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): February 13, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, **UPPER TRUCKEE WETLAND RESTORATION PRJECT**, **SPK-2002-25094**

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: **California** County/parish/borough: **El Dorado** City: **South Lake Tahoe**
Center coordinates of site (lat/long in degree decimal format): Lat. **38.9364**°, Long. **-119.9953**°
Universal Transverse Mercator: **10 760044.09 4313658.91**
Name of nearest waterbody: Lake Tahoe
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Lake Tahoe**
Name of watershed or Hydrologic Unit Code (HUC): **Lake Tahoe, 16050101**
☒ 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: February 15, 2016
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **are** "*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: As defined at 33 CFR 328.3 (a)(1) Lake Tahoe is an interstate Traditional Navigable Water of the U.S.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

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: 73.54 acres.
Wetlands: 463.12 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual
Elevation of established OHWM (if known): Lake Tahoe 6,229.1

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:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

[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.

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: Lake Tahoe

Summarize rationale supporting determination: **As defined at 33 CFR 328.3 (a)(1) Lake Tahoe is an interstate Traditional Navigable Water of the U.S.**

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": Wetlands WM1, WM27, WM28, WM29, WSM1, WSM2, WSM61, WSM73 and LPM12 are adjacent (as defined at 33 CFR 328.3(c)) to Lake Tahoe, a Traditional Navigable Water of the U.S based on a combination of factors including proximity, position in the landscape and indicators of shallow subsurface connection. Wetlands WM1, WM27, WSM1, WSM61, WSM73 and LPM12 border and are directly touching (i.e., no breaks in connection) Lake Tahoe. Wetlands WSM2, WM28, and WM29 are neighboring waters of Lake Tahoe. Wetland WSM2 is located approximately 70 feet away from Lake Tahoe. Wetland WM28 is located approximately 200 feet away from Lake Tahoe. Wetland WM29 is located approximately 300 feet away from Lake Tahoe. Wetlands WSM2, WM28, and WM29 are directly abutting other wetlands that directly abut Lake Tahoe and their position in the landscape and the soil types provide indicators of a shallow subsurface connection between these wetlands and Lake Tahoe.

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

(i) General Area Conditions:
Watershed size: 56.5 square miles
Drainage area: 56.5 square miles
Average annual rainfall: **30.26** inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☒ Tributary flows directly into TNW.
☐ Tributary flows through one tributary before entering TNW.

Project waters are 1 or less river miles from TNW.
Project waters are 1 or less river miles from RPW.
Project waters are **1 or less** aerial (straight) miles from TNW.

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

Project waters are **1 or less** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]: **Trout Creek flows to the Upper Truckee River and to Lake Tahoe. The upper Truckee River flows to Lake Tahoe.**
Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☒ Natural
☐ Artificial (man-made). Explain:
☒ Manipulated (man-altered). Explain: In the 1950s and 1960s the Upper Truckee River was straightened and deepened.

Tributary properties with respect to top of bank (estimate):
Average width: 5-85 feet
Average depth: 1-14 feet
Average side slopes 2:1**.**

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: Delineation area is large, tributaries are eroding in some areas and stable in others. The Upper Truckee River and Trout Creek are seasonally flooded, perennial meandering stream channels.
Presence of run/riffle/pool complexes. Explain: Present in upper reaches
Tributary geometry: **Meandering**
Tributary gradient (approximate average slope): 1 %

(c) Flow:
Tributary provides for: **Perennial**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime:
Other information on duration and volume: 5-2,000 cubic feet per second depending on seasonal conditions

Surface flow is: **Discrete and confined.** Characteristics:

Subsurface flow: **unknown**. 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
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ 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: ☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;

[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.
[7]Ibid.

☐ fine shell or debris deposits (foreshore)
☐ physical markings/characteristics
☐ tidal gauges
☐ other (list):
☐ 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: **Water is generally clear except during spring time snow melt and summer thunderstorms**
Identify specific pollutants, if known:

(iv) Biological Characteristics. Channel supports (check all that apply):
☒ Riparian corridor. Characteristics (type, average width): **700 foot average width palusrine emergent**
☒ Wetland fringe. Characteristics: **palusrine emergent**
☒ Habitat for:
☒ Federally Listed species. Explain findings: Lahontan cutthroat trout (LCT; Oncorhynchus clarkii henshawi)
☐ Fish/spawn areas. Explain findings:
☐ Other environmentally-sensitive species. Explain findings:
☒ Aquatic/wildlife diversity. Explain findings: **riparian corridor within a developed suburban area allows for wildlife movement and forage**

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: **0.01-47** acres
Wetland type. Explain: Palustrine emergent, Palustrine Scrub-Shrub and Palustrine forested
Wetland quality. Explain: **Good. Intact riparian corridor surrounding the Upper Truckee River and Trout Creek from headwaters to Lake Tahoe.**
Project wetlands cross or serve as state boundaries. Explain: **Wetlands are entirely within the State of California**

(b) General Flow Relationship with Non-TNW:
Flow is: **Perennial flow**. Explain: **The Upper Truckee River and Trout Creek are mapped as a blue line streams on the 1992 South Lake Tahoe USGS map.**

Surface flow is**: discrete and confined**
Characteristics:

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

(c) Wetland Adjacency Determination with Non-TNW:
☒ Directly abutting
☒ Not directly abutting
☒ Discrete wetland hydrologic connection. Explain: **Connected to the Upper Truckee River and Trout Creek through shallow, unconfined groundwater movement through underlying permeable sediments**
☐ Ecological connection. Explain:
☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW
Project wetlands are **1-2** river miles from TNW.
Project waters are **1-2** aerial (straight) miles from TNW.
Flow is from: **Wetland to Navigable waters.**
Estimate approximate location of wetland as within the **2-year or less** 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: **Water is generally clear except during spring time snow melt and summer thunderstorms.**
Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):
☒ Riparian buffer. Characteristics (type, average width): **700 foot average width palusrine emergent**

☐ 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: **Study area is within the riparian corridor surrounding the Upper Truckee River and Trout Creek.**

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

All wetland(s) being considered in the cumulative analysis: **30 (or more)**
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)
WM1	(Y)	34.167	WSM20	(Y)	5.2301
WM2	(Y)	2.646	WSM21	(Y)	0.2666
WM3	(Y)	0.558	WSM22	(N)	0.0736
WM4	(Y)	0.010	WSM23	(Y)	0.0686
WM5	(Y)	5.443	WSM24	(Y)	3.2045
WM6	(Y)	0.111	WSM25	(N)	1.2547
WM7	(Y)	1.576	WSM26	(Y)	0.4787
WM8	(Y)	34.682	WSM27	(Y)	1.1692
WM9	(Y)	0.846	WSM28	(Y)	0.314
WM10	(Y)	0.005	WSM29	(Y)	0.031
WM11	(Y)	0.146	WSM30	(Y)	0.04
WM12	(Y)	0.004	WSM31	(Y)	0.1576
WM13	(Y)	0.011	WSM32	(Y)	0.014
WM14	(Y)	0.019	WSM33	(N)	1.1826
WM15	(Y)	0.007	WSM34	(N)	1.1402
WM16	(Y)	0.034	WSM35	(Y)	0.6404
WM17	(Y)	0.154	WSM36	(Y)	0.4412
WM18	(Y)	7.511	WSM37	(N)	0.6766
WM19	(Y)	17.849	WSM38	(Y)	0.3479
WM20	(N)	1.935	WSM39	(Y)	0.5249
WM21	(Y)	32.739	WSM40	(Y)	1.7541
WM22	(Y)	23.056	WSM41	(Y)	0.342
WM23	(Y)	0.002	WSM42	(Y)	5.0258
WM24	(N)	0.739	WSM43	(Y)	8.7354
WM25	(Y)	1.402	WSM44	(Y)	0.2399
WM26	(Y)	2.828	WSM45	(Y)	0.3927
WM27	(Y)	3.350	WSM46	(Y)	0.9897
WM28	(N)	0.195	WSM47	(Y)	0.1192
WM29	(N)	0.218	WSM48	(Y)	0.1937
WM30	(Y)	7.585	WSM49	(N)	1.7689
WM31	(N)	1.358	WSM50	(N)	1.12
WM32	(Y)	1.257	WSM51	(Y)	2.8806
WM33	(Y)	7.750	WSM52	(N)	1.827
WM34	(N)	11.384	WSM53	(Y)	1.9058
WM35	(N)	1.657	WSM54	(N)	2.1217
WM36	(N)	0.190	WSM55	(Y)	0.6139
WM37	(Y)	1.699	WSM56	(N)	0.3286
WM38	(Y)	5.564	WSM57	(Y)	0.6014
WM39	(N)	0.635	WSM58	(N)	1.1348
WM40	(Y)	1.111	WSM59	(Y)	3.1429
WM41	(Y)	1.378	WSM60	(Y)	1.841
WM42	(Y)	0.662	WSM61	(Y)	0.4234
WM43	(Y)	1.416	WSM62	(Y)	4.7122
WM44	(Y)	2.399	WSM63	(Y)	0.6374
WM45	(Y)	0.359	WSM64	(Y)	8.1913
WM46	(Y)	2.085	WSM65	(Y)	0.2288
WM47	(N)	1.465	WSM66	(Y)	0.0305
WM48	(N)	0.268	WSM67	(Y)	0.0355
WM49	(Y)	0.771	WSM68	(Y)	0.0739

WM50	(Y)	0.246	WSM69	(Y)	1.5006
WSM1	(Y)	0.36	WSM70	(Y)	0.4673
WSM2	(N)	0.72	WSM71	(Y)	0.2589
WSM3	(Y)	8.55	WSM72	(Y)	0.0668
WSM4	(Y)	8.41	WSM73	(Y)	0.1875
WSM5	(Y)	4.65	WSM74	(Y)	0.1046
WSM6	(Y)	0.09	WSM75	(Y)	0.217
WSM7	(Y)	0.17	WSM76	(Y)	0.0362
WSM8	(Y)	5.50	LPM1	(N)	3.95
WSM9	(Y)	0.26	LPM2	(N)	0.92
WSM10	(Y)	1.48	LPM3	(N)	0.63
WSM11	(Y)	0.10	LPM4	(Y)	14.09
WSM12	(Y)	0.04	LPM5	(Y)	1.54
WSM13	(Y)	1.06	LPM6	(Y)	8.57
WSM14	(Y)	47.76	LPM7	(Y)	6.6
WSM15	(Y)	3.97	LPM8	(N)	0.82
WSM16	(Y)	0.07	LPM9	(Y)	2.69
WSM17	(N)	0.49	LPM10	(Y)	6.3
WSM18	(Y)	0.20	LPM11	(Y)	35.56
WSM19	(Y)	0.34	LPM12	(Y)	2.25

Summarize overall biological, chemical and physical functions being performed: **Groundwater recharge and streamflow maintenance, fish and wildlife habitat, water quality improvement through sediment removal, carbon and detritus contributions and flood protection through runoff detention.**

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: **The wetlands labeled as WM20, WM24, WM31, WM34, WM35, WM36, WM39, WM 47, WM48, WSM17, WSM22, WSM25, WSM33, WSM34, WSM37, WSM49, WSM50, WSM52, WSM54, WSM56, WSM 58, LPM1, LPM2, LPM3, and LPM8 (subject wetlands) on attached maps Appendix C were determined to**

be adjacent to the Upper Truckee River and/or Trout Creek, both Relatively Permanent Waters (RPW). The findings of AECOM clearly demonstrate that these wetlands are directly abutting other wetlands and connected to the Upper Truckee River and/or Trout Creek through shallow, unconfined groundwater movement through underlying permeable sediments. As such, they can be thought of as a wetland complex consisting of a mosaic of riparian, scrub-shrub, forested and emergent wetlands connected by the local water table that flow into Trout Creek and/or the Upper Truckee River into Lake Tahoe a Traditional Navigable Water of the U.S regulated under Section 10 of the Rivers and Harbors Act.

In their 2010 Lake Tahoe Total Maximum Daily Load Report the California Regional Water Quality Control Board, Lahontan Region and the Nevada Division of Environmental Protection found that the Upper Truckee River and Trout Creek are directly associated with the highest turbidity levels in the nearshore of Lake Tahoe during spring time snow melt and summer thunderstorms. The report also found that wetlands abutting and adjacent to Trout Creek are important in reducing runoff and turbidity in Lake Tahoe. The subject wetlands in combination with other similarly situated waters (those wetlands that have an unbroken hydrologic connection, via surface or subsurface flow, with the RPW) in the Upper Truckee River and Trout Creek watersheds have a significant effect on the physical, chemical and biological integrity of Lake Tahoe.

The subject wetlands and similarly situated wetlands provide infiltration and reduce runoff thereby reducing flow volumes and turbidity delivered downstream to Lake Tahoe. The 2010 Lahontan and NDEP report found that wetlands abutting and adjacent to Trout Creek are important in reducing turbidity in Lake Tahoe during spring time snow melt and summer thunderstorms and recommended constructing more wetlands to reduce turbidity in Lake Tahoe.

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 **45.32** acres.
- ☒ Wetlands adjacent to TNWs: 41.88 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: **USGS has mapped the Upper Truckee River and Trout Creek as perennial. USGS Stream gauge 10336610 on the Upper Truckee River shows permanent but seasonally variable streamflow with peak flows November-June. USGS Stream gauge 10336780 on Trout creek shows permanent but seasonally variable streamflow with peak flows in May and June**
- ☐ 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: **25,000** linear feet **28.22 acres**.
- ☐ 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: **The wetlands were observed by AECOM as directly touching (i.e., no breaks in connection) Lake Tahoe, the Upper Truckee River and Trout Creek. The Upper Truckee River, Trout creek and the wetland complex are mapped on NWI and the applicant supplied delineation. The Upper Truckee River and Trout Creek are mapped as perennial streams by USGS.**

[8]See Footnote # 3.

☐ 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: **383.85** 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: **37.39** 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.
☐ 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:
☐ 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:

[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.*

☐ 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): linear feet, 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:
- ☒ 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; CA-EMERALD BAY**
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx**
- ☒ National wetlands inventory map(s). Cite name: **http://www.fws.gov/wetlands/Data/Mapper.html**
- ☐ State/Local wetland inventory map(s):
- ☒ FEMA/FIRM maps: **Number 060040 Panel 386 Suffix F**
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☒ Photographs: ☐ Aerial (Name & Date): Google Earth
  or ☐ Other (Name & Date):
- ☐ Previous determination(s). File no. and date of response letter:
- ☐ Applicable/supporting case law:
- ☒ Applicable/supporting scientific literature: **Rowe, Timothy G., and Kip K. Allander. Surface-and Ground-Water Characteristics in the Upper Truckee River and Trout Creek Watersheds, South Lake Tahoe, California and Nevada, July-December 1996. No. 2000-4001. US Dept. of the Interior, US Geological Survey; Branch of Information Services [distributor],, 2000.**
- ☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

The 136 mapped wetlands form a wetland complex that directly abut Lake Tahoe, the upper Truckee River and Trout Creek. Trout Creek drains into Lake Tahoe and the Upper Truckee River which drains directly into Lake Tahoe a Traditional Navigable Water of the U.S regulated under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Each wetland and stream is documented on individual forms located in the documents submitted by AECOM on February 25, 2016. These sheets include the general area conditions, physical characteristics, chemical characteristics, and biological characteristics of each wetland/water evaluated so the responses provided in B and D of this document should be considered averages.