# APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

# **SECTION I: BACKGROUND INFORMATION**

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۸	REPORT COMPLETION	DATE FOR APPROVED	HIRIGHICTIONAL	DETERMINATION	(ID) · May 6 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Albuquerque District, Jurisdictional Determination Nash Draw Playa

	Lakes, Eddy County, New Mexico, SPA-2016-00367-LCO
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: New Mexico County/parish/borough: Eddy City: Loving Center coordinates of site (lat/long in degree decimal format): Lat. 32.222°, Long103.987° Universal Transverse Mercator: 13 595454.16 3565493.11 Name of nearest waterbody: Pecos River Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Name of watershed or Hydrologic Unit Code (HUC): Upper Pecos-Black, 13060011  ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form:
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  ☑ Office (Desk) Determination. Date: May 6, 2022  ☐ Field Determination. Date(s):
SEC	CTION II: SUMMARY OF FINDINGS
A.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required]  Waters subject to the ebb and flow of the tide.  Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S.  a. Indicate presence of waters of U.S. in review area (check all that apply):  TNWs, including territorial seas  Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands  b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet, wide, and/or acres. Wetlands: acres.  c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):
	2. Non-regulated waters/wetlands (check if applicable): <sup>3</sup>

# **SECTION III: CWA ANALYSIS**

# TNWs AND WETLANDS ADJACENT TO TNWs

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: The review area includes isolated waters as described in Section III.F and IV.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup> Supporting documentation is presented in Section III.F.

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only, if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

#### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

# B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e., tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

# 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i)	Gen	eral Area Conditions:
	Wate	ershed size: Pick List
	Drai	nage area: Pick List
	Ave	rage annual rainfall: inches
	Ave	rage annual snowfall: inches
(ii)	Phy (a)	sical Characteristics:  Relationship with TNW:  Tributary flows directly into TNW.
		Tributary flows through <b>Pick List</b> tributaries before entering TNW.
		Project waters are <b>Pick List</b> river miles from TNW.
		Project waters are <b>Pick List</b> river miles from RPW.
		Project waters are <b>Pick List</b> aerial (straight) miles from TNW.
		Project waters are <b>Pick List</b> aerial (straight) miles from RPW.
		Project waters cross or serve as state boundaries. Explain:
		Identify flow route to TNW <sup>5</sup> :
		Tributary stream order, if known:
	(b)	General Tributary Characteristics (check all that apply):  Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

		Tributary properties with respect to top of bank (estimate):  Average width: feet  Average depth: feet  Average side slopes: Pick List.
		Primary tributary substrate composition (check all that apply):  Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: Tributary geometry: Pick List Tributary gradient (approximate average slope):
	(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: Other information on duration and volume:
		Surface flow is <b>Pick List.</b> Characteristics:
		Subsurface flow: Pick List. Explain findings:  Dye (or other) test performed:
		Tributary has (check all that apply):  Bed and banks  OHWM <sup>6</sup> (check all indicators that apply):  clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):    High Tide Line indicated by:
(iii)	Cha E	emical Characteristics: racterize tributary (e.g., watercolor is clear, discolored, oily film; water quality; general watershed characteristics, etc.). xplain: httify specific pollutants, if known:
(iv)		logical Characteristics. Channel supports (check all that apply):  Riparian corridor. Characteristics (type, average width):  Wetland fringe. Characteristics:  Habitat for:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:  Other environmentally sensitive species. Explain findings:  Aquatic/wildlife diversity. Explain findings:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

# Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i)

	(i)	Phy	sical Characteristics:			
		(a)	General Wetland Charac	teristics:		
			Properties:			
			Wetland size:	acres		
			Wetland type. Expla			
			Wetland quality. Ex			
			Project wetlands cross of	r serve as state boundaries.	Explain:	
		(b)	General Flow Relationsh			
			Flow is <b>Pick List</b> . Expla	in:		
			Surface flow is Pick List			
			Characteristics:			
			Subsurface flow: Pick L	ist. Explain findings:		
			Dye (or other) tes	t performed:		
		(c)		rmination with Non-TNW	<u>.</u>	
			Directly abutting			
			Not directly abutting	haadaadaadaaaaaaaadaa Ea	-1-1	
			Ecological conne	hydrologic connection. Ex	piain:	
			Separated by berr			
			separated by berr	n/barrier. Explain.		
		(d)	Proximity (Relationship			
			-	<b>List</b> River miles from TN		
				<b>List</b> aerial (straight) miles t	From TNW.	
			Flow is from: <b>Pick List.</b>		de Diele I de Clarado la la	
			Estimate approximate io	cation of wetland as within	the Pick List Hoodplain.	
	(ii)		emical Characteristics:			
					own, oil film on surface; water qua	ality; general watershed
			haracteristics; etc.). Expla ntify specific pollutants, if			
		Iuci	nury specific ponutants, n	KIIOWII.		
	(iii)			Wetland supports (check a		
				ristics (type, average width	):	
			Vegetation type/percent co	over. Explain:		
		Ш	Habitat for:			
			Federally Listed spec			
				ly sensitive species. Expla	in findinge	
			Aquatic/wildlife dive		m mumgs.	
3.	Cha	aract	eristics of all wetlands ac	ljacent to the tributary (if	'any)	
٠.	OII.			red in the cumulative analy		
					in the cumulative analysis.	
		For	each wetland, specify the	following:		
			Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical, and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g., between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the number of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream food webs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

# D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:  ☐ TNWs: linear feet, wide, Or acres.  ☐ Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs.  ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:  ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet wide.  Other non-wetland waters: acres.  Identify type(s) of waters:
3.	Non-RPWs <sup>8</sup> that flow directly or indirectly into TNWs.  ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply):  Tributary waters: linear feet, wide.  Other non-wetland waters: acres.  Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

<sup>8</sup>See Footnote # 3.

	☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.  Wetlands adjacent to such waters and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters.  As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.  Demonstrate that impoundment was created from "waters of the U.S.," or  Demonstrate that water meets the criteria for one of the categories presented above (1-6) or.  Demonstrate that water is isolated with a nexus to commerce (see E below).
SU □ □	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, EGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY OCH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
Ide	entify water body and summarize rationale supporting determination:
	ovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet, wide. Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):  If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.  Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.  □ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).  Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:  Other: (explain, if not covered above):
fac	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR etors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional lgment (check all that apply):

E.

F.

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Lakes/ponds: acres.  Other non-wetland waters: 6,860 acres of ephemeral/intermittent playas. List type of aquatic resource: Lacustrine Mineral Flat Wetlands: acres.
vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such adding is required for jurisdiction (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet, wide.  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource:  Wetlands: acres.
ON IV: DATA SOURCES.
PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below):  Maps, plans, plots, or plat submitted by or on behalf of the applicant/consultant: Mosaic Potash  Data sheets prepared/submitted by or on behalf of the applicant/consultant.  Office concurs with data sheets/delineation report.  Office does not concur with data sheets/delineation report.  Data sheets prepared by the Corps:  Corps navigable waters' study:  U.S. Geological Survey Hydrologic Atlas:  USGS NHD data.  USGS 8- and 12-digit HUC maps.  U.S. Geological Survey map(s). Cite scale & quad name: 1:24K; NM-PIERCE CANYON  USDA Natural Resources Conservation Service Soil Survey. Citation: USDA, NRCS. 2022. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/.  National wetlands inventory map(s). Cite name:  State/Local wetland inventory map(s):  FEMA/FIRM maps:  100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)  Photographs: Aerial (Name & Date):  or Other (Name & Date):  Previous determination(s). File no. and date of response letter: SPA-2012-00112-LCO, 7/18/2012, and SPA-2016-00367-LCO, 1/25/2017  Applicable/supporting case law:  Applicable/supporting scientific literature:  Other information (please specify):
)

# B. ADDITIONAL COMMENTS TO SUPPORT JD:

The playa lakes covered by this AJD include Laguna Uno, Laguna Dos, Laguna Quatro, Laguna Cinco, Lindsey Lake, Laguna Grande, Laguna Tres, and Tamarisk Flats (6,860 acres). For the purpose of this jurisdictional determination (JD), these playas will collectively be referred to as the Nash Draw Playas.

Under the direction of the New Mexico Environment Department (NMED) and the New Mexico Office of the State Engineer (NMOSE), Mosaic is preparing several projects at its potash mine within the Nash Draw Playas. Planned projects include construction of diking along the playas, installation and management of storm water facilities, installation of a discharge brine pipeline and other maintenance activities.

The closest Cooperative Climatological Station to the Nash Draw Playas is the Waste Isolation Pilot Plant, New Mexico approximately 10 miles northeast of the Nash Draw Playas. Average annual precipitation is 12.88 inches for the period 1986 to 2014. The climate is arid to semi-arid, and the majority of the precipitation falls during the summer monsoon season. The monsoon rains are typically characterized as high intensity, short duration, isolated thunderstorms. Evaporation is high, nearly 8 times the amount of annual precipitation. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the Nash Draw Playas fall outside of the 100-year floodplain of the Pecos River (Golder Associates, 2022).

The dominant soils in the Nash Draw Playas include the Cottonwood, and Reeves Soil Series. The Cottonwood and Reeves series are medium-textured to moderately fine-textured Aridisols formed in residuum weathered from gypsum. These soils are slightly saline to strongly saline with high gypsum and calcium carbonate concentrations in the soil profiles. They occur in the lowest elevations in depressions within the review area. Areas where gypsum outcrops are exposed (playa lakes) harbor little vegetation due to the high salinity. The soils in the review area are generally not mapped as hydric soils and therefore cannot be considered jurisdictional wetlands (USDA NRCS 2022).

Nash Draw Basin is the collective area containing the Nash Draw Playas, it is an internally drained (closed) basin characterized by several saline playa lakes in the lower elevations. It is a topographic depression about 14 miles long and averaging 5 miles wide with no external surface drainage (Vine 1963). The Pecos River is the nearest jurisdictional water body and is a tributary to the Rio Grande, which is a traditionally navigable water (TNW). The confluence of the Pecos River and the Rio Grande is approximately 200 miles downstream from the review area.

Surface water in the Nash Draw Playas is ephemeral. Surface water ultimately drains to Laguna Grande mainly as sheet flow or via small unnamed ephemeral drainages that end in playas with no surface outlet. In 2012, and again in 2017 the United States Army Corps of Engineers (USACE), Albuquerque District determined that previously the Nash Draw Plays to be non-jurisdictional (SPA-2012-00112-LCO and SPA-2016-00367-LCO). The USACE determined that the Nash Draw Plays are isolated waters with no connection to interstate commerce and are not regulated under Section 404 of the CWA. The Pecos River is approximately 1 mile southwest of Laguna Grande; however, all surface water flow terminates at Laguna Grande never reaching the Pecos River (Golder Associates, 2022).

GL Environmental Inc. conducted a shorebird and aquatic macroinvertebrate habitat evaluation of the Nash Draw Playas (GL Environmental 2014) to document the extent to which shorebirds use the playas. Their study excluded the areas of Laguna Uno and Laguna Grande with where mining activity occurs. GL Environmental identified 45 avian species, including 18 shorebird species, eight macroinvertebrates, and twelve algae. Shorebird habitat quality and shorebird abundance was highest in three distinct areas: the eastern side of Laguna Quatro, the northeastern side of Laguna Uno, and northern extent of Laguna Grande. These three areas have lower salinity levels, higher dissolved oxygen and algae cover, and deeper water. GL Environmental concluded that these areas of the Nash Draw Playas provide favorable shorebird foraging habitat (GL Environmental 2014). Prior to the January 2001 Supreme Court decision in "SWANCC," the review area would have been potentially regulated based on the Migratory Bird Rule (MBR).

The Nash Draw Playas are ephemeral, isolated waters that have no nexus to a Traditionally Navigable Water (TNW). The Nash draw playas also have no nexus to interstate commerce and therefore, considered to be non-jurisdictional waters under the Clean Water Act (CWA).

- 1. USACE. 2009. List of Navigable Waters of the United States in the Albuquerque District. June 17, 2009.
- 2. USDA, NRCS. 2022. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/.
- 3. Dick-Peddie, W.A. and W.H. Moir. 1999. New Mexico Vegetation: Past, Present, and Future. University of New Mexico Press.
- 4. GL Environmental, Inc. 2014. Nash Draw Shorebird Habitat Evaluation Document ID 4847-6181-3020.2. Prepared for Department of the Interior Bureau of Land Management Pecos District. August 20, 2014.
- 5. Vine, James D. 1963. Surface Geology of the Nash Draw Quadrangle, Eddy County, New Mexico. USGS Bulletin 1141-B. Prepared on behalf of the U.S. Atomic Energy Commission. United States Government Printing Office, Washington.
- 6. Golder Associates Inc. 2022 Jurisdictional Determination Supporting Documentation Nash Draw Playa Lakes, Eddy County, New Mexico. Prepared for Mosaic Potash. April 1, 2022
- 7. Golder. 2014. DP-1399 Condition 12 Permit. Evaluation of the Hydrologic Conditions between Laguna Grande and the Pecos River. Submitted to The Mosaic Company. January 14, 2014