

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 8/25/2020 ORM Number: POH-2020-00091

Associated JDs: POH-2020-00087 (west / outside AOR)

Review Area Location¹: State/Territory: Hawaii City: Wailea County/Parish/Borough: Maui

Center Coordinates of Review Area: Latitude 20.693964 Longitude -156.416006

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.
- □ 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) Siz	e	(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.		

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

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.



D. Excluded Waters or Features

Excluded waters ((b)(1) - (b))(12)): ⁴		
Exclusion Name	Exclusior	n Size	Exclusion ⁵	Rationale for Exclusion Determination
Wai Lea Stream	1443	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Wai Lea Stream only flows during and immediately following a rain storm and does not flow intermittently. Wai Lea Stream
				As shown in USFWS National Wetlands Inventory data layer for Google Earth Pro, Wai Lea Stream begins just below (east of) Kula Highway and flows east for approximately 3.62 miles through the Wailea Golf Course to the Pacific Ocean. The portion of Wai Lea Stream within the AOR is 0.61 acres along 1,443 linear feet of channel. Wai Lea Stream, as mapped by the National Hydrography Dataset, crosses the AOR five times and is visible on topographical maps (USGS quad topographic map data layer for Google Earth Pro). According to EPA Waters GeoViewer, the stream's catchment is approximately 2,112 acres. Wai Lea Stream is indicated on EPA Waters GeoViewer as a "StreamRiver" and as R4SBC in the USFWS NWI data layer. Wai Lea Stream is also referred to as "Kihei Gulch 3" by Maui County. Wai Lea Stream is indicated on StreamStats.usgs.gov which identifies the total drainage area at 20.68844, -156.42652 to be 742.4 acres with a maximum 24-hour precipitation that occurs on average once in two years (equivalent to precipitation intensity index) of 3.7 inches. Additionally ORM was researched for additional projects in or near to the review area.
				and 28, 2019 and September 18, 2019, the Wai Lea Stream 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 Wai Lea Stream were typical of streams in arid environments, including a change in the slope and a change in vegetation. Kiawe trees

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) exclusion and in an effort to collect data on specific types of the A ID Form. These four sub-categories are not

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.



Excluded waters $((b)(1) - (b)(12))$: ⁴								
Exclusion Name	Exclusior	n Size	Exclusion ⁵	Rationale for Exclusion Determination				
				(Prosopis pallida; FACU) were observed to occur outside the channel, but not below the OHWM of Wai Lea Stream. Buffelgrass (Cenchrus ciliaris; FACU) was observed both above and below the OHWM of Wai Lea Stream, but was observed to generally be less abundant below the OHWM. Some sections of Wai Lea within the AOR had a substrate of rocky lava, but the majority of the channel was observed to uniformly be vegetated with grass. The agent also observed that the sediment was generally coarser (e.g., cobbles and small boulders when the substrate wasn't composed of lava) compared to finer-grained material above the OHWM (e.g., sand, silt, and clay).				
				Based on the terrain data layer for Google Earth Pro, the Wai Lea Stream changes by approximately 600 feet in elevation within the AOR from east to west downstream. Photographs provided with the delineation report (photos 3 to 11 within the AOR, shown in the photo location map on page 35 of 66 of the report pdf) reflect the consultant's characterization summary of Wai Lea Stream within the AOR, including bed and bank with full coverage of Buffelgrass in fall and spring (photos 3 to 7), the exclusion of kiawe trees from the channel (photos 6 to 8, 10, and 11), and portions of the stream substrate covered by lava (photos 8 and 9). None of the photographs showed flow in the channel. The Corps used the APT to evaluate whether precipitation was normal for the AOR during the delineation report site visit dates of March 27 and 28, 2019, September 18, 2019, and March 06, 2020. The APT reports indicate that the precipitation level was normal for all four dates. The Corps also reviewed unofficial weather data gathered in the Weather Underground website for sampling location Lower Maui Meadows (KHIKIHEI39) at elevation 598, 20.60°, -156.43°, located north outside of the AOR along Wai Lea Stream immediately east of the culvert under Piilani Highway. No precipitation was recorded for the four delineation site visit dates. ORM identified Wai Lea Stream downstream outside the AOR as				



Excluded waters (Excluded waters ((b)(1) – (b)(12)):4							
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination					
			2020-00087 (David Goode, Ledcor Development, Wailea Stream, Maui, Hawaii), completed 27 July 2020. Based the data described above, I have determined that Wai Lea Stream within the AOR is an ephemeral channel which flows only in direct response to rain events. In accordance with the Navigable Waters Protection Rule, ephemeral, (b)(3), waters are not Waters of the U.S. and not jurisdictional and therefore activities that take place in Wai Lea Stream do not require Corps authorization.					

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: Paeahu Solar Project Draft
 - Delineation of Wetland and Other Waters of the United States, June 2020

This information is sufficient for purposes of this AJD.

Rationale: The agent evaluated the channels in the AOR in accordance with Lichvar, R.W. and S.M. McColley, 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual, ERDC/CRREL TR-08-12. The agent provided adequate descriptive detail and clear photographs.

Data sheets prepared by the Corps: Title(s) and/or date(s).

Photographs: Aerial and Other: Aerial photographs acquired from Google Earth Pro, other photographs provided in delineation report

 \Box Corps site visit(s) conducted on: Date(s).

☑ Previous Jurisdictional Determinations (AJDs or PJDs): There were no previous AJDs or PJDs within the AOR of POH-2020-00091. ORM identified Wai Lea Stream downstream outside the AOR as Paeahu Stream, an ephemeral stream, in POH-2020-00087 (David Goode, Ledcor Development, Wailea Stream, Maui, Hawaii), completed 27 July 2020. As recorded in ORM, the downstream portion of Feature 1 outside of the AOR was included in the AOR of POH-2009-00091 (Subdivision Wailea Kihei-Makena Maui by Honuaula Partners LLC TMK 221008056), completed 11 May 2010, which made a jurisdictional determination of uplands only, no waters of the U.S. present.

- Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.
- USDA NRCS Soil Survey: SSURGO data layer for Google Earth Pro
- USFWS NWI maps: data layer for Google Earth Pro
- USGS topographic maps: Earth Point Topo Map data layer for Google Earth Pro

Data Source (select)	Name and/or date and other relevant information				
USGS Sources	N/A.				
USDA Sources	N/A.				

Other data sources used to aid in this determination:



Data Source (select)	Name and/or date and other relevant information
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	The Corps also reviewed unofficial weather data gathered in the Weather Underground website for sampling location Lower Maui Meadows (KHIKIHEI39) at elevation 598, 20.60°, -156.43°, located north outside of the AOR along Wai Lea Stream immediately east of the culvert under Piilani Highway. No precipitation was recorded for the four delineation site visit dates.

- B. Typical year assessment(s): The Corps used the APT to evaluate whether precipitation was normal for the AOR during the delineation report site visit dates of March 27 and 28, 2019, September 18, 2019, and March 06, 2020. The APT reports indicate that the precipitation level was normal for all four dates. As stated in the delineation report, according to the Online Rainfall Atlas of Hawai'i (Giambelluca et al. 2013), the area receives a mean annual rainfall of approximately 20 inches (505 millimeters [mm]). Rainfall is typically highest in December/January with between 2.8 to 3.4 inches (70 to 85 mm) per month and lowest in July.
- C. Additional comments to support AJD: The 212-acre area of review ((AOR) outlined in pink and called "Study Area" in Enclosure 1) is located on the southern leeward side of the Island of Maui on TMK 2-1-008:001, with the proposed main access road through TMK 2-1-008:056, west of the intersection of Piilani Highway and Wailea Ike Drive, Wailea, Island of Maui, Hawaii. The review area has two potential waters on site which are the subject of this analysis. These potential waters were identified by the requestor as 'Wai Lea Stream' in the center of the AOR (20.6858, -156.4135) and 'Feature 1' on the southern end of the review area (20.68404, -156.4130). The three soil series mapped within the AOR included Keawakapu extremely stony silty clay load, 3 to 25 percent slopes; Kamaole very stony silt load, 3 to 15 percent slopes; and Very stony land. The dominant soil types within the Keawakapu and Kamaole mapped areas were Aridic Ariustolls and Aridic Haplustolls, respectively. As stated in the delineation report, according to the Online Rainfall Atlas of Hawai'i (Giambelluca et al. 2013), the area receives a mean annual rainfall of approximately 20 inches (505 millimeters [mm]). Rainfall is typically highest in December/January with between 2.8 to 3.4 inches (70 to 85 mm) per month and lowest in July.



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Associated JDs: POH-2020-00087 (west / outside AOR)

Review Area Location¹: State/Territory: Hawaii City: Wailea County/Parish/Borough: Maui

Center Coordinates of Review Area: Latitude 20.693964 Longitude -156.416006

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.
- □ 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.	

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

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.

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D. Excluded Waters or Features



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

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^o 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.



Feature 1	210	Linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Feature 1 only flows during and immediately following a rain storm and does not flow intermittently. The channel shown as Feature 1 on the AOR is located approximately 990 feet south of Wai Lea Stream. Feature 1 is not shown in the USFWS National Wetlands Inventory data layer for Google Earth Pro, nor on the USGS topographic quad data layer for Google Earth Pro, or the EPA GeoViewer. Feature 1 starts to the north- east of a utility station and flows east for approximately 2.34 miles through the Wailea Golf Course, along the Wailea Old Blue Golf Club, to the Pacific Ocean. The portion of
				Feature 1 within the AOR is 0.11 acres along 210 linear feet of channel. Feature 1 is indicated on StreamStats.usgs.gov, which identifies the total drainage area at 20.68418, -156.41424 to be 44.4 acres with a maximum 24-hour precipitation that occurs on average once in two years (equivalent to precipitation intensity index) of 3.53 inches.
				Based on the terrain data layer for Google Earth Pro, Feature 1 changes by approximately 40 feet in elevation within the AOR from east to west downstream. Photographs provided with the delineation report (photos 21 and 22 within the AOR, shown in the photo location map on page 35 of 66 of the report pdf) reflect the consultant's characterization summary of Feature 1 within the AOR, including bed and bank delineated by slope with full coverage of Buffelgrass in fall and spring. Neither of the photographs showed flow in the channel. The Corps' review of the APT and Weather Underground data for Wai Lea Stream also applies to Feature 1: there was no precipitation documented during the agent's delineation site visit to Feature 1 on March 27, 2019 and the level of precipitation was normal for the rolling 30-year average. Additionally, ORM was researched for additional projects in or
				near to the review area. As recorded in ORM, the downstream portion of Feature 1 outside of the AOR was included in the AOR of POH-2009- 00091 (Subdivision Wailea Kihei-Makena Maui by Honuaula Partners LLC TMK 221008056), completed 11 May 2010, which made a jurisdictional determination of uplands only, no



N/A.	N/A.	N/A.	N/A.	
				waters of the U.S. present. Based the data described above, I have determined that Feature 1 within the AOR is an ephemeral channel which flows only in direct response to rain events. In accordance with the Navigable Waters Protection Rule, ephemeral, (b)(3), waters are not Waters of the U.S. and not jurisdictional and therefore activities that take place in Feature 1 do not require Corps authorization.

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: Paeahu Solar Project Draft Delineation of Wetland and Other Waters of the United States, June 2020

This information is sufficient for purposes of this AJD.

Rationale: The agent evaluated the channels in the AOR in accordance with Lichvar, R.W. and S.M. McColley, 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual, ERDC/CRREL TR-08-12. The agent provided adequate descriptive detail and clear photographs.

- Data sheets prepared by the Corps: Title(s) and/or date(s).
- Photographs: Aerial and Other: Aerial photographs acquired from Google Earth Pro, other

photographs provided in delineation report

□ Corps site visit(s) conducted on: Date(s).

☑ Previous Jurisdictional Determinations (AJDs or PJDs): There were no previous AJDs or PJDs within the AOR of POH-2020-00091. ORM identified Wai Lea Stream downstream outside the AOR as Paeahu Stream, an ephemeral stream, in POH-2020-00087 (David Goode, Ledcor Development, Wailea Stream, Maui, Hawaii), completed 27 July 2020. As recorded in ORM, the downstream portion of Feature 1 outside of the AOR was included in the AOR of POH-2009-00091 (Subdivision Wailea Kihei-Makena Maui by Honuaula Partners LLC TMK 221008056), completed 11 May 2010, which made a jurisdictional determination of uplands only, no waters of the U.S. present.

- Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.
- USDA NRCS Soil Survey: SSURGO data layer for Google Earth Pro
- USFWS NWI maps: data layer for Google Earth Pro
- USGS topographic maps: Earth Point Topo Map data layer for Google Earth Pro

Data Source (select)	Name and/or date and other relevant information			
USGS Sources	N/A.			
USDA Sources	N/A.			
NOAA Sources	N/A.			
USACE Sources	N/A.			
State/Local/Tribal Sources	N/A.			
Other Sources	The Corps also reviewed unofficial weather data gathered in the Weather Underground website for sampling location Lower Maui			

Other data sources used to aid in this determination:



Data Source (select)	Name and/or date and other relevant information
	Meadows (KHIKIHEI39) at elevation 598, 20.60°, -156.43°, located
	north outside of the AOR along Wai Lea Stream immediately east of the
	culvert under Piilani Highway. No precipitation was recorded for the
	four delineation site visit dates.

- B. Typical year assessment(s): The Corps used the APT to evaluate whether precipitation was normal for the AOR during the delineation report site visit dates of March 27 and 28, 2019, September 18, 2019, and March 06, 2020. The APT reports indicate that the precipitation level was normal for all four dates. As stated in the delineation report, according to the Online Rainfall Atlas of Hawai'i (Giambelluca et al. 2013), the area receives a mean annual rainfall of approximately 20 inches (505 millimeters [mm]). Rainfall is typically highest in December/January with between 2.8 to 3.4 inches (70 to 85 mm) per month and lowest in July.
- C. Additional comments to support AJD: The 212-acre area of review ((AOR) outlined in pink and called "Study Area" in Enclosure 1) is located on the southern leeward side of the Island of Maui on TMK 2-1-008:001, with the proposed main access road through TMK 2-1-008:056, west of the intersection of Piilani Highway and Wailea Ike Drive, Wailea, Island of Maui, Hawaii. The review area has two potential waters on site which are the subject of this analysis. These potential waters were identified by the requestor as 'Wai Lea Stream' in the center of the AOR (20.6858, -156.4135) and 'Feature 1' on the southern end of the review area (20.68404, -156.4130). The three soil series mapped within the AOR included Keawakapu extremely stony silty clay load, 3 to 25 percent slopes; Kamaole very stony silt load, 3 to 15 percent slopes; and Very stony land. The dominant soil types within the Keawakapu and Kamaole mapped areas were Aridic Ariustolls and Aridic Haplustolls, respectively. As stated in the delineation report, according to the Online Rainfall Atlas of Hawai'i (Giambelluca et al. 2013), the area receives a mean annual rainfall of approximately 20 inches (505 millimeters [mm]). Rainfall is typically highest in December/January with between 2.8 to 3.4 inches (70 to 85 mm) per month and lowest in July.