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February 20, 2015

Mr. Walter L. Baker, P.E.  
Director  
Utah Division of Water Quality  
Utah Department of Environmental Quality  
195 North 1950 West  
PO Box 144870  
Salt Lake City, UT 84114-4870

Submitted via email to: [jgardberg@utah.gov](mailto:jgardberg@utah.gov)

RE: Union Pacific Railroad Comments  
Draft Approval 401 Water Quality Certifications with Conditions  
Water Quality Certification No.: SPK 2011-00755 (to be determined 2015)  
USACE 404 Permit No.: SPK 2011-00755 (to be determined 2015)

Dear Mr. Baker:

Union Pacific Railroad (UPRR) submits the following comments on the Draft Approval 401 Water Quality Certifications with Conditions for the Great Salt Lake Causeway Permanent East Culvert Closure and Bridge Construction Project. We have worked closely with the Utah Division of Water Quality (UDWQ) staff, first to develop and implement UPRR's impacts reevaluation and modeling plan and then to develop, review, revise and resubmit the Proposed Compensatory Mitigation and Monitoring Plan (CMMP) to support UPRR's application for Clean Water Act Certification of the U.S. Army Corps of Engineers (USACE) individual permit. UPRR, UDWQ USACE and many other agencies have met multiple times to discuss UPRR's progress on each step of the evaluation. UPRR coordinated closely on the modeling effort with UDWQ and the U.S. Geological Survey, and UPRR has made two major revisions and resubmittals of the CMMP since its first submittal last summer to address significant input from UDWQ, USACE and the Environmental Protection Agency (EPA).

We have significant concerns with at least two provisions of the draft 401 certification, and UPRR requests that the UDWQ modify the draft certification to address those concerns and other comments outlined herein.

Our comments accompany the text of the draft Certification where we are requesting changes to the text of the conditions. In those cases, UPRR has included UDWQ's draft certification language showing the changes (in underline and strikeout format) UPRR proposes. Our explanation for each proposed change and any comments on each provision follow the marked up text. Our comments focus first on the proposed conditions themselves and then on the introductory project description and introductory information.



**1. Proposed Condition 1 should be removed from the 401 Certification.**

**~~UPRR must acquire all necessary easements, access authorizations and permits to ensure they are able to build the bridge. Meeting this requirement will fulfill the easement requirement stated in condition #4 of 401 Water Quality Certification SPK 2011-00755 dated December 16, 2013.~~**

**UPRR Comment:** UPRR objects to this requirement and requests that it be removed from the 401 certification. This condition is unrelated to UDWQ's authority to certify consistency of the 404 permit issued by the USACE with state water quality standards as provided in the federal Clean Water Act. The criteria for 401 water quality certification are set out at Utah Administrative Code Rule R317-15-6; these criteria do not include access requirements.

Further, regarding access issues, UPRR believes it has sufficient rights in the property to carry out this project. UPRR and its predecessor, the Southern Pacific Railroad, have operated on this causeway for many decades, and operated this portion of the rock-filled causeway since 1901, without objection from the State of Utah. Nevertheless, after this issue arose on the current project, UPRR submitted a request for an easement to the Utah Division of Forestry, Fire and State Lands (UDFFSL) in March 2014 as a means of avoiding a title dispute by confirming its rights. UDFFSL responded to UPRR's request with a proposed lease agreement in September 2014. UPRR continued discussions and submitted alternative language in November 2014 and January 2015. UPRR and UDFFSL are continuing discussions regarding access authorizations.

UPRR has every hope of reaching a timely agreement with UDFFSL so that this issue does not hold up construction of the bridge and control berm this year. However, it is improper for UDWQ to inject itself into this issue by imposing this condition on certification. UPRR requests that UDWQ delete this condition. Further UPRR requests that UDWQ acknowledge the impropriety of imposing the similar condition in the Interim emergency certification and declare that condition inapplicable (Condition #4 of 401 Water Quality Certification SPK 2011-00755 dated December 16, 2013).

**2. Proposed Condition 2 should be modified as follows:**

**The installation of the Bridge and Control Berm will be completed in substantial conformance with the description as outlined in Section 3.7.1 and Appendix A of the Proposed CMMP by December 31, 2016, unless this action is prevented by an Act of God or by a delay in agency approval. In the event that the bridge and control berm construction is delayed due to UPRR's failure to comply, or the Director may take appropriate action to ensure completion.**

**UPRR Comment:** These changes are necessary to acknowledge the Bridge and Control Berm description and final design process set forth in the CMMP and to take account of actions by agencies or Acts of God that could limit UPRR's ability to meet the deadline specified in this Condition.

**3. Proposed Condition 3 Should Be Modified as Follows:**

**During the period the Certification is in effect, UPRR shall allow the Director, or authorized representatives, upon the presentation of credentials and other documents as may be required by law, and in compliance with all UPRR and legal safety requirements, to:**

- a. enter upon UPRR Causeway where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the Certification;**

- b. *have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;*
- c. *inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this Certification; and*
- d. *sample or monitor at reasonable times, for the purpose of assuring Certification compliance or as otherwise authorized by the CWA, any substances or parameters at any location in the project area associated with this Certification.*
- e. *DWQ Inspections during the bridge implementation phase will be at Director's discretion in coordination with UPRR.*

**UPRR Comment:** This condition should be modified to authorize appropriate access to the project area during the permit and certification period and to acknowledge the necessity of UDWQ following all applicable safety requirements.

**4. Proposed Condition 4 Should Be Modified as Follows:**

*UPRR must adhere to all elements defined in the CMMP, unless otherwise approved by the Director, including these clarifications and modifications:*

- a. *Adherence to the outlined mitigation objectives, maintenance, performance standards, schedule and reporting time-frames, monitoring and adaptive management elements.*
- b. *A Long Term Management Memorandum of Understanding (MOU) will be drafted and proposed that defines each party's (including UPRRs) legal, financial and regulatory role relating to control berm access and modifications after the UPRR monitoring period ends. The relevant parties and their roles must be proposed by UPRR in the draft MOU defined and the MOU signed no later than 6 months prior to proposing the Director granting cessation of the monitoring period and the relinquishing of adaptive management responsibility as defined in the Approved CMMP. The proposed MOU must be public noticed for a minimum of 30 days.*

**UPRR Comment:** As written, Condition 4b. is dependent on the participation of other parties, which have not been established. It is not appropriate to condition the release of UPRR's permit obligations on the agreement of others who are not bound by the permit. Therefore, the requirement should be limited to proposing the MOU. As the condition is currently drafted, Union Pacific could be held hostage to the recalcitrance of the other parties to the MOU.

**c. Condition 4.c. should be removed from the certification:**

~~**c. An assessment of effects to aquatic life uses will be conducted after two consecutive quarters when the ambient monitoring results are outside Modeled and Historic salinity ranges identified in Table 3-7, of the Proposed CMMP or after two consecutive quarters when the ambient monitoring results are outside the Historic but inside the Modeled salinity range.**~~

**UPRR Comment:** This condition is intended to modify CMMP Section 3.10.3 Salinity and Salt Balance Reporting (Performance Standard 5), which is a part of the CMMP monitoring and reporting program. This CMMP section describes the monitoring and reporting steps for determining whether the project is meeting the salinity performance standard. Adaptive management is triggered if these steps indicate that the project is not meeting that performance standard, which is to duplicate the water and salt transfer function of the culverts before they were closed. The essential analytical steps for determining whether the project is meeting the salinity performance standard, and the rationale for that process is set forth in detail in CMMP Section 3.10.3, pages 38-40.

The first part of this proposed condition 4c requires an aquatic effects assessment when ambient monitoring results are outside modeled and historic ranges for two consecutive quarters. This requirement is similar to what is already contained in section 3.10.3 as one of the steps for determining whether the project is meeting the project's performance standard. However, under the CMMP provision, the aquatic effects assessment would begin after two quarters and be completed based on monitoring data that is outside the modeled and historic ranges for four quarters--a full hydrological cycle. Accordingly, UDWQ's proposal does not acknowledge the necessity of completing the assessment (as well as running the model) with data from all four quarters of the full hydrological cycle that are outside the ranges. Because it does not tie the assessment to the critical elements of Section 3.10.3 that must be followed to determine the project's consistency with the performance standard, it should be deleted for the same reasons discussed in our objections to the remainder of this condition.

Union Pacific is also very concerned about the second part of this condition. It would require Union Pacific to conduct the aquatic effects assessment when ambient salinity data collected under the monitoring program for two quarters are outside the historical salinity range only. In other words, this assessment would be required even if the monitoring results are within the 1987-2012 UPRR USGS Model's predicted salinity ranges (reflecting what would have occurred if the culverts had been left in place). This proposal is especially puzzling because both the historical and the model's predicted salinity ranges were both included in the analytical process at the recommendation of UDWQ.

Of greatest concern to UPRR is the purpose of this assessment as explained by UDWQ and advocated by EPA:<sup>1</sup> UDWQ would use the results of this assessment, if negative, to require a more "rapid response" adaptive management adjustment to the causeway opening than what would occur under the CMMP as proposed. However, to facilitate this more rapid response, UDWQ would disregard the essential cause and effect role of the project, effectively eliminating critical elements of the CMMP's analytical process established in the monitoring and reporting program to determine whether the project itself is meeting its performance standard (beginning with the initial determination whether the ambient salinity data is outside the modeled range as well as the historic range, followed by running the 2012 model to determine cause and effect and conducting the aquatic assessment—both utilizing four quarters of data that are outside the two ranges).

Union Pacific strongly objects to this condition. UPRR acknowledges UDWQ's desire to make adaptive management adjustments as quickly as possible and to correct adverse conditions that may develop in the GSL in the future over time. However, regardless of any general benefit UDWQ may see in conducting the assessment as described (and requiring quick adaptive management actions on that basis), there is no scientific foundation or regulatory support for imposing this additional condition in Section 3.10.3. It confuses the issues of satisfying Union Pacific's mitigation obligations through an adequate cause-and-effect-based mitigation and monitoring program and satisfying UDWQ's broad objectives of managing and correcting adverse GSL lake conditions generally.

This condition would fundamentally change the CMMP and cast aside an essential predicate of the entire effort—that Union Pacific is responsible to identify and mitigate project-caused adverse effects (i.e., of closing the culverts) but is not responsible for correcting GSL conditions that have no relationship to the project. By eliminating these essential elements of the accepted analytical approach, UDWQ's proposal would provide no basis for determining an appropriate response or assigning responsibility to Union Pacific.

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<sup>1</sup> EPA has supported the imposition of a requirement to take more rapid adaptive management actions based only on this assessment, also triggered only by exceedance of monitoring data outside the historical range—even for just one monitoring event. This is reflected in EPA's preliminary comments on the CMMP to USACE dated February 2, 2015.

Although consideration of the historical data is an important factor in the monitoring and reporting program, there is no basis for making duplication of the historical conditions a standard for the project to meet or for determining that not duplicating such conditions warrants adaptive management. Eliminating essential elements of the analytical process set forth in Section 3.10.3 would mean that UDWQ is assigning responsibility to Union Pacific for mitigating any adverse condition that is outside the historical range based on the results of two monitoring events.

There is no justification for requiring UPRR to conduct the assessment and carry out adaptive management under UDWQ's proposed addition. Accordingly, adopting this condition as proposed would be arbitrary and capricious and an abuse of discretion. For these and the reasons explained in more detail below, UPRR requests deletion of subsection (c).

**UDWQ's Proposal to Move More Quickly Toward Adaptive Management Improperly Disregards the Accepted Analytical Approach.** We understand that UDWQ and other agencies wish to evaluate lake conditions and conduct the aquatic resource assessment and require adaptive management actions more quickly than set forth in the CMMP to respond to extraordinary adverse conditions. However, such an objective must be evaluated in the context of this project's mitigation objectives and legal requirements, which are to duplicate the aquatic functions of the now-closed culverts (water and salt transfer) over time and through a variety of hydrologic conditions. Contrary to the implication of the proposed condition, it has never been contemplated that the UDWQ or USACE would or could require that the project replicate lake conditions as they occurred at any specific point in time. It is not possible, from an engineering or scientific standpoint, to duplicate 2012 lake conditions or any other specific point in time because lake levels continually rise and recede in response to seasonal, annual and cyclic hydrology.

EPA is encouraging UDWQ and USACE to require the aquatic assessment and impose adaptive management steps even after a single monitoring result outside the historic salinity range. However, one or two sampling results that fall outside the historic (and even the model) range do not provide sufficient evidence to support a requirement for adaptive management. Relying on such limited data without any cause and effect analysis would be inconsistent with the accepted analytical approach used throughout this process. Further, this approach would be inconsistent with the recent USACE mitigation guidelines that EPA cites in its comments to USACE. These guidelines state that "successful attainment of ecological performance standards depends on the expected stage of ecologic development at the end of the monitoring period" (Final 2015 Regional Compensatory Mitigation and Monitoring Guidelines for South Pacific Division USACE, pg. 37).

Under UPRR's proposal, the modeling and aquatic effects assessment processes would be started as soon as two consecutive quarterly monitoring results are outside the historic and modeled ranges and would be completed when ambient salinity data and bi-directional flow data for a full hydrologic year are available, assuming that the ambient monitoring results remain outside the modeled and historic ranges for two more consecutive monitoring events (Section 3.10.3 paragraph 3). UPRR maintains that the one-year period (sampling under a full hydrologic cycle) set forth in the CMMP is an appropriate time period to evaluate the project's performance and, if the project is not meeting the performance standard, require adaptive management. In contrast to UDWQ's proposed change to limit the data considered and shorten the period for determining adaptive management, the process set forth in Section 3.10.3 will properly utilize the analytical tools UPRR has developed in coordination with UDWQ, USACE and the other agencies and thereby provide adequate scientific support for a conclusion that the project is not duplicating the function of the culverts and causing adverse effects on aquatic resources.

**Following the Accepted Analytical Approach Set Forth in CMMP is Necessary in Order to Make Appropriate Adaptive Management Decisions.** The entire monitoring and reporting program proposed in the January 2015 CMMP is designed to determine whether the project is meeting its mitigation objective. USACE established that mitigation objective in its February 14, 2013 letter rejecting UPRR’s 2013 CMMP:

*[T]he Corps is unable to determine [that] the new causeway breach would adequately replace the functions of the culverts and that it would not cause additional adverse effects to the Great Salt Lake and, therefore, we cannot approve the current mitigation plan.*

After the USACE rejected the 2013 CMMP, UPRR undertook a complete reevaluation of project impacts under UDWQ’s and USACE’s direction and developed the September 25, 2013 analytical approach using the 1987-1998 USGS Water and Salt Balance Model as one of the critical elements. UPRR presented this analytical approach to USACE, UDWQ and other coordinating agencies for review and concurrence. The GSL water and salt balance modeling effort was supported by consultants including Kidd Waddell (USGS retired and key model developer) and in coordination with USGS and UDWQ personnel. Both agencies concurred that the model was utilized appropriately, and UDWQ stated the model results could be relied upon to meet mitigation design efforts. A revised mitigation design (180 ft. bridge and 150 ft. control berm), an updated and recalibrated 2012 UPRR/USGS Water and Salt Balance Model, numerous technical reports built upon the model<sup>2</sup> and a completely rewritten and twice-revised and resubmitted CMMP are the product of the agencies’ acceptance and UPRR’s implementation of this accepted analytical approach.

As reflected in the USACE direction and this accepted analytical approach, distinguishing the project-caused adverse effects from adverse lake conditions that are not caused by the project is a critical aspect of determining whether the project is meeting its performance standard:

The causeway with the mitigation should provide water and salt transfer similar to that of the free-flowing culverts before closure, with South Arm salinity within the ranges predicted by the 2012 model and historic variability. Any project-caused variation of South Arm salinity outside those ranges will have a less-than-minimal effect on lake aquatic resources that are protected by beneficial uses. CMMP Section 3.9.2.

In close coordination with USACE and UDWQ, UPRR has prepared a CMMP that, in a step-by-step process, would determine whether there is a cause and effect relationship between adverse changes in ambient salinity conditions and the project. The accepted analytical process utilized in preparation of the CMMP recognized the use of the UPRR/USGS model as a critical tool for (1) identifying the impacts of the project on GSL salt transfer, (2) setting the parameters used to determine whether the project is meeting the performance standard, (3) determining whether the project is, in fact, meeting the performance standard, and (4) determining what adaptive management adjustments to the causeway opening should made to achieve compliance with the performance standard should it be determined that the project is not duplicating the functions of the culverts. The CMMP discusses this analytical approach in more detail in CMMP Section 2.1.

The CMMP monitoring and reporting plan provides for the comparison of quarterly ambient salinity results with both historic South Arm salinity levels and the 1987- 2012 model predicted South Arm salinity levels . The CMMP provides:

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<sup>2</sup> Great Salt Lake Causeway Final Water and Salt Balance Modeling report, April 4, 2014; Great Salt Lake Causeway Culvert Closure and Bridge Construction Project, Bridge Evaluation Report, June 2, 2014; Great Salt Lake Causeway Culvert Closure and Bridge Construction Project, Resource Evaluation Report. July 1, 2014.

If the ambient salinity monitoring results are outside the established salinity ranges (described in Section 3.9.2, Water Quality (Salinity and Salt Balance) Performance Standard), this result is an indication that potentially adverse ambient South Arm salinity conditions exist. However, just the comparison of monitoring data with modeled and historical data does not reveal the cause of such conditions and, therefore, whether the project is meeting the salinity performance standard. *Additional steps must be taken to determine whether the project has caused the variation and, if so, whether that variation is having significant adverse effects on aquatic resources protected by the lake's beneficial uses.(emphasis added).*

In other words, if the lake's salinity is within the salinity ranges predicted by the model and historical data, then the project is presumed to be duplicating the function of the culverts because these comparisons indicate that the lake conditions with the mitigation in place are similar to the lake conditions that would have occurred if the culverts had remained in place (as they existed in 2012) and lake conditions in a historical context where adverse conditions to aquatic resources were not documented.

However, a comparison of the ambient salinity data with historic data alone provides insufficient support to make regulatory decisions. A comparison with both the historic range and the predicted model range is necessary to be consistent with the analytical approach *that the USACE and UDWQ accepted and reviewed again as it was implemented through each step of the process, i.e., the modeling report, bridge report, etc., leading to the CMMP*. Ambient monitoring results that vary outside both historic and modeled salinity ranges suggest that the project may not be performing as predicted. However, as discussed in the CMMP and supporting documents, many factors affect current GSL lake conditions. Therefore, even when monitoring results fall outside both ranges for a full hydrologic cycle, that does not establish that the project is, in fact, not performing as predicted, i.e., that the project has caused the variation and has caused adverse effects. The CMMP states:

It is well documented that the WSEs and salinities of the lake vary by season, year, and decade. Surface inflows, WSEs, salinities, salt loads, weather patterns, low lake levels, and industry infrastructure and operations all influence the water and salt transfer between Gilbert and Gunnison Bays. For this reason, monitoring results from a full hydrological cycle (that is, four consecutive quarterly monitoring events) are necessary in order to complete the modeling and impacts analysis that must be carried out in order to determine whether a causeway opening adjustment should be made. However, to facilitate timely, efficient, and fully informed determinations of consistency with the performance standard, UPRR will, in coordination with USACE and UDWQ, start the water and salt balance model update and calibration process as well as the impacts analysis after two consecutive monitoring events result in variations outside the 2012 model and historic salinity ranges to determine whether the project has adversely affected the lake's beneficial uses and, therefore, does not meet the performance standard.

If the ambient monitoring results are outside the developed historic and predicted model ranges, then additional analytical steps set forth in Section 3.10.3 must be carried out in order to determine that the project itself is not duplicating the function of the culverts and is causing adverse effects on aquatic resources. The additional steps are to rerun the model and conduct the impacts assessment for this purpose:

The purpose of this analysis will be to determine whether the variations in ambient salinity levels are caused by the project, adversely affect aquatic resources (for example, brine shrimp) protected by beneficial uses, and, therefore, do not meet salinity performance standard 5. CMMP Section 3.10.3.

This analysis is based specifically on the September 25, 2013 proposal and subsequent modeling and resource assessment, which in turn was based on the direction given by USACE and UDWQ to

determine whether the project is meeting its performance standard, and adaptive management measures are triggered.

There is no adequate scientific basis or sufficient evidence to support making quick adjustments to the causeway opening based on the very limited data that would be used in UDWQ's assessment approach. UDWQ's approach would disregard the well-documented variability of GSL salinity and lake level conditions, which adjust continually over time to changing hydrologic and anthropogenic conditions. Quick adjustments would be inconsistent with the accepted analytical approach developed in conjunction with the agencies; the analytical approach requires sufficient data over time to identify both significant changes in South arm salinity levels and the project's role in causing those changes vis-à-vis all the other factors that influence water and salt transfer between the north and south arms of the GSL—surface inflows, WSEs, salinities, salt loads, weather patterns, low lake levels, municipal and industrial infrastructure and operations.

UDWQ's proposal would effectively change the performance standard by eliminating the fundamental objective of duplicating the functions of the culverts and all related cause and effect considerations. This proposal raises a number of questions. For example, how would UDWQ, based on one sampling event or even two sampling events, make the determination whether and what modifications to the causeway opening are necessary, and how would UDWQ establish responsibility for UPRR to carry out these measures? Would the Director prescribe how to modify the opening (enlarge or constrict the opening, raise or lower the invert) to achieve a stipulated South Arm salinity? Whatever the prescribed causeway opening modification and salinity target might be, UDWQ's removal of the CMMP's essential analytical steps to facilitate faster action improperly eliminate the scientific and evidentiary support for requiring the action as well as the regulatory basis for requiring UPRR to take it.

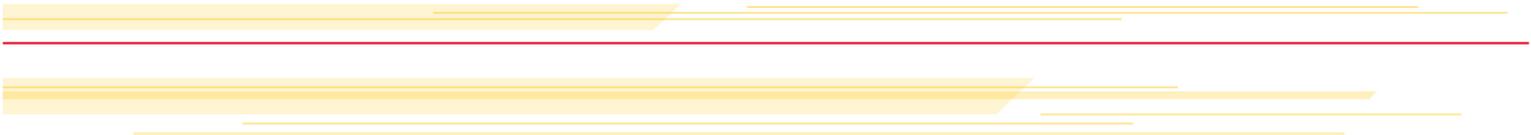
To summarize, the proposed condition would impose responsibility upon Union Pacific for responding to extraordinary lake conditions without establishing the necessary cause and effect connection to the project and, therefore, its adoption would be arbitrary and capricious and an abuse of discretion. This condition is particularly distressing in light of the fact that—based on extensive coordination with USACE, UDWQ and other agencies—Union Pacific has designed a monitoring and reporting program and an adaptive management mechanism that are based on the best available scientific information and the analytical approach that UDWQ, USACE and other agencies accepted. UPRR's proposal will ensure that Union Pacific meets the performance standard and, if not, adjusts the causeway opening as necessary. Further, UPRR's CMMP makes that adaptive management mechanism (the adjustable control berm) available to the State of Utah to make future post-monitoring period adjustments to the causeway opening to achieve appropriate ambient lake conditions.

For all these reasons, Subsection 4c should be removed from the conditions of the 401 certification.

- d. ***Determination of compliance with the Causeway Opening Geometry Performance Standards 1, 2 and 4 of the approved CMMP will be made semi-annually for the first two years after bridge completion and then annually until cessation of monitoring is granted by the Director. Triggers for Adaptive Management will be based on the semi-annual and annual measurement results with the targets noted in Table 3-5, page 28, of the Proposed CMMP.***

**UPRR Comment:** This change in the CMMP is acceptable to UPRR.

- e. ***Water quality monitoring results will be reported to DWQ within 45 days of monitoring or as otherwise approved by the Director. The annual report shall be submitted by February 1 of each year following the reporting period.***



**UPRR Comment:** We note that this reporting period is half the time allowed under the interim water quality certification. Nevertheless, this condition is acceptable to Union Pacific provided that the 45 day limit is keyed to the monitoring event. We have added an additional condition to set the date for the annual report submittal.

- f. *The provision to hold a public notice and comment period on any remediation plans associated with the project (as described in Proposed CMMP Section 3.12.1) is at the Director's discretion.***

**UPRR Comment:** The adaptive management provisions are already subject to public comment. Given UDWQ's concern about delays in implementing adaptive management, it may not be necessary to hold another public comment period on a specific adaptive management measure that is already described in 3.12.1.

- g. *Submittal of a revised Quality Assurance Project Plan (QAPP) and Sampling and Analysis Plan (SAP) will be within ~~90~~ 120 days of receiving Director approval of the Final CMMP. The QAPP must meet all EPA Requirements for Quality Assurance Project Plans (EPA/240/B-0011003).***

**UPRR Comment:** UPRR requests that a longer period be allowed to determine the details of bi-direction bridge flow monitoring procedures and data analysis procedures. It may be necessary for UPRR to coordinate these monitoring events with USGS and their existing bi-directional flow monitoring procedures. The additional time requested will not delay final monitoring, scheduled to begin in 2016, after the causeway opening is operational.

- h. *A request for cessation of monitoring will include a report that will document the results of the monitoring during the first five year monitoring period after bridge and berm completion and describe any long-term changes in flow and salt transfer associated with the project in relation to the lake salinity and beneficial uses of the Great Salt Lake, anti-degradation policy, numeric criteria and narrative standards. The Director will notify UPRR in writing if the report is approved. If the report is not approved, the Director will provide UPRR with a detailed description of the deficiencies. 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. Cessation of monitoring and termination of the certification will be approved with report approval when five years of monitoring demonstrates consistency with the salinity performance standard as described in CMMP Section 3.10. If the Director disapproves the request, UPRR and DWQ shall meet and consider which aspects of the monitoring program should continue and any additional terms of monitoring. The Director's disapproval shall be appealable as a "permit order" pursuant to Utah Code Section 19-1-301.5.***

**UPRR Comment:** These changes are proposed to tie the five-year report to the lake salinity and the lake salinity to beneficial uses consistent with the CMMP's performance standard. The Director's ultimate determination to disapprove cessation of monitoring should be subject to administrative appeal.

- i. *All CMMP annual reports will be approved by the Director in writing. If the report is not approved, the Director will provide UPRR with a detailed description of the deficiencies and 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 Comment:** UPRR has no comment on this provision.

**5. Condition 5 should be modified as follows:**

***As further provided in Condition 8, during construction of the bridge and earthen berms, Best Management Practices (BMPs) are required to minimize the erosion-sediment load to adjacent waters during project construction activities. Sediment retention efforts will be put in place at all drainage areas along the construction corridor to minimize movement of sediment into the water courses. Depending on location these could range from silt fencing to sediment retention basins or deeper storm drain vaults. Failure to implement appropriate BMPs may result in a Notice of Violation of the Utah Water Quality Act.***

**UPRR Comment:** This provision should be amended as shown to reflect that Condition 8 already requires construction BMPs and it should reflect actual conditions (the referenced BMPs would not be implemented on this project given the causeway characteristics and the location in the GSL).

**6. Conditions 7-9. UPRR has no comments on these conditions.**

**7. Technical Comments on the Project Description and Introductory Information**

***Project:*** The Project name should be corrected.

For consistency with the Clean Water Act Section 404 permit to which this draft certification pertains, UPRR requests that UDWQ revise the project name to be "Permanent East Culvert Closure and Bridge Construction, Union Pacific Causeway, Great Salt Lake Utah." This change is needed to conform the project name to that in the joint U. S. Army Corps of Engineers (USACE) and Utah Division of Water Quality (UDWQ) December 2013 Public Notice and UPRR applications for 404 permit and 401 certification.

***Project Location:*** The description of the location of the new causeway opening should be revised.

To clarify, the referenced locations for the proposed causeway opening are the same as the East Culvert, and the proposed causeway opening will be located west of the east culvert. The UPRR application provided the locational information for the East Culvert location only. The proposed opening is to be located in an area of the lake with no mapping available, and UPRR requests that UDWQ delete this information (Section 29, Township 6 North and Range 6 West). The proposed causeway opening is located at the latitude 41.221° and longitude -112.766°.

## **CONCLUSION**

UPRR believes that the changes proposed herein are necessary to:

- Make the CMMP and the proposed 401 certification consistent with the Director's authority under the CWA and Utah's 401 certification regulations;
- Make the certification requirements consistent with the significant scientific evidence in the record developed under the agencies' direction and the agency-accepted analytical approach for developing the proposed compensatory mitigation design and the CMMP; and,
- Ensure that the certification conditions are properly focused on satisfying Union Pacific's mitigation obligation—to duplicate, as closely as possible the aquatic function (water and salt transfer) lost due to the closure of the east and culverts—through an adequate cause-and-effect based mitigation, monitoring and adaptive management program.

Union Pacific believes that reaching a proper and timely resolution of these issues will be essential to the success of the project in 2015.

Thank you for considering our comments. We request a meeting with you and your staff at your offices to discuss the comments further.

Sincerely,



Debra L. Schafer  
General Director, Maintenance of Way - Environmental  
*for* Mark L. McCune, P.E.  
Director Structures  
Union Pacific Railroad

cc: Mr. William Damery, Utah Division of Water Quality  
Robert C. Bylsma  
Karen Nichols, PE  
Wayne M. Whitlock

