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 14, 2011

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Bryce Canyon National Park, Failing Sewage System and Wildlife Pullouts, SPK-2009-01022, Wetlands DH-Wet, HH-Wet, MC-Wet, MC Pullout-Wet and Sewer Lagoon OW-SL

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **Utah** County/parish/borough: **Garfield** City: **Approx. 11 miles south of Panguitch**
Center coordinates of site (lat/long in degree decimal format): Lat. **37.6430°**, Long. **-112.1729°**
Universal Transverse Mercator: **12**
Name of nearest waterbody: **Daves Hollow**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Piute Lake**
Name of watershed or Hydrologic Unit Code (HUC): **East Fork of Sevier, 16030002**
☒ 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 7, 2011**
☒ Field Determination. Date(s): **September 10, 2010**

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: **Wetlands DH-Wet, HH-Wet, MC-Wet, and MC Pullout-Wet are non-jurisdictional because they are intrastate, non-navigable waters with no significant nexus to traditional navigable waters. The Sewage Lagoon OW-SL is non-jurisdictional because waste treatment systems, including treatment ponds or lagoons designed to meet Clean Water Act requirements are not waters of the United States [33 CFR 328.3(a)(7)].**

SECTION III: CWA ANALYSIS

[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.

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

(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

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

☐ 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
☐ 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;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.
☐ tidal gauges
☐ other (list):

(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:

[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.

☐ 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: **0.93** acres
Wetland type. Explain: **Palustrine Emergent. Alluvial hollows, linear topographic depressions that slope towards the northwest.**
Wetland quality. Explain: **DH-Wet: Functional Assessment Class I (Total points=79.3%). HH-Wet: Functional Assessment Class I (Total points=67.2%). MC-Wet and MC Pullout-Wet: Functional Assessment Class I (Total points=76%).**
Project wetlands cross or serve as state boundaries. Explain: **No; wetland boundaries are within the Park.**

(b) General Flow Relationship with Non-TNW:
Flow is: **Ephemeral flow**. Explain: **Wetlands MC-Wet and MC Pullout-Wet, and easterly Wetland HH-Wet, have topographic and man-made connectivity to Wetland DH-Wet, which flows to Daves Hollow (intermittent RPW), which flows to East Fork of Sevier River (perennial RPW), which flows to Sevier River (perennial RPW), which flows to Piute Reservoir (Navigable-In Fact TNW).**

Surface flow is**: Discrete and confined**
Characteristics: **In most years, flow from snowmelt and summer storms enters the depressional wetlands where the water evaporates or percolates. During high snowmelt, when wetlands are inundated from four to six weeks, or in response to a 24-hour 100-year storm event, water south of the mixing circle intersection would flow north, possibly pool at Wetlands MC-Wet and MC Pullout-Wet, and then drain through three side-by-side culverts under the Mixing Circle Access Road, and flow in an upland swale, down slope, on the east side of Highway 63. Water southeast of the historic housing would flow northwest, possibly pool at Wetland HH-Wet, and then drain through two side-by-side culverts under the access road, and flow down slope in an upland swale towards Highway 63 where it would combine with the mixing circle flow. This combined flow would enter a 3-foot culvert passing under Highway 63, then flow north in an upland swale to Wetland DH-Wet, possibly pool, and then drain though historic drop structures in an upland swale, enter a man-made channel constructed around the westerly side of the four sewage lagoon cells (OW-SL), pass through two side-by-side culverts, and flow to Daves Hollow an intermittent RPW (USGS blue line), which flows to East Fork of Sevier River (perennial RPW), which flows to Sevier River (perennial RPW), which flows to Piute Reservoir (Navigable-In Fact TNW).**

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: **Wetlands MC-Wet and MC Pullout-Wet and HH-Wet are about 7000 feet and 5000 feet south, respectively, and connected to Wetland DH-Wet by upland swales. DH-Wet is about 1800 feet south of, and connected to Daves Hollow, an intermittent RPW (USGS blue line), by an upland swale and man-made channel constructed around OW-SL. The upland swale flow between Wetland DH-Wet and Daves Hollow appears discontinuously for about 750 feet, until it passes through the man-made channel culverts where jurisdictional features (scour, bed/bank, ordinary high water mark, etc) become apparent immediately down slope. Daves Hollow intermittently flows, in response to snowmelt and summer rainfall, and enters the East Fork of Sevier River about 4.5 miles downstream of the man-made channel culverts. From the Daves Hollow/East Fork confluence, surface water flows about 53 miles to the Sevier River, and enters Piute Reservoir about 1500 feet downstream of the East Fork/Sevier River confluence.**
☐ Ecological connection. Explain:
☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW
Project wetlands are **30 (or more)** river miles from TNW.
Project waters are **30 (or more)** aerial (straight) miles from TNW.
Flow is from: **Wetland to navigable waters.**
Estimate approximate location of wetland as within the **500-year or greater** 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: **Potentially recieves low to moderate levels of sediment, nutrients, or other compounds through surface water runoff from near-by-roads, groundwater, or direct input. Bisecting roads likely positively impacts water storage cabability by backing up water and temporarily detaining it.**

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: **DH-Wet: Iris missouriensis (5%), Juncus arcticus (38%), Pascopyrum smithii (5%), Carex praegracilis (36%), Astragalus agrestis (4%). HH-Wet: Juncus arcticus (50%), Carex praegracilis (48%). MC-Wet: Carex praegracilis (82%). MC Pullout-Wet: Iris missouriensis (5%). Achillea lanulosa (2%), Pascopyrum smithii (5%), Artemisia frigida (2%), Taraxacum officinale (<1%), Carex praegracilis (49%), Juncus arcticus (29%).**

☒ Habitat for:

☒ Federally Listed species. Explain findings: **DH-Wet, HH-Wet, MC-Wet, and MC Pullout-Wet are primary habitat for small populations of the federally threatened Utah Prairie Dog (Cynomys parvidens).**

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: **None**

☐ 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: **4**

Approximately **0.93** 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)
DH-Wet (N)	**0.35**	**HH-Wet (N)**	**0.20**
MC-Wet (N)	**0.02**	**MC Pullout-Wet (N)**	**0.36**

Summarize overall biological, chemical and physical functions being performed: **These wetlands provide biological habitat, enhance water quality and storage, and provide ecological benefit to surrounding and downstream waters.**

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: **Wetlands MC-Wet and MC Pullout-Wet and HH-Wet are about 7000 feet and 5000 feet south, respectively, and connected to Wetland DH-Wet by upland swales. DH-Wet is about 1800 feet south of, and connected to Daves Hollow, an intermittent RPW (USGS blue line), by an upland swale and man-made channel constructed around OW-SL. The upland swale flow between DH-Wet and Daves Hollow appears discontinuously for about 750 feet, until it passes through the man-made channel culverts where jurisdictional features (scour, bed/bank, ordinary high water mark, etc) become apparent immediately down slope. Daves Hollow intermittently flows, in response to snowmelt and summer rainfall, and enters the East Fork of Sevier River about 4.5 miles downstream of the man-made channel culverts. From the Daves Hollow/East Fork confluence, surface water flows about 53 miles to the Sevier River, and enters Piute Reservoir about 1500 feet downstream of the East Fork/Sevier River confluence. Although DH-Wet, HH-Wet, MC-Wet, and MC Pullout-Wet are hydrologically connected to Puite Reservoir, flow from these depressional wetlands occurs infrequently and any potential downstream effects would be insignificant by the time the water traveled about 60 miles downstream to Piute Reservoir. Therefore, DH-Wet, HH-Wet, MC-Wet, and MC-Pullout-Wet do not have a significant nexus to Piute Reservoir (Navigable-In Fact TNW) .**

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.

[8]See Footnote # 3.

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.

☐ 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: **Although DH-Wet, HH-Wet, MC-Wet, and MC Pullout-Wet are hydrologically connected to Puite Reservoir, flow from these depressional wetlands occurs infrequently and any potential downstream effects would be insignificant by the time the water traveled about 60 miles downstream to Piute Reservoir. Therefore, DH-Wet, HH-Wet, MC-Wet, and MC-Pullout-Wet are non-jurisdictional because they do not have a significant nexus to Piute Reservoir (Navigable-In Fact TNW) .**

☒ Other: (explain, if not covered above): **The Sewage Lagoon OW-SL is non-jurisdictional because waste treatment systems, including treatment ponds or lagoons designed to meet Clean Water Act requirements are not waters of the United States [33 CFR 328.3(a)(7)].**

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): linear feet, wide.

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[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.*

☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☒ Wetlands: **0.93** 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: **Bryce Canyon National Park, Wetland Finding Final Report, Rehabilitation of the Failing Park Sewage System, construction of a Wildlife Pullout at the Mixing Circle Intersection, Task Order T2011090583, Contract No. 10F-0105K, July 2010. Supplemental National Park Service information, emailed January 12, 2011 and January 27, 2011.**
- ☒ 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; UT-BRYCE POINT**
- ☐ USDA Natural Resources Conservation Service Soil Survey. Citation:
- ☐ National wetlands inventory map(s). Cite name:
- ☐ State/Local wetland inventory map(s):
- ☐ FEMA/FIRM maps:
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☐ Photographs: ☐ Aerial (Name & Date):
  or ☐ Other (Name & Date):
- ☐ Previous determination(s). File no. and date of response letter:
- ☐ Applicable/supporting case law:
- ☐ Applicable/supporting scientific literature:
- ☒ Other information (please specify): **Rainfall/snowfall reference: Desert Research Institute, Western Regional Climate Center. http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ut1006.**

B. ADDITIONAL COMMENTS TO SUPPORT JD:

In July 2010, a Wetlands Delineation was prepared and, on August 3, 2010, National Park Service requested an approved jurisdictional determination for Bryce Canyon National Park, Rehabilitation of the Failing Park Sewage System and Construction of a Wildlife Pullout at the Mixing Circle Intersection. On September 10, 2010, a field visit was conducted to verify the delineation. On January 12, 2011 and January 27, 2011, National Park Service submitted additional biological and hydrological information.

Precipitation generally falls as snow in the winter and rain in the summer. The average annual total precipitation is 15.24 inches. The average total snowfall is 93.2 inches. During the growing season, most of the precipitation (3.42 inches) occurs during the summer months of July, August, and September. Generally, surface drainages flow in response to high snow melt and rain events.

One waterbody (OW-SL) and four wetland complexes (DH-Wet, HH-Wet, MC-Wet, MC Pullout-Wet) were delineated and described as follows.

Area ID	Feature Name	General Location	Size (acres)
OW-SL	Sewer Lagoon	Daves Hollow West	8.40
DH-Wet	Dave's Hollow	Daves Hollow West	0.35
HH-Wet	Historic Housing	Daves Hollow East	0.20
MC-Wet	Mixing Circle	Mixing Circle Intersection	0.02
MC Pullout-Wet	Mixing Circle	Mixing Circle Intersection	0.36

Sewage Lagoon OW-SL is a waste treatment system designed to meet Clean Water Act requirements.

DH-Wet, HH-Wet, MC-Wet, and MC Pullout-Wet are primary habitat for small populations of the federally threatened Utah Prairie Dog (Cynomys parvidens), that live either directly within the wetland area or adjacent to it. DH-wet may provide periodic, but not annual, communal breeding habitat for Great Basin Spadefoot toad (Spea intermontana). This species is not a federally listed species, a Utah State Tier I, II, or III species, nor does it have any regional conservation issues or designations.

Throughout the study area, the wetlands exhibit similar hydrology, vegetation, and soils. Hydrology: All three wetlands are located in alluvial hollows, linear topographic depressions that slope northwest toward Emery Canyon and Daves Hollow (intermittent RPW). As evidenced by old channels and check dams cut within several of the hollows, these features may have historically held more water for longer periods than under current conditions. Vegetation: All wetlands are dominated by palustrine emergent

vegetation, specifically meadow sedge (Carex praegracilis) and Artic rush (Juncus arcticus var. balticus). Fragmentation of the hydrophytic community from encroachment of Western wheatgrass and other upland species is evident in all areas. This community modification has resulted in the formation of "complexes", multiple wetland features within a general area. Soils: No hydric soils indicators were found within areas of hydrophytic vegetation. Soils within all wetland areas matched the listed area type, Venture silty loam. The Venture Series are loamy-skeletal, mixed, suparactive, frigin, petrocalcic paleustolls not listed on the National Hydric Soils list.

Seasonally ponded, depressional wetlands occur in basins and valleys throughout the Western Mountains. Most are perched systems, with water ponding above a restrictive soil layer, such as a hardpan or clay layer that is at or near the surface. Some of these wetlands lack hydric soil indicators and require further analysis according to procedures described in the April 2008, Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, Final Report. Although hydrology and vegetation were present at DH-Wet, HH-Wet, MC-Wet, and MC Pullout-Wet, the Wetlands Delineation did not evaluate problematic hydric soil factors. According to Procedure 4e in the Western Mountains Regional Supplement, depressional wetlands soils are considered hydric if repeated direct hydrologic observations determine the soils are ponded or flooded for 14 or more consecutive days during the growing season in most years (at least 5 years in 10 or 50 percent or higher probability). Park staff observations found the wetlands hold water for 4 to 6 weeks during high snowfall years, and up to a week during a typical monsoon season in July. The Wetlands Delineation reports surface water is present for longer periods in most years (3 to 6 months/year). Therefore, according to Procedure 4e, it is reasonable to assume the wetland soils are hydric. Since hydrology, vegetation, and soil factors are present, Wetlands DH-Wet, HH-Wet, MC-Wet, and MC Pullout-Wet meet the Corps definition of Wetland.

The September 10, 2010 field visit verified a hydrologic connection between HH-Wet, DH-Wet, and Daves Hollow, an intermittent RPW (USGS blue line). On January 27, 2011, National Park Service documented a hydrologic connection between Wetlands MC-Wet and MC Pullout-Wet and Wetland DH-Wet.

In most years, flow from snowmelt and summer storms enters the depressional wetlands where the water evaporates or percolates. During high snowmelt, when wetlands are inundated from four to six weeks, or in response to a 24-hour 100-year storm event, water south of the mixing circle intersection would flow north, possibly pool at MC-Wet and MC Pullout-Wet, and then drain through three side-by-side culverts under the Mixing Circle Access Road, and flow in an upland swale, about 4000 feet down slope, on the east side of Highway 63. Water southeast of the historic housing would flow northwest, possibly pool at HH-Wet, and then drain through two side-by-side culverts under the access road, and flow about 3000 feet down slope in an upland swale towards Highway 63 where it would combine with the mixing circle flow. This combined flow would enter a 3-foot culvert passing under Highway 63, then flow about 2000 feet north in an upland swale to DH-Wet, possibly pool, and then drain though historic drop structures in an upland swale, enter a man-made channel constructed around the westerly side of the four sewage lagoon cells (OW-SL), and pass through two side-by-side culverts. The upland swale flow between DH-Wet and Daves Hollow appears discontinuously for about 750 feet, until it passes through the man-made channel culverts where jurisdictional features (scour, bed/bank, ordinary high water mark, etc) become apparent immediately down slope. Daves Hollow intermittently flows, in response to snowmelt and summer rainfall, and enters the East Fork of Sevier River about 4.5 miles downstream of the man-made channel culverts. From the Daves Hollow/East Fork confluence, surface waters flow about 53 miles to the Sevier River, and enter Piute Reservoir about 1500 feet downstream of the East Fork/Sevier River confluence.