



**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): [9/15/2020](#)

ORM Number: [POH-2020-00071](#)

Associated JDs: AJD-NPR, POH-2019-00164 (West Oahu Solar Project, Ewa District, Oahu) finalized 04 September 2019 confirmed an earlier AJD-NPR (POH-2015-00063) that was still valid (until May 2020) that surface flow from Kaloι Gulch ends in irrigation ponds within the Hoakalei Golf Course. On 07 May 2015 the Corps regulatory staff conducted a site visit for POH-2015-00063 to determine if Kaloι Gulch had a surface connection or a discrete subsurface conveyance to the Pacific Ocean. The Corps found that the portion of Kaloι Gulch that flows into the Haokalei Golf Course had been highly manipulated to form irrigation and ornamental ponds for the golf course. The Corps met on site with representatives of the Haokalei Golf Course (Tad Fujimaki of the Haokalei Country Club) and Haseko Development Inc., the developer and prior owner of the golf course (Daniel Lum). The representatives of the golf course owner and developer informed the Corps that there was not a pipe connecting the southernmost pond on the property (the pond closest to the shoreline) to the Pacific Ocean, nor is there a pipe connecting the southernmost pond to the next closest pond to the north. The Corps also visually inspected both the north and south shorelines of the southernmost pond and did not observe a pipe. The Corps also visually inspected Papipi Road, the road that separates the Haokalei Golf Course from the shoreline, and did not observe any culverts or other evidence of surface or subsurface connection.

The Corps determined that, because there was no hydrologic connection from Kaloι Gulch to the Pacific Ocean, located approximately 1,800 feet downslope of the southernmost irrigation pond in the Hoakalei Golf Course, that Kaloι Gulch was an isolated water.

AJD-NPR documentation for POH-2015-00063 dated 14 May 2015, the Corps determined that Kaloι Gulch stops conveying surface water to downstream waters at approximately one mile north of the Pacific Ocean and that Kaloι Gulch is an isolated water not under Corps jurisdiction. In POH-2015-00063, the Corps also determined that the two tributaries to Kaloι Gulch within the Farrington Highway alignment AOR, Hunehune Gulch and Palehua Stream Gulch, were also part of the isolated water and therefore were not waters of the U.S.

In a prior AJD issued under the same permit number POH-2005-00089 on 28 July 2010 and February 2006, the Corps determined that Kaloι Gulch and the upper reaches of Kaloι Gulch do not have a regulated tributary connection to waters of the U.S. due to developments within the lower reaches of the Kaloι Gulch watershed.

Review Area Location¹: State/Territory: [Hawaii](#) City: [Ewa](#) County/Parish/Borough: [Island of Oahu](#)

Center Coordinates of Review Area: Latitude [21.374414](#) Longitude - [158.033544](#)

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list **MUST** be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: [N/A or describe rationale](#).

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.



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- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
Honouliuli Stream	94	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	<p>As shown in USFWS National Wetlands Inventory data layer for Google Earth Pro, Honouliuli Stream originates approximately 6.40 miles north of H1 and flows south to merge with Honouliuli Tributary on the upstream side of H1. Honouliuli Tributary originates approximately 4.40 miles north of H1. Honouliuli Stream continues south of the confluence with Honouliuli Tributary for 2.29 miles through West Loch Golf Course to the confluence with the West Loch of Pearl Harbor (a TNW). The portion of Honouliuli Stream within the AOR is 900 square feet along 94 linear feet of channel. The terrain data layer for Google Earth Pro indicates that the portion of Honouliuli Stream within the AOR is nearly flat, but Honouliuli Stream from H1 north of the AOR to downstream at the AOR at Farrington Highway changes by approximately 63 feet in elevation.</p> <p>Honouliuli Stream is shown on USGS quad topographic map data layer for Google Earth Pro as a perennial stream and labeled Honouliuli Gulch above H1 and Honouliuli Stream south of the AOR. According to EPA Waters GeoViewer, the Honouliuli Stream’s catchment is approximately 1.23 km², with a drainage area measurement of 65.46 km². Honouliuli Stream is indicated on StreamStats.usgs.gov which identifies the total drainage area at 21.374414, - 158.033544 to be 11.1 square miles with a maximum 24-hour precipitation that occurs on average once in two years (equivalent to precipitation intensity index) of 4.9 inches. According to the DLNR Watershed Atlas, the entire Honouliuli Stream watershed (including the portion that is downstream outside of the AOR) is 23.2 square miles with a maximum elevation of 3,045 feet. Land use in the Honouliuli Watershed is</p>

² If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



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Tributaries ((a)(2) waters):			
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
			<p>primarily agricultural (54.3%) followed by urban (31.7%) and conservation (14%).</p> <p>One Nationwide Permit 12 that would affect Honouliuli Stream north of the AOR: POH-2006-00309 (Board of Water Supply Ewa Shaft) was verified 25 January 2007.</p> <p>A Standard Permit for activities on Honouliuli Stream south of the AOR on the West Loch Golf Course, POH-2012-00129 (Drainage Improvements for Honouliuli Stream, West Loch Municipal Golf Course, Oahu) was authorized 21 June 2016. Honouliuli Stream was listed in POH-2012-00129 as a perennial/RPW A Nationwide Permit 14, POH-2007-00119 (Pedestrian Bridge over Honouliuli Stream), for the portion of Honouliuli Stream running through West Loch Golf Course, was verified on 28 January 2008.</p> <p>During the Corps' and R.M. Towill Corporation's (RMTc) site investigation on 15 July 2020, the Honouliuli Stream was flowing and was found to have a bed and bank and physical indicators of an Ordinary High Water Mark (OHWM) within the AOR. Physical indicators of the OHWM observed at Honouliuli Stream included erosion along the bank, water staining on the eastern concrete abutment of the Farrington Highway Bridge, and tree roots exposed from erosion. Physical indicators of frequently flowing streams were also observed including the absence of rooted vegetation or vegetative debris in-stream, rocks covered in algae, rounded rocks throughout the stream in the AOR. Human use of the site for bathing site as indicated by a shower-caddy and bathing products located alongside the stream was also noted.</p> <p>According to a 2017 USGS study of Honouliuli Stream and Honouliuli Tributary in the vicinity of H-1, Waiahole Ditch releases into Honouliuli Tributary occur downstream of USGS gage station 16212480 and upstream of USGS gage station 16212490. The Corps reviewed the USGS gage information for both gage stations for the week of the 15 July 2020 site visit. From 11 to 16 July 2020, USGS gage station 16212480, located above the Waiahole Ditch release point at Honouliuli Tributary, did not show any stream flow, while USGS gage station 16212490, located below the Waiahole Ditch release point at Honouliuli Tributary, showed stream flow ranging from 11 cubic feet per second (cfs) on 11 July 2020 to two cfs on 16 July 2020.</p> <p>The 2017 USGS study stated that "Available flow data from USGS streamflow-gaging stations 16212490 and 16212480 indicate that both Honouliuli Stream and its tributary flowed intermittently during the study period from February 2015 to June 2016". The Corps coordinated with Mr. Vernon Pico of the Agribusiness Development Corporation (ADC), the managers of the Oahu Reservoir that conveys releases from the Waiahole Ditch at the release point in Honouliuli Tributary. In an email to the Corps dated 11 August 2020, Mr. Pico provided a schedule of releases from Waiahole Ditch through the Oahu Reservoir to Honouliuli Stream via Honouliuli Tributary for the month of July 2020. The schedule showed no releases into Honouliuli Tributary by the ADC infrastructure on 15 July 2020. According to the ADC release schedule, the</p>



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(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
			<p>most recent release was on 04 July 2020.</p> <p>The Corps evaluated rainfall data at the time of the 15 July 2020 site visit. The USACE Antecedent Precipitation Tool, which evaluates whether precipitation was normal for the AOR indicates that the precipitation level was drier than normal for 15 July 2020. The Corps reviewed the NOAA Daily Summaries Map, which indicated that no precipitation was recorded at the two closest locations, Mililani and Ewa Beach, for 15 July 2020, but the Ewa Beach location recorded between 0 and 0.1 inches of precipitation on 14 July 2020. The Corps also reviewed unofficial weather data gathered in the Weather Underground website for sampling location Westloch 'Ewa Beach, HI (KHIEWABE8) at elevation 335, 21.37, -158.02, located 0.6 miles east as the crow flies of the AOR at Honouliuli Stream. No precipitation was recorded for 15 July 2020, but a total 0.04 inches of precipitation was recorded between 0349 and 0509 on 14 July 2020.</p> <p>The Corps compared the precipitation event recorded in the early morning of 14 July 2020, the stream flow in Honouliuli Stream recorded at USGS gage station 16212490 showed small variations in flow between two and three cfs, followed by a decrease in flow to nearly zero cfs in the evening of 14 July 2020, followed by two separate increases in flow to two cfs and nearly four cfs on the evening of 14 July and early morning of 15 July 2020. Since no additional rainfall was recorded following the 0.04 inches of precipitation on the morning of 14 July, the two increases in flow on 14 and 15 July did not occur in response to a rainfall event.</p> <p>The Corps also compared the flow at USGS gage station 16212490 at Honouliuli Stream to the USGS gage station 16238500 at Manoa Stream, a known perennial stream, on 15 and 16 July 2020. Unlike the steady flow (a decrease from 2 cfs to 1.5 cfs over the entirety of 15 July 2020) resulting from baseflow at a perennial stream like Manoa Stream, Honouliuli Stream was recorded to have varying flow, starting at 1.5 cfs at 1200 on 15 July, then increasing at 2.5 cfs at 1400, decreasing to 1 cfs at 1700, and increasing to 2.5 cfs again at 2100. The varied stream flow at Honouliuli Stream indicates that Honouliuli Stream is not perennial.</p> <p>Based the data described above, the Corps has determined that Honouliuli Stream within the AOR is an (a)(2) tributary that is naturally occurring surface water channel that contributes surface water flow to a paragraph (a)(1) water in a typical year. Honouliuli Stream is an intermittent channel which flows continuously during certain times of the year and more than in direct response to precipitation.</p> <p>In accordance with the Navigable Waters Protection Rule, intermittent waters, are jurisdictional Waters of the U.S. and therefore the discharge of fill in Honouliuli Stream does require Corps authorization.</p>



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Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination	
N/A.		N/A.	N/A.	N/A.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- Information submitted by, or on behalf of, the applicant/consultant: [vicinity map of the five crossings](#)
This information is sufficient for purposes of this AJD.
Rationale: [The crossing locations were clearly shown.](#)
- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\).](#)
- Photographs: [Aerial and Other: Aerial photographs acquired from Google Earth Pro. Photographs acquired during 15 July 2020 site visit.](#)
- Corps site visit(s) conducted on: [15 July 2020](#)
- Previous Jurisdictional Determinations (AJDs or PJDs): [See Section I above.](#)
- Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- USDA NRCS Soil Survey: SSURGO data layer for Google Earth Pro: The soil series mapped for the portion of Honouliuli Stream within the AOR is Waipahu silty clay, 0 – 2 % slopes. Waipahu soil series consists primarily of Torrertic Haplustolls, which are within the Mollisol soil order, typically indicating grassland or agricultural soils with a deep upper horizon. Mollisols do not specifically indicates long-term perennial stream flow, like the Inceptisol soil order. The soil layers shown in the NRCS SSURGO data layer for the soil series do not indicate gleying or a confined layer to a depth of 178cm, but terraces are mentioned in the notes. The soils including Honouliuli Stream upstream, north of the AOR, are similar but with 6 – 12% slopes. Soils in the portions of Kaloi Gulch, Hunehune Gulch, existing culvert crossing, and Palehua Gulch within the AOR are of the soil series Ewa silty clay loam, 3 to 6 percent slopes (Aridic Haplostolls). According to the Online Rainfall Atlas of Hawai'i (Giambelluca et al. 2013), the AOR located north of Ewa and west of Waipahu receives a mean annual rainfall of approximately 619.7 millimeters [mm]. Rainfall is typically highest in December/January with between 84 to 110 mm per month and lowest in June with 14 mm.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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- USFWS NWI maps: [data layer for Google Earth Pro](#)
- USGS topographic maps: [Earth Point Topo Map data layer for Google Earth Pro](#)

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	USGS StreamStats web application, USGS stream gage station data for 16212480 and 16212490, USGS Study Report Rosa, S.N. 2017. Measuring Surface-Water Loss in Honouliuli Stream near the 'Ewa Shaft, Oahu, Honolulu. USGS Scientific Investigations Report 2017-5042.
USDA Sources	N/A.
NOAA Sources	NOAA Daily Summaries precipitation web application.
USACE Sources	N/A.
State/Local/Tribal Sources	State of Hawaii Department of Land and Natural Resources Watershed Atlas
Other Sources	Personal communications between adjacent property owners and the consultant shared with the Corps. Personal communication between the State of Hawaii Department of Agriculture's Agribusiness Development Corporation and the Corps. Weather underground precipitation data. EPA GeoViewer web application.

- B. Typical year assessment(s):** [The Corps used the APT for a typical year assessment for the date of the Corps site visit 15 July 2020. The APT report stated that the date of the site visit was drier than normal.](#)
- C. Additional comments to support AJD:** [See Enclosures 3, 4, 5, and 6 for the AJD forms for Kalo'i Gulch, Hunehune Gulch, the existing culvert, and Palehua Stream Gulch.](#)



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I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): [9/15/2020](#)

ORM Number: [POH-2020-00071](#)

Associated JDs: AJD-NPR, POH-2019-00164 (West Oahu Solar Project, Ewa District, Oahu) finalized 04 September 2019 confirmed an earlier AJD-NPR (POH-2015-00063) that was still valid (until May 2020) that surface flow from Kaloι Gulch ends in irrigation ponds within the Hoakalei Golf Course. On 07 May 2015 the Corps regulatory staff conducted a site visit for POH-2015-00063 to determine if Kaloι Gulch had a surface connection or a discrete subsurface conveyance to the Pacific Ocean. The Corps found that the portion of Kaloι Gulch that flows into the Haokalei Golf Course had been highly manipulated to form irrigation and ornamental ponds for the golf course. The Corps met on site with representatives of the Haokalei Golf Course (Tad Fujimaki of the Haokalei Country Club) and Haseko Development Inc., the developer and prior owner of the golf course (Daniel Lum). The representatives of the golf course owner and developer informed the Corps that there was not a pipe connecting the southernmost pond on the property (the pond closest to the shoreline) to the Pacific Ocean, nor is there a pipe connecting the southernmost pond to the next closest pond to the north. The Corps also visually inspected both the north and south shorelines of the southernmost pond and did not observe a pipe. The Corps also visually inspected Papipi Road, the road that separates the Haokalei Golf Course from the shoreline, and did not observe any culverts or other evidence of surface or subsurface connection.

The Corps determined that, because there was no hydrologic connection from Kaloι Gulch to the Pacific Ocean, located approximately 1,800 feet downslope of the southernmost irrigation pond in the Hoakalei Golf Course, that Kaloι Gulch was an isolated water.

AJD-NPR documentation for POH-2015-00063 dated 14 May 2015, the Corps determined that Kaloι Gulch stops conveying surface water to downstream waters at approximately one mile north of the Pacific Ocean and that Kaloι Gulch is an isolated water not under Corps jurisdiction. In POH-2015-00063, the Corps also determined that the two tributaries to Kaloι Gulch within the Farrington Highway alignment AOR, Hunehune Gulch and Palehua Stream Gulch, were also part of the isolated water and therefore were not waters of the U.S.

In a prior AJD issued under the same permit number POH-2005-00089 on 28 July 2010 and February 2006, the Corps determined that Kaloι Gulch and the upper reaches of Kaloι Gulch do not have a regulated tributary connection to waters of the U.S. due to developments within the lower reaches of the Kaloι Gulch watershed.

Review Area Location¹: State/Territory: [Hawaii](#) City: [Ewa](#) County/Parish/Borough: [Island of Oahu](#)

Center Coordinates of Review Area: Latitude [21.374414](#) Longitude - [158.033544](#)

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list **MUST** be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: [N/A or describe rationale](#).

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.



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- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³			
(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):			
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):			
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):			
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
Kaloi Gulch	98 linear feet	(b)(3) Ephemeral feature, including an ephemeral	The Corps evaluated rainfall data at the time of the 15 July 2020 site visit. The USACE Antecedent Precipitation Tool, which evaluates whether precipitation was normal for the AOR indicates that the precipitation level was drier than normal for 15 July 2020. The Corps reviewed the NOAA Daily Summaries Map, which indicated that no precipitation was recorded at the two closest locations, Mililani and Ewa Beach, for 15 July 2020. However, the Ewa Beach location recorded between 0 and 0.1

² If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
		stream, swale, gully, rill, or pool.	<p>inches of precipitation on 14 July 2020. The Corps also reviewed unofficial weather data gathered in the Weather Underground website for sampling location Westloch 'Ewa Beach, HI (KHIEWABE8) at elevation 335, 21.37, -158.02, located 0.6 miles east as the crow flies of the AOR at Honouliuli Stream. No precipitation was recorded for 15 July 2020. However, concurrent with NOAA, a total 0.04 inches of precipitation was recorded between 0349 and 0509 on 14 July 2020.</p> <p>The portion of Kaloι Gulch within the AOR is located approximately 8,600 feet west of Honouliuli Stream along Farrington Highway. Kaloι Gulch originates approximately 3.69 miles northwest of the AOR. The Kaloι Gulch is identified as an intermittent stream by the National Hydrography Dataset (NHD), as a perennial stream in the USGS quad map Earth Point Topo Map data layer for Google Earth, and as a Freshwater Forested/Shrub Wetland (PSS3A - Palustrine, Scrub-Shrub, Broad-Leaved Evergreen, Temporary Flooded) by the USFWS National Wetland Inventory data layer in Google Earth. Based on the Corps previous AJD's discussed in Section 1 along with the recent site visit, the Kaloι Gulch within the AOR is not a tributary but an ephemeral feature. The following information provides the supporting information for this determination.</p> <p>The portion of Kaloι Gulch within the AOR is 2,000 square feet along 98 linear feet of channel. According to EPA Waters GeoViewer, the Kaloι Gulch's catchment is approximately 0.55 km², with a drainage area measurement of 11.57 km². Kaloι Gulch is indicated on StreamStats.usgs.gov and identifies the total drainage area at 21.36893, - 158.05745 to be 4.37 square miles with a maximum 24-hour precipitation that occurs on average once in two years (equivalent to precipitation intensity index) of 4.65 inches.</p> <p>In a pre-application web meeting with the Corps on 12 June 2020, the RMTC stated that Kaloι Gulch only flows in response to rainfall. During the Corps' and R.M. Towill Corporation's (RMTC) site investigation on 15 July 2020, the Kaloι Gulch was not flowing and was observed to have bed and bank within the AOR. Physical indicators of the OHWM observed at Kaloι Gulch were typical of streams in arid environments, including a change in the slope and a change in vegetation. On both sides of the two Farrington Highway bridge crossings over Kaloι Gulch, the Corps observed that Haole koa trees (<i>Leucaena leucocephala</i>; UPL) were rooted outside the channel, not below the OHWM. Herbaceous vegetation, dominated by Guinea grass (<i>Panicum maximum</i>; FAC), was observed to be rooted both above and below the OHWM of Kaloι Gulch and appeared to be growing at the same density and maturity both within and outside of the channel. The Corps observed smaller Haole koa trees and unidentified herbaceous vegetation rooted through the entirety of Kaloι Gulch between the two Farrington Highway bridges. The Corps observed physical indicators of ephemeral flow in direct response to precipitation and ponding in the portions of Kaloι Gulch beneath the two Farrington Highway bridges including absence of rooted vegetation, fine sediment coasting most rocks, and two hydrology indicators in the Corps wetland delineation protocol: orange-peel like soil cracks and salt staining. Water may pond beneath the parallel Farrington Highway bridge crossings due to a combination of factors. Ephemeral flow in direct response to precipitation in Kaloι Gulch may be slowed by the vegetation in the channel or a slight rise in elevation on the south side of the road. Standing</p>



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Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
			<p>water in Kaloi Gulch may remain longer beneath the bridge crossings due to the shade slowing evaporation and the absence of rooted vegetation which would otherwise uptake and lose the water in transpiration.</p> <p>The Corps has determined that Kaloi Gulch is not a tributary based on the information above. Kaloi Gulch is however an ephemeral feature (b)(3) that does not contribute surface water flow to a water identified as an (a)(1) water in a typical year either directly or through one or more waters identified in (a)(2),(3) or (4) of the NWPR. In accordance with the NWPR, ephemeral, (b)(3), waters are not Waters of the U.S. and therefore not jurisdictional.</p>

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- Information submitted by, or on behalf of, the applicant/consultant: [vicinity map of the five crossings](#)
This information is sufficient for purposes of this AJD.
Rationale: [The crossing locations were clearly shown.](#)
- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\).](#)
- Photographs: [Aerial and Other: Aerial photographs acquired from Google Earth Pro. Photographs acquired during 15 July 2020 site visit.](#)
- Corps site visit(s) conducted on: [15 July 2020](#)
- Previous Jurisdictional Determinations (AJDs or PJDs): [See Section I above.](#)
- Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- USDA NRCS Soil Survey: SSURGO data layer for Google Earth Pro: The soil series mapped for the portion of Honouliuli Stream within the AOR is Waipahu silty clay, 0 – 2 % slopes. Waipahu soil series consists primarily of Torrertic Haplustolls, which are within the Mollisol soil order, typically indicating grassland or agricultural soils with a deep upper horizon. Mollisols do not specifically indicates long-term perennial stream flow, like the Inceptisol soil order. The soil layers shown in the NRCS SSURGO data layer for the soil series do not indicate gleying or a confined layer to a depth of 178cm, but terraces are mentioned in the notes. The soils including Honouliuli Stream upstream, north of the AOR, are similar but with 6 – 12% slopes. Soils in the portions of Kaloi Gulch, Hunehune Gulch, existing culvert crossing, and Palehua Gulch within the AOR are of the soil series Ewa silty clay loam, 3 to 6 percent slopes (Aridic Haplostolls). According to the Online Rainfall Atlas of Hawai'i (Giambelluca et al. 2013), the AOR located north of Ewa and west of Waipahu receives a mean annual rainfall of approximately 619.7 millimeters [mm]. Rainfall is typically highest in December/January with between 84 to 110 mm per month and lowest in June with 14 mm.
- USFWS NWI maps: [data layer for Google Earth Pro](#)
- USGS topographic maps: [Earth Point Topo Map data layer for Google Earth Pro](#)



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Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	USGS StreamStats web application, USGS stream gage station data for 16212480 and 16212490, USGS Study Report Rosa, S.N. 2017. Measuring Surface-Water Loss in Honouliuli Stream near the 'Ewa Shaft, Oahu, Honolulu. USGS Scientific Investigations Report 2017-5042.
USDA Sources	N/A.
NOAA Sources	NOAA Daily Summaries precipitation web application.
USACE Sources	N/A.
State/Local/Tribal Sources	State of Hawaii Department of Land and Natural Resources Watershed Atlas
Other Sources	Personal communications between adjacent property owners and the consultant shared with the Corps. Personal communication between the State of Hawaii Department of Agriculture's Agribusiness Development Corporation and the Corps. Weather underground precipitation data. EPA GeoViewer web application.

- B. Typical year assessment(s):** The Corps used the APT for a typical year assessment for the date of the Corps site visit 15 July 2020. The APT report stated that the date of the site visit was drier than normal.
- C. Additional comments to support AJD:** See Enclosures 2, 4, 5, and 6 for the AJD forms for Honouliuli Stream, Hunehune Gulch, the existing culvert, and Palehua Stream Gulch.



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I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): [9/15/2020](#)

ORM Number: [POH-2020-00071](#)

Associated JDs: AJD-NPR, POH-2019-00164 (West Oahu Solar Project, Ewa District, Oahu) finalized 04 September 2019 confirmed an earlier AJD-NPR (POH-2015-00063) that was still valid (until May 2020) that surface flow from Kaloι Gulch ends in irrigation ponds within the Hoakalei Golf Course. On 07 May 2015 the Corps regulatory staff conducted a site visit for POH-2015-00063 to determine if Kaloι Gulch had a surface connection or a discrete subsurface conveyance to the Pacific Ocean. The Corps found that the portion of Kaloι Gulch that flows into the Haokalei Golf Course had been highly manipulated to form irrigation and ornamental ponds for the golf course. The Corps met on site with representatives of the Haokalei Golf Course (Tad Fujimaki of the Haokalei Country Club) and Haseko Development Inc., the developer and prior owner of the golf course (Daniel Lum). The representatives of the golf course owner and developer informed the Corps that there was not a pipe connecting the southernmost pond on the property (the pond closest to the shoreline) to the Pacific Ocean, nor is there a pipe connecting the southernmost pond to the next closest pond to the north. The Corps also visually inspected both the north and south shorelines of the southernmost pond and did not observe a pipe. The Corps also visually inspected Papipi Road, the road that separates the Haokalei Golf Course from the shoreline, and did not observe any culverts or other evidence of surface or subsurface connection.

The Corps determined that, because there was no hydrologic connection from Kaloι Gulch to the Pacific Ocean, located approximately 1,800 feet downslope of the southernmost irrigation pond in the Hoakalei Golf Course, that Kaloι Gulch was an isolated water.

AJD-NPR documentation for POH-2015-00063 dated 14 May 2015, the Corps determined that Kaloι Gulch stops conveying surface water to downstream waters at approximately one mile north of the Pacific Ocean and that Kaloι Gulch is an isolated water not under Corps jurisdiction. In POH-2015-00063, the Corps also determined that the two tributaries to Kaloι Gulch within the Farrington Highway alignment AOR, Hunehune Gulch and Palehua Stream Gulch, were also part of the isolated water and therefore were not waters of the U.S.

In a prior AJD issued under the same permit number POH-2005-00089 on 28 July 2010 and February 2006, the Corps determined that Kaloι Gulch and the upper reaches of Kaloι Gulch do not have a regulated tributary connection to waters of the U.S. due to developments within the lower reaches of the Kaloι Gulch watershed.

Review Area Location¹: State/Territory: [Hawaii](#) City: [Ewa](#) County/Parish/Borough: [Island of Oahu](#)

Center Coordinates of Review Area: Latitude [21.374414](#) Longitude - [158.033544](#)

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list **MUST** be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: [N/A or describe rationale](#).

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.



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- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
Hunehune Gulch	200	linear feet	(b)(3) Ephemeral feature, including an ephemeral	The Corps evaluated rainfall data at the time of the 15 July 2020 site visit. The USACE Antecedent Precipitation Tool, which evaluates whether precipitation was normal for the AOR indicates that the precipitation level was drier than normal for 15 July 2020. The Corps reviewed the NOAA Daily Summaries Map, which indicated that no precipitation was recorded at the two closest locations, Mililani and Ewa Beach, for 15 July 2020, but the Ewa Beach location recorded between

² If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
		stream, swale, gully, rill, or pool.	<p>0 and 0.1 inches of precipitation on 14 July 2020. The Corps also reviewed unofficial weather data gathered in the Weather Underground website for sampling location Westloch ‘Ewa Beach, HI (KHIEWABE8) at elevation 335, 21.37, -158.02, located 0.6 miles east as the crow flies of the AOR at Honouliuli Stream. No precipitation was recorded for 15 July 2020, but a total 0.04 inches of precipitation was recorded between 0349 and 0509 on 14 July 2020.</p> <p>The portion of Hunehune Gulch within the AOR is located approximately 3,066 feet west of Kaloi Gulch along Farrington Highway. Hunehune Gulch originates approximately 5,838 feet northwest of the AOR. Hunehune Gulch is mapped on the USFWS NWI data layer for Google Earth as continuing south from the AOR for 4,382 feet to the confluence with Kaloi Gulch. Based on the Corps previous AJD’s discussed in Section 1 along with the recent site visit, the Hunehune Gulch within the AOR is not a tributary but an ephemeral feature. The following information provides the supporting information for this determination.</p> <p>The portion of Hunehune Gulch within the AOR is 2,000 square feet including both sides of Farrington Highway. Hunehune Gulch is shown on USGS quad topographic map data layer for Google Earth Pro as a perennial stream. According to EPA Waters GeoViewer, the Hunehune Gulch’s catchment is approximately 1.68 km², with a drainage area measurement of 11.57 km². Hunehune Gulch is indicated on StreamStats.usgs.gov which identifies the total drainage area at 21.35766, - 158.06045 to be 0.52 square miles with a maximum 24-hour precipitation that occurs on average once in two years (equivalent to precipitation intensity index) of 4.19 inches.</p> <p>In a pre-application web meeting with the Corps on 12 June 2020, the RMTTC stated that Hunehune Gulch only flows in response to rainfall. During the Corps and RMTTC site investigation on 15 July 2020, the Hunehune Gulch was not flowing and was observed to have bed and bank within the AOR. Physical indicators of the OHWM observed at Hunehune Gulch south of Farrington Highway for approximately 200 feet were typical of streams in arid environments, including a change in the slope and a change in vegetation.</p> <p>For an approximately 200-foot-long section of Hunehune Gulch south of the culvert crossings under Farrington Highway, the channel contained an unidentified rooted herbaceous vegetation that was darker than the surrounding vegetation. Unidentified trees growing on the banks were not rooted within feature. In the remainder of the portion of Hunehune Gulch within the AOR, including the north side of the Farrington Highway and between the two culverts crossing beneath Farrington Highway, the Corps observed an absence of a defined channel with bed and bank indicating this may be the upper reach of an ephemeral system.</p> <p>The Corps has determined that Hunehune Gulch is not a tributary based on the position in the landscape (headwater), absence of flow,</p>



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Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
			vegetated channel, absence of sediment deposits, absence of particulate matter along with information above. Hunehune Gulch is an ephemeral feature (b)(3) that does not contribute surface water flow to a water identified as an (a)(1) water in a typical year either directly or through one or more waters identified in (a)(2),(3) or (4) of the NWPR. In accordance with the NWPR, ephemeral, (b)(3), waters are not Waters of the U.S. and therefore not jurisdictional.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- Information submitted by, or on behalf of, the applicant/consultant: [vicinity map of the five crossings](#)
This information **is** sufficient for purposes of this AJD.
Rationale: [The crossing locations were clearly shown.](#)
- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\).](#)
- Photographs: [Aerial and Other: Aerial photographs acquired from Google Earth Pro. Photographs acquired during 15 July 2020 site visit.](#)
- Corps site visit(s) conducted on: [15 July 2020](#)
- Previous Jurisdictional Determinations (AJDs or PJDs): [See Section I above.](#)
- Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- USDA NRCS Soil Survey: SSURGO data layer for Google Earth Pro: The soil series mapped for the portion of Honouliuli Stream within the AOR is Waipahu silty clay, 0 – 2 % slopes. Waipahu soil series consists primarily of Torrertic Haplustolls, which are within the Mollisol soil order, typically indicating grassland or agricultural soils with a deep upper horizon. Mollisols do not specifically indicates long-term perennial stream flow, like the Inceptisol soil order. The soil layers shown in the NRCS SSURGO data layer for the soil series do not indicate gleying or a confined layer to a depth of 178cm, but terraces are mentioned in the notes. The soils including Honouliuli Stream upstream, north of the AOR, are similar but with 6 – 12% slopes. Soils in the portions of Kaloi Gulch, Hunehune Gulch, existing culvert crossing, and Palehua Gulch within the AOR are of the soil series Ewa silty clay loam, 3 to 6 percent slopes (Aridic Haplostolls). According to the Online Rainfall Atlas of Hawai'i (Giambelluca et al. 2013), the AOR located north of Ewa and west of Waipahu receives a mean annual rainfall of approximately 619.7 millimeters [mm]. Rainfall is typically highest in December/January with between 84 to 110 mm per month and lowest in June with 14 mm.
- USFWS NWI maps: [data layer for Google Earth Pro](#)
- USGS topographic maps: [Earth Point Topo Map data layer for Google Earth Pro](#)

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	USGS StreamStats web application, USGS stream gage station data for 16212480 and 16212490, USGS Study Report Rosa, S.N. 2017. Measuring



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Data Source (select)	Name and/or date and other relevant information
	Surface-Water Loss in Honouliuli Stream near the 'Ewa Shaft, Oahu, Honolulu. USGS Scientific Investigations Report 2017-5042.
USDA Sources	N/A.
NOAA Sources	NOAA Daily Summaries precipitation web application.
USACE Sources	N/A.
State/Local/Tribal Sources	State of Hawaii Department of Land and Natural Resources Watershed Atlas
Other Sources	Personal communications between adjacent property owners and the consultant shared with the Corps. Personal communication between the State of Hawaii Department of Agriculture's Agribusiness Development Corporation and the Corps. Weather underground precipitation data. EPA GeoViewer web application.

- B. Typical year assessment(s):** The Corps used the APT for a typical year assessment for the date of the Corps site visit 15 July 2020. The APT report stated that the date of the site visit was drier than normal.
- C. Additional comments to support AJD:** See Enclosures 2, 3, 5, and 6 for the AJD forms for Honouliuli Stream, Kaloi Gulch, the existing culvert, and Palehua Stream Gulch.



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NAVIGABLE WATERS PROTECTION RULE**

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): [9/15/2020](#)

ORM Number: [POH-2020-00071](#)

Associated JDs: AJD-NPR, POH-2019-00164 (West Oahu Solar Project, Ewa District, Oahu) finalized 04 September 2019 confirmed an earlier AJD-NPR (POH-2015-00063) that was still valid (until May 2020) that surface flow from Kaloι Gulch ends in irrigation ponds within the Hoakalei Golf Course. On 07 May 2015 the Corps regulatory staff conducted a site visit for POH-2015-00063 to determine if Kaloι Gulch had a surface connection or a discrete subsurface conveyance to the Pacific Ocean. The Corps found that the portion of Kaloι Gulch that flows into the Haokalei Golf Course had been highly manipulated to form irrigation and ornamental ponds for the golf course. The Corps met on site with representatives of the Haokalei Golf Course (Tad Fujimaki of the Haokalei Country Club) and Haseko Development Inc., the developer and prior owner of the golf course (Daniel Lum). The representatives of the golf course owner and developer informed the Corps that there was not a pipe connecting the southernmost pond on the property (the pond closest to the shoreline) to the Pacific Ocean, nor is there a pipe connecting the southernmost pond to the next closest pond to the north. The Corps also visually inspected both the north and south shorelines of the southernmost pond and did not observe a pipe. The Corps also visually inspected Papipi Road, the road that separates the Haokalei Golf Course from the shoreline, and did not observe any culverts or other evidence of surface or subsurface connection.

The Corps determined that, because there was no hydrologic connection from Kaloι Gulch to the Pacific Ocean, located approximately 1,800 feet downslope of the southernmost irrigation pond in the Hoakalei Golf Course, that Kaloι Gulch was an isolated water.

AJD-NPR documentation for POH-2015-00063 dated 14 May 2015, the Corps determined that Kaloι Gulch stops conveying surface water to downstream waters at approximately one mile north of the Pacific Ocean and that Kaloι Gulch is an isolated water not under Corps jurisdiction. In POH-2015-00063, the Corps also determined that the two tributaries to Kaloι Gulch within the Farrington Highway alignment AOR, Hunehune Gulch and Palehua Stream Gulch, were also part of the isolated water and therefore were not waters of the U.S.

In a prior AJD issued under the same permit number POH-2005-00089 on 28 July 2010 and February 2006, the Corps determined that Kaloι Gulch and the upper reaches of Kaloι Gulch do not have a regulated tributary connection to waters of the U.S. due to developments within the lower reaches of the Kaloι Gulch watershed.

Review Area Location¹: State/Territory: [Hawaii](#) City: [Ewa](#) County/Parish/Borough: [Island of Oahu](#)

Center Coordinates of Review Area: Latitude [21.374414](#) Longitude - [158.033544](#)

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list **MUST** be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: [N/A or describe rationale](#).

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.



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- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
Existing culvert crossing of Farrington Highway	200	linear feet	(b)(3) Ephemeral feature, including an ephemeral	The Corps evaluated rainfall data at the time of the 15 July 2020 site visit. The USACE Antecedent Precipitation Tool, which evaluates whether precipitation was normal for the AOR indicates that the precipitation level was drier than normal for 15 July 2020. The Corps reviewed the NOAA Daily Summaries Map, which indicated that no precipitation was recorded at the two closest locations, Mililani and Ewa Beach, for 15 July 2020, but the Ewa Beach location recorded between

² If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
		stream, swale, gully, rill, or pool.	<p>0 and 0.1 inches of precipitation on 14 July 2020. The Corps also reviewed unofficial weather data gathered in the Weather Underground website for sampling location Westloch ‘Ewa Beach, HI (KHIEWABE8) at elevation 335, 21.37, -158.02, located 0.6 miles east as the crow flies of the AOR at Honouliuli Stream. No precipitation was recorded for 15 July 2020, but a total 0.04 inches of precipitation was recorded between 0349 and 0509 on 14 July 2020.</p> <p>The portion of the existing culvert within the AOR is located approximately 1,027 feet west of Hunehune Gulch along Farrington Highway. The existing culvert crossing is not shown on the USFWS NWI or the USGS quad topographic map data layers for Google Earth Pro. The portion of the existing culvert crossing under Farrington Highway within the AOR is 200 linear feet including 130 feet north of Farrington Highway and 40 feet south of Farrington Highway. Based on the Corps previous AJD’s discussed with respect to Kaloi Gulch above, along with the recent site visit, the existing culvert crossing under Farrington Highway within the AOR is not a tributary but an ephemeral feature. The following information provides the supporting information for this determination.</p> <p>In a pre-application web meeting with the Corps on 12 June 2020, the RMTC stated that the existing culvert only conveys ephemeral flow in direct response to precipitation. During the Corps and RMTC site investigation on 15 July 2020, water was not flowing through the existing culvert. The Corps observed the approximately 130-foot-long portion of the existing culvert crossing within the AOR to be confined in a defined channel with bed and bank and physical indicators of the OHWM located north of the existing culvert at Farrington Highway. The channel was delineated by a change in slope and in vegetation, with Haole koa trees in the area rooted only outside the channel. Herbaceous vegetation was observed to grow at the same height and density within and adjacent to the 130-foot-long channel. The Corps observed that the 130-foot-long defined channel flattened out at the intake of the culvert under Farrington Highway.</p> <p>The intake at the north side of the existing culvert appeared to have flattened vegetative debris and some bare spots of earth. The Corps observed evidence of recent human disturbance at the culvert, indicating that the source of the flattened vegetative debris and bare spots of earth could be flowing water or anthropogenic. The outfall of the existing culvert on the south side of Farrington Highway consisted of two four-inch diameter openings with a concrete spillway. The approximately 8-foot long concrete spillway was stained brown in the center, potentially indicating iron or fine sediment left behind by flowing water, but no other distinct channels were observed on the south side of Farrington Highway at the existing culvert crossing.</p> <p>The Corps has determined that the existing culvert under Farrington Highway is not a tributary based on the information above. The existing culvert under Farrington Highway is an ephemeral feature (b)(3) that does not contribute surface water flow to a water identified as an (a)(1)</p>



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Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
			water in a typical year either directly or through one or more waters identified in (a)(2),(3) or (4) of the NWPR. In accordance with the NWPR, ephemeral, (b)(3), waters are not Waters of the U.S. and therefore not jurisdictional.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- Information submitted by, or on behalf of, the applicant/consultant: [vicinity map of the five crossings](#)
This information **is** sufficient for purposes of this AJD.
Rationale: [The crossing locations were clearly shown.](#)
- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\).](#)
- Photographs: [Aerial and Other: Aerial photographs acquired from Google Earth Pro. Photographs acquired during 15 July 2020 site visit.](#)
- Corps site visit(s) conducted on: [15 July 2020](#)
- Previous Jurisdictional Determinations (AJDs or PJDs): [See Section 1 above.](#)
- Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- USDA NRCS Soil Survey: SSURGO data layer for Google Earth Pro: The soil series mapped for the portion of Honouliuli Stream within the AOR is Waipahu silty clay, 0 – 2 % slopes. Waipahu soil series consists primarily of Torric Haplustolls, which are within the Mollisol soil order, typically indicating grassland or agricultural soils with a deep upper horizon. Mollisols do not specifically indicates long-term perennial stream flow, like the Inceptisol soil order. The soil layers shown in the NRCS SSURGO data layer for the soil series do not indicate gleying or a confined layer to a depth of 178cm, but terraces are mentioned in the notes. The soils including Honouliuli Stream upstream, north of the AOR, are similar but with 6 – 12% slopes. Soils in the portions of Kaloi Gulch, Hunehune Gulch, existing culvert crossing, and Palehua Gulch within the AOR are of the soil series Ewa silty clay loam, 3 to 6 percent slopes (Aridic Haplostolls). According to the Online Rainfall Atlas of Hawai'i (Giambelluca et al. 2013), the AOR located north of Ewa and west of Waipahu receives a mean annual rainfall of approximately 619.7 millimeters [mm]. Rainfall is typically highest in December/January with between 84 to 110 mm per month and lowest in June with 14 mm.
- USFWS NWI maps: [data layer for Google Earth Pro](#)
- USGS topographic maps: [Earth Point Topo Map data layer for Google Earth Pro](#)

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	USGS StreamStats web application, USGS stream gage station data for 16212480 and 16212490, USGS Study Report Rosa, S.N. 2017. Measuring Surface-Water Loss in Honouliuli Stream near the 'Ewa Shaft, Oahu, Honolulu. USGS Scientific Investigations Report 2017-5042.
USDA Sources	N/A.
NOAA Sources	NOAA Daily Summaries precipitation web application.



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Data Source (select)	Name and/or date and other relevant information
USACE Sources	N/A.
State/Local/Tribal Sources	State of Hawaii Department of Land and Natural Resources Watershed Atlas
Other Sources	Personal communications between adjacent property owners and the consultant shared with the Corps. Personal communication between the State of Hawaii Department of Agriculture's Agribusiness Development Corporation and the Corps. Weather underground precipitation data. EPA GeoViewer web application.

- B. Typical year assessment(s):** [The Corps used the APT for a typical year assessment for the date of the Corps site visit 15 July 2020. The APT report stated that the date of the site visit was drier than normal.](#)
- C. Additional comments to support AJD:** See Enclosures 2, 3, 4, and 6 for the AJD forms for Honouliuli Stream, Kaloi Gulch, Hunehune Gulch, and Palehua Stream Gulch.



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I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): [9/15/2020](#)

ORM Number: [POH-2020-00071](#)

Associated JDs: AJD-NPR, POH-2019-00164 (West Oahu Solar Project, Ewa District, Oahu) finalized 04 September 2019 confirmed an earlier AJD-NPR (POH-2015-00063) that was still valid (until May 2020) that surface flow from Kaloι Gulch ends in irrigation ponds within the Hoakalei Golf Course. On 07 May 2015 the Corps regulatory staff conducted a site visit for POH-2015-00063 to determine if Kaloι Gulch had a surface connection or a discrete subsurface conveyance to the Pacific Ocean. The Corps found that the portion of Kaloι Gulch that flows into the Haokalei Golf Course had been highly manipulated to form irrigation and ornamental ponds for the golf course. The Corps met on site with representatives of the Haokalei Golf Course (Tad Fujimaki of the Haokalei Country Club) and Haseko Development Inc., the developer and prior owner of the golf course (Daniel Lum). The representatives of the golf course owner and developer informed the Corps that there was not a pipe connecting the southernmost pond on the property (the pond closest to the shoreline) to the Pacific Ocean, nor is there a pipe connecting the southernmost pond to the next closest pond to the north. The Corps also visually inspected both the north and south shorelines of the southernmost pond and did not observe a pipe. The Corps also visually inspected Papipi Road, the road that separates the Haokalei Golf Course from the shoreline, and did not observe any culverts or other evidence of surface or subsurface connection.

The Corps determined that, because there was no hydrologic connection from Kaloι Gulch to the Pacific Ocean, located approximately 1,800 feet downslope of the southernmost irrigation pond in the Hoakalei Golf Course, that Kaloι Gulch was an isolated water.

AJD-NPR documentation for POH-2015-00063 dated 14 May 2015, the Corps determined that Kaloι Gulch stops conveying surface water to downstream waters at approximately one mile north of the Pacific Ocean and that Kaloι Gulch is an isolated water not under Corps jurisdiction. In POH-2015-00063, the Corps also determined that the two tributaries to Kaloι Gulch within the Farrington Highway alignment AOR, Hunehune Gulch and Palehua Stream Gulch, were also part of the isolated water and therefore were not waters of the U.S.

In a prior AJD issued under the same permit number POH-2005-00089 on 28 July 2010 and February 2006, the Corps determined that Kaloι Gulch and the upper reaches of Kaloι Gulch do not have a regulated tributary connection to waters of the U.S. due to developments within the lower reaches of the Kaloι Gulch watershed

Review Area Location¹: State/Territory: [Hawaii](#) City: [Ewa](#) County/Parish/Borough: [Island of Oahu](#)

Center Coordinates of Review Area: Latitude [21.374414](#) Longitude - [158.033544](#)

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list **MUST** be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: [N/A or describe rationale](#).

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.



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- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³			
(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):			
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):			
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):			
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
Palehua Gulch	94 linear feet	(b)(3) Ephemeral feature, including an ephemeral	The Corps evaluated rainfall data at the time of the 15 July 2020 site visit. The USACE Antecedent Precipitation Tool, which evaluates whether precipitation was normal for the AOR indicates that the precipitation level was drier than normal for 15 July 2020. The Corps reviewed the NOAA Daily Summaries Map, which indicated that no precipitation was recorded at the two closest locations, Mililani and Ewa Beach, for 15 July 2020, but the Ewa Beach location recorded between 0 and 0.1 inches of

² If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
		stream, swale, gully, rill, or pool.	<p>precipitation on 14 July 2020. The Corps also reviewed unofficial weather data gathered in the Weather Underground website for sampling location Westloch 'Ewa Beach, HI (KHIEWABE8) at elevation 335, 21.37, -158.02, located 0.6 miles east as the crow flies of the AOR at Honouliuli Stream. No precipitation was recorded for 15 July 2020, but a total 0.04 inches of precipitation was recorded between 0349 and 0509 on 14 July 2020.</p> <p>The portion of Palehua Gulch within the AOR is located approximately 2,237 feet west of Hunehune Gulch along Farrington Highway. Palehua Gulch is mapped on the USFWS NWI data layer as continuing south from the AOR to the confluence with Hunehune Gulch, which then connects to Kaloi Gulch farther south. The portion of Palehua Gulch within the AOR is 2,000 square feet including both sides of Farrington Highway. Palehua Gulch is not shown on USGS quad topographic map data layer for Google Earth Pro within the AOR, but a perennial tributary south of the AOR is shown discharging to Hunehune Gulch. Palehua Gulch is not shown on the EPA Waters GeoViewer or USGS StreamStats applications. Based on the Corps previous AJD's discussed with respect to Kaloi Gulch above, along with the recent site visit, the Palehua Gulch within the AOR is not a tributary but an ephemeral feature. The following information provides the supporting information for this determination.</p> <p>In a pre-application web meeting with the Corps on 12 June 2020, the RMTTC stated that only flows ephemeral through the Palehua Gulch culvert under Farrington Highway in direct response to precipitation. During the Corps and RMTTC site investigation on 15 July 2020, water was not flowing in the vicinity of or through the Palehua Gulch culvert. In the linear feature above the intake for the Palehua Gulch culvert, the Corps observed herbaceous vegetation and shrub-height Haole koa trees growing throughout the feature. The uniform height of the majority of the vegetation indicates that the area is maintained with mowing. At the Palehua Gulch culvert intake on the north side of Farrington Highway, no channel geomorphology was present nor indicators of flow or ponding was observed. The Corps visually examined the berm bordering the north side of the feature and the neighboring property to the north and did not observe any low flow channel or indicator of flow or ponding. At the outfall of Palehua Gulch culvert on the south side of Farrington Highway, no channel geomorphology was observed. However, the Corps observed indicators of ephemeral flow in direct response to precipitation and ponding in two approximately 20-square-foot areas to the east and west of the outfall. The Corps observed bent herbaceous vegetation throughout the east area, potentially indicating impacts from water flowing in direct response to precipitation. In the west area, the Corps observed bare soil sparsely vegetated with dead Castor bean (<i>Ricinus communis</i>; FACU) plants and surrounded by matted vegetation and Haole koa trees which appeared to be stunted and smaller in comparison to the size of the trees in the east area. The presence of the dead Castor bean plants, a hardy pioneer species, and the bare soil indicate periodic and potentially long-term ponding in the west area. Standing water in areas east and west of the Palehua Gulch culvert outfall may be retained by the surrounding vegetation or a slight rise in elevation to the south of the outfall.</p>



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Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
			The Corps has determined that Palehua Gulch is not a tributary based on the information above. Palehua Gulch is an ephemeral feature (b)(3) that does not contribute surface water flow to a water identified as an (a)(1) water in a typical year either directly or through one or more waters identified in (a)(2),(3) or (4) of the NWPR. In accordance with the NWPR, ephemeral, (b)(3), waters are not Waters of the U.S. and therefore not jurisdictional.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

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This information **is** sufficient for purposes of this AJD.
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- Photographs: [Aerial and Other: Aerial photographs acquired from Google Earth Pro. Photographs acquired during 15 July 2020 site visit.](#)
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- Previous Jurisdictional Determinations (AJDs or PJDs): [See Section 1 above.](#)
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Data Source (select)	Name and/or date and other relevant information
	Surface-Water Loss in Honouliuli Stream near the 'Ewa Shaft, Oahu, Honolulu. USGS Scientific Investigations Report 2017-5042.
USDA Sources	N/A.
NOAA Sources	NOAA Daily Summaries precipitation web application.
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