



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): April 19, 2021

ORM Number: SPK-2010-01033-SG

Associated JDs: October 2, 2016 determination (SPK-2010-01033-SG)

Review Area Location¹:

State/Territory: NV County/Parish/Borough: Clark County

Center Coordinates of Review Area: Latitude 36.481972 Longitude -114.861793

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

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

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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
AC01	1801 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC02	3186 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC03	2232 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC04	1650 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC05	1595 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC06	2523 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC07	14672 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC08	1252 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC09	1721 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC10	2467 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC11	2109 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC12	5598 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC13	4226 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC14	6355 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC15	12024 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC16	1264 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully,	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR

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		rill, or pool	328.3(c)(3)
AC17	2640 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC18	2711 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC19	9901 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC20	3316 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC21	3576 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC22	12923 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC23	2235 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC24	5621 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC25	1852 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC26	2575 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC27	1841 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC28	6114 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC29	11263 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC30	2255 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC31	2689 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC32	480 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC33	1746 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))

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AC34	2670 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC35	2906 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC36	407 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC38	730 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC39	729 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC40	390 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC41	351 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC42	684 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))
AC43	179 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	The subject channels flow only in direct response to precipitation (e.g., rain or snowfall) (33 CFR 328.3(c)(3))

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: *Arrow Canyon Solar Project Wetlands and Waters of the U.S. Survey Report prepared by Heritage Environmental Consultants dated January 2021, revised April 2021.*

This information *is* sufficient for purposes of this AJD.

Rationale: *N/A.*

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

Photographs: *aerial and other. Arrow Canyon Solar Project Wetlands and Waters of the U.S. Survey Report, Appendix C Photo Log dated September 16 and 17, 2020. GoogleEarth 7.3.3.7692. (2020 May, 2017 May, 2014 February, 2008 February, 2006 July). Clark County, NV. Latitude 36.481972 Longitude -114.861793, eye alt 23808 ft. Retrieved April 19, 2021, from <http://www.earth.google.com>*

____ Corps Site visit(s) conducted on: *N/A.*

Previous Jurisdictional Determinations (AJDs or PJDs): *October 2, 2016 determination (SPK-2010-01033-SG).*

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- Antecedent Precipitation Tool: provide detailed discussion in Section III.B.
- USDA NRCS Soil Survey: *Title(s) and/or date(s).*
- USFWS NWI maps: *Arrow Canyon Solar Project Wetlands and Waters of the U.S. Survey Report (Figure 3).*
- USGS topographic maps: *Title(s) and/or date(s).*

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 Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	N/A.

- B. Typical year assessment(s):** The Antecedent Precipitation Tool (APT) was used by Heritage Environmental Consultants (Appendix B) to compare precipitation in the 90 days prior to the field survey (September 16 and 17, 2020) against normal precipitation. The APT results showed that the Study Area was drier than normal and in moderate drought. The APT results also showed that the Study Area had received substantial precipitation in March and April of 2020 and that the area was wetter than normal in that period, however no rainfall was recorded in the area between April and the field survey in September. There are two precipitation gauges located in the vicinity of the Study Area at the Muddy River near Moapa (approximately 14 miles north-northeast of the Project), USGS gauge 09416000 and Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) gauge NV-CK-41. Additionally, there are three Clark County Regional Flood Control District (CCRFCD) precipitation sensors; 3114, 3124, 3129, within 3 miles of the Study Area to the north and northeast. Approximately 4.5 months of precipitation data were reviewed (May 01-September 16, 2020). In that period 0.0 inches of precipitation was recorded (USGS 2020b, CoCoRaHS 2020, CCRFCD 2020).
- C. Additional comments to support AJD:** A portion of the Study Area – the 850-acre previously approved Moapa Solar Energy Center (MSEC) and the proposed gen-tie line and access road - had an approved Jurisdictional Determination (JD) issued by the U.S. Army Corps of Engineers on October 2, 2016 (SPK-2010-01033-SG). The Corps concluded that potential WOTUS in the MSEC Project Area are intrastate isolated waters with no apparent interstate or foreign commerce connection and are not jurisdictional. The additional potential WOTUS that were surveyed for the expanded solar site also flow to Dry Lake, an isolated evaporative playa and are therefore also intrastate isolated waters and not connected downstream to a TNW. The nearest TNW, The Colorado River, is 32 miles away to the Southeast. The Study Area lies entirely within the Dry Lake Valley watershed. Several ephemeral washes were mapped in the field that cross the study area generally from north to south. These washes only potentially flow during and immediately after a rainfall event. Soils are sandy to gravelly

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with some exposed caliche, especially within washes. No wetlands were observed in the study area. Several washes with OHWM indicators and ephemeral hydrologic regimes were observed in the Study Area.

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