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

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 10, 2020

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Albuquerque District, Espanola Transit Mix, LLC, El Guique Mine, Estaca, Rio Arriba County, New Mexico, SPA-2020-00102-ABQ

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **New Mexico** County/parish/borough: **Rio Arriba County** City: **Estaca**
Center coordinates of site (lat/long in degree decimal format): Lat. **36.1197°**, Long. **-106.0532°**
Universal Transverse Mercator: **Zone: 13, X: 405219.598882, Y: 3997738.600672**
Name of nearest waterbody: **Rio Grande**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Rio Grande**
Name of watershed or Hydrologic Unit Code (HUC): **HUC 12: Rio Chama-Rio Grande (130201011107) and Arroyo del Palacio-Rio Grande (130201011105) / HUC 10: Rio Chama-Rio Grande (1302010111)**
☒ 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: **April 30, 2020**
☒ Field Determination. Date(s): **June 3, 2020**

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review 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.

There **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):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (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):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **The Area of Review encompasses approximately 51 acres and contains three (3) drainage features, identifed as Drainages A1, A2, and A3. The Area of Review is entirely on the north/west side of the Rio Grande. The drainage features were evaluated to determine if a significant nexus to a TNW (Rio Grande) exists. The U.S. Army Corps of Engineers (Corps) conducted a site inspection on June 3, 2020. No flow was present within the drainages. The drainage features encounter infrequent, low volume flows, do not carry a relatively permanent flow of water, and**

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] 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).
[3] Supporting documentation is presented in Section III.F.

are identified as ephemeral channels. The features exhibit bed, bank, and ordinary high watermark indicators along portions of their lengths, as discussed within Section III.F. of this form.

In accordance with Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States, a significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters. The significant nexus evaluation also includes consideration of hydrologic and ecologic factors, such as the potential of tributaries to carry pollutats and flood waters to a TNW, provision of aquatic habitat that supports a TNW, potential of wetlands to trap and filter pollutants or store flood waters, and maintenance of water quality in a TNW.

There are no wetlands within the Area of Review; therefore, wetland functions are not included in this significant nexus evaluation. Additionally, given the infrequent, low volume flows which are carried within the channels, Drainages A1, A2, and A3 do not exhibit suitable habit for aquatic organisms. Pollutants and sediments from the adjacent uplands would be carried with stormwater, and the amount and distance that flow would travel is reliant on the intensity of the storm events. However, based on the evaluations described in Section III.F., flows generated within Drainages A1, A2, and A3 would not contribute a significant effect to the chemical, physical, or biological integrity of the Rio Grande. Therefore, based on the site inspection, desktop review, and evaluations described in Section III.F. of this form, Drainages A1, A2 and A3 are not considered jurisdictional waters of the United States, because they do not have a significant nexus to a downstream TNW. Refer to Section III.F. for the findings of the no significant nexus determinations.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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[4] 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

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

(i) General Area Conditions:
Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☒ Natural
☒ Artificial (man-made). Explain:
☒ Manipulated (man-altered). Explain:

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: **Pick List.** Characteristics:

Subsurface flow: **Pick List**. Explain findings:
☐ Dye (or other) test performed:

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events

[5] 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.
[6]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.

☐ water staining
☐ other (list):
☐ abrupt change in plant community
☐ Discontinuous OHWM.[7] 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:
☐ oil or scum line along shore objects
☐ fine shell or debris deposits (foreshore)
☐ physical markings/characteristics
☐ tidal gauges
☐ other (list):
☐ Mean High Water Mark indicated by:
☐ survey to available datum;
☐ physical markings;
☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain:
Identify specific pollutants, if known:

(iv) Biological 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:

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

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:
Wetland size: acres
Wetland type. Explain:
Wetland quality. Explain:
Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:
Flow is: **Pick List**. Explain:

Surface flow is**: Pick List**
Characteristics:

Subsurface flow: **Pick List**. Explain findings:
☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:
☐ Directly abutting
☐ Not directly abutting
☐ Discrete wetland hydrologic connection. Explain:
☐ Ecological connection. Explain:
☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW
Project wetlands are **Pick List** river miles from TNW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Flow is from: **Pick List.**
Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:
Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):

[7]Ibid.

☐ Riparian buffer. Characteristics (type, average width):
☐ Vegetation type/percent cover. Explain:
☐ Habitat for:
  ☐ Federally Listed species. Explain findings:
  ☐ Fish/spawn areas. Explain findings:
  ☐ Other environmentally-sensitive species. Explain findings:
  ☐ Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**
Approximately acres in total are being considered 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 amount 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 foodwebs?
- 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[8] 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.
☐ 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 jurisidictional. 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.[9]**
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).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH 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.

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[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] 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.*

☐ Interstate isolated waters. Explain:
☐ Other factors. Explain:

Identify water body and summarize rationale supporting determination:

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:
☐ Wetlands: acres.

F. NON-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:

The feature identified as Drainage A1 is a channel which exhibits the characteristics of ephemeral flow, only transporting water during and shortly after heavy precipitation events and generally during specific times of the year (e.g., monsoon season) in this region, identified as the arid southwest. Drainage A1 is within the HUC 12 watershed of 130201011107 (Rio Chama-Rio Grande). The overall watershed size is approximately 49.214 square miles (31,497.08 acres). The majority of the watershed is located on the south and east side of the Rio Grande. The approximate drainage area specific to Drainage A1 is 0.03 square miles (19 acres). Drainage A1 has an approximate length of 2,538 linear feet (29,544 square feet/0.68 acre), which includes two (2) small side channels along its length within the Area of Review. Within the Area of Review, Drainage A1 is surrounded by uplands with minimal scrubby vegetation. The soils within the vicinity, to include the substrates of the channel, are classified as Florita-Rock outcrop complex, 15 to 45 percent slopes. This soil is identified as being comprised of gravelly fine sandy loam and sandy loam. The soil is well drained with a medium runoff class. The channel substrates also consist of gravel, cobbles, and sands. When precipitation events occur, the chemical characteristics of the water within Drainage A1 would be turbid and transport substrate materials and adjacent upland sediments. Given the minimal vegetation within the adjacent upland area, seed transport would be minimal. The existing El Guique Mine expansion is located nearby to the west of Drainage A1. However, mining activities are stabilized and protected from releasing construction-related materials outside of the work zone. As such, it is not expected that pollutants from the existing mine would not contribute to the chemical characteristics of downstream waters, nor would sediment and/or seed sources within the adjacent uplands.

In regard to biological characteristics, given the ephemeral flow conditions, Drainage A1 does not support conditions for suitable habitat for aquatic organisms. Additionally, the adjacent uplands are sparsely vegetated and do not provide a viable riparian buffer, no wetlands were identified, and the channel does not provide habitat for federally listed or other environmentally-sensitive species. Based on these factors, it is deterined that Drainage A1 does not contribute to the biological characteristics of downstream waters. The channel possesses the indicators of a defined bed and bank and ordinary high watermark (scour, sediment deposition, sediment sorting) until approximately 20 feet west of the west edge of County Road (CR) 57 (CR 57 is also identified on maps as CR 582) where a gabion structure with drainage pipes near its base is present. A large berm is also present directly on the west side of CR 57, downstream of the gabion structure. A small erosional feature was observed on the northwest corner of the berm. No other flowpaths were observed along or around the berm. This would indicate that if stormwater from the upper limits of the channel does reach the berm, it would be a minimal quantity, as the overall berm appeared stable. Additionally, the small drainage area of Drainage A1 further indicates that the quantity of stormwater collected and transported within Drainage A1 is minimal. During a large enough precipitation event, if stormwater does cross the berm, it would fan out as sheet-flow along the shoulder/pull-off area and across CR 57, as no culvert or other channel features are present to carry flow beneath the roadway. As a note, the Area of Review limits end at CR 57.

The area outside of the Area of Review was evaluated in order to determine connectivity to downstream waters. On the east side of CR 57, Drainage A1 becomes a man-made/maintained channel that runs eastward to the south side of a private driveway. The San Rafael del el Guique Ditch (Ditch) is present approximately 78 feet east of CR 57 and is carried via culvert beneath the private driveway. A stable berm is present on the west side of the Ditch, and there were no physical erosional characteristics identified along the berm which would denote that flow along CR 57 crosses the berm, thereby indicating that flows, if present within Drainage A1, do not enter the Ditch. If sheet-flow crosses CR 57 and re-enters the man-made portion Drainage A1, it would then travel east within the man-made channel for approximately 270 feet, at which point the defined bed and banks become less defined and ultimately fan out as sheet-flow to the south/southeast into an upland area. A stable man-made flood control berm runs along the west side of the Rio Grande approximately 290 feet east of where Drainage A1 dissipates into the uplands. There were no erosional characteristics or other physical features identified along the berm which would denote that flow crosses the berm, thereby indicating that flow does not enter into the Rio Grande. Based on the above findings, which include the small drainage area, lack of aquatic habitat, the well

drained and medium runoff class of the soils, and lack of defined connection, Drainage A1 has an insignificant and insubstantial effect on the chemical, physical, and biological integrity of the Rio Grande, a TNW. Therefore, it is determined that Drainage A1 does not have a significant nexus with a TNW and is not considered to be a jurisdictional waters of the United States.

The feature identified as Drainage A2 is a channel which exhibits the characteristics of ephemeral flow, only transporting water during and shortly after heavy precipitation events and generally during specific times of the year (e.g., monsoon season) in this region, identified as the arid southwest. Drainage A2 is within the HUC 12 watershed of 130201011105 (Arroyo del Palacio-Rio Grande). The overall watershed size is approximately 54.731 square miles (35,027.9974 acres). The majority of the watershed is located on the south and east side of the Rio Grande. The approximate watershed area specific to Drainage A2 is 0.009 square miles (6 acres). Drainage A2 has an approximate length of 737 linear feet (4,338 square feet/0.01 acre), which includes one (1) small side channel along its length within the Area of Review. Drainage A2 is surrounded by uplands with minimal scrubby vegetation. The soils within the vicinity are classified as Florita-Rock outcrop complex, 15 to 45 percent slopes. This soil is identified as being comprised of gravelly fine sandy loam and sandy loam. The soil is well drained with a medium runoff class. The channel substrates also consist of gravel, cobbles, and sands. When precipitation events occur, the chemical characteristics of the water within Drainage A2 would be turbid and transport substrate materials and adjacent upland sediments. Given the minimal vegetation within adjacent upland area, seed transport would be minimal. The existing El Guique Mine is present to the west of A2 but is protected and stabilized so as not to discharge mine and/or construction materials outside of the work zone. As such, it is not expected that pollutants from the existing mine, or sediment and seed sources from the adjacent uplands, would contribute to the chemical characteristics of downstream waters.

In regard to biological characteristics, given the ephemeral flow conditions, Drainage A2 does not support conditions for suitable habitat for aquatic organisms. Additionally, the adjacent uplands are sparsely vegetated and do not provide a viable riparian buffer, no wetlands were identified, and the channel does not provide habitat for federally listed or other environmentally-sensitive species. Based on these factors, it is expected that Drainage A2 has an insignificant effect on the biological characteristics of downstream waters. The channel possesses the indicators of a defined bed and bank and ordinary high watermark (scour, sediment deposition, sediment sorting) until approximately 10 feet west of the west edge of CR 57. Stormwater would exit Drainage A2 and fan out as sheet-flow along the shoulder/pull-off area. During a large enough precipitation event, a portion of sheet-flow may cross CR 57, as there is no culvert, pipe, or other channel feature which provides flow access beneath CR 57 to the east side of the roadway. Given the small drainage area of Drainage A2, the quantity of water would be minimal. Any sheet-flow crossing CR 57 would be contained within the roadway by a stable berm that borders the east side of the road. The Ditch identified within the evaluation of Drainage A1 lies approximately 30 feet east of CR 57 and the berm. There were no erosional characteristics or other physical features identified along the berm which would denote that flow crosses the berm, thereby indicating that flow does not enter into the Ditch. Additionally, there is no identified direct or indirect overland pathway, culvert, pipe or other channel which would allow precipitation-driven flows transported within Drainage A2 to reach the Rio Grande, which lies approximately 790 feet west, once stormwater would reach the upland roadside and roadway.

Based on the above findings, which include the small drainage area, lack of aquatic habitat, the well drained and medium runoff class of the soils, and lack of defined connection, Drainage A2 has an insignificant and insubstantial effect on the chemical, physical, and biological integrity of the Rio Grande, a TNW. Therefore, it is determined that Drainage A2 does not have a significant nexus with a TNW and is not considered to be a jurisdictional waters of the United States.

The feature identified as Drainage A3 is a channel which exhibits the characteristics of ephemeral flow, only transporting water during and shortly after heavy precipitation events and generally during specific times of the year (e.g., monsoon season) in this region, identified as the arid southwest. Drainage A3 is within the HUC 12 watershed of 130201011105 (Arroyo del Palacio-Rio Grande). The overall watershed size is approximately 54.731 square miles (35,027.9974 acres). The majority of the watershed is located on the south and east side of the Rio Grande. The approximate watershed area specific to Drainage A3 is 0.014 square miles (9 acres). Drainage A3 has an approximate length of 1,016 linear feet (7,595 square feet/0.17 acre) within the Area of Review. Drainage A3 is surrounded by uplands with minimal scrubby vegetation. The soils within the vicinity are classified as Florita-Rock outcrop complex, 15 to 45 percent slopes. This soil is identified as being comprised of gravelly fine sandy loam and sandy loam. The soil is well drained with a medium runoff class. The channel substrates also consist of gravel, cobbles, and sands. When precipitation events occur, the chemical characteristics of the water within Drainage A3 would be turbid and transport substrate materials and adjacent upland sediments. Given the minimal vegetation within adjacent upland area, seed transport would be minimal. The existing El Guique Mine is present to the west of Drainage A3 but is protected and stabilized so as not to discharge mine and/or construction materials outside of the work zone. Given these factors, it is not expected that pollutants from the existing mine, or sediment and seed sources from the adjacent uplands would contribute to the chemical characteristics of downstream waters.

In regard to biological characteristics, given the ephemeral flow conditions, Drainage A3 does not support conditions for suitable habitat for aquatic organisms. Additionally, the adjacent uplands are sparsely vegetated and do not provide a viable riparian buffer, no wetlands were identified, and the channel does not provide habitat for federally listed or other environmentally-sensitive species. Based on these factors, it is expected that Drainage A3 has an insignificant effect on the biological characteristics of downstream waters. Drainage A3 has an approximate length of 1,016 linear feet (7,595 square

feet/0.17 acre) within the Area of Review. The channel possesses the indicators of a defined bed and bank and ordinary high watermark (scour, sediment deposition, sediment sorting) until approximately 10 feet west of the west edge of CR 57. On the west side of CR 57, ephemeral flows would exit Drainage A3 and fan out as sheet-flow along the shoulder/pull-off area of the roadway. During a large enough precipitation event, a portion of stormwater could sheet-flow across the roadway, as no culvert, pipe or other channel is present which provides access of flows to the east side of CR 57. A stable berm is located along the east side of CR 57, and opposite of the berm exists a downhill slope which opens into pasture lands. There were no erosional characteristics or other physical features identified along the berm which would denote that flow crosses the berm, thereby indicating that flow does not enter into the pasture. Additionally, a dirt driveway and a topographic depression situated adjacent to the south side of the driveway, are located within the vicinity of the downstream limit of Drainage A3. The point at which sheet-flow along CR 57 could enter the upland driveway and topographic depression is located approximately 250 feet west of the Ditch identified in the evaluation of Drainage A1, and 875 feet west of the the Rio Grande. The topographic depression contains berms built around it that would contain sheet-flow, and no outlet from the depression was observed. Additionally, there is no direct or indirect overland pathway, culvert, pipe or other channel to allow precipitation-driven flows within Drainage A3 to reach the Rio Grande.

Based on the above findings, which include the small drainage area, lack of aquatic habitat, the well drained and medium runoff class of the soils, and lack of defined connection, Drainage A3 has an insignificant and insubstantial effect on the chemical, physical, and biological integrity of the Rio Grande, a TNW. Therefore, it is determined that Drainage A3 does not have a significant nexus with a TNW and is not considered to be a jurisdictional waters of the United States.

☐ Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (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.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☒ Non-wetland waters (i.e., rivers, streams): **Overall approximately 4,291** linear feet, **various lengths** wide.
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Ecosystem Services, LLC.**
☐ 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: **HUC 12: Rio Chama-Rio Grande (130201011107) and Arroyo del Palacio-Rio Grande (130201011105)**
  ☐ USGS NHD data.
  ☐ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: **1:24K; San Juan Pueblo, NM, 2020.**
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **Rio Arriba Area, New Mexico, Parts of RSio Arriba and Sandoval Counties (SPA-2020-102-ABQ (El Guique Mine Expansion)).**
☒ National wetlands inventory map(s). Cite name: **El Guique Mine, Estaca, NM, created February 13, 2020 using the U.S. Fish and Wildlife Service National Wetlands Inventory Mapper.**
☐ State/Local wetland inventory map(s):
☒ FEMA/FIRM maps: **Rio Arriba County, NM, 35039C2875D.**
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):
  or ☒ Other (Name & Date): **Photos taken during June 3, 2020 site inspection.**
☐ Previous determination(s). File no. and date of response letter:
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Based on the desktop review, June 3, 2020 site inspection, and evaluations described in Section III.F. of this form, flows generated within Drainages A1, A2, and A3 would not contribute to the chemical, physical, or biological integrity of the Rio Grande, which is a TNW. Therefore, Drainages A1, A2 and A3 are not considered jurisdictional waters of the United States, because they do not have a significant nexus to a downstream TNW.