

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): January 17, 2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, SF PHOSPHATES NEAR VERNAL, SPK-1999-75070

Name of water being evaluated on this JD Form: SPK-1999-7570 Channel 1 (No Sig Nexus)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **Utah** County/parish/borough: **Uintah** City: **Vernal**

Center coordinates of site (lat/long in degree decimal format): Lat. **40.6188°**, Long. **-109.4910°**

Universal Transverse Mercator: **12 627633.58 4497544.23**

Name of nearest waterbody: **Big Brush Creek**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **N/A**

Name of watershed or Hydrologic Unit Code (HUC): **Ashley-Brush, Utah., 14060002**

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: **5 Jan 2012**

Field Determination. Date(s): **16 Oct 2011**

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 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):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: **Three project areas identified on the attached Figure 2 as 2012-2014 (251 acres), 2015-2016 (185 acres), and 2017-2027 (921 acres); totalling 1,357 acres are included in this assessment. The area identified in Figure 2 as the**

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.

Tailing Impoundment Area (591 acres) is assessed in a separate JD form. Within the 3 areas indicated above there were 7 upland swales that did not exhibit an OHWM using the Updated Datasheet of the Identification of the OHWM in the Arid West Region of the Western US, July 2010 and one ephemeral channel feature, Channel 1 which did have an OHWM. The total length of Channel 1 that exhibited an OHWM within the study area was 5,725 linear feet with an average width of 1 foot. During the Corps' site visit on October 16, 2011 the channel downstream of the study area was examined at several points until it appeared to disappear before reaching SR-191. The Figure titled "Vernal Mine 2011 Survey Supplemental Photopoints" shows the locations of the attached photopoints along Channel 1 downstream of the project area. Photopoints 1 and 2 show some evidence of an OHWM, predominantly through scour and lack of vegetation. Based on the site visit observations and photographic evidence, it appears that the OHWM disappears just downstream of Photopoint 2, approximately 5,000 feet from the closest RPW, Big Brush Creek. Photopoint 3 shows the area as flatter, no longer channelized and dominated by an upland sagebrush community. The relatively narrow width (1 foot) of Channel 1, its ephemeral nature and the apparent lack of channel or evidence of OHWM at Photopoint 3 indicate that Channel 1 lacks a physical, biological and chemical connection to Big Brush Creek, the closest potential RPW.

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 waterbody⁴ 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) **General Area Conditions:**

Watershed size: **642 square miles**

Drainage area: **482 acres**

Average annual rainfall: **8.84 inches**

Average annual snowfall: **0 inches**

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

(ii) **Physical Characteristics:**

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **2** tributaries before entering TNW.

Project waters are **15-20** river miles from TNW.
 Project waters are **1 (or less)** river miles from RPW.
 Project waters are **15-20** aerial (straight) miles from TNW.
 Project waters are **1 (or less)** aerial (straight) miles from RPW.
 Project waters cross or serve as state boundaries. Explain: **No.**

Identify flow route to TNW⁵: **The potential flow route would be from Channel 1 to Big Brush Creek to the Green River.**

Tributary stream order, if known: **1**

(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: **1** feet
 Average depth: **1** feet
 Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input checked="" type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input checked="" type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input checked="" type="checkbox"/> Vegetation. Type/% cover: herbaceous 5% | |
| <input type="checkbox"/> Other. Explain: | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Soil appears to be moderately erosive.**

Presence of run/riffle/pool complexes. Explain: **None.**

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): **1 %**

(c) Flow:

Tributary provides for: **Ephemeral flow**

Estimate average number of flow events in review area/year: **1**

Describe flow regime: **Ephemeral flow after major or successive storm events.**

Other information on duration and volume: **None**

Surface flow is: **Discrete**. Characteristics: **Flow is discrete but not always confined, there appears to be an incised active floodplain, however, the ordinary high water mark is discontinuous and stops approximately 1 mile prior to its confluence with Big brush Creek.**

Subsurface flow: **Unknown**. Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):

<input type="checkbox"/> clear, natural line impressed on the bank	<input type="checkbox"/> the presence of litter and debris
<input type="checkbox"/> changes in the character of soil	<input checked="" type="checkbox"/> destruction of terrestrial vegetation
<input checked="" type="checkbox"/> shelving	<input type="checkbox"/> the presence of wrack line
<input type="checkbox"/> vegetation matted down, bent, or absent	<input type="checkbox"/> sediment sorting
<input type="checkbox"/> leaf litter disturbed or washed away	<input checked="" type="checkbox"/> scour
<input type="checkbox"/> sediment deposition	<input type="checkbox"/> multiple observed or predicted flow events
<input type="checkbox"/> water staining	<input type="checkbox"/> abrupt change in plant community
<input type="checkbox"/> other (list):	
- Discontinuous OHWM.⁷ Explain:

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.

⁷Ibid.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: **Water was not observed at the time of the delineation or the field visit. Since the channel is ephemeral and would only flow in response to storm events, it can be assumed that the water would have high turbidity and a high sediment load.**

Identify specific pollutants, if known: **None.**

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): **10-50 feet, sparsley vegetated with juniper overstory.**
- 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):**

- 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:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
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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: **Three project areas identified on the attached Figure 2 as 2012-2014 (251 acres), 2015-2016 (185 acres), and 2017-2027 (921 acres); totalling 1,357 acres are included in this assessment. The area identified in Figure 2 as the Tailing Impoundment Area (591 acres) is assessed in a separate JD form. Within the 3 areas indicated above there were 7 upland swales that did not exhibit an OHWM using the Updated Datasheet of the Identification of the OHWM in the Arid West Region of the Western US, July 2010 and one ephemeral channel feature, Channel 1 which did have an OHWM. The total length of Channel 1 that exhibited an OHWM within the study area was 5,725 linear feet with an average width of 1 foot. During the Corps' site visit on October 16, 2011 the channel downstream of the study area was examined at several points until it appeared to disappear before reaching SR-191. The Figure titled "Vernal Mine 2011 Survey Supplemental Photopoints" shows the locations of the attached photopoints along Channel 1 downstream of the project area. Photopoints 1 and 2 show some evidence of an OHWM, predominantly through scour and lack of vegetation. Based on the site visit observations and photographic evidence, it appears that the OHWM disappears just down stream of Photopoint 2, approximately 5,000 feet from the closest RPW, Big Brush Creek. Photopoint 3 shows the area as flatter, no longer channelized and dominated by an upland sagebrush community. The relatively narrow width (1 foot) of Channel 1, its ephemeral nature and the apparent lack of channel or evidence of OHWM at Photopoint 3 indicate that Channel 1 lacks a physical, biological and chemical connection to Big Brush Creek, the closest potential RPW. Based on available information, it appears that any pollutants entering Channel 1 would not be able to flow downstream into Big Brush Creek,**

demonstrating a lack of significant physical or chemical nexus. Further, there is no evidence that any organisms using Channel 1 would also utilize Big Brush Creek, thereby lacking a significant biological nexus.

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-RPWs⁸ 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 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.⁹**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

- 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.
- 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: **Three project areas identified on the attached Figure 2 as 2012-2014 (251 acres), 2015-2016 (185 acres), and 2017-2027 (921 acres); totalling 1,357 acres are included in this assessment. The area identified in Figure 2 as the Tailing Impoundment Area (591 acres) is assessed in a separate JD form. Within the 3 areas indicated above there were 7 upland swales that did not exhibit an OHWM using the Updated Datasheet of the Identification of the OHWM in the Arid West Region of the Western US, July 2010 and one ephemeral channel feature, Channel 1 which did have an OHWM. The total length of Channel 1 that exhibited an OHWM within the study area was 5,725 linear feet with an average width of 1 foot. During the Corps' site visit on October 16, 2011 the channel downstream of the study area was examined at several points until it appeared to disappear before reaching SR-191. The Figure titled "Vernal Mine 2011 Survey Supplemental Photopoints" shows the locations of the attached photopoints along Channel 1 downstream of the project area. Photopoints 1 and 2 show some evidence of an OHWM, predominantly through scour and lack of vegetation. Based on the site visit observations and photographic evidence, it appears that the OHWM disappears just down stream of Photopoint 2, approximately 5,000 feet from the closest RPW, Big Brush Creek. Photopoint 3 shows the area as flatter, no longer channelized and dominated by an upland sagebrush community. The relatively narrow width (1 foot) of Channel 1 , its ephemeral nature and the apparent lack of channel or evidence of OHWM at Photopoint 3 indicate that Channel 1 lacks a physical, biological and chemical connection to Big Brush Creek, the closest potential RPW. Based on available information, it appears that any pollutants entering Channel 1 would not be able to flow downstream into Big Brush Creek, demonstrating a lack of significant physical or chemical nexus. Further, there is no evidence that any organisms using Channel 1 would also utilize Big Brush Creek, thereby lacking a significant biological nexus.**
- 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):

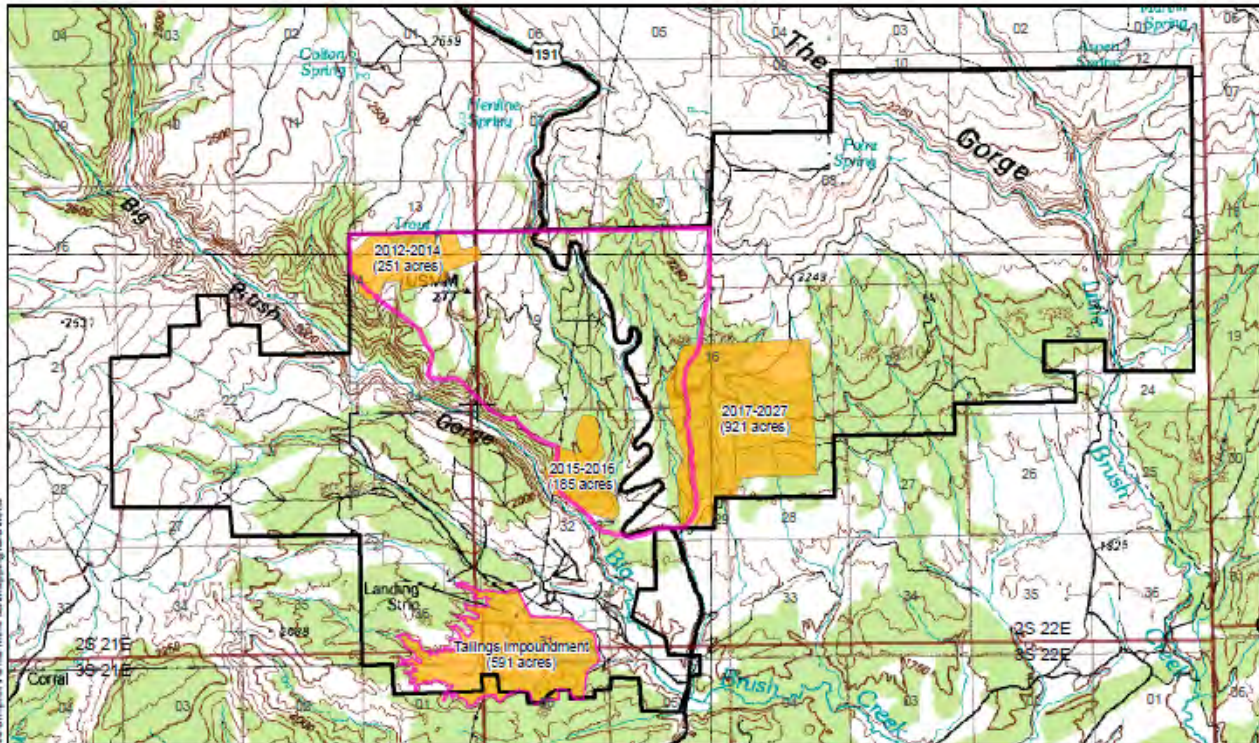
- Non-wetland waters (i.e., rivers, streams): linear feet, wide.
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

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):

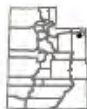
- Non-wetland waters (i.e., rivers, streams): **5,725** linear feet, **1 foot** wide.
- Lakes/ponds: acres.

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.

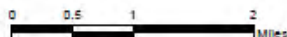
channels within the Tailings Impoundment Area and the closest water of the US, Big Brush Creek. As such these waters have been determined to be isolated and have no connections to interstate commerce.



BASE MAP: USGS 1:100,000 SCALE TOPOGRAPHIC MAP



- Mine Boundary
- Build-Out Areas & 2011 Delineation Study Area
- 1999 Delineation Study Area

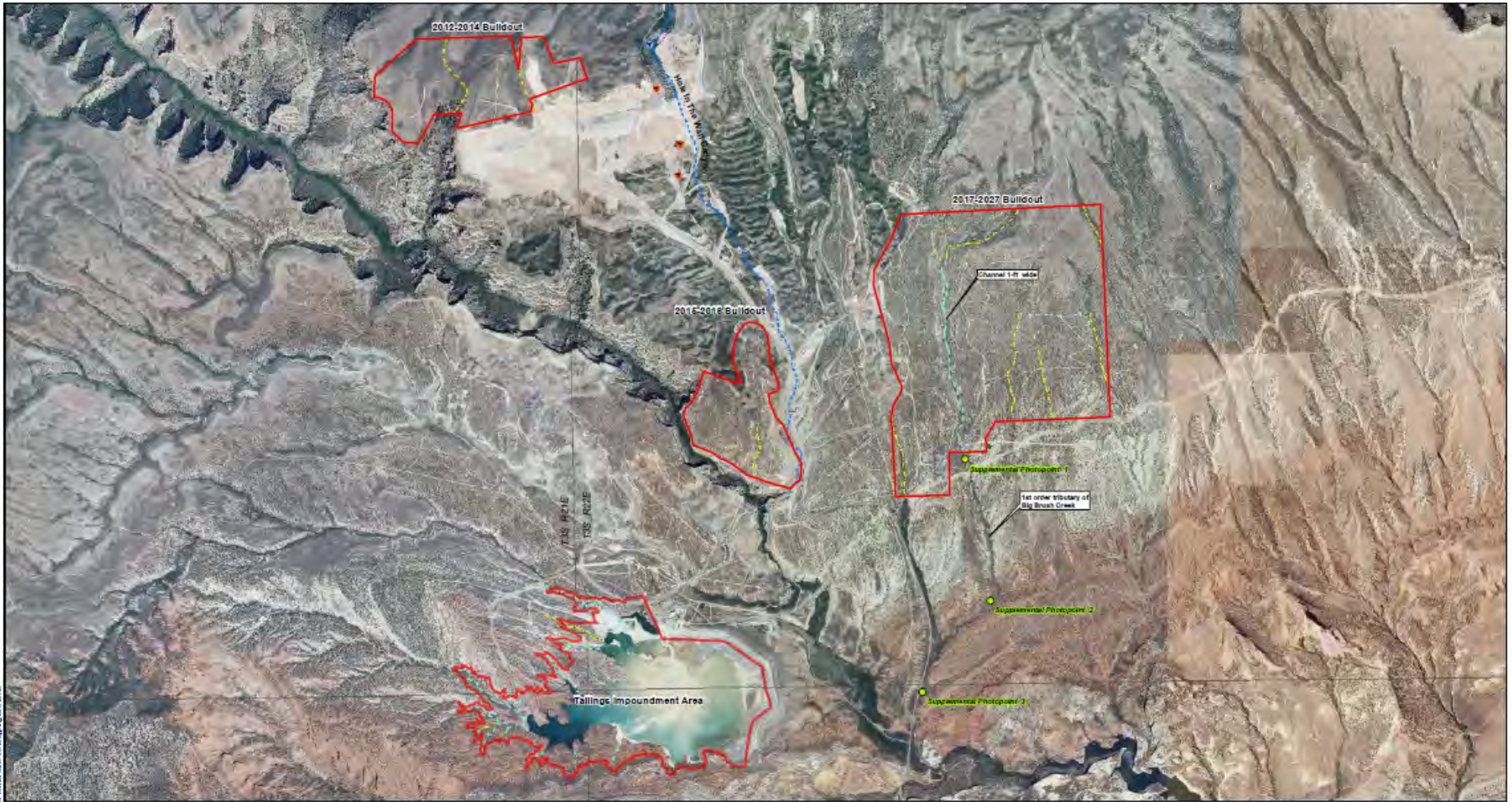


**SIMPLOT PHOSPHATES, LLC
WATERS OF THE U.S. SURVEY**

**FIGURE 2
DELINEATION STUDY AREAS**



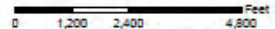
DRAWN BY	CHJ	DATE DRAWN	08/11
SCALE		1 in = 1 miles	



BASE MAP: 2010 NAIP IMAGE



- Survey Boundaries
- Wetland Avoided
- Wetland Filled/Excavated (Permitted)
- Supplemental Photopoint
- Channel with OHWM
- Channel Filled/Excavated (Permitted)
- Swale without OHWM



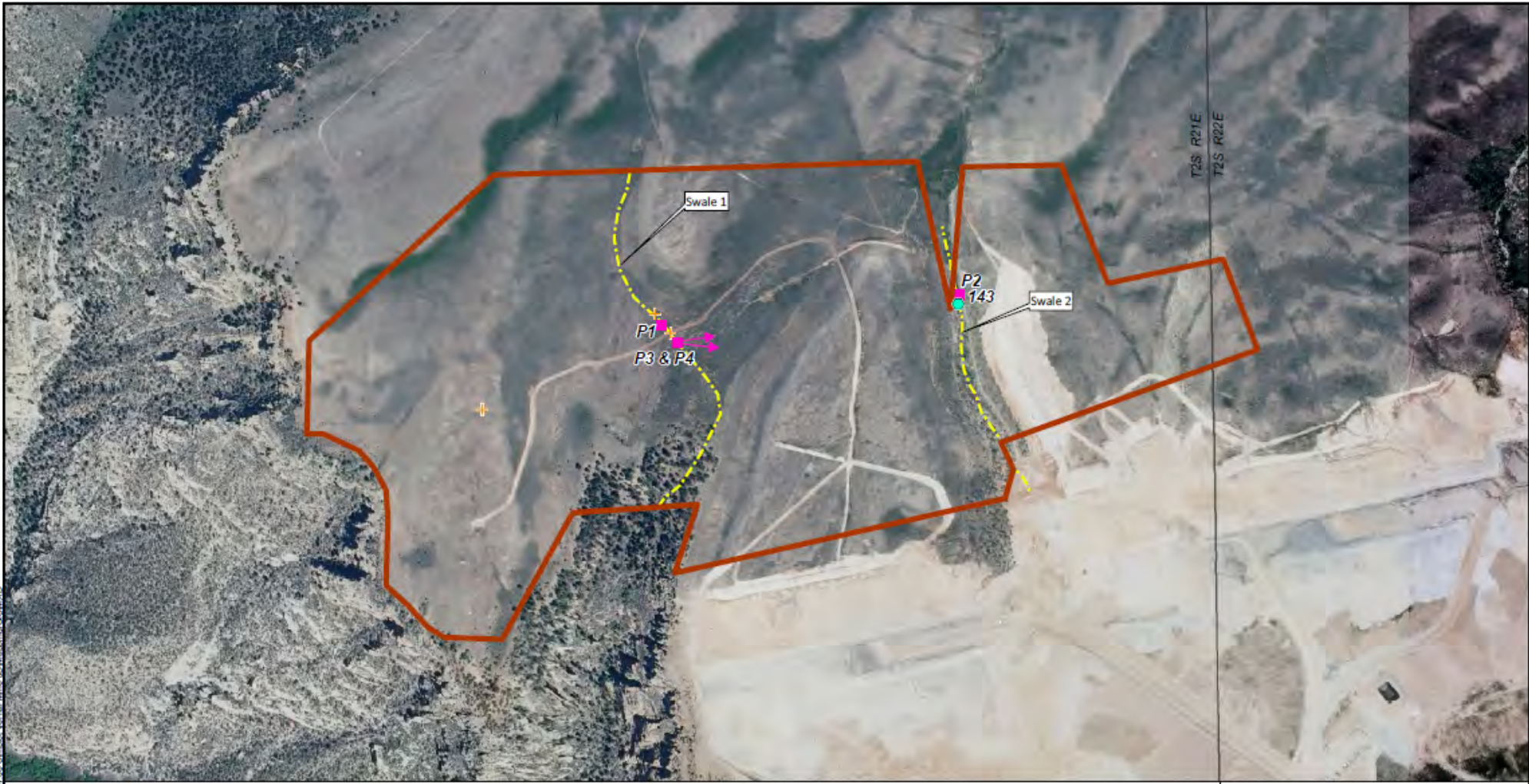
SIMPLOT PHOSPHATES, LLC
WATERS OF THE U.S. SURVEY

VERNAL MINE 2011 SURVEY
 SUPPLEMENTAL PHOTOPOINTS



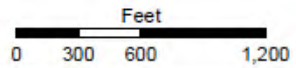
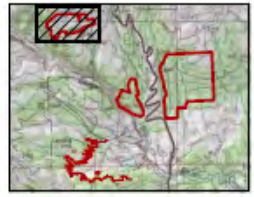
DRAWN BY	CHJ	DATE DRAWN	10/28/11
SCALE		1 in = 1,250 feet	

File Path: P:\Clearn0011\Clearn0011_A11157.00_Simplified_Vernal_Mire_EDM.mxd



BASE MAP: NAIP IMAGE 2010

- 2012-2014 Buildout Boundary
- P2 Photograph Location
- 143 Reference Location (OHWM datasheet)
- + Data Collection Site
- Channel with OHWM
- Swale without OHWM

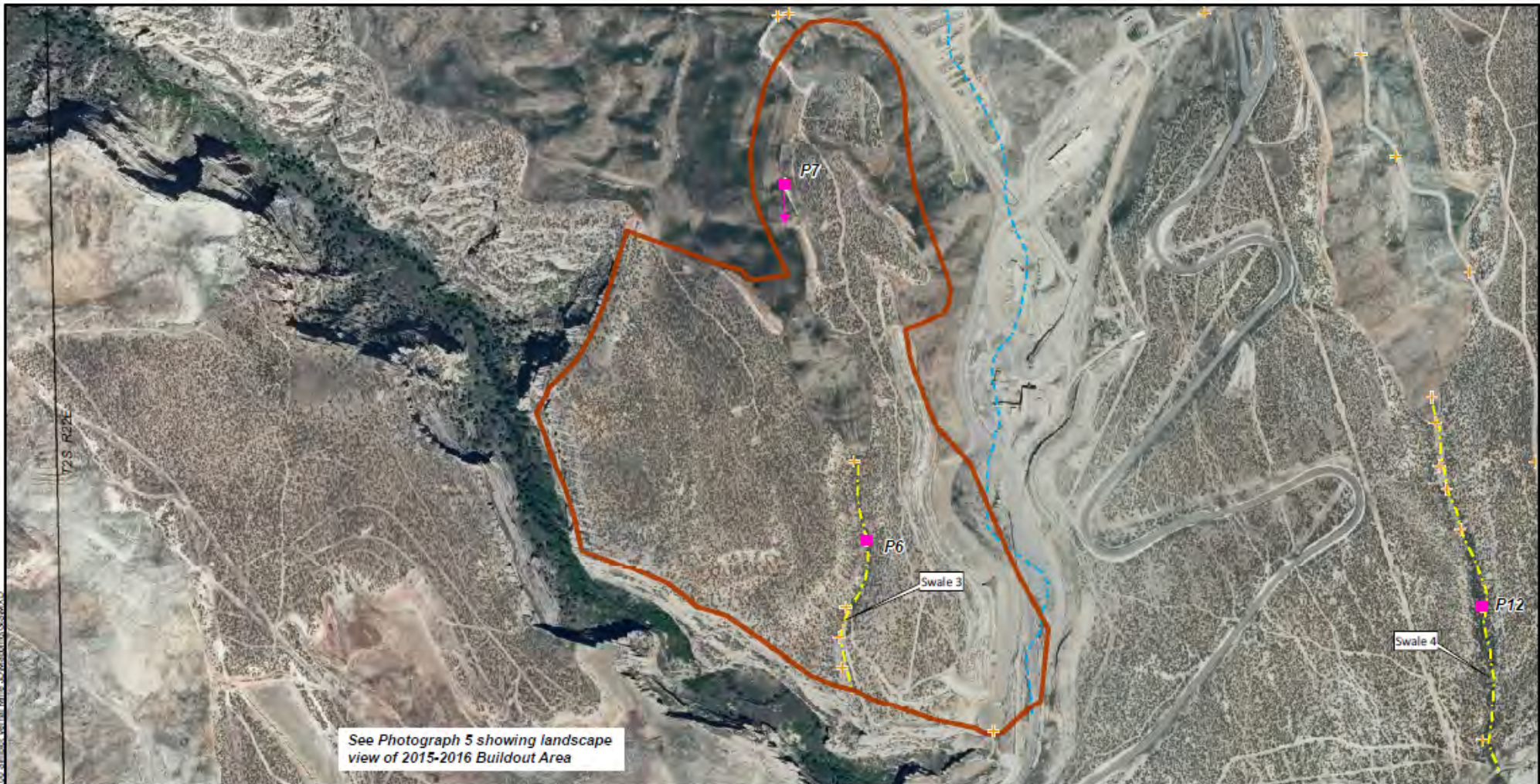


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FIGURE 5
2012-2014 BUILDOUT

	DRAWN BY	CHJ	DATE	DRAWN	9/8/11
	SCALE		1 inch = 600 feet		

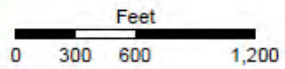
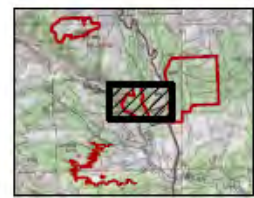
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See Photograph 5 showing landscape view of 2015-2016 Buildout Area

BASE MAP: NAIP IMAGE 2010

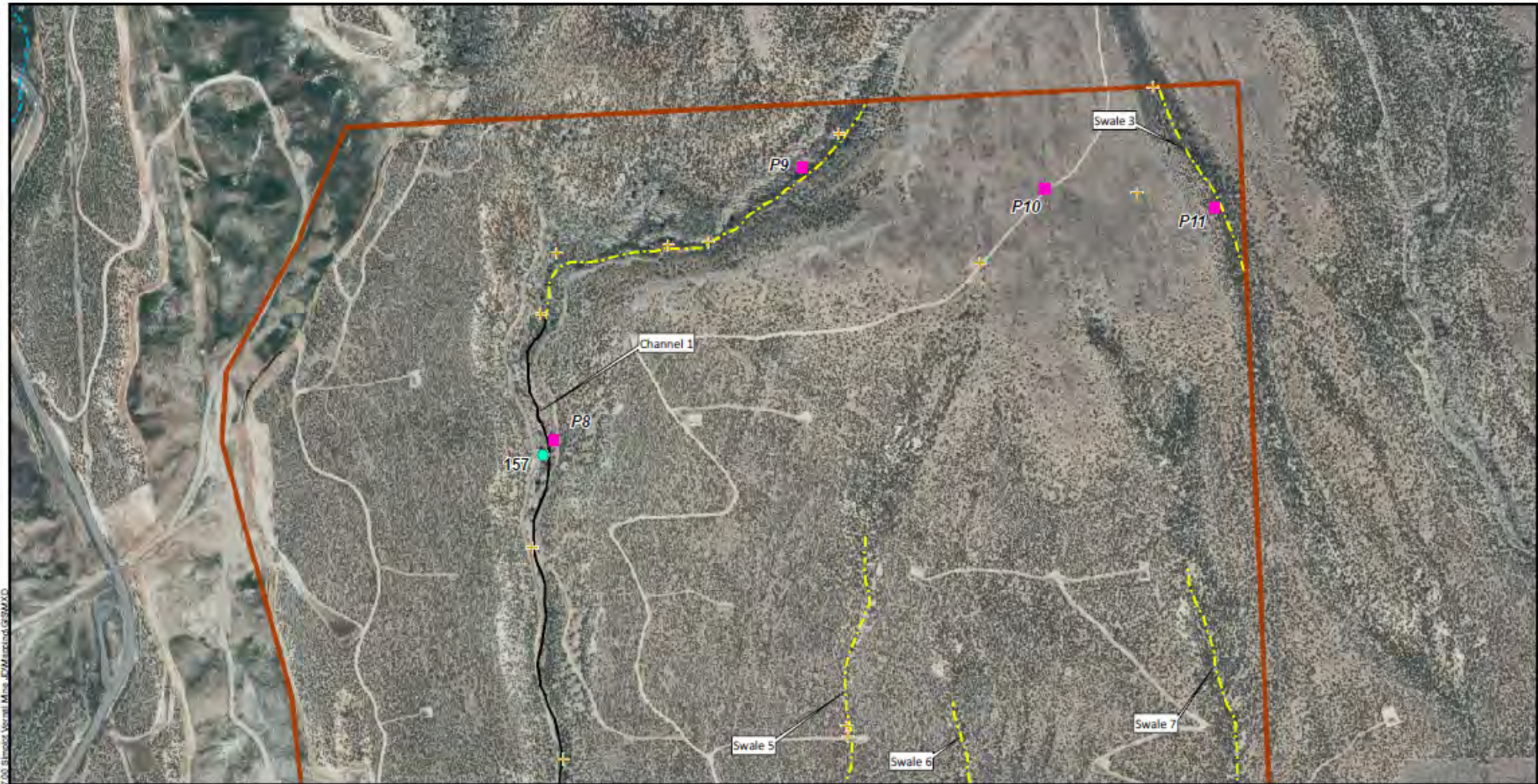
- 2015-2016 Buildout Boundary
- P2 Photograph Location
- 143 Reference Location (OHWM datasheet)
- Data Collection Site
- Channel with OHWM
- Swale without OHWM
- Channel Not Present (Authorized Fill)



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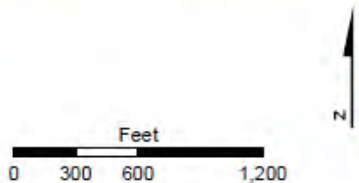
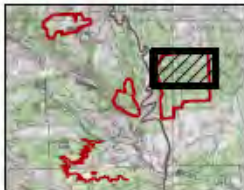
FIGURE 6
2015-2016 BUILDOUT

	DRAWN BY	CHJ	DATE DRAWN	9/8/11
	SCALE	1 inch = 625 feet		



BASE MAP: NAIP IMAGE 2010

- 2017-2027 Buildout Boundary
- P2 Photograph Location
- 157 Reference Location (OHWM datasheet)
- + Data Collection Site
- Channel with OHWM
- Swale without OHWM



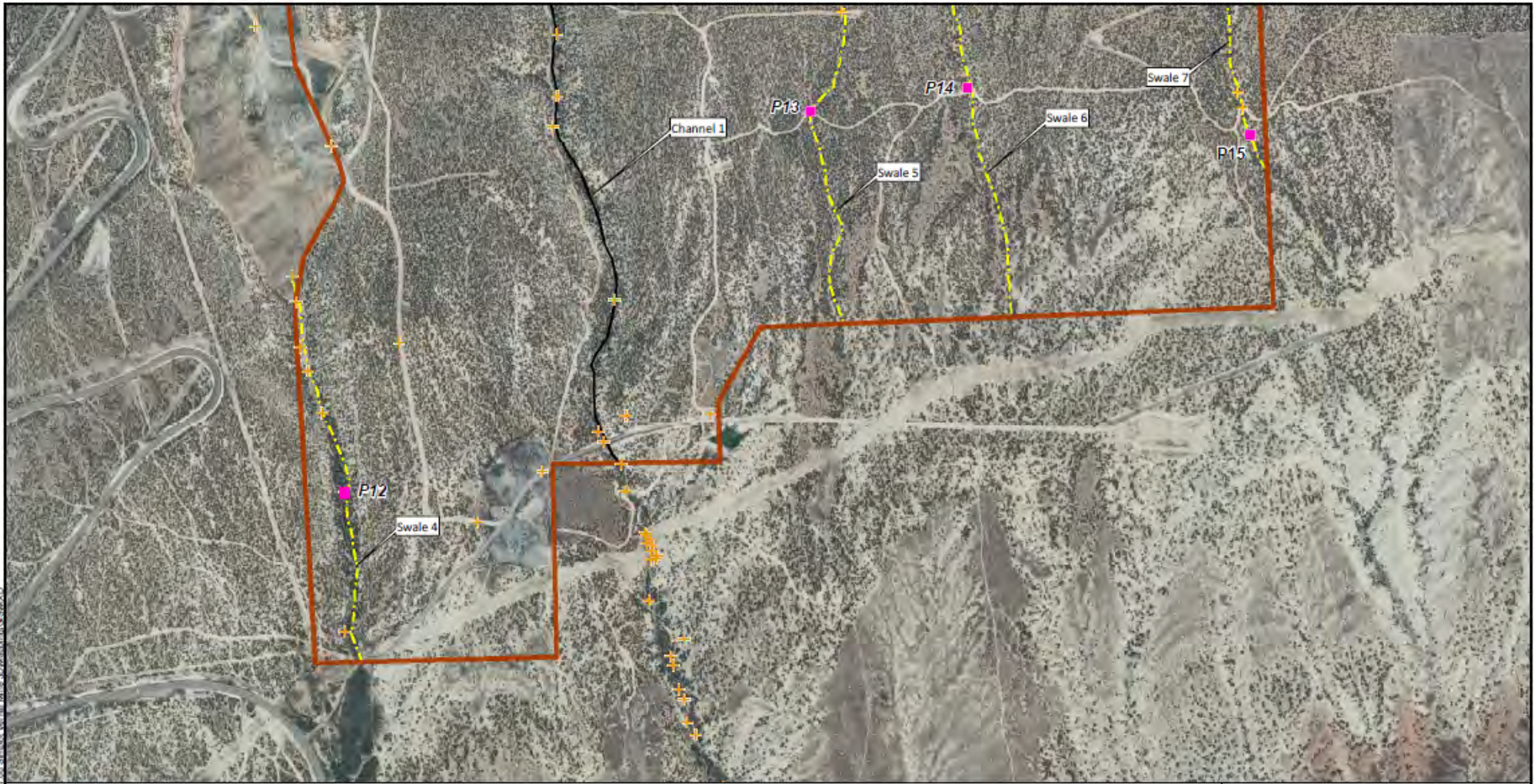
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FIGURE 7
2017 - 2027 BUILDOUT UPPER



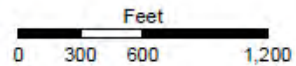
DRAWN BY	CHJ	DATE DRAWN	9/8/11
SCALE		1 inch = 600 feet	

File Path: P:\Jobs\2011\Chilpan09_A1115208_SimpPlot_Verrill_Minor_P2MintPlot_GSM.dwg



BASE MAP: NAIP IMAGE 2010

- 2017-2027 Buildout Boundary
- P8 Photograph Location
- 31 Reference Location (OHWM datasheet)
- + Data Collection Site
- Channel with OHWM
- Swale without OHWM



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FIGURE 8
2017 - 2027 BUILDOUT LOWER



DRAWN BY	CHU	DATE DRAWN	9/8/11
SCALE		1 inch = 600 feet	

File Path: P:\Clients\2011 Clients\AS1167700_Street View Maps - P\MapOutput\GEMAXD

Note: Photopoints are shown on Figure



Channel 1 @ Supplemental Site 1. View downstream. June 21, 2011.



Channel 1 @ Supplemental Site 1. View Upstream. June 21, 2011.



Channel 1 @ Supplemental Site 2. View downstream. June 21, 2011.



Channel 1 @ Supplemental Site 2. View upstream. June 21, 2011.



Overview of Supplemental Site 3. View downstream. October 18, 2011.



Supplemental Site 3. Landscape View upstream. October 18, 2011.