CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

RESOLUTION R6T-2013-0011

UNITED STATES FOREST SERVICE-LAKE TAHOE BASIN MANAGEMENT UNIT, UPPER TRUCKEE RIVER REACH 5 RESTORATION – EXEMPTIONS TO WASTE DISCHARGE PROHIBITIONS CONTAINED IN THE WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION

250	El Dorado County
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WHEREAS, the California Water Quality Control Board, Lahontan Region (Water Board) finds:

- On November 30, 2012, the United States Forest Service-Lake Tahoe Basin Management Unit (LTBMU) submitted the following information for the Upper Truckee River Reach 5 Restoration and Utility Relocation Project (hereafter referred to as the "Project") to the Water Board:
 - a. The Final Environmental Assessment/Negative Declaration for the Sunset Stables Reach Restoration Project dated February 2012, prepared jointly by the LTBMU and the California Tahoe Conservancy (CTC).
 - The National Environmental Protection Act (NEPA) Decision Notice and Finding of No Significant Impact for the Project signed by the LTBMU Forest Supervisor on March 20, 2012.
 - c. The California Environmental Quality Act (CEQA) Notice of Determination for a Negative Declaration for the Project, filed on March 21, 2012 by the California Tahoe Conservancy.
 - d. The Project Design Plans and Technical Specifications for both the Restoration Project component and the Utility Relocation Project component.
 - e. A draft Storm Water Pollution Prevention Plan (SWPPP) to comply with Board Order No. R6T-2011-0019, General Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit No. CAG616002 for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit.
 - f. A complete application for Clean Water Act 401 Water Quality Certification.
- 2. The Project area is located within the Upper Truckee River watershed on approximately 300 acres, just south of the City of South Lake Tahoe, CA and adjacent to the airport in El Dorado County. It is part of the larger Sunset Reach Project Boundary evaluated in the joint NEPA/CEQA document that includes restoration of approximately 13,000 feet of channel in Reaches Five and Six. The Project area covered under this Resolution includes approximately 7,400 feet of existing Upper Truckee River channel and the associated meadow floodplain in Reach Five. The Project vicinity is shown on Figure 1.

- 3. Past activities that have influenced conditions within the Project area include urban development, gravel mining, road building, bridge construction, airport construction, grazing, and sewer and water utility line installation. The resulting conditions include an oversized and incised channel that is not well connected to its adjacent floodplain, poor aquatic habitat conditions, and high bank erosion rates.
- 4. The purpose of the Project is to improve conditions in the meadow, riparian and aquatic ecosystems by constructing a new meandering channel and improving channel form and function, which will reduce sedimentation and restore and expand wet meadow habitat and function.
- 5. Implementation of the Project is expected to begin in June of 2013 and planned to be completed in October of 2016.
- 6. The purpose of this Resolution is to grant exemptions to two waste discharge prohibitions contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan) for activities that will be occurring within Stream Environment Zones (SEZs). The total area of disturbance proposed within the SEZ is approximately 36 acres. This sum includes approximately 10.2 acres of new channel construction, up to 2 acres of sod harvest areas, up to 6 acres of floodplain grading, approximately 13 acres of backfilling the existing channel, and about 5 acres of temporary access road. Project activities located within SEZs include the following:
 - a. Constructing approximately 7,420 linear feet of new Upper Truckee River channel in the Project area.
 - b. Backfilling approximately 7,400 linear feet of existing Upper Truckee River channel in this reach.
 - c. Harvesting meadow sod from the designated sod harvest areas and other locations within the Project area identified during implementation as having good quality sod that can be used for bank treatments.
 - d. Installing and decommissioning a temporary access road from the Sunset Stables staging area to the work area.
 - Installing a temporary bridge at the upstream stream crossing location and a constructed culvert crossing (or a second temporary bridge) at the downstream stream crossing location.
 - f. Relocation of the existing public utility buried backup treated effluent export line and water line to accommodate project construction.
 - g. Grading and revegetation of up to 6 acres of floodplain.
 - h. Installing temporary stream diversions to support construction activities.
 - i. Installing and operating a dewatering system to support construction activities that includes application of dewatering waters to the meadow in the Project area.

7. The Basin Plan specifies the following discharge prohibitions:

(a) Lake Tahoe Basin:

The discharge or threatened discharge, attributable to new development or permanent disturbance in Stream Environment Zones, of solid or liquid waste, including soil, silt, clay, rock, metal, plastic, or other organic mineral or earthen materials, to Stream Environment Zones in the Lake Tahoe Basin is prohibited. (Chapter 5, Waste Discharge Prohibitions, page 5.2-4)

(b) Regionwide:

The discharge of waste which causes violation of any numeric water quality objective contained in this Plan is prohibited. (Chapter 5, Waste Discharge Prohibitions, page 5.2-1)

The Basin Plan contains a numeric water quality objective for turbidity:

Increases in turbidity shall not exceed natural levels by more than 10 percent. (Chapter 5, Water Quality Objectives, page 5.1-9)

- 8. The activities listed in Finding 6 will likely result in a short-term and temporary discharge or threatened discharge of solid or liquid waste, more specifically sediment-laden water, to SEZs. Therefore, these activities require an exemption to the prohibitions stated in Finding 7above.
- 9. The Basin Plan contains a provision that the prohibition stated in Finding 7(a) above shall not apply to any activity the Water Board approves as reasonably necessary for erosion control projects, habitat restoration projects, wetland rehabilitation projects, SEZ restoration projects, and similar projects, if all of the following findings can be made:

(a) The project, program, or facility is necessary for environmental protection.

Historic anthropogenic activities in the watershed have resulted in degraded river and meadow conditions within the Project area. These conditions include an incised river channel, hydrologic disconnection between the channel and the meadow, bank erosion, and poor aquatic habitat within the channel. The Project will restore this river reach and associated meadow floodplain to improve geomorphic and aquatic function and meadow ecosystem function. The Project is expected to result in enhanced conditions of meadow, riparian, and aquatic ecosystems and a long-term water quality improvement by reducing sedimentation and restoring and expanding wet meadow habitat and function.

(b) There is no reasonable alternative, including relocation, which avoids or reduces the extent of encroachment in the Stream Environment Zone (SEZ).

The Project by its very nature must be located in the SEZ, and the purpose is to restore SEZ areas within the Project boundary. There is no reasonable alternative that would reduce the extent of encroachment in the SEZ.

(c) Impacts are fully mitigated.

The LTBMU will implement construction Best Management Practices (BMPs), as described within the Project's Storm Water Pollution Prevention Plan (SWPPP), Environmental Assessment/Negative Declaration, and construction plans and specifications. These BMPs are required to prevent construction activities from discharging sediment and other pollutants into the Upper Truckee River and its surrounding SEZ areas. However, moving the Upper Truckee River into a new channel and related in-channel work may generate a short-term and temporary increase of turbidity into the Upper Truckee River. The Project includes BMPs that are designed to minimize the likelihood of increasing turbidity in the Upper Truckee River from the construction activity. The temporary access road will be rehabilitated following completion of the restoration activities. The temporary access road and stream crossings within the SEZ will be removed with specified BMPs implemented at the end of each construction season. This Project is designed to result in overall water quality and riparian area improvement. The long term benefits from the Project implementation are expected to result in an overall reduction in the amount of erosion and sediment loading to Lake Tahoe and elevated groundwater in the adjacent meadow. Implementation of the Project design and construction specifications, the Water Board's Construction Permit requirements, and Water Quality Certification Order conditions will ensure that the impacts are fully mitigated.

- 10. The Upper Truckee River's in-stream turbidity levels are naturally very low, generally ranging from less than 1 nephelometric turbidity units (NTU) to 5 NTU during baseflow non-storm conditions. Due to these very low natural levels of turbidity, even a slight increase in sediment inputs to the river during restoration activities could result in a violation of the numeric water quality objective for turbidity stated in Finding 7(b) above.
- 11. Several activities associated with the Project could result in a short-term violation of the numeric water quality objective for turbidity. These activities include (1) the installation and removal of temporary crossings and temporary stream diversions, and (2) the introduction of flow into the newly constructed channel.

Temporary Crossings and Stream Diversions

For the temporary crossings and stream diversions, the potential for elevated turbidity exists during installation and removal and when water is first introduced back into the channel. The increased turbidity associated with these activities is expected to be limited in magnitude and duration. The anticipated magnitude of elevated turbidity is an increase up to 10 NTUs, with elevated turbidity lasting for no more than one hour during each activity (i.e. up to 10 NTUs for one hour during each culvert crossing installation, crossing removal, and installation and removal of each diversion).

During crossing and diversion activities, water will be pumped from within 20 feet downstream of the work area until turbidity is less than or equal to 10 NTUs. The pumped water will be discharged to nearby meadow areas or temporary upland basins constructed for this purpose. The LTBMU shall perform visual inspections of meadow infiltration areas to assure that no pumped water flows back into the river. The LTBMU shall note the start and finish time for each discrete crossing and diversion activity and record turbidity 50 feet downstream of the activity no less than every 20 minutes during active in-stream work to document compliance with the magnitude and duration of elevated turbidity authorized by this Resolution.

Flow Introduction into the Newly Constructed Channel

Introducing flow into the newly constructed channel may result in a violation of the numeric water quality objective for turbidity, even after the LTBMU allows a minimum of one construction season to rest the new channel to allow for stabilization and growth of planted vegetation. LTBMU will also flood the new channel segments and percolate introduced flow to facilitate the sediment settling. This flooding/percolation technique will be conducted a minimum of three times with the goal of incorporating any loose fine sediments into the new channel. The LTBMU will then introduce river flow into the constructed channel in a controlled manner without discharging or connecting the flow to the live channel. The introduced flow will be pumped and sprayed onto the floodplain and adjacent upland areas until the turbidity in the last fast water reach of the new channel is less than or equal to 10 NTUs. At that time, flows in the new channel can be released and connected to the existing channel. If after three full 10-hour days of introducing flows and pumping to the meadow and dewater basins, the turbidity of the new channel is still greater than 10 NTUs but less than 15 NTUs, flows in the new channel can be released and connected to the existing channel.

The LTBMU shall note the time it initiates channel flushing and document all turbidity measurement and field notes taken during channel flushing to assess compliance with the magnitude and duration of turbidity increases authorized by this Resolution.

Additional Monitoring and Reporting

The sampling sites associated with the above-described activities are shown on Figure 1.

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In addition to collecting grab samples for turbidity associated with specific activities as specified above, the LTBMU will install and operate continuous turbidity monitoring instruments near the upstream and downstream ends of the Project area.

Elevated turbidity downstream of the Project shall not exceed 15 NTUs at any time during project construction, and turbidity levels are expected to return to background conditions (as described in Finding 10) within 48 hours of reestablishing flows through the Project area.

Turbidity measurements, associated field notes, and analyses shall be reported in weekly monitoring reports as described in the SWPPP. Should field turbidity measurements exceed the duration or extent indicated above, the LTBMU must notify Water Board staff within 24 hours.

- 12. The Basin Plan encourages restoration projects that are intended to reduce or mitigate existing sources of soil erosion, water pollution, or impairment of beneficial uses. The Basin Plan contains provisions for the Water Board to grant exemptions to prohibitions including the discharge of waste which causes violation of any narrative water quality objective contained in the Basin Plan, including the Nondegradation Objective, whenever it finds that a specific restoration project meets all the following criteria:
 - (a) The project will eliminate, reduce, or mitigate existing source of erosion, water pollution, and/or impairment of beneficial uses of water.

The purpose and need for this Project are discussed in several documents including the Upper Truckee River Reclamation Project Environmental Assessment, Feasibility Report and Conceptual Plans (Tahoe Resource Conservation District ,2003), the Sunset Stables Restoration and Resource Management Plan (Entrix, March 2005), and the Agency Draft - Sunset Stables Restoration and Resource Management Plan (Entrix, July 2008). The purpose of the Project is to improve the Upper Truckee River watershed conditions and the function of the aquatic, riparian, meadow, and terrestrial ecosystems by reducing sedimentation, restoring and expanding meadow habitat and improving aquatic habitat within the Project area. Work will include construction of a new river channel in order to restore historic meadow conditions and drainage and flooding patterns. Two of the expected outcomes of the Project will be a restored (elevated) groundwater table and reconnection of flood flows back onto the meadow floodplain. The Project is expected to result in a long term reduction in sediment delivery and turbidity and overall improvement in water quality due to decreased bank erosion and better connectivity to the floodplain.

(b) There is no feasible alternative to the project that would comply with provisions of the Basin Plan, precluding the need for an exemption.

An existing source of erosion and sediment delivery is the result of ongoing incision and bank instability of the existing channel. There is a need to restore this reach of the Upper Truckee River in order to increase the potential for this meadow floodplain to store water and sediment and allow it to function as a wet meadow ecosystem thereby improving water quality.

Any other feasible alternative action that would restore the Upper Truckee River and meadow floodplain would involve similar inherent risk of elevated turbidity either during construction or during the connection of river flows to the constructed channel. The LTBMU and CTC considered design alternatives in planning the Project, including no action. There is no feasible alternative that would fully comply with Basin Plan turbidity requirements.

(c) Land disturbance will be limited to the absolute minimum necessary to correct or mitigate existing sources of soil erosion, water pollution, and/or impairment of beneficial uses of water.

The total area of disturbance proposed within the SEZ is approximately 36 acres. This sum includes approximately 10.2 acres of new channel construction, up to 2 acres of sod harvest areas, up to 6 acres of floodplain grading, approximately 13 acres of backfilling the existing channel and 5 acres of temporary access road. Approximately two-thirds of the access road alignment follows an existing disturbance footprint from the current utility access easement and user created trails.

These disturbances are the minimum necessary to meet Project objectives of improving the function of the aquatic, riparian, meadow and terrestrial ecosystems by reducing existing sources of sedimentation, and restoring and expanding wet meadow habitat and function.

(d) All applicable BMPs and mitigation measures have been incorporated into the project to minimize soil erosion, surface runoff, and other potential adverse environmental impacts.

The LTBMU submitted a draft SWPPP that describes BMPs and mitigation measures designed to avoid, reduce and minimize adverse environmental impacts, particularly during project phases that include new channel activation and seasoning, and dewatering/backfilling of the existing channel. Specific procedures are outlined for the methods, timing, and monitoring of activities listed in Finding 6.

The flow of the Upper Truckee River will remain in the existing channel until the new channel construction is complete, the new channel is seasoned, and turbidity levels within the constructed channel are reduced to the maximum extent practicable in accordance with plans and criteria described in Finding 11, above.

(e) The Project complies with all applicable laws, regulations, plans and policies.

Prior to Project implementation (anticipated June 2013) the LTBMU must obtain the following permits from the Water Board:

- a) Water Quality Certification pursuant to Clean Water Act, Section 401.
- b) Notice of Applicability of Board Order No. R6T-2011-0019, Updated Waste Discharge Requirements and NPDES General Permit No. CAG616002 for Discharges of Storm Water Runoff Associated with Construction Activity Involving Land Disturbance in the Lake Tahoe Hydrologic Unit.
- (f) Additional exemption criteria apply to restoration projects proposed within the Lake Tahoe Basin. To the extent that they are more stringent, the Lake Tahoe Basin criteria supersede the regionwide criteria above.

As described in Findings 8 and 9 above, disturbances within the SEZ resulting from Project activities requires an exemption to a waste discharge prohibition against the discharge or threatened discharge to SEZs attributable to new development or permanent disturbance within an SEZ. This exemption is also part of this resolution.

13. The LTBMU Forest Supervisor signed a Decision Notice and Finding of No Significant Impact (DN/FONSI) for the Project in accordance with the National Environmental Policy Act on March 20, 2012.

Water Board staff have reviewed the DN/FONSI and noted that the document contains specific design features, BMPs, and construction controls to reduce potentially significant impacts to less than significant levels. These features are further described in the submitted draft SWPPP and technical documents. The Water Board will include implementation of these measures as described in the submitted documents in the required Water Quality Certification Order that must be issued pursuant to Clean Water Act Section 401.

14. In February 2012, the LTBMU and the CTC prepared a Final Environmental Assessment/Negative Declaration for the Sunset Stables Reach Restoration Project. The CTC adopted a negative declaration (SCH No. 2011042069) for the project in order to comply with CEQA, for which a Notice of Determination was filed on March 21, 2012. The Regional Water Board is a responsible agency for this project under CEQA, and has considered the environmental document and any proposed changes

incorporated into the project or required as a condition of approval to avoid significant effects to the environment. The Regional Water Board will file a Notice of Determination within five days from the issuance of this order.

- 15. The Water Board has notified the Project proponent and interested agencies and persons of interest of its intent to adopt this Resolution. A draft of this Resolution was circulated for a 30-day public comment period.
- 16. The Water Board, in a public meeting, heard and considered all comments pertaining to the proposed activities and the proposed exemption to two prohibitions in the Basin Plan.

THEREFORE, BE IT RESOLVED THAT:

- 1. The Project is necessary for stream channel, habitat, and SEZ restoration, and meets the eligibility criteria for an exemption to the Basin Plan waste discharge prohibition as outlined in Findings 7(a) and 9, above.
- 2. The Water Board hereby grants an exemption to the Basin Plan prohibition stated in Finding 7(a), above.
- 3. The Project is a restoration project that is intended to reduce or mitigate existing sources of soil erosion, water pollution, or impairment of beneficial uses, and meets the eligibility criteria for an exemption to the Basin Plan waste discharge prohibition as outlined in Findings 7 (b) and 12, above.
- 4. The Water Board hereby grants an exemption to the Basin Plan prohibition stated in Finding 7(b), above. This exemption is limited to the water quality objective for turbidity and to the specific turbidity limit described in Finding 11, above.
- 5. Prior to construction commencing, the LTBMU must receive Water Quality Certification (WQC) pursuant to Clean Water Act Section 401 and obtain coverage under Order R6T-2001-0019, General Waste Discharge Requirements and NPDES General Permit No. CAG616002 for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit.

I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional **Water Quality Control Board, Lahon**tan Region, on February 14, 2013.

PATTYZ KOUYÖUMDJIAN

EXECUTIVE OFFICER

Attachment: Figure 1- Project Map (including turbidity sampling locations)

