

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD):AUG 20, 2020.
ORM Number: SPK-2016-00121.
Associated JDs: N/A.
Review Area Location¹: State/Territory: Nevada. City: near Pahrump. County/Parish/Borough: Clark. Center Coordinates of Review Area: Latitude 36.0625°. Longitude -115.8005°.

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.
 - 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).

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



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.	acres	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.	acres	N/A.	N/A.		

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

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

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴						
Exclusion	Exclusion Size		Exclusion ⁵	Rationale for Exclusion		
Name				Determination		
Wash 1	4,836	linear	(b)(3) Ephemeral feature, including	AJD completed on January 10,		
Wash 2	6,862	feet	an ephemeral stream, swale, gully,	2019 found Wash 1-Wash 7		
Wash 3	8,941		rill, or pool.	(subject channels) to be ephemeral.		
Wash 4	3,865			The subject channels flow only in		
Wash 4a	1,146			direct response to precipitation		
Wash 5	13,003			(e.g., rain or snow fall) (33 CFR		
Wash 5a	1,234			328.3(c)(3)) and do not flow to an		

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.



Excluded waters $((b)(1) - (b)(12))$: ⁴						
Exclusion	Exclusion Size		Exclusion ⁵	Rationale for Exclusion		
Name				Determination		
Wash 6	17,187			(a)(1) water directly or indirectly		
Wash 6a	8,045			during a typical year.		
Wash 6b	6,783					
Wash 6c	2,656					
Wash 7	15,252					

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: Aquatic Resources Delineation Report For The Yellow Pine Solar Project. Prepared by SWCA Environmental Consultants, September 2018 (Revised December 2018).

This information is. sufficient for purposes of this AJD. Rationale: N/A.

Data sheets prepared by the Corps:

Photographs: Aerial and Other. Aquatic Resources Delineation Report For The Yellow Pine Solar Project. Appendix B. Prepared by SWCA Environmental Consultants, September 2018 (Revised December 2018)

GoogleEarth 7.3.3.7692. (2007, January 19 and 2004 February 29). Pahrump, Nevada. 36.0625° latitude, -115.8005° longitude, eye alt 30294 ft. Retrieved August 4, 2020, from http://www.earth.google.com

Corps site visit(s) conducted on:

Previous Jurisdictional Determinations (AJDs or PJDs): SPK-2016-00121, January 10, 2019.

Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

USDA NRCS Soil Survey:

USFWS NWI maps: USFWS. (n.d.). National Wetland Inventory. Project ID: R01Y05P08. Project title and area: State of Nevada. Source imagery date: from 1980 to 1986. Washington, D.C.: U.S. Fish and Wildlife Service, Dept. of the Interior. Retrieved August 5, 2020, from Wetlands Mapper:

https://www.fws.gov/wetlands/data/mapper.html <https://www.fws.gov/wetlands/data/mapper.html> .

USGS topographic maps: USGS. (2018). Topographic Map Hidden Hills Ranch, NV. 1:24,000 scale.

2018. Reston, VA, USA: U.S. Dept. of the Interior. Retrieved from

https://ngmdb.usgs.gov/topoview/viewer/#12/42.2093/-111.0122

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USGS. (2018). Topographic Map Griffith Peak, NV. 1:24,000 scale. 2018. Reston, VA, USA: U.S. Dept. of the Interior. Retrieved from https://ngmdb.usgs.gov/topoview/viewer/#12/42.2093/-111.0122 https://ngmdb.usgs.gov/topoview/viewer/#12/42.2093/-111.0122



Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA NRCS SNOTEL	Kyle Canyon (15N05) Nevada SNOW COURSE/AERIAL
	MARKER Site - 8300 ft, Reporting Frequency: Monthly; Date
	Range: Aug 2000 to Aug 2020.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Applicable/supporting scientific literature	Griffiths, Peter G., Richard Hereford, and Robert H. Webb.
	"Sediment yield and runoff frequency of small drainage basins in
	the Mojave Desert, USA." Geomorphology 74.1-4 (2006):
	232-244

- **B.** Typical year assessment(s): The Corps Antecedent Precipitation Calculator indicated that at the time the field data was collected (JUN-AUG, 2016) the area was experiencing normal conditions. The ground photographs provided by the SWCA Environmental Consultants (2018) document channels with clear ordinary high water marks but without evidence of persistent flow. Xeric shrubs border these channels rather than the willows (Salix spp.) or saltcedar (Tamarix spp.) that we typically see associated with intermittent or perennial streams in this region. The channels are free of hydrophytic vegetation and algae which we typically find in low gradient intermittent and perennial streams and ditches in this region. Review of Google Earth aerial photography from typically wet periods (1/19/2007 and 2/29/2004) did not reveal the presence of surface water anywhere within the review area.
- C. Additional comments to support AJD: Investigation and analysis performed by SWCA Environmental Consultants (2018) demonstrated that the features in the review area do not have any connection with a downstream TNW or a connection to interstate commerce. All features previously determined to be ephemeral on AJD completed January 10, 2019. Review of available information indicates that these waters flow or pool only in direct response to precipitation (e.g., rain or snow fall). There is no information available to indicate that the subject channels flow continuously seasonally and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts). The findings of Griffiths et al (2006) demonstrate that within this region only runoff above a certain magnitude (i.e. convective storm) will overcome transmission losses on the alluvial fan. During normal conditions the low-angle slopes of the survey area along the alluvial fan surface limit hydrologic transport through transmission losses due to coarse substrate and channel storage. The combination of local climate (arid) and substrate are consistent with the observed ephemeraral nature of the subject channels. The subject channels receive hydrologic input from precipitation, and snowpack on the west side of the Spring Mountains. No adjacent or abutting wetlands which could contribute water have been identified. USGS has mapped springs upstream of the review area in the Spring Mountains (Trout spring and Kiup spring) (2018) which can contribute hydrology during high precipitation events but do not contribute during a typical year, indicated by the lack of mapped channels connecting these springs to the subject channels. The findings of Griffiths et al (2006) demonstrate that substrate within the review area (low-angle and course) contributes to the ephemeral nature of the subject channels by slowing water velocity and promoting infiltration to groundwater. USDA NRCS SNOWTEL data reported at the Kyle Canyon station (15N05) within the Spring Mountains indicated a snow pack ranging between 0-76 inches (mean 18, median 9, mode 0) during winter



months over the last 20 year period and 3 inches for the year field work was performed (2016). The 2016 snow pack was less than the mean and median values but more than the most common yearly snowpack which is 0. The SNOWTEL data indicates that the region can experience high snow fall on occasion, which form the OHWM (Griffiths et al, 2006) but the region most commonly experiences low snowpack (potential hydrologic input) which is consistent with the SWCA's observations of no water flowing or present during field work. These data support the conclusion that the subject channels are ephemeral and not seasonally intermittent.