STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH

Section 401 Water Quality Certification No. DWQ-2021-06002

Project Proponents: Michael McKee, Executive Director
Seven County Infrastructure Coalition
294 East 100 South
Price, Utah 84501

Mark Hemphill, Senior Vice President – Program Management
Uinta Basin Railway, LLC
400 West Morse Boulevard, Suite 220
Winter Park, Florida 32789

Project: The Seven County Infrastructure Coalition and the Uinta Basin Railway, LLC (the Project Proponents) propose an 88-mile-long rail line (the Uinta Basin Railway, or Project). According to the Project Proponents, the purpose of the Project is to operate a common-carrier rail line connecting the Uinta Basin to the common carrier rail network. The Project would cross lands within the Uintah and Ouray Reservation, lands claimed by the Ute Indian Tribe as "Indian Country", and the U.S. Forest Service Ashley National Forest. The Environmental Protection Agency (EPA) has determined that the Administrator is the 401 Water Quality Certifying Authority in these areas. Because the EPA determined the Administrator is the Certifying Authority in these areas, the DWQ will not issue an additional Certification for those lands. The DWQ is the Certifying Authority in all other areas and this Draft 401 Water Quality Certification only addresses waters where DWQ is the Certifying Authority. The Project would permanently impact 10,981 feet (1.43 acres) and temporarily impact 1,508 feet (0.23 acre) of streams; permanently impact 2.06 acres and temporarily impact 0.60 acre of palustrine emergent (PEM) wetlands; and permanently impact 0.35 acre and temporarily impact 0.24 acre of open water. Mitigation for the Project as a whole, including areas where the EPA is the Certifying Authority, would include 10.46 acres of wetland establishment and 7.91 acres (21,509 linear feet) of stream establishment.

Location: Western Terminus near Kyune, Utah: 40.152, -110.084; Eastern Terminus near Myton, Utah: 40.1519, -109.887

Watercourse(s): Price River and tributaries, Beaver Creek and tributaries, Kyune Creek, and Horse Creek (Price River-Beaver Creek Assessment Unit [AU][[1]]); Willow Creek and tributaries, Pole Canyon Creek, and Dry Fork (Willow Creek AU); Indian Canyon Creek and Indian Canyon tributaries (Indian Canyon Creek AU); Antelope Creek (Antelope Creek AU); and PEM wetlands.

USACE Section 404: SPK-2019-00308

Effective Date: Month, Day, Year

[1] The DWQ delineates streams, rivers, lakes and reservoirs into discrete units called Assessment Units. Assessment Units (AUs) are used in identifying waters of the State that have been assessed to determine if they are supporting their designated beneficial uses. See https://deq.utah.gov/legacy/programs/water-quality/monitoring-reporting/assessment/docs/2011/04Apr/IR2008/Part1/2008_Part-1-IR_CWB10102010.pdf for additional information.

Table of Contents

I. Definitions

A. **Designated Beneficial Uses** means a water's present most reasonable uses, grouped by use classes to protect the uses against controllable pollution. Beneficial uses designated within each class are described in Utah Administrative Code (UAC) R317-2-6 and waterbodies beneficial uses can be found in UAC R317-2-13. For the purposes of this document, the term "designated beneficial uses" will be used to describe all uses required to be protected by Utah water quality standards and antidegradation policy.

B. **Existing Uses** *"means those uses actually attained in a water body on or after November 28, 1975, whether or not they are included in the water quality standards."* UAC R317-1-1. *"If a situation is found where there is an existing use which is a higher use (i.e., more stringent protection requirements) than that current designated use, the Director will apply the water quality standards and anti-degradation policy to protect the existing use"* UAC R317-2-3.

C. **Total Maximum Daily Load (TMDL)** *"means the maximum amount of a particular pollutant that a waterbody can receive and still meet state water quality standards, and an allocation of that amount to the pollutant's sources."* UAC R317-1-1

D. **303(d) list** is a state's list of impaired and threatened waters, including but not limited to; streams, lakes, and reservoirs adopted to implement the Clean Water Act (CWA) Section 303(d).

E. **Project Proponent** *"means the applicant for license or permit or entity seeking certification*." 40 CFR §121.1

F. **Waters of the United States (WOTUS)** means waterbodies subject to the provisions of the CWA.

II. Acronyms

AU – Assessment Unit
BMPs – Best Management Practices
CFR – Code of Federal Regulations
CWA – Clean Water Act
CY – cubic yards
DEQ – Utah Department of Environmental Quality
DWQ – Utah Division of Water Quality
EPA – Environmental Protection Agency
mg/L – milligrams per liter
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NTU – Nephelometric Turbidity Units
PEM – palustrine emergent
ROW – right of way
SWPPP – stormwater pollution prevention plan
TMDL – Total Maximum Daily Load
TSS – total suspended solids
UAC – Utah Administrative Code
UPDES – Utah Pollutant Discharge Elimination System
USACE – U.S. Army Corps of Engineers
WQS – Utah Water Quality Standards
WOTUS – Waters of the United States

III. Executive Summary

Pursuant to Section 401 of the CWA 33 U.S.C. Section 1251 et seq., the DWQ grants Water Quality Certification (Certification) to Seven County Infrastructure Coalition, a government entity composed on Carbon, Daggett, Duchesne, Emery, San Juan, Sevier and Uintah Counties, and Uinta Basin Railway, LCC (together, the Project Proponents) for the proposed Uinta Basin Railway Project (Project) in Utah, Carbon, Duchesne, and Uintah

Counties, Utah. Certification is subject to the conditions outlined in this document and adherence to any U.S. Army Corps of Engineers (USACE) Section 404 Permit Conditions. The conditions outlined in this Certification are necessary to assure compliance with effluent limitations, monitoring requirements, and/or other applicable laws and regulations adopted for state primacy of the CWA. Condition justification and appropriate citations of Federal and State laws that authorize the condition, as required by 30 CFR Part 121.7, can be found in the section immediately following the conditions.

DWQ's conditions are based on and are necessary to comply with applicable state rules. Specifically, the following Utah rules represent overarching considerations that require the conditions outlined by this document to apply to the USACE Section 404 Permit: Utah's rules promulgating standards of quality for waters of the State affirm "*it shall be unlawful and a violation of these rules for any person to discharge or place any wastes or other substances in such manner as may interfere with designated uses protected by assigned classes or to cause any of the applicable standards to be violated*" UAC R317-2-7.1.a. Additionally, "*all actions to control waste discharges under these rules shall be modified as necessary to protect downstream designated uses*" UAC R317-2-8. As stated in UAC R317-15-6.1 the Director will ordinarily consider whether the proposed discharge "*impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6*" UAC R317-15-6.1.A.1., "*exceeds water quality criteria, either narrative or numeric, in Section R317-2-7*" UAC R317-15-6.1A.2. or "*fails to meet the antidegradation (ADR) requirements of Section R317-2-7*" UAC R317-15-6.1.A.3.

The DWQ participated in a pre-filing meeting with the Project Proponents on April 21, 2021, and received a formal Section 401 Certification Request on June 10, 2021 for the Project. DWQ was notified by Nicole Fresard with the USACE that the reasonable period of time to make a Certification decision is 90 days. This requires the Director to act by September 8, 2021.

IV. Background

The Project Proponents propose the Uinta Basin Railway, an 88-mile-long rail line which would begin near Kyune, Utah at a proposed connection with the existing Union Pacific Railroad Provo Subdivision, and terminate near Myton, Utah in the Uinta Basin. The Project would cross lands within the Uintah and Ouray Reservation, lands claimed by the Ute Indian Tribe as "Indian Country", and the U.S. Forest Service Ashley National Forest. The EPA has determined that the Administrator is the 401 Water Quality Certifying Authority in these areas. Because the EPA determined the Administrator is the Certifying Authority in these areas, the DWQ will not issue an additional Certification for those lands. The DWQ is the Certifying Authority in all other areas and this Draft 401 Water Quality Certification only addresses waters where DWQ as Certifying Authority.

The Uinta Basin Railway would consist of a single main track with sidings to let trails pass each other. The track would be constructed of steel rail and supported by timber, steel, or concrete ties. The rail ROW would generally extend 100-feet wide from the centerline, but could be wider in some locations where rugged topography would require large areas of cut and fill. The Project would include temporary and permanent workspaces, temporary and permanent access roads, 26 bridges and 5 permanent culverts to cross waters of the U.S. (WOTUS), four tunnels and a fifth summit tunnel to pass through the West Tavaputs Plateau near Indian Creek Pass on U.S. Highway 191. Other permanent Project features would include at-grade road crossings, communication towers, signaling and safety equipment, and road realignments. The Project would permanently impact 10,981 feet (1.43 acres) and temporarily impact 1,508 feet (0.23 acre) of perennial and intermittent streams; permanently impact 2.06 acres and temporarily impact 0.60 acre of palustrine emergent (PEM) wetlands[2]; and permanently impact 0.35 acre and

[2] PEM wetlands in the Project area include emergent marsh and wet meadows.

temporarily impact 0.24 acre of open water. The Project includes stream channel realignments in 15 locations, totaling 7,827 feet. Impacts to WOTUS would be mitigated through on-site (along Indian Canyon Creek) and off-site compensatory mitigation activities (along Middle Strawberry River). At these sites, mitigation would consist of rehabilitating the main channel, establishing side channels, and establishing wetlands adjacent to channels and in created floodplain swales. Mitigation for the Project as a whole (including areas where the EPA is the Certifying Authority) would include 10.46 acres of wetland establishment and 7.91 acres (21,509 linear feet) of stream establishment. According to the Project Proponents, construction is anticipated to begin in 2023 and the Project is anticipated to be operational in 2025.

Based on information provided by the Project Proponents, the overall Project purpose is to operate a common-carrier rail line connecting the Uinta Basin to the common carrier rail network using a route that would provide shippers with a viable alternative to trucking. The Project Proponents anticipate that traffic associated with the proposed rail line would consist primarily of trains transporting crude oil from the Uinta Basin to markets across the United States. The Uinta Basin is an isolated geographical region, approximately 12,000 square miles in area, extending from northeastern Utah into northwestern Colorado. Because it is surrounded by high mountains and plateaus with elevations up to 13,500 feet above sea level, the Uinta Basin has limited access to all transportation modes. Currently, all freight moving into and out of the Uinta Basin is transported by trucks on the area's limited road network, which includes one north-south two-lane highway (U.S. Highway 191) and one east-west two-lane highway (U.S. Highway 40).

V. DWQ's Review

The DWQ completed a thorough review of application materials provided by the Project Proponents, including their "Clean Water Act Section 401 Water Quality Certification Request", "Clean Water Act 404 Effects Analysis", "Draft Compensatory Mitigation Plan", relevant portions of the "Uinta Basin Railway Draft Environmental Impact Statement", and associated mapping. The DWQ confirmed which waters DWQ is the Certifying Authority for, and for these waters, confirmed designated beneficial uses pursuant to UAC R317-2-6 and numeric and narrative water quality standards pursuant to R317-2-7 would be met, and completed a Level I Antidegradation Review pursuant to UAC R317-2-3.

VI. Aquatic Resource Impacts

All Waters of the State of Utah (defined in UAC R317-1-1) are protected from pollutant discharges that affect water quality by narrative standards (see UAC R317-2-7.2); broadly, discharges should not become offensive or cause undesirable conditions in human health effects or aquatic life. In addition, some particularly sensitive classes of water are further protected from deleterious effects of specific pollutants by application of numeric criteria to designated beneficial uses of that waterbody. Listed below are the water features, grouped by AUs, impacted by the Project, their associated designated beneficial uses (see UAC R317-2-6 and UAC R317-2-13) and any impairments:

A. Price River-Beaver Creek AU UT14060007-003_00 (includes Price River and tributaries, Beaver Creek and tributaries, Kyune Creek, and Horse Creek)

1. <u>Beneficial Use Designations</u>
    a. Class 1C: Protected for domestic purposes with prior treatment processes as required by the Utah Division of Drinking Water.
    b. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.

c. Class 3A: Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
d. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

2. Impairments and Total Maximum Daily Loads (TMDLs)
Results from the current water quality assessment, as documented in Utah's Final 2016 Integrated Report[3], indicate that the water quality of the Price River-Beaver Creek AU is considered impaired (Assessment Category 5). The Price River-Beaver Creek AU is impaired for dissolved oxygen and OE bioassessment. These impairments impact beneficial use class 3A (cold water aquatic life). The CWA directs states to prepare a plan to restore water quality to impaired waters, otherwise known as TMDL study. A TMDL is required for each parameter and waterbody to define pollutant reduction requirements necessary for the waterbody to meet water quality standards. At present, no TMDLs have been finalized for the Price River-Beaver Creek AU.

3. Antidegradation Review
Waters within the Price River-Beaver Creek AU are considered Category 3 waters for antidegradation purposes. Category 3 waters in Utah are waters where "*point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in Section 3.5*", as described in UAC R317-2-3.4. The antidegradation policy allows for discharges where the water quality effects of the proposed Project are determined to be temporary and limited after consideration of the factors identified in UAC R317-2-3.5.b.4., and where best management practices (BMPs) would be employed to minimize pollution effects.

B. Willow Creek AU UT14060007-004_00 (includes Willow Creek and tributaries, Pole Canyon Creek, and Dry Fork)

1. Beneficial Use Designations
a. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
b. Class 3A: Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
c. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

2. Impairments and TMDLs
Results from the current water quality assessment, as documented in Utah's Final 2016 Integrated Report[4], indicate insufficient data are available to assess the Willow Creek AU.

3. Antidegradation Review
Waters within the Willow Creek AU are considered Category 3 waters for antidegradation purposes. Category 3 waters in Utah are waters where "*point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in Section 3.5*", as described in UAC R317-2-3.4. The antidegradation policy allows for discharges where the water quality effects of the proposed Project are determined to be temporary and limited after consideration of the factors identified in UAC R317-2-3.5.b.4., and where BMPs would be employed to minimize pollution effects.

[3] https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2017-004941.pdf
[4] https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2017-004941.pdf

C. Indian Canyon Creek AU UT14060004-002_00 (includes Indian Canyon Creek, and Indian Canyon tributaries)

1. Beneficial Use Designations
    a. Class 1C: Protected for domestic purposes with prior treatment processes as required by the Utah Division of Drinking Water.
    b. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
    c. Class 3A: Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
    d. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

2. Impairments and TMDLs
Results from the current water quality assessment, as documented in Utah's Final 2016 Integrated Report[5], indicate that the water quality of the Indian Canyon Creek AU is considered impaired (Assessment Category 5). Waters within the Indian Canyon Creek AU are impaired for arsenic, boron, total dissolved soils, and selenium. The arsenic impairment impacts beneficial use class 1C (drinking water); the selenium impairment impacts beneficial use class 3A (cold water aquatic life); and boron and total dissolved solid impairments impact beneficial use class 4 (agricultural uses). The CWA directs states to prepare a plan to restore water quality to impaired waters, otherwise known as TMDL study. A TMDL is required for each parameter and waterbody to define pollutant reduction requirements necessary for the waterbody to meet water quality standards. The TMDLs for Total Dissolved Solids in the Duchesne River Watershed was approved by EPA on July 9, 2007[6] to address these impairments.

3. Antidegradation Review
Waters within the Indian Canyon Creek AU are considered Category 3 waters for antidegradation purposes. Category 3 waters in Utah are waters where "*point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in Section 3.5*", as described in UAC R317-2-3.4. The antidegradation policy allows for discharges where the water quality effects of the proposed Project are determined to be temporary and limited after consideration of the factors identified in UAC R317-2-3.5.b.4., and where BMPs would be employed to minimize pollution effects.

D. Antelope Creek AU UT14060003-005_00 (includes Antelope Creek)

1. Beneficial Use Designations
    a. Class 1C: Protected for domestic purposes with prior treatment processes as required by the Utah Division of Drinking Water.
    b. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
    c. Class 3A: Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
    d. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

[5] https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2017-004941.pdf
[6] https://documents.deq.utah.gov/water-quality/watershed-protection/total-maximum-daily-loads/DWQ-2015-006576.pdf

2. Impairments and TMDLs

Results from the current water quality assessment, as documented in Utah's Final 2016 Integrated Report[7], indicate that the water quality of Antelope Creek is considered impaired (Assessment Category 5). Antelope Creek is impaired arsenic, boron, total dissolved soils, and selenium. The arsenic impairment impacts beneficial use class 1C (drinking water); the selenium impairment impacts beneficial use class 3A (cold water aquatic life); boron and total dissolved solid impairments impact beneficial use class 4 (agricultural uses). The CWA directs states to prepare a plan to restore water quality to impaired waters, otherwise known as TMDL study. A TMDL is required for each parameter and waterbody to define pollutant reduction requirements necessary for the waterbody to meet water quality standards. The TMDLs for Total Dissolved Solids in the Duchesne River Watershed was approved by the EPA on July 9, 2007[8] to address these impairments.

3. Antidegradation Review

Antelope Creek is considered a Category 3 water for antidegradation purposes. Category 3 waters in Utah are waters where "*point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in Section 3.5*", as described in UAC R317-2-3.4. The antidegradation policy allows for discharges where the water quality effects of the proposed Project are determined to be temporary and limited after consideration of the factors identified in UAC R317-2-3.5.b.4., and where BMPs would be employed to minimize pollution effects.

E. PEM Wetlands[9]

1. Beneficial Use Designations

   a. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
   b. Class 3D: Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C including the necessary aquatic organisms in their food chain.

2. Impairments and TMDLs: N/A

3. Antidegradation Review

The PEM wetlands are considered a Category 3 water for antidegradation purposes. Category 3 waters in Utah are waters where "*point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in Section 3.5*", as described in UAC R317-2-3.4. The antidegradation policy allows for discharges where the water quality effects of the proposed Project are determined to be temporary and limited after consideration of the factors identified in UAC R317-2-3.5.b.4., and where BMPs would be employed to minimize pollution effects.

VII. Certification Conditions

A. All activities with a potential discharge to WOTUS must implement and maintain BMPs to fully protect the waterbodies assigned beneficial use(s).

[7] https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2017-004941.pdf
[8] https://documents.deq.utah.gov/water-quality/watershed-protection/total-maximum-daily-loads/DWQ-2015-006576.pdf
[9] In UAC R317-2-13, all waters not specifically classified are presumptively classified 2B and 3D.

B. All activities shall not cause further degradation of impaired waterbodies, as defined in DWQ's most recent 303(d) list, regardless of whether a TMDL has been completed. The Project Proponent must review impairments on the waterbodies where the Project has the potential to discharge and is responsible for ensuring that water quality standards are not exceeded and designated beneficial uses are not impaired.

C. Hazardous and otherwise deleterious materials (e.g. oil, gasoline, chemicals, trash, sawdust, etc.) shall not be stored, disposed of, or accumulated or conveyed through adjacent to or in immediate vicinity WOTUS unless adequate measures and controls are provided to ensure those materials would not enter WOTUS in the State of Utah. **Any spill or discharge of oil or other substance which may cause pollution to WOTUS in the State of Utah, including wetlands, must be immediately reported to the Utah DEQ Hotline at (801) 536-4123, a 24-hour phone number**.

D. Project Proponents conducting activities in or immediately adjacent to WOTUS in the State of Utah with assigned beneficial use class 1C (domestic drinking water), that are upstream 2 miles or less from any intake supply, must notify the water supply operator and the local health department prior to commencement of work. If the water supply operator or the local health department recommends additional BMPs or monitoring, the Project Proponent must consider those recommendations in their Project design.

E. All activities conducted in or immediately adjacent to WOTUS in the State of Utah with assigned beneficial use class 3A (cold water fishery) or has blue ribbon fishery designation must avoid removal of native riparian vegetation that provides stream shading to the maximum extent practicable. Any Projects that approve removal of riparian vegetation that provides shade must require reestablishment of native vegetation that provides equal or greater shade. The Project Proponent shall provide successful reestablishment of native vegetation.

F. All activities conducted in WOTUS in the State of Utah shall be conducted in the "dry" to the maximum extent practicable, by diverting flow utilizing cofferdams, berms constructed of sandbags, clean rock (containing no fine sediment) or other non-erodible, non-toxic material. All diversion materials shall be removed at the completion of the work. The Project Proponent shall consider conducting instream work during low flow conditions and work shall not be conducted during spawning season. Additionally, construction machinery shall not be operated within WOTUS in the State of Utah unless it is unavoidable, in which case it shall be conducted in the "dry" as stated above. The work shall be conducted in a manner to minimize the duration of the disturbance, turbidity increases, substrate disturbance, and minimize the removal of riparian vegetation. Construction machinery shall be clean to prevent the transfer of aquatic invasive species.

G. Permanent culverts must be installed below existing stream bed elevation, to allow natural substrate to reestablish. This is required to prevent downstream impacts to beneficial uses and adhere to the requirements in UAC R317-2-3.

H. Project activities shall not increase water turbidity by more than 10 Nephelometric Turbidity Units (NTUs) in waterbodies classified as beneficial use class 2B for recreation and 3A for cold water aquatic life. Project activities shall not cause an increase in water turbidity by more than 15 NTUS in waterbodies classified as beneficial use class 3D. Project Proponents must continuously monitor turbidity during instream construction to ensure turbidity increases are within the limits listed above. The Project Proponents must provide monthly reports to DWQ during instream construction in waterbodies with class 2B, 3A, and 3D beneficial use designations that include at a minimum: baseline (reference) turbidity measurements in each waterbody where

instream construction is occurring; and identifying any exceedances and duration of exceedances that have occurred during instream work.

I. The Project Proponent must submit a Post-Construction Monitoring Plan to the DWQ for review and approval, for the realignments on Indian Canyon Creek by January 31, 2022. The Monitoring Plan must include a minimum of 5 years post-realignment monitoring and must demonstrate successful realignments of Indian Canyon Creek. Realignment will be considered successful if the realigned channels of Indian Canyon Creek 1) meet USACE-approved mitigation plan requirements and permit conditions, 2) adhere to the antidegradation policy in UAC R317-2-3, and 3) by maintaining designated beneficial uses in UAC R317-2-6. The Monitoring Plan must also propose parameters[10] to be monitored, frequency of monitoring, method of monitoring, and photographic records to ensure successful realignment requirements above are met. In addition to the Monitoring Plan, the Project Proponents must provide annual post-realignment monitoring reports (including photos) on January 31st of each year, for 5 years post re-alignment, to the DWQ to ensure water quality standards, including the antidegradation policy are met.

J. Construction activities that disturb either greater than one acre of land, or less than one acre of land and is part of a larger common plan of development that would disturb greater than one acre, are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Storm Water General Permit for Construction Activities (Permit No. UTRC00000[11]). The permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site, until final stabilization of the project. The SWPPP should include, but not be limited to, final site maps and legible plans, location of storm water outfalls/discharges, and information pertaining to any storm water retention requirements.

K. Dewatering activities, if necessary during construction, may require coverage under the UPDES General Permit for Construction Dewatering (Permit No. UTG070000[12]) applies to the construction dewatering of uncontaminated groundwater or surface water sources due to construction activities; hydrostatic testing of pipelines or other fluids vessels; water used in disinfection of drinking water vessels; and other similar discharges in the State of Utah that have no discharge of process wastewater. The permit requires submission of a Notice of Intent (NOI); maintenance of a discharge log; development and implementation of a dewatering control plan; and monitoring for Flow, Oil & Grease, pH, Total Suspended Solids (TSS), and Chlorine (required when chlorinated water is used and discharged to a stream with a chlorine standard). Discharge Monitoring Reports (DMRs) are required to be submitted monthly, regardless of whether a site discharges in a particular month.

VIII. Condition Justification and Citation

A. Implementation of BMPs. Project approval is conditioned on implementation of BMPs, which are required to be implemented by the antidegradation policy in UAC R317-2-3, water quality standards may be violated unless appropriate BMPs are incorporated to minimize the erosion-sediment and nutrient load. Violations of water quality standards could cause a waterbody to fail to meet its designated beneficial uses. As required by Utah's antidegradation policy UAC R317-2-3.1 "*Existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to*

10 Proposed parameters should demonstrate that water quality standards are being met, beneficial uses are being maintained, and that the project is not contributing to an existing impairment.

11 https://documents.deq.utah.gov/water-quality/stormwater/construction/DWQ-2020-013890.pdf

12 https://documents.deq.utah.gov/water-quality/permits/updes/DWQ-2019-005143.pdf

existing instream water uses." As stated in UAC R317-15-6.1 the Director will ordinarily consider whether the proposed discharge "*impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6*" UAC R317-15-6.1.A.1., "*exceeds water quality criteria, either narrative or numeric, in Section R317-2-7*" UAC R317-15-6.1A.2. or "*fails to meet the antidegradation (ADR) requirements of Section R317-2-7*" UAC R317-15-6.1.A.3 when making a Certification decision. If appropriate BMPs are incorporated, there is assurance that the Project will not violate water quality standards or impair a waterbody's beneficial use.

Citation(s): UAC R317-2-3.1, UAC R317-15-6.1, UAC R317-15-6.1.A.1., UAC R317-15-6.1.A.2., UAC R317-15-6.1.A.3.

B. Protection of Impaired Waterbodies. Waters that are impaired and conjunctively on Utah's most up to date 303(d) list are not currently meeting their designated beneficial uses. According to Utah's Final 2016 Integrated Report[13] the waters identified as impaired are not meeting their designated beneficial uses because "*the concentration of the pollutant- or several pollutants- exceeds numeric water quality criteria, or quantitative biological assessments indicate that the biological designated uses are not supported (Narrative water quality standards are violated)*." Utah's antidegradation policy states "*existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses.*" UAC R317-2-3.1. In order to ensure that proposed Project meets Utah's antidegradation policy and that discharges do not further degrade water quality the Project Proponent needs to be aware of the waterbodies assessment, more specifically if the waterbody is impaired and listed on Utah's most current 303(d) list. If the potential discharge contains pollutants/parameters that the waterbody is listed as impaired for, the Project Proponent needs to take extra precautions to minimize and prevent discharges that could further degrade the waterbodies and prevent the waterbodies from meeting its beneficial and existing uses. Typical pollutants associated with USACE Section 404 permits (e.g. sediment), especially when a waterbody proposed for discharge is impaired, could cause applicable water quality standards to be violated, if appropriate measures are taken. As stated in UAC R317-15-6.1 the Director will ordinarily consider whether the proposed discharge "*impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6*" UAC R317-15-6.1.A.1., "*exceeds water quality criteria, either narrative or numeric, in Section R317-2-7*" UAC R317-15-6.1A.2. or "*fails to meet the antidegradation (ADR) requirements of Section R317-2-7*" UAC R317-15-6.1.A.3. when making a Certification decision.

Citation(s): UAC R317-2-3.1, UAC R317-2.1.A, UAC R317-15-6.1, UAC R317-15-6.1.A.1., UAC R317-15-6.1.A.2., UAC R317-15-6.1.A.3.

C. Proper Storage of Hazardous and Otherwise Deleterious Materials. Project approval is conditioned on proper storage of hazardous and otherwise deleterious materials, and notification of any discharge of those materials, to assure that water quality and narrative standards are not violated. When projects are occurring in or around waterbodies, there is a chance for pollutants to inadvertently be spilled/discharged into waterbodies due to increased risk from project related activities (e.g. presence of machinery, onsite chemical and gas storage, improper waste storage, and failure to use proper BMPs). To prevent or reduce the possibility that hazardous and otherwise deleterious materials are inadvertently discharged into a waterbody, Project Proponents must not store, dispose of, or accumulated such materials adjacent to or in immediate vicinity of WOTUS unless adequate measures and controls are provided to ensure those materials would not enter waters of the State. If there is a discharge to WOTUS in the State of Utah, it must be immediately reported to the DEQ, as stated in Utah Code Section 19-5-114. An inadvertent discharge of pollutants can cause violations with Utah's Narrative

[13] https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2017-004941.pdf

Standards, which states "*It shall be unlawful, and a violation of these rules, for any person to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures; or determined by biological assessments in Subsection R317-2-7.3*" UAC R317-3-7.2. Utah's rules promulgating standards of quality for waters of the State affirm "*it shall be unlawful and a violation of these rules for any person to discharge or place any wastes or other substances in such manner as may interfere with designated uses protected by assigned classes or to cause any of the applicable standards to be violated*" UAC R317-2-7.1.a. Discharges of pollutants, even inadvertently, could cause both a violation of applicable water quality standards and possibly interfere with a waterbodies designated uses.

Citation(s): Utah Code § 19-5-114, UAC R317-3-7.2, UAC R317-2-7.1.A, UAC R317-15-6.1., UAC R317-15-6.1.A.1., UAC R317-15-6.1A.2.

D. Notification to water supply operators and local health departments is a condition of Project approval for all projects in or immediately adjacent to WOTUS with assigned class 1C for domestic drinking water upstream two miles or less from any intake supply. As stated in Utah's antidegradation policy UAC R317-2-3.5.d "*depending upon the locations of the discharge and its proximity to downstream drinking water diversions, additional treatment or more stringent effluent limits or additional monitoring, beyond that which may otherwise be required to meet minimum technology standards or in stream WQS [water quality standards], may be required by the Director in order to adequately protect public health and the environment. The additional treatment/effluent limits/monitoring which may be required will be determined by the Director after consultation with the Division of Drinking Water and the downstream drinking water users*." UAC R317-2-3.5.d. These additional requirements are necessary to ensure that beneficial use class 1C is maintained in the waterbody proposed for discharge or in some cases, protection of the downstream waterbodies designated beneficial use, when classified as 1C.

Citation(s): UAC R317-2-3.5.d, UAC R317-2-7.1.a, UAC R317-2-8., UAC R317-15-6.1, UAC R317-15-6.1.A.1, UAC R317-15-6.1A.2., UAC R317-15-6.1.A.3

E. Vegetation Preservation and Reestablishment in Fisheries. Project approval is conditioned on avoiding vegetation removal to the maximum extent practicable in or immediately adjacent to WOTUS used as fisheries in order to maintain existing beneficial use. Waterbodies with beneficial use class 3A (cold water fishery) or waterbodies with a blue ribbon fishery designation rely heavily on the available stream cover/shade to maintain designated beneficial uses. Riparian vegetation supplies necessary shade to stabilize water temperatures in streams. Removal of riparian vegetation, without reestablishment, could cause a waterbody not to maintain beneficial use 3A or its blue ribbon fishery designation. Utah's antidegradation policy states "*existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses*." UAC R317-2-3.1. Failure to minimize riparian vegetation removal and failure to reestablish riparian vegetation which results in the failure to maintain beneficial use class 3A would be considered a violation of Utah's rules promulgating standards of quality for waters of the State, more specifically Utah's antidegradation policy found at UAC R317-2-3. Additionally, the loss of riparian vegetation could cause a violation of the instream numeric criteria for temperature, which is listed as 20°C with a maximum temperature change of 2°C for beneficial use class 3A. UAC R317-2-14.2. If

the temperature of the waterbody increases, there is a potential for instream water quality criteria for dissolved oxygen to be violated. Temperature and dissolved oxygen have an inverse relationship, where temperature increases then dissolved oxygen decreases, so an increase in temperature could cause a decrease in dissolved oxygen, and possibly a violation of the instream criteria for dissolved oxygen. The instream criteria for dissolved oxygen for beneficial use class 3A is a minimum of 8.0 milligrams per liter (mg/L) when early life stages are present and 4.0 mg/L when all other life stages are present. UAC R317-2-14.2. As stated in UAC R317-15-6.1 the Director will ordinarily consider whether the proposed discharge "*impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6*" UAC R317-15-6.1.A.1., "*exceeds water quality criteria, either narrative or numeric, in Section R317-2-7*" UAC R317-15-6.1A.2. or "*fails to meet the antidegradation (ADR) requirements of Section R317-2-7*" UAC R317-15-6.1.A.3 when making a certification decision.

Citation(s): UAC R317-2-3.1., UAC R317-2-3., UACR317-2-14.2., UAC R317-2-14.2., UAC R317-15-6.1, UAC R317-15-6.1.A.1, UAC R317-15-6.1A.2., UAC R317-15-6.1.A.3.

F. Dry Conditions to the Maximum Extent Practicable. Project approval is conditioned on conducting activities under dry conditions to the maximum extent practicable to assure that water quality standards are not exceeded. Construction machinery used within a waterbody can cause significant impacts to water quality if adequate precautions are not taken. When it is unavoidable to operate construction machinery within the waterbody the Project Proponent should focus on minimizing the duration of the disturbance, turbidity increase, substrate disturbance, removal of riparian vegetation, and work shall be conducted in the "dry" to the maximum extent practicable. Minimizing the duration of impact reduces the chance that the impacts will accumulate and cause significant impacts to water quality. Minimizing turbidity increases is important because the State of Utah has numeric water quality criteria for turbidity in certain use designations, which could be violated if the Project Proponent does not take proper steps to minimize the increases. Water quality criteria for turbidity will be violated if there is an increase of 10 NTUs in waterbodies with designated uses related to recreation and if there is an increase of 10 NTUs (class 3A and 3B) or 15 NTUs (class 3C and 3D) in waterbodies with aquatic wildlife designated uses. UAC R317-2-14.1 and UAC R317-2-14.2. Conducting work in the "dry" to the maximum extent practicable will help reduce the risk of the numeric criteria for turbidity to be exceeded, as well as reduce the risk of a significant sediment load being transported downstream. Discharges of sediment can not only violate numeric criteria, but also, risk violating Utah's narrative standard "*It shall be unlawful, and a violation of these rules, for any person to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures; or determined by biological assessments in Subsection R317-2-7.3*." UAC R317-2-7.2. Violations of numeric and narrative criteria could cause a waterbody not to meet its designated beneficial use and a transport of sediment downstream could prevent a downstream waterbody from meeting its designated beneficial uses. As required by Utah's antidegradation policy UAC R317-2-3.1 "*Existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses*". Additionally, "*All actions to control waste discharges under these rules shall be modified as necessary to protect downstream designated uses*" UAC R317-2-8. As stated in UAC R317-15-6.1 the Director will ordinarily consider whether the proposed discharge "*impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6*" UAC R317-15-6.1.A.1., "*exceeds water quality criteria, either narrative or numeric, in Section R317-2-7*"

UAC R317-15-6.1A.2. or "*fails to meet the antidegradation (ADR) requirements of Section R317-2-7*" UAC R317-15-6.1.A.3 when making a certification decision.

Citation(s): UAC R317-2-3.5., UAC R317-2-7.1.A., UAC R317-2-14.1, UAC R317-2-14.2., UAC R317-2-7.1.a., UAC R317-2-7.2., UAC R317-2-3.1, UAC R317-2-8. , UAC R317-15-6.1, UAC R317-15-6.1.A.1, UAC R317-15-6.1A.2., UAC R317-15-6.1.A.3.

G. Culverts. Installing permanent culverts below existing streambed elevation, allowing natural substrate to reestablish is required to ensure the stream will continue to meet its beneficial uses in UAC R317-2-6 and to comply with Utah's antidegradation policy in UAC 317-2-3. Installing the culverts below existing streambed elevation reduces the potential for further stream erosion, increased sedimentation, and subsequent downstream water quality impacts while protecting existing fish habitat and preventing impediments to fish passage. Utah's antidegradation policy states "*existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses*" UAC R317-2-3.1. Failure to maintain designated beneficial uses would be considered a violation of Utah's rules and promulgated standards of quality for waters of the State, specifically Utah's antidegradation policy found at UAC R317-2-3. The Director will ordinarily consider whether the proposed discharge "*impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6*" UAC R317-15-6.1.A.1., "*exceeds water quality criteria, either narrative or numeric, in Section R317-2-7*" UAC R317-15-6.1A.2. or "*fails to meet the antidegradation (ADR) requirements of Section R317-2-7*" UAC R317-15-6.1.A.3 when making a certification decision.

Citations: UAC R317-2-6, UAC R317-15-6.1, UAC R317-15-6.1.A.1, UAC R317-15-6.1A.2, UAC R317-15-6.1.A.3, R317-2-8.

H. Turbidity Increases and Instream Construction Monitoring. Beneficial uses associated with recreation and aquatic life have been assigned numeric criteria for turbidity. An increase of more than 10 NTUs in class 2B and 3A waterbodies above the turbidity of that waterbody would be a violation of instream criteria for waterbodies that have recreation or aquatic life uses. Similarly, an increase of more than 15 NTUs in class 3D waterbodies above the turbidity of that waterbody would be a violation of instream criteria for waterbodies that have aquatic life uses. UAC R317-2-14.1 and UAC R317-2-14.2. Therefore, turbidity increases above those allowed by this Certification could cause the waterbody to fail to meet its designated beneficial use classes. Turbidity monitoring during instream construction in waterbodies with class 2B, 3A and 3D beneficial uses designations will ensure turbidity increases do not violate Utah's water quality standards. Utah's antidegradation policy states "*existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses*" UAC R317-2-3.1. Failure to minimize turbidity increases that result in the failure to maintain beneficial use class 2B or 3A would be considered a violation of Utah's rules and promulgated standards of quality for waters of the State, specifically Utah's antidegradation policy found at UAC R317-2-3. The Director will ordinarily consider whether the proposed discharge "*impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6*" UAC R317-15-6.1.A.1., "*exceeds water quality criteria, either narrative or numeric, in Section R317-2-7*" UAC R317-15-6.1A.2. or "*fails to meet the antidegradation (ADR) requirements of Section R317-2-7*" UAC R317-15-6.1.A.3 when making a certification decision.

Citations: UAC R317-2-3.1, UAC R317-2-3, UAC R317-2-14.1, UAC R317-2-14.2 R317-15-6.1, UAC R317-15-6.1.A.1, UAC R317-15-6.1A.2., UAC R317-15-6.1.A.3.

I. Monitoring Required for Stream Realignments. Project approval is conditioned on successful stream realignments that 1) meet water quality standards in UAC R317-2-7 and designated beneficial uses in UAC R317-2-6 of the stream and 2) comply with the antidegradation policy in UAC R317-2-3. Realigned stream channels can present a set of physical and ecological issues, often related to accelerated erosion and deposition which can lead to further secondary and tertiary issues, such as hanging tributaries, vegetation loss, water quality issues, and associated ecological impacts (Flatley, et al, 2018). Violations of water quality standards could cause a waterbody to fail to meet its designated beneficial uses. As required by Utah's antidegradation policy UAC R317-2-3.1 "*Existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses*." The Director will ordinarily consider whether the proposed discharge "*impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6" UAC R317-15-6.1.A.1., "exceeds water quality criteria, either narrative or numeric, in Section R317-2-7*" UAC R317-15-6.1A.2. or "*fails to meet the antidegradation (ADR) requirements of Section R317-2-7*" UAC R317-15-6.1.A.3 when making a Certification decision. If annual monitoring is incorporated, there is assurance that the Project will not violate water quality standards or impair a waterbody's beneficial use.

Citation(s): UAC R317-2-3.1, UAC R317-15-6.1, UAC R317-15-6.1.A.1., UAC R317-15-6.1.A.2., UAC R317-15-6.1.A.3. Flatley, A., I. Rutherfurd, and R. Hardie. 2018. River Channel Relocation: Problems and Prospects. Available online at: https://www.mdpi.com/2073-4441/10/10/1360. Accessed June 2021.

J. UPDES Storm Water General Permit for Construction Activities (Permit No. UTRC00000). UAC R317-8-2.5, gives the Director authority to issue general permits to cover specific categories of discharges, including storm water and construction dewatering that is discharged to a surface water. According to UAC R317-8-3.9 (6)(d), construction activities that result in a land disturbance of equal to or greater than one acre, including clearing, grading, and excavation are "industrial activities" under UAC R317-8-3.9(1)(a) and are therefore required to obtain and comply with a UPDES Permit for storm water discharges. This only applies to projects that meet or exceed one acre of disturbance.

Citation(s): UAC R317-8-3.9(6)(d) and UAC R317-8-3.9(1)(a)

K. UPDES General Permit for Construction Dewatering (Permit No. UTG070000). UAC R317-8-2.5, gives the Director authority to issue general permits to cover specific categories of discharges, including storm water and construction dewatering that is discharged to a surface water. Under the authority granted by UAC R317-8-2.5, the Director issued the General Permit for Construction Dewatering and Hydrostatic Testing, UPDES Permit No. UTG070000 renewed and effective as of February 1, 2020. UPDES Permit No. UTG070000 applies to construction dewatering of uncontaminated groundwater or surface water sources due to construction activities, hydrostatic testing of pipelines or other fluids vessels, water used in disinfection of drinking water vessels and other similar discharges in the State of Utah that have no discharge of process wastewater. This only applies to projects that require dewatering and discharge to surface water.

Citation(s): UAC R317-8-2.5

IX. Disclaimers

A. Fees

1. The legislatively-mandated fee for the 2021 fiscal year is $100.00/hour for review and issuance of the Section 401 Water Quality Certification. A quarterly invoice will be sent and your payment is due within 30 days.

2. Disclaimers
    1. The Project Proponent must acquire all necessary easements, access authorizations and permits to ensure they are able to implement the Project. This Section 401 Certification does not convey any property rights or exclusive privileges, nor does it authorize access or injury to private property.

    2. This Section 401 Certification does not preclude the Project Proponent's responsibility of complying with all applicable Federal, State or local laws, regulations or ordinances, including water quality standards. Permit coverage does not release the project proponent from any liability or penalty, should violations to the permit terms and conditions or Federal or State Laws occur.

    3. A Project within a Municipal Separate Storm Sewer System (MS4) jurisdiction, must comply with all the conditions required in that UPDES MS4 Permit and associated ordinances. No condition of this Section 401 Certification shall reduce or minimize any requirements provided in the MS4 Permit. In the case of conflicting requirements, the most stringent criteria shall apply.

X. Public Notice and Comments

As in UAC R317-15-5., this Certification decision is subject to a 30 public notice period. After considering public comment, the Director may execute the Certification issuance, revise it, or abandon it.

A. Public Notice Dates
B. Public Notice Comments/Response
C. During finalization of the Certification certain dates, spelling edits, and minor language or formatting corrections may have been completed. Due to the nature of these changes they were not considered major and the Certification will not be Public Noticed again.

XI. Water Quality Certification

The Utah DWQ certifies that if the Project Proponents adhere to the conditions outlined in this Certification and adheres to any USACE Section 404 Permit Conditions, then the Project will comply with water quality requirements and applicable provisions of the CWA sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards).

_____ _____

Erica Brown Gaddis PhD, Director Date

DWQ-2021-012264