

# I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD):October 19, 2020. ORM Number: SPK-1998-25005. Associated JDs: N/A. Review Area Location<sup>1</sup>: State/Territory: Nevada. City: Las Vegas. County/Parish/Borough: Clark. Center Coordinates of Review Area: Latitude 36.09881. Longitude -115.18126.

# **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:
  - 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).

<sup>&</sup>lt;sup>1</sup> Map(s)/figure(s) are attached to the AJD provided to the requestor.



# B. Rivers and Harbors Act of 1899 Section 10 (§ 10)<sup>2</sup>

| § 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): <sup>3</sup> |             |       |                 |                                    |  |  |
|---|-------------|-------|-----------------|------------------------------------|--|--|
| (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 $((b)(1) - (b)(12))$ : <sup>4</sup> |                |                |   |   |  |  |
|---|----------------|----------------|---|---|--|--|
| Exclusion   | Exclusion Size |                | Exclusion <sup>5</sup>  | Rationale for Exclusion   |  |  |
| Name  |                |                |   | Determination   |  |  |
| Tropicana<br>Wash<br>Channel                        | 1000           | Linear<br>Feet | (b)(3) Ephemeral feature, including<br>an ephemeral stream, swale, gully,<br>rill, or pool. | The Tropicana Wash Channel and<br>the Tropicana Outlet Channel<br>(subject channels) were<br>constructed by SPL for flood |  |  |
| Tropicana<br>Outlet<br>Channel                      | 550            | Linear<br>Feet |   | control. The subject channels flow<br>only in direct response to<br>precipitation (e.g., rain or snow fall)               |  |  |

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> 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)): <sup>4</sup> |                |  |                        |                         |  |  |
|--|----------------|--|------------------------|-------------------------|--|--|
| Exclusion  | Exclusion Size |  | Exclusion <sup>5</sup> | Rationale for Exclusion |  |  |
| Name   |                |  |                        | Determination           |  |  |
|  |                |  |                        | (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: NDOT. (9/9/2020). Attachment A - U.S. Army Corps of Engineers NWP Pre-Construction Notification Form Supplemental Information.

This information is. sufficient for purposes of this AJD.

Rationale:

Data sheets prepared by the Corps:

Photographs: Aerial and Other. Ground level NDOT 1/3/2018. Aerial GoogleEarth 7.3.3.7692. (2018, September 14). Las Vegas, Nevada. Latitude 36°05'57.36" N, longitude 115°10'48.57" W, eye alt 4133 ft. Retrieved October 13, 2020, from http://www.earth.google.com <a href="http://www.earth.google.com/">http://www.earth.google.com/</a> Imagery Dates: 2/29/2004, 3/24/2014, 3/22/2015, 11/4/2016, 4/25/2017, 3/2/2019 and 2/12/2020.

- Corps site visit(s) conducted on:
- Previous Jurisdictional Determinations (AJDs or PJDs): SPK-1998-25005, January 2001.
- Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.
- USDA NRCS Soil Survey:
- USFWS NWI maps:

USGS topographic maps: USGS. (2018). Topographic Map Las Vegas SW, 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<br>MARKER Site - 8300 ft, Reporting Frequency: Monthly; Date<br>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 (JAN, 2018) the area was experiencing mild drought. The ground photographs provided by the NDOT (1/3/2018) document channels without evidence of persistent flow. 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 (2/29/2004, 3/24/2014, 3/22/2015, 11/4/2016, 4/25/2017, 3/2/2019 and 2/12/2020) did not reveal the presence of surface water anywhere within the review area.
- C. Additional comments to support AJD: Review of available information indicates that these waters flow or pool only in direct response to precipitation (e.g., rain or snow fall). USGS has mapped the Tropicana Wash as an ephemeral channel within the review area (2018). 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 in the upstream reaches on the alluvial fan. During normal conditions the low-angle slopes within the survey area limit hydrologic transport through transmission losses due to evaporation. The combination of local climate (arid) and the substrate of the upstrem reaches are consistent with the observed ephemeraral nature of the subject channels. The subject channels receive hydrologic input from precipitation, and snowpack on the East side of the Spring Mountains. No adjacent or abutting wetlands which could contribute water have been identified. The findings of Griffiths et al (2006) demonstrate that the substrate upstream of 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. The most common yearly snowpack is 0. The SNOWTEL data indicates that the region can experience high snow fall on occasion but the region most commonly experiences low snowpack (potential hydrologic input) which is consistent with the observations of no water flowing or present in aerial pictures. These data support the conclusion that the subject channels are ephemeral and not seasonally intermittent.