



State of Utah

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DIVISION OF WATER QUALITY  
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January 27, 2022

DIVISION OF WATER QUALITY  
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY  
PUBLIC NOTICE OF COMPLETION REPORT APPROVAL

**PURPOSE OF PUBLIC NOTICE**

The purpose of this public notice is to declare the State of Utah's intention to approve a Completion Report required by a Section 401 Water Quality Certification condition under the authority of the Federal Clean Water Act (33 U.S.C. § 1341), and consistent with the Utah Water Quality Act, Title 19, Chapter 5, Utah Code and Utah Administrative Code R317-15.

**PERMIT INFORMATION**

PERMITTEE NAME: Union Pacific Railroad (UPRR)  
MAILING ADDRESS: 1400 Douglas St., Omaha NE, 68179  
PROJECT LOCATION: Latitude: 40.724111, Longitude: -112.034234  
DWQ CERTIFICATION NO.: Amended SPK 2011-00755  
WATERCOURSES: Great Salt Lake

**BACKGROUND**

The twenty-mile Union Pacific Railroad (UPRR) causeway across the Great Salt Lake (GSL) separates the lake into a North Arm and South Arm of different salinities. Between 2011 and 2013, UPRR applied for and received a federal Clean Water Act Section 404 permit from the U. S. Army Corps of Engineer (USACE) to close two culverts in the rock-fill causeway that were at risk of imminent collapse. Several agencies, including the Division of Water Quality (DWQ) and GSL stakeholders expressed concerns about potential changes to the lake's ecological resources and uses from culvert closure. In response, UPRR proposed construction of a 180-foot bridge intended to replicate the water and salt transfer previously accomplished by the free-flowing exchange of the lake water through the culverts. After completing water and salt balance modeling for the lake, UPRR determined that a 150-foot bridge would better duplicate the water-salt exchange accomplished by the culverts.

Culvert closure and bridge construction required a Section 404 permit from USACE and a corresponding state 401 Water Quality Certification with conditions from DWQ. The Section 401 Water Quality Certification included conditions to ensure protection of GSL water quality. These include requirements for monitoring causeway opening morphology, flow volume through the causeway, and salinity in the lake. Conditions also include performance measures for causeway opening morphology and salinity values in the lake to ensure that the new opening matches the water and salt exchange of the previous causeway culverts. The performance measures were outlined in the *Updated Final Compensatory Mitigation and Monitoring Plan (CMMP)* approved by the DWQ June 16, 2017. The CMMP outlined four (4) performance standards related to Causeway Opening Geometry and a performance standard (performance standard 5) based on salinity and salt balance, referred to as Salinity Performance Standard Ranges. The geometry standards are met by remaining within 10% or as-built or agreed upon altered geometry. The salinity performance standard is met by South Arm salinity being within the ranges predicted by the 2012 UPRR/USGS Model simulations and historic variability. Any project-caused variation of South Arm salinity

outside those ranges will be evaluated to determine whether it has an effect on lake aquatic resources that are protected by beneficial uses.

Direct connectivity between Gilbert (south arm) and Gunnison Bays (north arm) via the new causeway bridge was restored in December 2016. Monitoring and evaluation of the bridge opening and water quality impacts commenced following the opening of the causeway bridge.

Condition four (4) of the Section 401 Water Quality Certification requires that UPRR to submit a Completion Report to the DWQ in order to request cessation of monitoring and adaptive management. The Completion Report must contain no less than 5 years of monitoring results after the most recent causeway modification affecting water and salt transfer. The Completion Report must document the results of the monitoring during the agreed permit monitoring period after the bridge and berm completion, and describe any long-term changes in flow and salt transfer associated with the project in relation to lake salinity and the beneficial uses of the GSL, mitigation objectives, antidegradation policy, numeric criteria, and narrative standards.

The Completion Report must be public noticed for 60 days. If after 60 days of public notice the Director concurs that the Salinity Performance Standard Ranges are met, the Director will approve cessation of monitoring and adaptive management. If the Completion Report is not approved, the Director will provide the UPRR with a detailed description of the deficiencies and the UPRR will submit a revised report addressing these deficiencies within 60 days of receiving notification, unless an alternative time period is approved by the Director.

UPRR submitted a Completion Report on January 10, 2022 to the Utah Division of Water Quality, requesting cessation of monitoring and adaptive management and documenting that UP conducted 5 years of monitoring, submitted the required quarterly and annual data monitoring reports, and met the Project geometry and salinity performance standards.

### **PUBLIC COMMENTS**

Public comments are invited any time prior to the deadline of the close of business on **March 28, 2022**. Written public comments can be submitted to: Leanna Littler-Woolf, General Permitting Section, Utah Division of Water Quality, PO Box 144870, Salt Lake City, Utah 84114-4870 or by email at [wqcomments@utah.gov](mailto:wqcomments@utah.gov). After considering public comment the Utah Division of Water Quality will either approve or not approve the Completion Report. The Completion Report is available for public review under <https://deq.utah.gov/water-quality/water-quality-public-notices>. If internet access is not available, a copy may be obtained by calling Leanna Littler-Woolf at 801-536-4397.