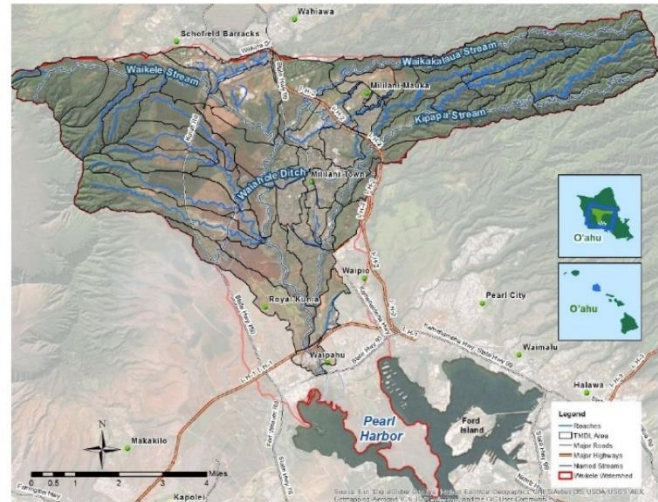
Project Description & Status

KMWP will conduct planting activities to restore native forest cover in Ala Moana and Waihee watersheds on O'ahu.

WATERSHED-BASED PLANS

Waikele Watershed TMDL Implementation Plan

Grantee:	PG Environmental, LLC
Project Duration:	5/15/20 - 5/14/22
Watershed:	Waikele
Project Type:	Plan
CNPCP Category:	N/A
319 Grant Amount:	\$149,985
Award Balance:	\$89,308
Match:	\$0



Project Description & Status

This hybrid TMDL implementation/watershed-based plan is being developed to integrate the 2019 Waikele TMDL load allocations for sediment and nutrients and the nine elements of a watershed-based plan into one plan.

A draft of the TMDL implementation plan has been prepared by PG Environmental; most of the required nine elements have been completed. A large focus of the planning effort has been on 1) ensuring that the load estimates and sources are consistent with the TMDL, 2) ensuring that management measures and BMPs specific to the watershed; 3) modifying and finalizing BMP load reductions in STEPL; and 4) holding meetings with landowner and stakeholders to ensure that their recommendations, concerns, and priorities are considered during the plan’s development. PRC, PG Environmental, and PG’s subcontractor One World One Water met bimonthly in FY21 to discuss the plan’s status. The final plan is scheduled for completion in May 2022.

Project Details: <https://eha-cloud.doh.hawaii.gov/cwb#!/project/63/details/view>

CANCELLED/EXPIRED PROJECTS

Ma'ili'ili Reservoir Mitigation Project

Grantee:	Hui Ku Maoli Ola
Project Duration:	N/A*
Watershed:	Ma'ili'ili
Project Type:	Restoration
CNCP Category:	Wetlands/Riparian Areas
Award Amount:	\$727,080
Award Balance:	\$727,080
Match:	\$201,560

*Awarded 2/2016

Project Description & Status

The purpose of this project was to restore wetland and wildlife habitat and native vegetation, control NPS pollution, improve water quality, and provide educational opportunities to local elementary school children.

The project was awarded using Supplemental Environmental Projects (SEP) funds as part of the City and County of Honolulu's Dept. of Facilities Maintenance settlement agreement with DOH for violation of the CWA. Unfortunately, the contract expired in 2/2021 (before the project was implemented) as a result of delays in obtaining the appropriate permits. Another RFP will be conducted to solicit a SEP-funded project in Ma'ili'ili in 2022.

Appendix B – FY20 Grant (C9-96978720-0) Expenditures

The following is the FY20 Grant budget that reflects the planned and actual spending in FY21. Highlighted line items indicate where spending changes occurred.

a. PERSONNEL				PLANNED	SPENT
Position	No.	Salary	Mo.	Amt.	
Accountant IV	1	67,044.00	1	5,587.00	5,823.00
Administrative Specialist IV	1	52,956.00	1	4,413.00	0.00
Contracts Specialist	1	54,825.00	12	54,825.00	57,420.00
Environmental Health Specialist IV	1	55,092.00	12	55,092.00	57,420.00
Office Assistant III	1	31,440.00	12	31,440.00	34,440.00
Planner IV	1	57,897.00	12	57,897.00	62,136.00
Program Specialist V*	1	59,616.00	12	59,616.00	42,516.00
Personnel Total	7		62	268,870.00	259,755.00
b. FRINGE BENEFITS					
Base				268,870.00	259,755.00
Rate (63.08%)				169,603.20	163,853.45
Fringe Benefits Total				169,603.20	163,853.45
c. TRAVEL					
Local Travel				4,000.00	0.00
Out-of-State Travel				6,000.00	0.00
Travel Total				10,000.00	0.00
d. EQUIPMENT (N/A)				0.00	0.00
e. SUPPLIES					
Item	No.	Cost/Unit		Total	Total
EMD Supplies	1	2,925.00		2,925.00	2,925.00
CWB-PRC Supplies	1	300.00		300.00	300.00
Printing & Outreach Materials	1	500.00		500.00	500.00
Supplies Total				3,725.00	3,725.00
f. CONTRACTUAL (N/A)				0.00	0.00
g. CONSTRUCTION (N/A)				0.00	0.00
h. OTHER					
Item	No.	Cost/Unit		Total	Total
Laboratory Equipment Maintenance	1	12,000.00		12,000.00	12,000.00
Copier Lease	1	1,200.00		1,200.00	1,200.00
Telephone Service	1	450.00		450.00	450.00
Postage & Shipping	1	50.00		50.00	50.00
Waikiki Aquarium Earth Day	1	15,000.00		15,000.00	10,000.00
Training & Registration	1	3,500.00		3,500.00	103.50
Miscellaneous (Subscriptions, etc.)	1	3,500.00		3,500.00	1,000.00
WBP Implementation Projects (Project Funds) (RFP)				632,500.00	621,395.18
Planning & WBP Implementation Projects (Program Funds) (RFP)				75,323.04	53,964.00
Other Total				743,523.04	700,162.68
i. TOTAL DIRECT COSTS				1,195,721.24	1,127,496.13
j. INDIRECT COSTS					
Base				438,473.20	423,608.45
Rate (15.80%)				69,278.76	66,930.14
k. TOTAL PROPOSED COSTS				1,265,000.00	1,194,426.27

Non-Federal Match

a. PERSONNEL				PLANNED	SPENT
Position	No.	Salary	Mo.	Amt.	Amt.
Branch Chief	1	170,688.00	3	42,672.00	42,672.00
Secretary II	1	55,152.00	3	13,788.00	13,788.00
IT Specialist IV	1	65,264.00	3	16,316.00	16,316.00
Environmental Health Specialist IV (QA/QC)	1	52,956.00	3	13,239.00	0.00
Environmental Health Specialist IV	1	64,476.00	3	16,119.00	16,119.00
Environmental Health Specialist IV	1	52,956.00	3	13,239.00	13,239.00
Environmental Health Specialist IV	1	72,528.00	3	18,132.00	18,132.00
Environmental Health Specialist IV	1	62,004.00	3	15,501.00	15,501.00
Individual Wastewater System Engineer III	1	55,512.00	8	37,008.00	37,008.00
Individual Wastewater System Engineer III	1	72,372.00	8	48,248.00	48,248.00
Individual Wastewater System Engineer IV	1	87,312.00	8	58,208.00	58,208.00
Individual Wastewater System Engineer III	1	72,612.00	8	48,408.00	48,408.00
Individual Wastewater System Engineer III	1	78,204.00	8	52,136.00	52,136.00
Personnel Total	13		64	393,014.00	379,775.00
b. FRINGE BENEFITS					
Base				393,014.00	379,775.00
Rate (63.08%)				247,913.23	239,562.07
Fringe Benefits Total				247,913.23	239,562.07
c. TRAVEL (N/A)				0.00	0.00
d. EQUIPMENT (N/A)				0.00	0.00
e. SUPPLIES (N/A)				0.00	0.00
f. CONTRACTUAL (N/A)				0.00	0.00
g. CONSTRUCTION (N/A)				0.00	0.00
h. OTHER					
Item				Total	Total
WBP Implementation Projects (up to 0.25:1 Contractor In-Kind) (RFP)				101,139.27	\$186,821
Other Total				101,139.27	186,821.46
i. TOTAL DIRECT COSTS				742,066.50	806,158.53
j. INDIRECT COSTS					
Base (personnel total+fringe)				640,927.23	619,337.07
Rate (15.8%)				101,266.50	97,855.26
k. TOTAL PROPOSED COSTS				843,333.00	904,013.79

	PLANNED	SPENT
FEDERAL FUNDS REQUESTED	1,265,000.00	1,194,426.27
RECIPIENT SHARE (NON-FEDERAL MATCH)	843,333.00	904,013.79
RECIPIENT SHARE OF TOTAL PROPOSED COSTS	40.00%	43.08%
FEDERAL SHARE OF TOTAL PROPOSED COSTS	60.00%	56.92%

Appendix C – Potential Unliquidated Obligations and Planned Encumbrances

Hawaii State Department of Health Polluted Runoff Control Program

Updated: 9/27/21

Potential Unliquidated Obligations

FY 15 C996978715-0 (S-16-201/9290-15)				10/1/15 - 9/30/21
Category	Budget	Spent/Encumbered		Balance
Payroll	258,507.77	258,507.77		0.00
B-Costs (Spent)	15,575.00	18,680.82		(3,105.82)
B-Costs (Encumbered)		0.00		0.00
Contracts (Spent)	842,549.08	863,318.77		(20,769.69)
Contracts (Encumbered)		8.60		(8.60)
Indirect	44,668.15	43,566.61		1,101.54
Balance				(22,782.57)
Revenue Adjustment				(23,236.54)
Potential FY15 Unliquidated Obligations				453.97
FY 16 C996978716-0 (S-17-201/9290-16)				10/1/16 - 9/30/21
Category	Budget	Spent/Encumbered		Balance
Payroll	266,921.54	266,921.54		0.00
B-Costs (Spent)	18,325.00	18,227.07		97.93
B-Costs (Encumbered)		0.00		0.00
Contracts (Spent)	872,834.32	881,511.71		(8,677.39)
Contracts (Encumbered)		0.00		0.00
Indirect	40,919.14	40,868.60		50.54
Balance				(8,528.92)
Revenue Adjustment				(8,546.93)
Potential FY16 Unliquidated Obligations				18.01
FY 17 C996978717-0 (S-18-201/9290-17)				10/1/17 - 9/30/22
Category	Budget	Spent/Encumbered		Balance
Payroll	315,851.80	315,851.80		0.00
B-Costs (Spent)	1,908.64	1,908.64		0.00
B-Costs (Encumbered)		0.00		0.00
Contracts (Spent)	865,010.81	213,050.58		651,960.23
Contracts (Encumbered)		616,099.43		(616,099.43)
Indirect	57,228.75	57,228.75		0.00
Balance				35,860.80
Revenue Adjustment				(18,341.03)
Potential FY17 Unliquidated Obligations				54,201.83
FY 18 C996978718-0 (S-19-201/9290-18)				9/30/18 - 9/29/23
Category	Budget	Spent/Encumbered		Balance
Payroll	319,336.65	319,336.65		0.00
B-Costs (Spent)	25,608.01	25,608.01		0.00
B-Costs (Encumbered)		0.00		0.00
Contracts (Spent)	820,222.26	147,029.47		673,192.79
Contracts (Encumbered)		672,840.48		(672,840.48)
Indirect	60,833.08	60,833.08		0.00
Balance				352.31
Revenue Adjustment				0.00
Potential FY18 Unliquidated Obligations				352.31
FY 19 C996978719-0 (S-20-201/9290-19)				10/1/19 - 9/30/24
Category	Budget	Spent/Encumbered		Balance
Payroll	451,076.63	394,390.36		56,686.27
B-Costs (Spent)	45,075.00	16,771.32		28,303.68
B-Costs (Encumbered)		0.00		0.00
Contracts (Spent)	627,279.82	36,933.23		590,346.59
Contracts (Encumbered)		373,798.11		(373,798.11)
Indirect	91,568.55	59,019.35		32,549.20
Balance				334,087.63
Revenue Adjustment				0.00
Potential FY19 Unliquidated Obligations				216,548.48
FY20 C996978720-0 (S-21-201/9290-20)				10/1/20 - 9/30/25
Category	Budget	Spent/Encumbered		Balance
Payroll	438,473.20	283,283.05		155,190.15
B-Costs (Spent)	49,425.00	10,114.24		39,310.76
B-Costs (Encumbered)		0.00		0.00
Contracts (Spent)	707,823.04	0.00		707,823.04
Contracts (Encumbered)		53,963.57		(53,963.57)
Indirect	69,278.76	21,402.56		47,876.20
Balance				896,236.58
Revenue Adjustment				0.00
Potential FY19 Unliquidated Obligations				653,859.47
Total Potential 319(h) Unliquidated Obligations				925,434.07

Hawaii State Department of Health Polluted Runoff Control Program

Updated: 9/27/21

Planned Encumbrances & RFPs

FY15 C996978715-0 (S-16-201/9290-15)				10/1/15 - 9/30/21
Category	Amount	Cost	Balance	
Projected FY15 ULO	453.97		453.97	
Awarded Contracts Under Development/Review				
Planned RFPs				
Other Potential Program Expenditures				
-				
Subtotal		0.00		
FY15 Final Estimated ULO			453.97	
FY16 C996978716-0 (S-17-201/9290-16)				10/1/16 - 9/30/21
Category	Amount	Cost	Balance	
Projected FY16 ULO	18.01		18.01	
Awarded Contracts Under Development/Review				
Planned RFPs				
Other Potential Program Expenditures				
-				
Subtotal		0.00		
FY16 Final Estimated ULO			18.01	
FY17 C996978717-0 (S-18-201/9290-17)				10/1/17 - 9/30/22
Category	Amount	Cost	Balance	
Projected FY17 ULO	54,201.83		54,201.83	
Approved Contracts to be Encumbered				
- ORCD - Ag Stewardship Kaiaka Bay		53,763.57		
Awarded Contracts Under Development/Review				
Other Potential Program Expenditures				
-				
Subtotal		53,763.57		
FY17 Final Estimated ULO			438.26	
FY18 C996978718-0 (S-19-201/9290-18)				9/30/18 - 9/29/23
Category	Amount	Cost	Balance	
Projected FY18 ULO	352.31		352.31	
Approved Contracts to be Encumbered				
Planned RFPs				
Other Potential Program Expenditures				
-				
Subtotal		0.00		
FY18 Final Estimated ULO			352.31	
FY19 C996978719-0 (S-20-201/9290-19)				10/1/19 - 9/30/24
Category	Amount	Cost	Balance	
Projected FY19 ULO	216,548.48		216,548.48	
Approved Contracts to be Encumbered				
-				
Other Potential Program Expenditures				
- Waipa Phase 2 Extension		150,000.00		
- DLNR - Eke		46,000.00		
Subtotal		196,000.00		
FY19 Final Estimated ULO			20,548.48	
FY20 C996978720-0 (S-21-201/9290-20)				10/1/20 - 9/30/25
Category	Amount	Cost	Balance	
Projected FY19 ULO	653,859.47		653,859.47	
Approved Contracts to be Encumbered				
- ORCD - Ag Stewardship Kaiaka Bay		176,270.18		
Awarded Contracts Under Development/Review				
- Queen Emma - Mitigating Erosion in Pelekane		257,125.00		
Planned RFPs				
Other Potential Program Expenditures				
- DLNR - Eke		188,000.00		
Subtotal		621,395.18		
FY20 Final Estimated ULO			32,464.29	
Total Potential 319(h) Unliquidated Obligations			54,275.32	

Appendix D – Project Funding by Grant

**Hawaii State Department of Health Polluted Runoff Control Program
Project Funding by Grant**

Updated: 9/27/21

ASO#	Contractor	Project Title	Status	Budget	Grant	Type	Expended	Balance
N/A	Central Maui Soil & Water Conservation District	Southwest Maui Watershed-Based Plan Finalization	C	11,500.00	C9-96978714-1	Prog	11,500.00	0.00
				2,500.00	C9-96978716-0	Prog	2,500.00	0.00
				14,000.00			14,000.00	0.00
N/A	Central Maui Soil & Water Conservation District	Keokea Riparian Rehabilitation	E	1,000.00	C9-96978717-0	Proj	1,000.00	0.00
				48,998.50	C9-96978719-0	Proj	36,933.23	12,065.27
				49,998.50			37,933.23	12,065.27
N/A	County of Maui	West Maui and Southwest Maui Water Quality Sampling (HOKWO)	E	38,536.43	C9-96978717-0	Proj	0.00	38,536.43
				38,536.43			0.00	38,536.43
20-166	Coral Reef Alliance	Improve Coastal Water Quality and Coral Reef Health by Expanding Stream Gulch Restoration Actions in Wahikuli, West Maui	E	47,000.00	C9-96978718-0	Proj	46,427.60	572.40
				168,010.50	C9-96978719-0	Proj	0.00	168,010.50
				215,010.50			46,427.60	168,582.90
N/A	Dept. of Land & Natural Resources (DAR)	West Maui Ridge to Reef Priority Watershed Coordinator	E	93,000.00	C9-96978717-0	Proj	0.00	93,000.00
				11,000.00	C9-96978718-0	Proj	0.00	11,000.00
				104,000.00			0.00	104,000.00
18-146	Dept. of Land & Natural Resources (DOFAW)	Pelekane Grazing Improvement Project	C	90,000.00	C9-96978716-0	Proj	90,000.00	0.00
				90,000.00			90,000.00	0.00
17-195	Dept. of Land & Natural Resources (DOFAW)	DLNR, Div. of Forestry and Wildlife: Polluted Runoff Control Project for West Maui	E	160,000.00	C9-96978713-0	Proj	160,000.00	0.00
				84,510.92	C9-96978714-1	Proj	84,510.92	0.00
				164,149.26	C9-96978715-0	Proj	164,149.26	0.00
				326,500.79	C9-96978716-0	Proj	326,500.79	0.00
				735,160.97			735,160.97	0.00
TBD	Dept. of Land & Natural	Sustaining the Source Waters of Kawaihae	D	234,000.00	TBD	Proj	0.00	234,000.00
				234,000.00			0.00	234,000.00
16-050	Hui ku Maoli Ola	Ma'ili'iili Watershed Implementation Project	X	727,082.45	SEP	N/A	55,296.31	671,786.14
19-206	Hui o Ko'olaupoko	Ko'olaupoko Moku Watersheds Coordinator	E	10,559.33	C9-96978715-0	Proj	10,559.33	0.00
				140,000.00	C9-96978718-0	Proj	44,939.60	95,060.40
				150,559.33			55,498.93	95,060.40
21-049	Kaho'olawe Island Reserve Commission	Operations and Maintenance Plan for Hakioawa Watershed	E	30,000.00	C9-96978718-0	Proj	4,000.00	26,000.00
				62,185.91	C9-96978719-0	Proj	0.00	62,185.91
				92,185.91			4,000.00	88,185.91
19-156	Maui Land & Pineapple Co., Inc.	Treatment Train: An Ahupua'a Approach to Watershed Best Management Practices in West Maui	E	212,510.92	C9-96978716-0	Proj	212,510.92	0.00
				201,988.07	C9-96978717-0	Proj	1,776.26	200,211.81
				131,536.43	C9-96978719-0		0.00	131,536.43
				53,963.57	C9-96978720-0		0.00	53,963.57
				599,998.99			214,287.18	385,711.81
20-165	The Nature Conservancy	He'eia Watershed Ungulate-Exclusion Fencing and Erosion Control	E	210,934.10	C9-96978718-0	Proj	1,985.63	208,948.47
				210,934.10			1,985.63	208,948.47
17-060	O'ahu Resource Conservation &	Ka'alaea and Waiahole Stream Restoration/Phase 2	C	216,811.20	C9-96978715-0	Proj	216,811.20	0.00
				216,811.20			216,811.20	0.00
17-059	O'ahu Resource Conservation & Development Council	Agricultural Stewardship in the Ma'ili'iili Watershed	C	43,732.63	SEP	N/A	43,732.63	0.00
				146,302.88	C9-96978715-0	Proj	146,302.88	0.00
				190,035.51			190,035.51	0.00
18-209	O'ahu Resource Conservation & Development Council	Waimanalo Stream Restoration and Community Outreach - Phase 3	C	147,716.49	C9-96978714-1	Proj	147,716.49	0.00
				100,000.00	C9-96978716-0	Proj	100,000.00	0.00
				247,716.49			247,716.49	0.00
19-154	O'ahu Resource Conservation & Development Council	Buffers and BMPs for Windward O'ahu	E	150,000.00	C9-96978714-1	Proj	150,000.00	0.00
				125,000.00	C9-96978715-0	Proj	124,999.37	0.63
				29,726.24	C9-96978717-0	Proj	0.00	29,726.24
				304,726.24			274,999.37	29,726.87
22-083	O'ahu Resource Conservation & Development Council	Ag Stewardship and Stream Restoration in Ki'iki'i and Paukauila Watersheds	D	53,763.57	C9-96978717-0	Proj	0.00	53,763.57
				176,270.18	C9-96978720-0	Proj	0.00	176,270.18
				230,033.75			0.00	230,033.75

ASO#	Contractor	Project Title	Status	Budget	Grant	Type	Expended	Balance
20-143	PG Environmental	Waikele Watershed and Total Maximum Daily Load Implementation Plan	E	11,000.00	C9-96978715-0	Prog	11,000.00	0.00
				138,984.79	C9-96978718-0	Prog	49,676.64	89,308.15
				149,984.79			60,676.64	89,308.15
TBD	Queen Emma Land	Mitigating Erosion in Pelekane	D	257,125.00	TBD	Proj	0.00	257,125.00
				257,125.00			0.00	257,125.00
20-123	University of Hawai'i (CTAHR)	Implementing Soil Management Strategies and Soil Testing Technologies	E	349,922.86	C9-96978717-0	Proj	172,821.54	177,101.32
				349,922.86			172,821.54	177,101.32
17-100	University of Hawai'i (Sea Grant)	He'eia Fishpond Mangrove Island Removal Project	C	189,504.70	C9-96978715-0	Proj	189,496.73	7.97
				189,504.70			189,496.73	7.97
20-139	University of Hawai'i (Sea Grant)	Expanding Water Quality Improvement Projects at He'eia Fishpond	E	64,510.92	C9-96978717-0	Proj	33,616.27	30,894.65
				241,951.06	C9-96978718-0	Proj	0.00	241,951.06
				306,461.98			33,616.27	272,845.71
19-155	The Waipa Foundation	Watershed Implementation Project for the Ahupua'a of Waipa - Phase 2	E	150,997.60	C9-96978714-1	Proj	150,997.60	0.00
				150,000.00	C9-96978716-0	Proj	150,000.00	0.00
				50,000.00	C9-96978717-0	Proj	3,364.00	46,636.00
				150,000.00	TBD	Proj		
				350,997.60			304,361.60	46,636.00

Status

- C: Completed
- E: Contract Executed/Project in Progress
- R: Contract Under Review (ASO/Attorney General/Etc.)
- D: Contract Development (PRC)
- X: Contract Cancelled

*These funds were originally encumbered for the respective projects but were ultimately unspent by the contractors. This unspent balance was unencumbered and used for other PRC projects.

Appendix E – Workplan Progress Report for FY21

Goal 1: Restore and protect waters through partnerships and implementation of watershed-based plans				
Objective	Task	Milestone/ Outcome	3/15/21 Status	9/30/21 Status
Invest in and implement NPS pollution control projects to improve water quality	Release RFP targeting impaired waterbodies in priority restoration watersheds (for spending the FFY 2021 grant)	RFP outreach, RFP release, proposal evaluation and meetings, award notification	N/A	The RFP was released on 8/6/21. The proposal deadline was 9/28/21. PRC received 5 proposals that requested a total of \$938,000 in 319 Project Funds. Best and final offer (BAFO) discussions will take place 10/25 and 10/26/21 and the BAFO deadline is 11/10/21. Award notification will take place on 11/18/21.
	Meet with partners and stakeholders in priority restoration watersheds to develop additional restoration projects	Develop one restoration project to fund in FFY 2022	The Program continues to meet with partners in the South Kohala Coastal Partnership (October 2020, January 2021) to discuss restoration projects and will be meeting with the W. Maui watershed coordinator to discuss potential projects in W. Maui in May.	PRC plans to implement OSDS/septic system maintenance components of watershed plans in a priority watershed to conduct septic system pump-outs and outreach using the FY22 grant. The priority watershed will be selected once the OSDS prioritization tool is completed by UH, although likely South Kohala (Waikoloa watershed) will be selected because its WBP provides the best guidance for OSDS projects, there is a large network of partners there, and there are septic systems near surface waters there. The project schedule will be coordinated with proposed amendments to HAR Chapter 11-62 concerning septic system pump-out requirements. The project will also support the CNPCP Operating OSDS management measure.
	Participate in DOFAW's Watershed Partnership Program Grant (WPPG) review process and identify watershed protection project(s) to fund (using the FFY 2021 grant)	Leverage WPPG and 319 grant funds on at least one project	This will occur in April-May this year instead of Aug-Sept. PRC reviewed and provided comments on the draft WPPG RFP, which includes language about 319 funding opportunities for projects that include water quality-related goals and outcomes.	PRC participated on the WPPG evaluation committee, which met on 9/23/21 to discuss applications. PRC selected two protection projects to provide DOFAW funding for: \$210,000 for ungulate management and planting projects in West Maui priority watersheds and approximately \$15,000 to revegetate areas in two Koolaupoko watersheds (Ala Moana and Waihee). The West Maui project will be conducted by Mauna Kahalawai Watershed Partnership and adds to the NPS mitigation efforts by CORAL in Wahikuli watershed; the ungulate control and planting activities are mauka to CORAL's restoration site. More information about the DOFAW / Watershed Partnership projects can be found in the Projects List.

<p>Invest in and implement NPS pollution control projects to improve water quality (cont'd)</p>	<p>Discuss project opportunities and watershed plan implementation updates and challenges with W. Maui watershed coordinator, Koolaupoko watershed coordinator, and other partners</p>	<p>High quality projects that will successfully mitigate NPS pollution and address community needs</p>	<p>PRC has discussed project opportunities with DOFAW to prepare for their WPPG grant. PRC will be meeting with the W. Maui coordinator in May to discuss potential projects. The Koolaupoko watershed coordinator is collecting data on water quality improvement projects and will be implementing an outreach plan to engage stakeholders and discuss NPS project opportunities throughout this fiscal year</p>	<p>PRC discussed projects with the W. Maui Watershed Coordinator in September, particularly projects focused on improving water quality in Wahikuli, along with the status of current projects underway in W. Maui. The Coordinator supported W. Maui projects proposed as part of the FY21 RFP (as indicated by letters of support). The Koolaupoko watershed coordinator continues to conduct outreach and collect data on WQ-related projects in that region. No projects in Koolaupoko are planned, except for the small DOFAW / Ko'olau Mountains Watershed Partnership planting project in Waihee. The Program continues to discuss projects as a member of the Soil and Watershed Team in the South Kohala Coastal Watershed Partnership (SKCP), including potential fire mitigation and OSDS projects, which may be funded in FY23.</p>
	<p>Oversee projects (see attached Projects List)--ensure 319 project deliverables are submitted; provide technical assistance and feedback on project deliverables; conduct site visits as needed or practicable</p>	<p>Review of and feedback on Project Effectiveness Monitoring Plans, Quarterly Status Reports, and Quarterly Financial Reports</p>	<p>Completed (see Project List for current project status/updates)</p>	<p>Completed (see Project List for current project status/updates). Approved reports and plans can be found in a projects resources on the PRC Viewer.</p>
	<p>Draft new project contracts; modify existing contracts when necessary</p>	<p>Contracts executed within 9 months of award</p>	<p>Continuous; see Project List</p>	<p>Four new contracts (with KIRC, County of Maui, DLNR, and Oahu RC&D) were drafted and executed this year; one contract (with Queen Emma Land Company) is awaiting its NTP; and one contract with DLNR is being finalized before submission. See projects list for all active and awarded projects.</p>
	<p>Fiscal management of 319 projects</p>	<p>Fiscal management of 319 projects</p>	<p>Continuous. PRC has been assessing project grant balances regularly and has had to resolve some issues with ASO.</p>	<p>Continuous</p>

Monitor and assess water quality in priority watersheds	Coordinate water quality sampling in W. Maui with County, HOKWO, Central Maui SWCD, and CWB	Water quality data collection in West Maui and Southwest Maui	The "Coastal Water Quality Monitoring in West Maui and Southwest Maui Watersheds," which PRC and County of Maui are partnering on, has not received its NTP yet. It is expected to begin in 8/2021. PRC sent the draft MOA to the SWCD's Corp Counsel for review in 2/2021 and may require revisions to the contract language.	PRC is partnering with County of Maui (with Hui O Ka Wai Ola as the subcontractor) to conduct WQ monitoring at 7 DOH-approved sites in the West Maui priority watersheds and in Southwest Maui. The County of Maui is collecting and analyzing water samples to collect data, assess trends, and monitor the effectiveness of current watershed projects on water quality. Monitoring started in June 2021 and will conclude in August 2022. Monitoring data will be assessed in the 2022 Integrated Report.
	Coordinate water quality sampling in Hanalei Bay	Water quality data for coastal and inland waters	Ongoing coordination with the Waipa Foundation, the CWB Monitoring Section, and the DOH Lab.	Ongoing coordination with the Waipa Foundation, the CWB Monitoring Section, and the DOH Lab.
	Monitor water quality in Heeia (DOH, UH Sea Grant, Heeia NERR, TNC (via 319 funds))	Comprehensive water quality monitoring in a priority watershed	Ongoing. WQ is being monitoring in Heeia Fishpond as part of the "Expanding Water Quality Improvement Projects in Heeia Fishpond" (March 2020-March 2022) and will be conducted in Heeia Stream as part of the "Heeia Watershed Ungulate Exclusion Fencing and Erosion Control" (Nov 2020-Nov 2023). PRC will coordinate monitoring with the Monitoring coordinator for the Heeia NERR.	Ongoing. WQ is being monitoring in Heeia Fishpond as part of the "Expanding Water Quality Improvement Projects in Heeia Fishpond" (March 2020-March 2022) and will be conducted in Heeia Stream as part of the "Heeia Watershed Ungulate Exclusion Fencing and Erosion Control" (Nov 2020-Nov 2023). PRC will coordinate monitoring with the Monitoring coordinator for the Heeia NERR.

Monitor and assess water quality in priority watersheds (cont'd)	Provide guidance and feedback on monitoring plans and activities	Monitoring plans meet DOH QA/QC standards	Reviewed and provided feedback on CORAL's monitoring plan for the 319 project in West Maui. PRC has not received one from TNC yet for their Heeia project.	Reviewed KIRC monitoring plan (no water quality monitoring) and assisted DOFAW /The Kohala Center with potential monitoring for "Sustaining Source Waters" project in Kawaihae watershed (see Projects List for more information).
	Include water quality monitoring component in restoration projects to the extent possible	Potential increase in number of inland water bodies monitored	PRC has been working with DOFAW to include water quality monitoring as part of their Eke project, which is still in development. No new restoration projects (outside of those awarded through the RFP process) are currently planned.	PRC has been working with DOFAW to include water quality monitoring as part of their Eke project, which is currently in contract development. One new stream will be monitored. No new restoration projects have been awarded this year, so the PRC will continue to work with partners on potential WQ monitoring opportunities as new projects are proposed/discussed.
	Report water quality data	Transmit data to WQX	Continuous	Completed by the Monitoring Section
	Assist CWB with monitoring and QA/QC needs	Monitoring assistance	CWB has not required monitoring assistance, but PRC and Monitoring did meet in March to work towards coordinating monitoring, TMDL, and watershed plan efforts	PRC has been working with Monitoring to find additional WQ data and become more involved in WQ monitoring efforts by other agencies, such as UH Hilo and the National Park Service. PRC has been working with partners (e.g., the SKCP, NRCS) to find additional data that can be potentially assessed in the IR. PRC has initiated discussion with EPA's Office of Water along with Monitoring to update the Recovery Potential Screening tool to help with EPA's Healthy Watersheds Program.
Document environmental outcomes	Populate and update GRTS	Submit GRTS mandated elements	Completed mandated elements for all open projects	Completed mandated elements for all open projects
	Update project outcomes on the PRC Viewer	Load reductions and environmental outcomes are current	Completed	Completed; the Viewer is up to date.
	Assess 2020 IR in relation to PRC projects and new water quality data	Document progress for potential success story	Completed	Completed in the Annual Report

Document environmental outcomes (cont'd)	End of year assessments of projects, including environmental results	Results reported in FFY 2020 End of Year Report	Completed	Completed; posted on PRC's website
Goal 2: Establish a comprehensive NPS management and control program				
Objective	Task	Milestone/ Outcome	3/15/21 Status	9/30/21 Status
Create branch policies and procedures	Provide assistance needed to make branch operational	Relocation to new dept; policies and procedures document; new website with branch information	N/A -- the new branch has not yet been created	Branch update: The branch has not yet been approved. It is now with the Dept. of Budget and Finance (B&F). If it is approved by them, then the reorganization paperwork is routed to the Governor for approval, and then sent back to B&F for final approval. This process generally takes at least two months.
Develop administrative rules that regulate NPS pollution and provide consistency with CZARA 6217 (Note: CNPCP Program Fund (FTE) allocation)	Revise existing draft rules package that regulates NPS pollution from agriculture, forestry, and marinas	Completed rules package	Completed in March. PRC attended the public hearing held on Feb 1, 2021, which was also the deadline for public comments. There were eight public comments on 11-56 -- all were in support, and several comments recommended expanding the rules. PRC worked with the Enforcement Section to discuss and respond to the comments, revise the rules and the rationale, and format the final rules in the Ramseyer and Standard formats for submission. Chapter 11-56 will be sent to the Deputy AG for review and to the Office of Planning, Policy and Program Development (OPPPD) by the end of March.	Completed. NPS rules (HAR Chapter 11-56) were signed by Gov. Ige in June 2021.

Support statewide and national initiatives aimed at protecting watersheds and water quality	Submit watersheds for NRCS NWQI implementation or readiness phase	NWQI application submittal and implementation in Pelekane or other watersheds	N/A	Per discussions with NRCS, no new NWQI watershed will be added this year. Focus this year was getting Hilo watershed from readiness phase back into implementation phase, and having several discussions with NRCS and the Monitoring Section on monitoring streams and which pollutants to target for de-listing waterbodies. PRC also assisted partners in the readiness phase in Pelekane / South Kohala watersheds by reviewing and providing feedback on their NWQI watershed assessment.
	Support the Marine 30 x 30 initiative by working with DAR to support watershed coordinators	Fund W. Maui watershed coordinator for 2+ years	In process -- PRC is working with DLNR to resolve issues	The W. Maui watershed coordinator has been funded with DLNR-DAR (MOA was executed in June 2021). PRC is also supporting the marine 30x30 initiative by implementing projects in W. Maui to reduce sediment and nutrients that negatively impact reefs.
	Support the watershed protection 30 x 30 initiative by collaborating on projects with DOFAW and watershed partnerships	Continue to implement projects with DOFAW and watershed partnerships; WPPG / 319 grant coordination	PRC will be participating in DOFAW's WPPG, which scheduled for April, and provided feedback on their draft WPPG RFP. PRC anticipates funding one protection or restoration project arising from the WPPG by late FY21/early FY22.	PRC is spending \$225,000 to support the watershed protection 30x30 initiative to protect native forests from degradation and to prevent and reduce soil erosion and sediment runoff in West Maui watersheds and Ko'olaupoko moku via projects selected by PRC from the WPPG RFP).
	Support the State Cesspool Conversion Working Group efforts	Attend relevant meetings, meet with coordinator to discuss alternative wastewater systems and inspection programs	PRC has not been involved with the Cesspool Conversion Work Group yet this year, but will likely begin to attend meetings once the PRC is fully staffed.	PRC met with Sina to discuss the CCWG's prioritization mapping tool, and worked with her an UH to add septic systems and prioritization criteria to the mapping tool, which will be completed in 2022.

<p>Investigate innovative approaches and develop new strategies to address NPS pollution</p>	<p>Attend relevant conferences, workshops, trainings, and events to support strategies and new approaches</p>	<p>EPA's National NPS Training Workshop (November), ESRI ArcGIS or ArcPRO training (TBD based on course availability), State Procurement Office Training (October), contract development trainings (TBD by DOH-ASO), Hawaii Conservation Conference (summer), ACWA webinars; other conferences and trainings TBD</p>	<p>PRC attended the SPO training in October, the virtual NPS training workshop in November, and the SRF training in March. Attended webinars of note include the EPA STEPL and How's My Waterway webinars.</p>	<p>Since March, PRC has attended the Hawaii Conservation Conference and the City and County of Honolulu's Stormwater Quality BMPs workshops, as well as the SKCP summer series. PRC also attending Wastewater Alternatives and Innovation's Sanitation Conference in August. PRC also sat on the North Shore Flood Mitigation Task Force and joined the Ala Wai Watershed Collaboration. PRC attended Ocean Resources Management Plan (ORMP) Council meeting in July.</p>
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Goal 3: Develop an approvable CNPCP to protect coastal water quality

Objective	Task	Milestone/ Outcome	3/15/21 Status	9/30/21 Status
<p>Implement the CNPCP 5-Year Work Plan</p>	<p>Complete and submit the Monitoring and Tracking administrative element</p>	<p>Submittal to EPA/NOAA</p>	<p>Monitoring and Tracking document was revised in Feb and sent to EPA in March. Originally the write-up was going to be sent to EPA and NOAA HQ, but PRC and OP-CZM decided to submit to the EPA 319 Project Officer for review prior to sending to HQ. Comments from EPA are anticipated by early April, and a revised version of the document will be submitted to HQ by April 30.</p>	<p>PRC received feedback from EPA and NOAA in May. One of the main issues with the tracking component is that not all MMs have been approved, and therefore it was difficult for EPA and NOAA to determine whether the proposed tracking methods were sufficient. PRC will revise other components that EPA and NOAA commented on as other management measures are submitted and approved, and will finalize its tracking methods after the remaining MMs are approved. The (water quality) monitoring component was found to be adequate and will not need to be revised.</p>

Implement the CNPCP 5-Year Work Plan (cont'd)	Revise and resubmit New Development management measure (MM)	Submittal to EPA/NOAA	Analysis and drafting of the additional information for the next submittal, which will be sent to EPA/NOAA at the end of March	EPA and NOAA approved the New Development MM in May.
	Prepare and submit Roads, Highways, and Bridges MMs	Submittal to EPA/NOAA	Will be submitted at the end of March	OP-CZM submitted these MMs to EPA and NOAA in July and August.
	Work with DOBOR and UH Sea Grant on CNPCP	Revised Boaters Guide distributed in classes and at boating facilities	This project has been put on hold by all partners until 2022.	This project is still on hold, and may not be necessary now that Marinas and Recreational Boating are subject to HAR 11-56, which include the public education component for Marinas and Boating. The Program may revisit in 2022 pending interest from DOBOR.
	Meet with OP-CZM to discuss strategies and progress	CNPCP approval strategies, CNPCP workplan implementation	Met in December to discuss OSDS strategies and bills. Discussed with WWB whether it would be best to advance OSDS inspections legislatively, via rule amendments, or other mechanisms. The main limitation is funding for an inspection program, which a rule change would not address, but a bill could if the State were in a better financial position. Continued to discuss strategies with OP-CZM over email / TEAMS. Reviewed and provided feedback on DOH testimony in support of an OSDS inspection bill in January.	PRC has been meeting with OP-CZM monthly to discuss CNPCP management measures and strategies. The focus since spring has been on OSDS, including discussion on and drafts of septic system related bills, outreach plans, and funding opportunities. PRC plans to submit an updated version of its OSDS strategy to EPA and NOAA in December 2021 that includes proposed HAR 11-62 pump-out requirement language to ensure it is on the right track for approval.

<p>Implement the CNPCP 5-Year Work Plan (cont'd)</p>	<p>Implement Operating OSDS management measure approval strategy</p>	<p>HAR 11-62 amendments and rules package; data collection</p>	<p>HAR 11-62 is not being amended at this time. PRC and OP-CZM continue to work with WWB to develop a strategy, and are currently looking into CWSRF options and legislative bills.</p>	<p>PRC, in discussion with OP-CZM, drafted a bill for septic systems mandates in lieu of a bill requiring point of sale inspections in May. In running the bill idea by Sina, she thought that amending 11-62 was still the better strategy (particularly because the bill might not pass or things might be added to the bill that wouldn't meet CNPCP objectives or make OSDS maintenance more difficult to implement). PRC consulted with Sina and updated its OSDS inspection strategy to require pump-outs in sensitive areas, which would be identified using similar criteria as the cesspool prioritization tool being developed by UH. PRC, UH, and Sina discusses the mapping tool and data needs for septic system pump-outs, culminating in a scope of work by DOH (Sina) in which septic systems and parameters for prioritizing them would be included in an updated mapping tool. In addition the scope of work included data management for cesspools and septic systems as well as a dashboard. PRC put together an outline for an outreach strategy, which it would begin to implement (with 319 funds and CZMA funds) once HAR 11-62 is amended (including language requiring pump-outs in specific areas identified using the mapping tool). PRC also plans to conduct a pilot pump-out and outreach program in a priority watershed to determine the best way to educate homeowners about septic systems pump-outs as well as to work out issues with reporting and tracking of pump-outs before the pump-out mandate goes into effect (most likely in 2024 or 20225; the rules will be amended in 2022/2023). PRC will is also considering the potential to monitor water quality along with the pump-outs, and met with UH researchers in July to discuss their research on OSDS wastewater microbial source tracking. PRC has also discussed funding septic system maintenance for underserved communities as</p>
	<p>Ensure HAR 11-56 is consistent with CNPCP</p>	<p>Amended indicators for tracking</p>	<p>Completed -- 11-56 was finalized in March and the indicators were updated in February (but may still be revised further).</p>	<p>Completed -- 11-56 was finalized in March and the indicators were updated in February (but may still be revised further).</p>

Goal 4: Develop watershed-based plans and TMDLs to control NPS pollution from its source(s)

Objective	Task	Milestone/ Outcome	3/15/21 Status	9/30/21 Status
Develop Waialeale TMDL Implementation Plan	Meet with contractors to discuss progress and review drafts; oversee plan development	Plan development begins	Ongoing. PRC met with PG and OWOW bimonthly, reviewed drafts of the outline/plan, provided information on stakeholders and management measures, provided requested data, and discussed issues with the plan's development.	Ongoing. PRC met with PG and OWOW bimonthly, reviewed and discussed drafts of the plan, provided information on stakeholders and management measures, and provided requested data. The plan is coming along; load reduction estimates have been completed using STEPL, and are being discussed by key stakeholders, including CCH and DOFAW.
Develop Kaelepulu TMDL	Provide assistance for NPS component; work with Koolaupoko watershed coordinator to incorporate data from TMDL into Koolaupoko watershed plan update	Completed TMDL	TMDL to be completed in 2022. PRC met with Monitoring in December and March to discuss the TMDL development and NPS projects/efforts in the area.	TMDL to be completed in 2022. PRC met with Monitoring in December and March to discuss the TMDL development and NPS projects/efforts in the area. There were no NPS-related TMDL developments requiring PRC assistance in the spring/summer.
Develop process to consistently fund and develop high quality watershed plans	Investigate funding sources for watershed plans (besides CWA grants)	Comprehensive list of funding sources, organizations that fund plans, other types of watershed management plans, resources needed	This is included in the NPS Plan update and will begin in FY22.	This is included in the NPS Plan update and will begin in FY22.
	Collaborate with partners (e.g., DOH-SDWB, BWS, DOFAW) to prioritize watershed plan development	Prioritized list of watersheds that need plans and funding mechanisms		
Approve watershed-based plans	Review and provide feedback on watershed plans, meet with plan authors to discuss plan requirements; provide planning assistance	Approved nine element watershed plans	No plans were submitted for review or approval.	No watershed plans were submitted for review or approval.

Perform fiscal, reporting, and administrative duties to ensure the PRC Program continues to achieve its mission				
Objective	Task	Milestone/ Outcome	3/15/21 Status	9/30/21 Status
Administer 319 program	Ensure NPS Management Plan and FFY 2021 workplan are being implemented, hold PRC staff meetings, serve as liaison between PRC and other agencies, attend contractor outreach events, oversee administrative and accounting activities, etc.	Management of PRC Program	Ongoing	Weekly staff meetings were held starting with the hiring of the new Program Specialist in April. The Program Specialist served as a liaison between PRC and NRCS, OP-CZM, CNPS, and various contractors. PRC was able to visit two sites, Waimanalo and Kahaluu, in August. These two sites are part of ORC&D's 319 projects. The Program Specialist has met several times with DOH's Environmental Resources Office to learn how to use the state's Federal Award Management System (FAMS) for accounting activities.
Obtain the FFY 2021 grant	Develop workplan and budget	Workplan and budget	Will be completed 3/31/21 and submitted to EPA in April.	Completed
	Negotiate and submit grant	Midyear meeting and grant submission	NA	Completed. Grant was awarded in September.
Perform fiscal management to ensure successful and appropriate spending of 319 grant funds	Spend all awarded funds with no unobligated funds; implement FFY 2020 strategy to spend all ULOs	Fiscal administration of open grants	Continuous management of grants. However, due to ASO delays and mistakes, grants have been overspent, frozen, and delayed in encumbering funds in a timely manner. We had a solid plan to encumber funds by grant year 1, but have to reassess and rearrange due	PRC has plans for spending down the FFY 20 grant project funds (see "Available Grants" spreadsheet). Due to COVID-19 delays with projects and ASO delays in approving invoices, contracts, etc., PRC rearranged funds so they are spent in a timely manner. PRC's Environmental Health Specialist has been carefully tracking awarded funds to ensure there are no ULOs. PRC discusses the management of grants as a group to get consensus as to various options in re-assigning funds when necessary.

Perform fiscal management to ensure successful and appropriate spending of 319 grant funds (cont'd)	Identify unspent Personnel funds (if applicable) and reallocate towards contractors	Reallocation of unspent personnel funds to contracts	S-16 and S-17 were reallocated and approved by EPA in October. S-18 reallocation approved by EPA in January. Plan to request reallocation of S-19 soon (waiting for ASO to fix their mistakes), then will work on S-20 reallocation next.	S-19 reallocation of funds was approved by EPA in July 2021. PRC will assess S-20 unspent funds next round (pending ASO transactions).
	Submit semi-annual fiscal progress reports	Quarterly fiscal reports submitted to EPA	Completed	Completed
	Close out FFY 2015 grant	Interim and Final 2015 FFR	FFY 15 grant was given a year extension, to close out 9/2021. Currently one project still has funds to spend in this grant.	FFY 15 (S-16) grant needs to be closed out. All projects in this grant have spent their funds. PRC will also close out the FFY 16 (S-17) grant that also expires 9/2021. The Program Specialist is working with DOH's Environmental Resources Office and EPA in closing out the FFY 15 (S-16-201) and FFY 16 (S-17-201) grants.
Perform reporting activities for the 319 grant	Participate in Midyear and End of Year meetings with the EPA	Evaluation of 319 program	End of Year meeting and evaluation completed	Completed
	Evaluate workplan progress	Midyear progress report, end of year progress report	Completed (October)	Completed
	Submit End Of Year Report	End of Year Report	Completed	Completed
	Report grant spending in PRC Viewer	Viewer has current grant information for each project	Ongoing	Ongoing; Viewer is up to date
	Discuss workplan progress with EPA	PRC/EPA meetings	Ongoing - PRC and EPA have discussed workplan status and other updates at monthly meetings	Ongoing - PRC and EPA have discussed workplan status and other updates at monthly meetings

Provide additional functionality to PRC Viewer	Work with Windsor to develop reporting functions for staff and contractors	Reporting functions implemented	So far, no changes to the site have taken place. PRC has met with Windsor this fiscal year.	PRC has been working with Windsor to finalize the electronic QSR feature in the PRC viewer. PRC has been testing the feature along with a contractor in PRC's test viewer. PRC is planning on meeting with the contractor in early October to discuss feedback from the testing.
Support CWB/SWPB programs	Assist CWB or SWPB with procurement and contract development and other administrative tasks	Improved branch efficiency	Assisted branch with administering the PG master contract; assisted monitoring section with contract modifications; provided guidance to monitoring section on procurement matters; assisted branch in securing internal approvals for grants.	Ongoing - Assisted monitoring section in 5/21 with RFP for water quality monitoring services on Kauai; submitted contracts status reports to the Senate Special Committee on Procurement and the State Procurement Office on behalf of CWB