

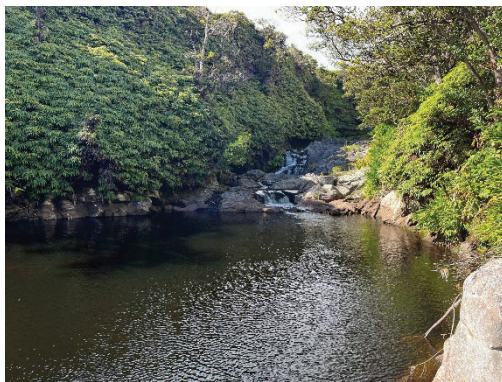
COMMISSION ON WATER RESOURCE MANAGEMENT

Overview: The Commission on Water Resource Management (Water Commission) is the trustee who oversees the rightful sharing of water. The Water Commission has a duty to protect and promote the entire range of public trust purposes dependent upon instream flows and an obligation to control and regulate the use of Hawai‘i’s water resources for the benefit of all people. The Water Commission does this by establishing instream flow standards on a stream-by-stream basis through the development of instream flow standards and in water management areas, water use permits. A public-fact-gathering meeting is conducted (although not required by statute) to amend an interim instream flow standard (IFS) to receive testimony and additional information the public may want to provide to be compiled as part of the Instream Flow Standard Assessment Report. This report will serve as the primary reference of best available information for subsequent amendments to the interim instream flow standards for the Waikoloa, Kohākōhau, or Wai‘ula‘ula streams in the surface water hydrologic unit of Waikoloa (8161), on the Island of Hawai‘i.

Purpose: This handout is a helpful summary of the hydrological data available for amending interim IFS.

Summary of Surface Water Monitoring in Waikoloa

| Station ID | Station Name | Operator | Station Status | Period of Record |
|------------|-------------------------------|----------|-------------------|-------------------|
| 16757000 | Waikoloa Stream near Kamuela | USGS | Continuous Active | 1947-1971, 2018-P |
| 16758000 | Waikoloa Str at Marine Dam | USGS | Not active | 1947-2011 |
| 16756100 | Kohākōhau Stream above Intake | USGS | Not active | 1997-2011 |
| 8-253 | Waikoloa Stream at Lindsey Rd | CWRM | Continuous Active | 2021-P |



Kohākōhau Stream at 3440 ft



Waikoloa Reservoir No. 4

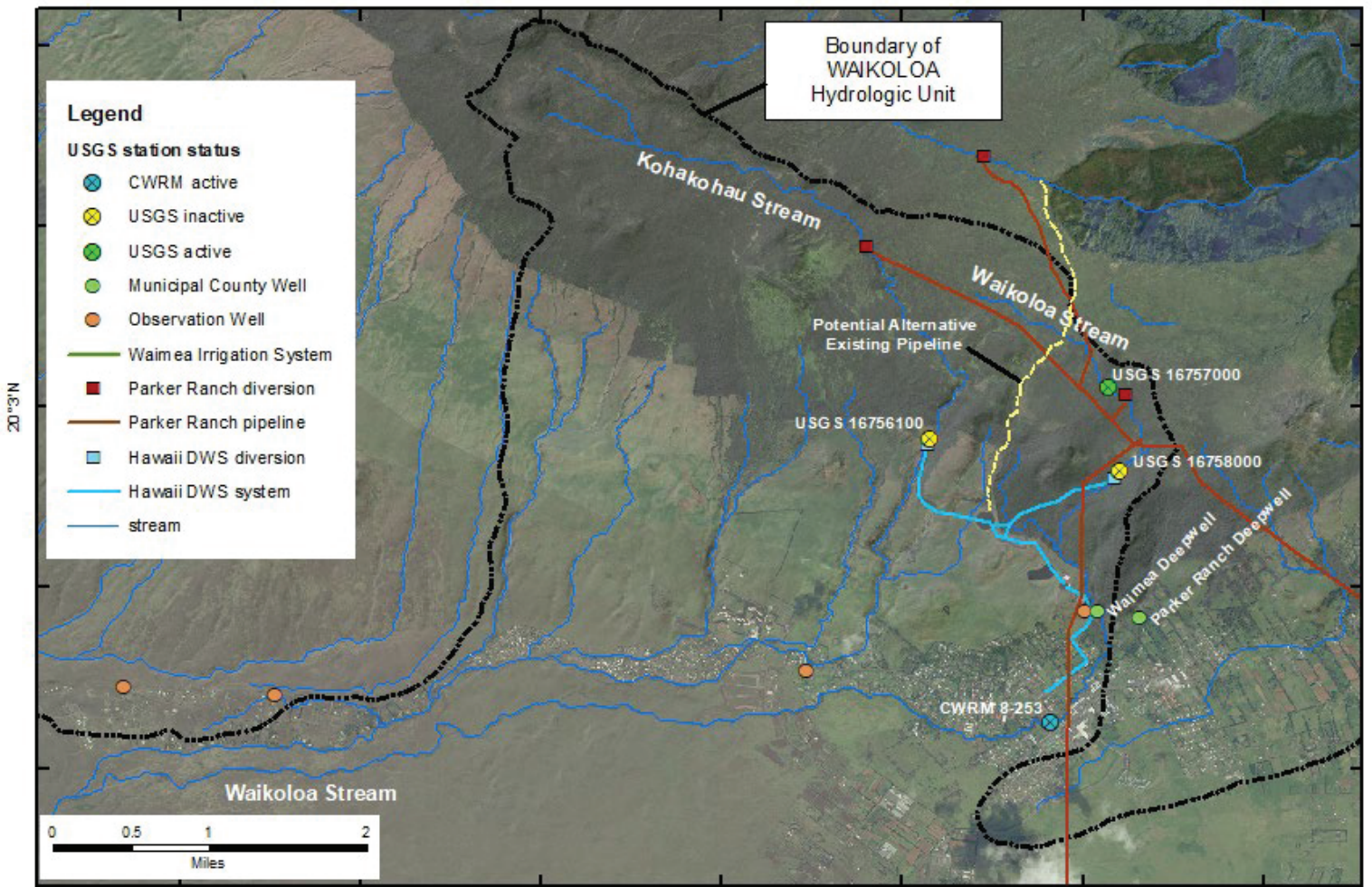


Waikoloa Stream at 3550 ft

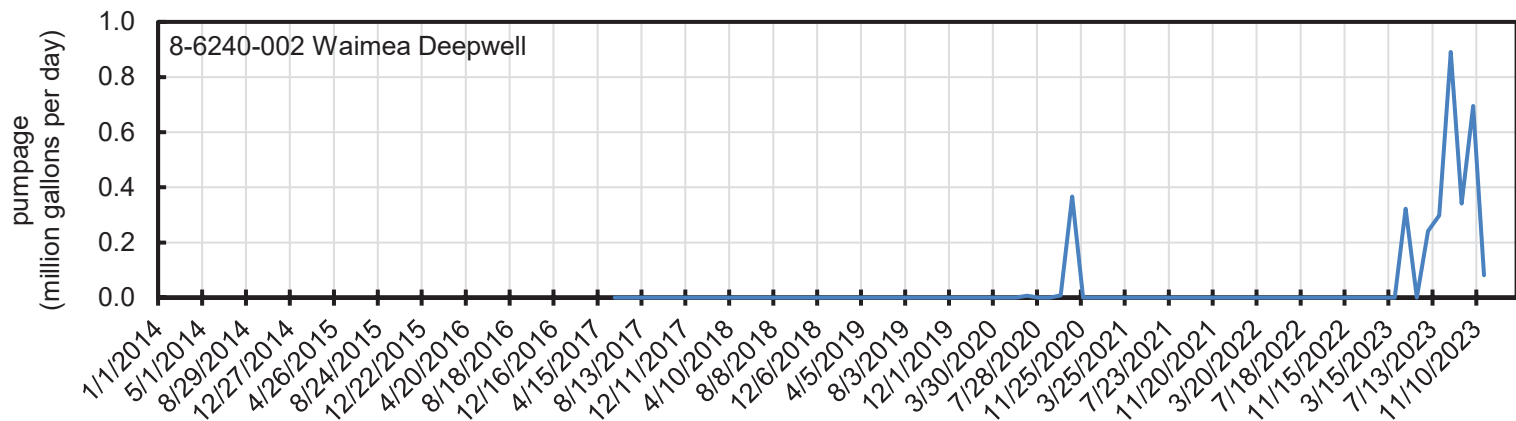
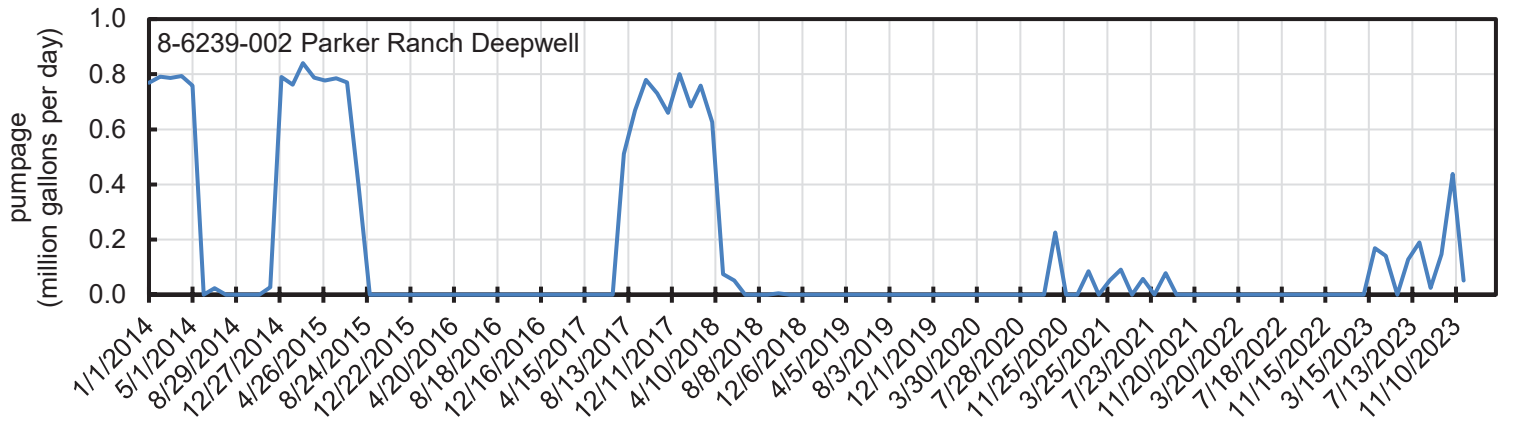
Summary of Surface Water Statistics in Waikoloa

Streamflow statistics in cubic feet per second (million gallons per day) for natural and regulated flow conditions above Hawai‘i DWS stream diversions. MDF = mean daily flow; Q_{XX} = magnitude of flow equaled to or exceeded XX percent of the time.

| Station Name | Period of Record | USGS ID | Type | MDF | Q ₃₀ | Q ₄₀ | Q ₅₀ | Q ₆₀ | Q ₇₀ | Q ₈₀ | Q ₉₀ | Q ₉₅ |
|-----------------------------|------------------|----------|-----------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Waikoloa near Kamuela | 2018-2023 | 16757000 | natural | 5.09 (3.29) | 4.67 (3.02) | 3.66 (2.37) | 2.81 (1.81) | 2.331 (1.49) | 1.92 (1.24) | 1.56 (1.01) | 1.18 (0.76) | 0.93 (0.60) |
| Waikoloa at Marine Dam | 2018-2023 | 16758000 | natural | 5.89 (3.80) | 5.67 (3.67) | 4.46 (2.88) | 3.41 (2.20) | 2.71 (1.75) | 2.22 (1.43) | 1.76 (1.14) | 1.28 (0.83) | 1.02 (0.66) |
| Waikoloa at Marine Dam | 1998-2011 | 16758000 | regulated | 7.49 (4.84) | 6.72 (4.34) | 4.94 (3.19) | 3.85 (2.46) | 3.08 (1.99) | 2.42 (1.56) | 1.85 (1.20) | 1.42 (0.92) | 1.14 (0.74) |
| Kohākōhau Stream abv intake | 1998-2011 | 16756100 | regulated | 9.58 (6.19) | 5.25 (3.39) | 3.10 (2.00) | 2.0 (1.26) | 1.26 (0.81) | 0.76 (0.49) | 0.61 (0.39) | 0.25 (0.16) | 0.11 (0.07) |

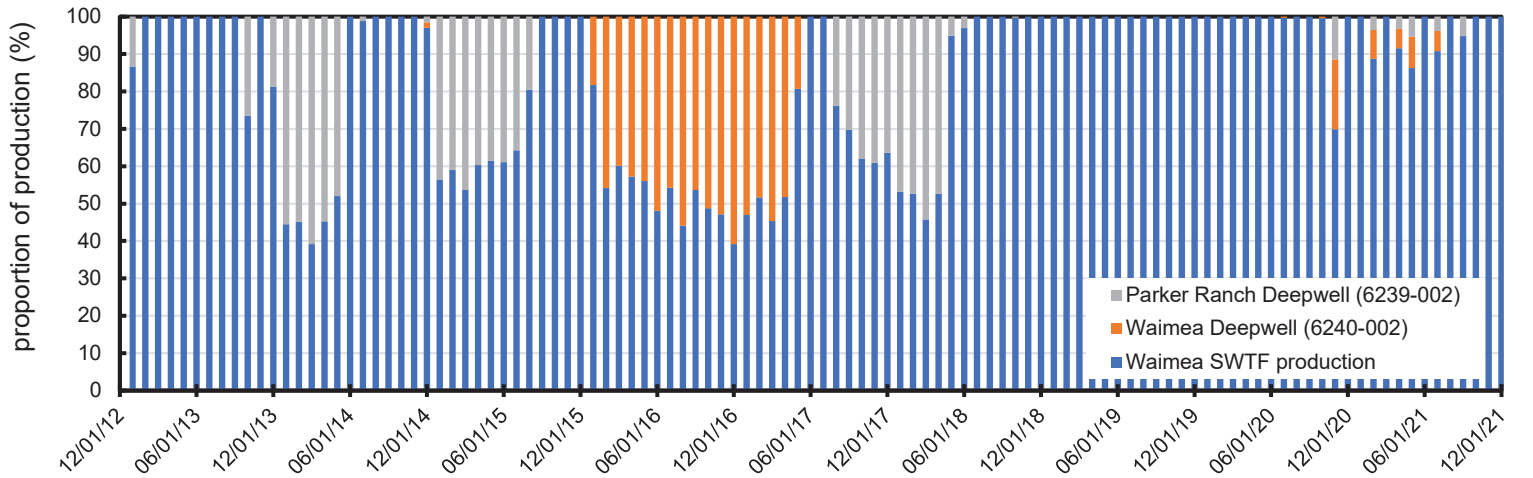
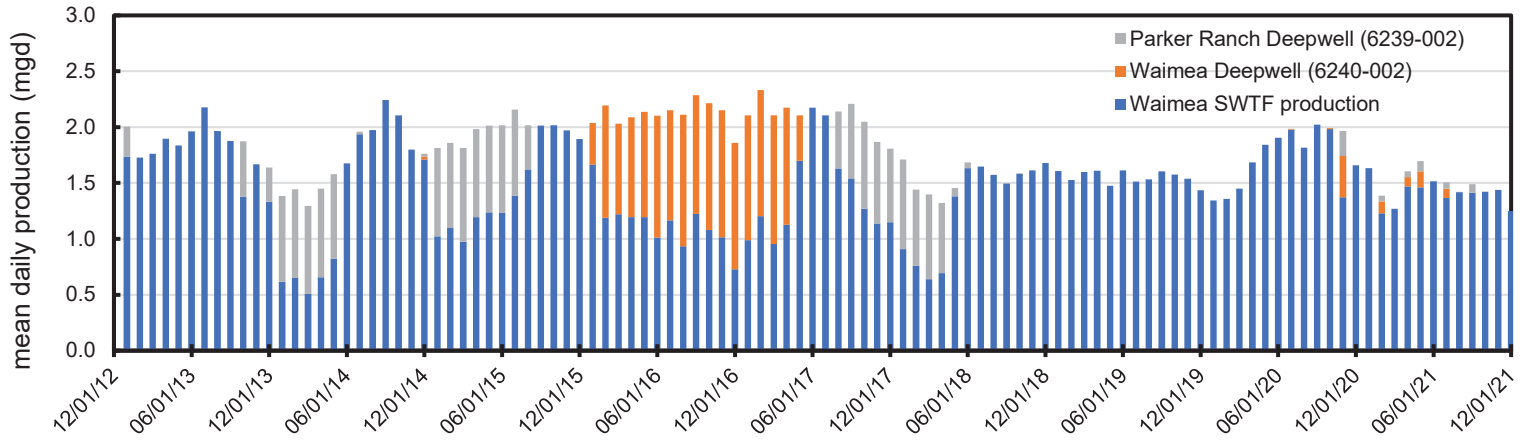


Hawai'i DWS South Kohala System Monthly Well Pumpage



Hawai'i DWS South Kohala System Source Production

| Daily Flow 2013-2021 | Waimea Surface Water Treatment Facility (mgd) | Waimea Deepwell (mgd) | Parker Ranch Deepwell (mgd) | Total Production (mgd) |
|----------------------|---|-----------------------|-----------------------------|------------------------|
| mean | 1.46 | 0.16 | 0.17 | 1.79 |
| median | 1.50 | 0.00 | 0.00 | 1.81 |
| minimum | 0.51 | 0.00 | 0.00 | 1.25 |
| maximum | 2.24 | 1.18 | 0.84 | 2.33 |



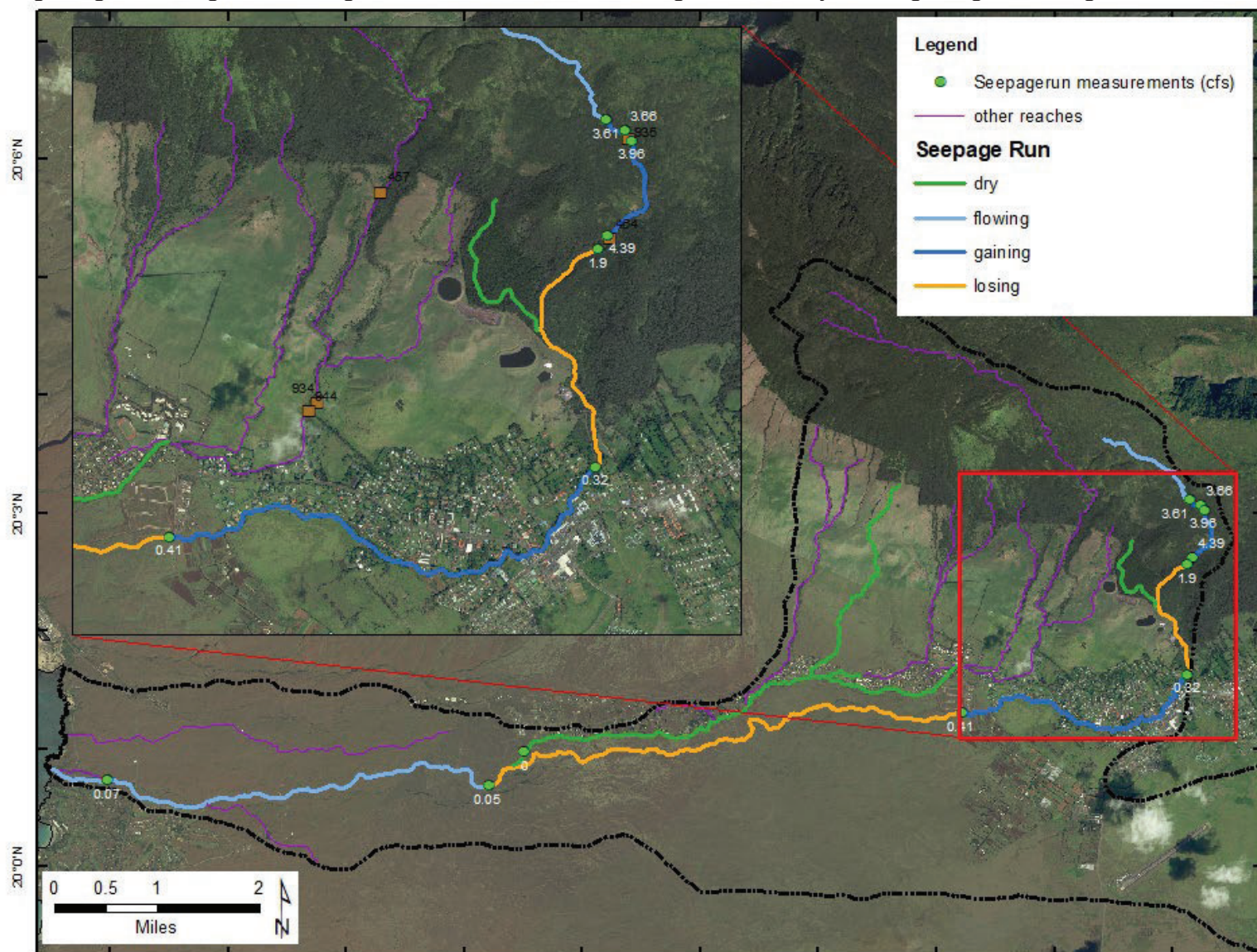
Hawai'i DWS dam and intake on Waikoloa Stream



Upstream view of Hawai'i DWS dam

Seepage Run Results

USGS made simultaneous measurements during stable flow conditions at site locations indicated below to quantify the gains and losses in streamflow due to surface water-groundwater interactions. Based on these measurements, stream reaches were classified as “gaining” or “losing”, or “flowing” in the case where it was flowing but not clearly either “gaining” or “losing”.



For More Information

For more information, visit the Instream Flow Standard webpage for the Hydrologic Unit of Waikoloa (8161).
<https://dlnr.hawaii.gov/cwrmsurfacewater/ifs/hawaii/8161-waikoloa/>

Submit testimony through:

Mail: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809.

Facsimile: (808) 587-0219

E-mail: dlnr.cwrms@hawaii.gov

Oral testimony: **April 18, 2024 (in-person at community meeting)**

Deadline to submit written testimony: **May 2, 2024**

Commission on Water Resource Management:

<https://dlnr.hawaii.gov/cwrms/>

Stream Protection and Management Branch:

<https://dlnr.hawaii.gov/cwrmsurfacewater/>

USGS Pacific Islands Water Science Center:

<https://www.usgs.gov/centers/piwsc>



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