2018 Joint Government Water Conference

Hawaii State Department of Health | Clean Water Branch

Polluted Runoff Program Strategy
Nonpoint Source Pollution in Hawai‘i

Basically:
• Any water pollution not from a point source (as defined by §502(14) of the Clean Water Act)
• Precipitation, etc. transports pollutants into water bodies and ultimately into State coastal waters

Effects:
• Negative impacts on surface and groundwater quality, drinking water supply, public health, coral reefs, marine life, cultural resources and practices, recreation, and tourism

Major Sources:
• Onsite Disposal Systems (nutrients, pathogens)
  • Cesspools
• Urban Areas (nutrients, pathogens, toxic chemicals)
  • Development/construction; impervious surfaces; hydromodifications
• Agriculture (nutrients, sediment, toxic chemicals)
• Conservation Land (nutrients, sediment)
Mission:
To protect and improve the quality of Hawai‘i’s water resources by preventing & reducing NPS pollution

Clean Water Act §319(h):
• Enacted in 1987 and administered by the U.S. Environmental Protection Agency
• Requires states to adopt NPS management programs (Hawai‘i’s PRC Program) and address NPS pollution and achieve/maintain water quality standards
• Provides annual funding to implement PRC program

Activities:
• Fund projects that prevent/reduce NPS pollution
• Education and outreach
• Develop and implement Coastal Nonpoint Pollution Control Program (CNPCP) management measures (with DBEDT’s Office of Planning)
Clean Water Act §319(h) Grant

2019 Federal Grant: ~$1,200,000

Program Funds: $600k
- Travel
- Supplies
- Equipment
- Personnel

Project Funds: $600k
- NPS pollution control projects*
- Water quality monitoring*
- Education and outreach
- Technical assistance
*in watersheds with approved watershed-based plans
Clean Water Act §319(h) Grant Restrictions

We do not fund:
• Permit requirements for point-source discharges
• Research
• Projects in watersheds that do not have approved watershed-based plans
• Watershed plan development*
  *Due to current lack of available funds

Watershed-Based Plans:
• Identify NPS issues and detail projects prioritized to address these issues
• Approved by the PRC program
• Must meet the EPA’s nine requirements for effective watershed-based plans
Watersheds with Approved Plans
Watersheds with Approved Plans on Kauaʻi

Hanalei Bay Watersheds
- Hanalei
- Waioli
- Waikoko
- Waipa

Nawiliwili Bay Watersheds
- Nawiliwili
- Huleʻia
- Puali
Watersheds with Approved Plans on O‘ahu

Ala Wai Watersheds
- Manoa
- Ala Wai

Honouliuli Watershed

Kaiaka Watersheds
- Paukauila
- Ki‘iki’i

Kapakahhi Stream Watershed

Ko‘olaupoko Watersheds
- Waikane
- Waiahole
- Hakipu‘u
- Waihe‘e
- Waianu
- Kualoa
- Ka‘alaea
- Waimanalo
- Kahalulu‘u
- Haiamoa
- Makapu‘u
- Kahawai
- He‘eia
- Kawainui
- Kane‘ohe
- Kawa
- Pu‘u Hawaiiloa
- Ka‘elepulu
- Kea‘ahala

Ma‘ili‘ili Watershed

Wailupe Watershed
Watersheds with Approved Plans on Maui

**West Maui Watersheds**
- Wahikuli
- Honokowai
- Honokahua
- Honolua
- Kahana

**Hakioawa Watershed (Kaho‘olawe)**
**Kaulana Watershed (Kaho‘olawe)**
Watersheds with Approved Plans on the Big Island

Waikoloa Watershed
Kawaihae Watershed
Watershed Implementation Project for the Ahupua‘a of Waipa:

- Implement BMPs throughout the watershed: replace three cesspools; conduct streambank and riparian restoration; feral ungulate control; promote taro lo‘i BMPs; establish constructed wetlands; and install livestock fencing
- 30 months (ends August 2018)
- Phase II awarded, expands BMP implementation

Targeted Pollutants:
- Total nitrogen, total phosphorous, total suspended solids, fecal coliform bacteria

$386,291.24 Grant funds
$108,645.00 In-kind match
$494,936.24 Total project cost
Agricultural Stewardship in Maʻiliʻili Watershed:

- Develop a minimum of ten conservation plans for farmers in Maʻiliʻili watershed that complies with NRCS requirements (with priority to properties along streams); assist farmers with grading & grubbing permit exclusions; and establish a BMP fund to cost-share implementation of practices identified in the plans
- 24 months (ends December 2018)

Targeted Pollutants:

- Total nitrogen, total phosphorous, sediment

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Grant funds</td>
<td>$146,302.88</td>
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<td>Settlement funds</td>
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<td>In-kind match</td>
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<tr>
<td>Total project cost</td>
<td>$251,712.87</td>
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</table>
Heʻeia Fishpond Mangrove Island Removal Project:

- Create a staging area, removing mangroves and implementing BMPs to reduce runoff along the southwestern wall of the fishpond; remove mangroves from “mangrove island” in the fishpond; replant the staging area and island with native plants and implement erosion control measures
- 24 months (ends March 2019)

Targeted Pollutant:
- Total phosphorous

$189,504.70 Grant funds
$57,571.97 Match
$247,076.67 Total project cost
Awarded Project – Maui Land & Pineapple

Ahupua‘a Approach to Watershed Practices:
• Assess and stabilize existing push piles; restore 6.7 acres of landscape using native plants; hydoseed exposed streambanks and hillsides with native seeds; restore abandoned, historic lo‘i kalo as constructed wetlands; conduct ungulate fence checks and perform maintenance as necessary; and conduct ungulate and invasive weed management
• 36 months (NTP to be determined)

Targeted Pollutants:
• Sediment, turbidity, total nitrogen, total phosphorous

$599,999.99 Grant funds
$549,557.00 In-kind match
$1,149,556.99 Total project cost
Implementation of BMPs in the Waiʻulaʻula Watershed:

- Implement BMPs in Waimea, at the Waimea Shopping Center and at Waimea Nature Park (Ulu Laʻau)
- BMPs include stream riparian corridor stabilization, erosion control, native plant restoration, and raingarden installation
- 54 months (ends August 2018)

Targeted Pollutants:

- Total nitrogen, sediment, total phosphorous

$447,467.81 Grant funds
$111,866.95 In-kind match
$559,334.76 Total project cost
Project Results

2017 & 2018 Project Funds:
• $2,379,687.63 Grant funds contracted/awarded
• $1,168,931.76 Match
• $3,548,619.39 Total funds dedicated to improving water quality

Reported Load Reductions from Projects (2017):
• Total nitrogen: 6,506 lbs
• Total phosphorous: 1,591 lbs
• Sediment: 2,521 tons

Heʻeia Stream Delistings:
• 2016: Total phosphorous (wet season) & turbidity (wet season)
• 2018: Nitrate/nitrite (wet season)
How to Get Funded

State Procurement Rules Apply:
• Annual request for proposals (implementation projects)
• Other program RFPs (monitoring, planning, other special projects)
• RFP exemption for contracts with other government agencies

Program Projects:
• Generally 3 – 4 years in length
• Average budget $400,000
• 25% non-federal in-kind match required

Evaluation Criteria for Proposed Projects:
• Water Quality Improvements
• Existing PRC program investment in a given watershed
• Partnership opportunities to leverage resources and/or public support
• Cost
## Additional Project Information

**PRC Program Viewer:**

<table>
<thead>
<tr>
<th>Watershed Based Plan</th>
<th>Island</th>
<th>Status</th>
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<tbody>
<tr>
<td>Akiwa Watershed</td>
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<tr>
<td>Hanapepe and Kalului Watersheds</td>
<td>Kaua'i</td>
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<td>Waikoloa Watershed</td>
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**Hawai‘i State Department of Health | Clean Water Branch | Polluted Runoff Control Program**

He‘eia Watershed Lo‘i Kalo/Grady Timmons
Website: hawaii.gov/doh/pollutedrunoffcontrol

Contact: michael.burke@doh.hawaii.gov