March 5, 2018

To Interested Parties

Notice of Intent to Adopt a Mitigated Negative Declaration and Opportunity to Provide Comments on the Proposed Dry Creek Watershed Sites 5-8 Restoration Project, Nevada County, State Clearinghouse No. 2017122068

The California Regional Water Quality Control Board, Lahontan Region (Water Board) is the California Environmental Quality Act (CEQA) lead agency for the Dry Creek Watershed Sites 5-8 Restoration Project (Project). A mitigated negative declaration (MND), describing potential adverse environmental impacts and associated mitigation measures, has been prepared by the Water Board in connection with this project. This request for comments is intended to provide interested individuals, organizations, and agencies the opportunity to comment on the environmental effects of the Project as described in the MND. A copy of the MND can be downloaded at: www.waterboards.ca.gov/lahontan. To request a compact disc of the MND, please call the Water Board's South Lake Tahoe office at 530-542-5400.

Project Location:

The Project area is in the north-eastern portion of Nevada County, approximately nine miles north of Truckee, California and on the east side of Highway 89. The Dry Creek project area is located within the Little Truckee River – Boca Reservoir sub-watershed. Locally, the overall project area is also referred to as Russel Valley.

Project Description:

The goals of the Project are to restore hydrologic function, reduce erosion, and improve meadow habitat. The proposed Project would restore four impacted areas, Sites 5, 6, 7, and 8, in the Dry Creek watershed. Sites 5, 6, and 7 are on lands managed by the United States Forest Service - Tahoe National Forest. Site 8 is on private property. The total Project size is approximately 8.5 acres. The Project includes re-vegetation of disturbed areas with native and local plant species to stabilize the sites and ensure long term success.

Specifically, the proposed Project would involve the following actions at each Site:

- Site 5 (approximately 1.1 acres) - Restoration of an active headcut on an intermittent tributary stream in a small meadow that parallels Sierra County Road

261. Approximately 1000 cubic yards of fill comprised of soil and rock will be placed to stabilize the headcut and reconnect the channel to the floodplain.

• Site 6 (approximately 0.4 acres) - An ephemeral stream channel runs down an existing USFS road and causes erosion. Approximately 250 feet of the existing road will be relocated away from the channel, and the channel will be reconstructed to restore natural drainage topography.

• Site 7 (approximately 2 acres) - A redundant road segment will be removed from a meadow. Road fill and an existing culvert will be removed; the new surface will be graded to match the surrounding meadow and re-vegetated. Drainage patterns will be re-established through the disturbed area.

• Site 8 (approximately 5 acres) - A degraded meadow will be restored by placing engineered fill within the currently incised stream channel to return stream flow to historic channels, thus improving the meadow's hydrology and function. Approximately 10,500 cubic yards of fill will be placed to partially fill the existing incised channel.

The Project will be carried out by the Truckee River Watershed Council in coordination with the Tahoe National Forest. Short-term construction impacts would occur to approximately 8.5 acres, which would be restored with native vegetation. Construction is anticipated in the late summer/early fall of 2018 and would last approximately eight to ten weeks.

Regulatory Process:

Project implementation will require the Water Board to take regulatory actions such as issuance of a National Pollutant Discharge Elimination System storm water construction permit; Water Quality Certification pursuant to Clean Water Act section 401; and Lahontan Basin Plan Prohibition Exemptions. This notice serves as a notice of intent to adopt an MND for this project pursuant to the CEQA Guidelines section 15072.

Comment Deadline and How to Submit Comments:

Please submit your comments on the MND via email to: Lahontan@waterboards.ca.gov with the subject line "Dry Creek Sites 5-8 Project, attention Laurie Scribe" no later than close of business on **April 5, 2018.**

For questions or additional information, please contact Laurie Scribe, Lahontan Water Board staff, at (530) 542-5465 (laurie.scribe@waterboards.ca.gov).

cc: 1. Interested Parties Mailing List
2. Lyris Lists:
   - Basin Plan Prohibition Exemptions – Truckee only
   - TMDLs – Truckee River Sediment

LS/ma/T: CEQA Dry Creek 5-8 NOI
File Under: ECM / 2017122068/Environmental Document/Submittal/CEQA Environmental Documents

California Environmental Quality Act (CEQA)

Initial Study

Supporting the Preparation of a Mitigated Negative Declaration

for the

Dry Creek Watershed Sites 5 – 8

Restoration Project

February 2018

California Regional Water Quality Control Board, Lahontan Region
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

CEQA APPENDIX G
ENVIRONMENTAL CHECKLIST FORM

1. Project title: Dry Creek Watershed Sites 5-8 Restoration Project

2. Lead agency name and address:
Lahontan Regional Water Quality Control Board (Lahontan Water Board)
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

3. Contact person and phone number:
Laurie Scribe, (530) 542-5465

4. Project location:

The Dry Creek project area is located approximately nine miles north of Truckee, California on the east side of Highway 89. Locally, the overall Project area is also referred to as Russel Valley. The Project area is included in the Dry Creek watershed, a Hydrologic Unit Code (HUC) 7 drainage nested within the Little Truckee River – Boca Reservoir sub-watershed. The Dry Creek Project area is located in Nevada County. Attachment B, Figure 1 shows the watershed location.

The Dry Creek Watershed Sites 5-8 Restoration Project (Project) includes work at four sites within the Dry Creek watershed (Attachment B, Figure 2).

5. Project sponsor's name and address:

Truckee River Watershed Council (TRWC)
P.O. Box 8568
Truckee, CA 96162
Beth Christman, (530) 550-8760

And

Tahoe National Forest
10811 Stockrest Springs
Truckee, CA 96161

6. General plan designation: FOR-160

7. Zoning: FR-160

8. Description of project:

<u>Project Background</u>

The Dry Creek Watershed Assessment (USDA, 2013) identified the impacts of past and current land use on the natural hydrology and habitat of the watershed, including historic railroad, timber harvest, and grazing practices and the existing road and trail network. The road and skid trail network (including historic railroad grades) have interrupted, captured, and re-routed surface water flows in the Project area. Meadows in the Project area have been impacted by this transportation network as well as by reservoir operations. Incision of stream channels through the meadows has decreased floodplain connectivity, reduced filtering capacity, lowered the seasonal water table, and impacted riparian and aquatic habitat. The incision has reduced the water holding capacity of the meadow area and increased the speed of water draining from the watershed. Erosion within the incised stream channels is significant. Some of the stream segments have active head cuts that need to be stabilized to slow or stop the erosion processes from moving upstream. More recently, pipeline and power line construction, and user-created routes have contributed to modified linear drainage networks, also accelerating erosion and speed of water drainage.

The Dry Creek watershed and surrounding areas had relatively low to moderate rates of erosion prior to human disturbance (USDA, 2013). Without human disturbance, the area would be expected to have low to moderate rates of erosion. The topography and drainage system are mainly on a low to moderate gradient with a small potential for unstable vegetated conditions.

Identified impacts have decreased the ability of the watershed to capture and store water, increased the speed at which water drains from the watershed, increased erosion and sediment transport, and reduced riparian and aquatic habitat. The Truckee River and all of its tributaries are listed as impaired for excessive sediment under section (303(d)) of the federal Clean Water Act (LRWQCB, 2008). The Dry Creek Watershed is a tributary to the Little Truckee River via Boca Reservoir and flows into the Truckee River. Watershed conditions need to be improved to reduce erosion, improve water holding capacity, and improve habitat.

The USDA Forest Service – Tahoe National Forest (Tahoe NF) prepared an Environmental Assessment for the Dry Creek Project (Dry Creek EA) (USDA 2015), and in 2015 signed a Decision Notice and Finding of No Significant Impact for the Dry Creek Project. The Dry Creek EA included environmental analysis of vegetation management and watershed restoration proposed for Tahoe NF lands in the Dry Creek area, including Sites 5, 6, and 7 in the proposed Project. Site 8 is located on private lands in the Dry Creek watershed adjacent to Tahoe NF lands.

Project Implementation

The Project proposes to implement watershed restoration activities at 4 locations (Sites 5-8) within the Dry Creek Watershed to improve riparian function and reduce erosion and loss of meadow habitat. Sites 5, 6, and 7 are smaller in size (2 acres or less per site) and seasonally dry. Site 8 is larger, approximately 5 acres, and involves work in a perennial section of Dry Creek to restore a meadow. Site photos are included in Attachment C.

It is anticipated that the Project will be implemented in 2018 or 2019, with additional revegetation work the year following construction if needed. Work will take place in late summer and early fall, from

approximately August 1 to October 31, when stream flows are at a minimum and the meadow surface is dry.

Site 5

At this location, an active headcut is moving upstream/up valley along an intermittent tributary that parallels Sierra County Road 261. This headcut has formed a gully next to the existing remnant channel and is actively eroding. The erosion is moving into an adjoining meadow. Without intervention additional meadow habitat will be lost. The disturbance area at Site 5 is approximately 1.1 acres.

Project design at this site includes treatment of the headcut and the area downstream with a combination of rock riffles and soil to stabilize and reconnect the natural hydrology of the area. Project implementation will arrest erosion, restoring and protecting the existing meadow habitat. Fill will be placed in the existing eroded intermittent drainage and adjoining wetland area. The remnant intermittent channel will be restored, resulting in a net increase of intermittent stream length at this site. The current channel is 400 feet long and the remnant channel is approximately 420 feet long.

Specific construction actions:

- Salvage topsoil. Any usable topsoil and sod from the area to be filled will be removed and stockpiled for re-use.
- Generate fill. Approximately 1,000 cubic yards of soil and rock will be used to stabilize the headcut and reconnect the channel. On-site upland borrow areas are available, and fill will be generated from these areas. Borrow area disturbance would be 0.2 acres.
- Place fill. Place and shape fill in gully to direct flows into the remnant channel. Approximately 400 feet of eroding channel will be treated.
- Revegetation. Any salvaged sod will be replaced. The area will be seeded and mulched by a combination of California Conservation Corps (CCC) crews, USFS personnel, and TRWC volunteers.

Site 6

Site 6 is located along an existing USFS road. A small segment of the road runs directly in an ephemeral stream channel and is actively eroding. The road will be relocated and the segment within the drainage restored. The disturbance size at Site 6 is approximately 0.4 acres.

Fill will be removed from approximately 175 feet of ephemeral drainage. Any excess fill generated will be used within the Project area.

Specific construction actions:

- Relocate road segment. A stable alignment has been identified. Approximately 230 feet of road will be constructed to replace the obliterated road segment.
- Obliterate existing road segment. Approximately 175 feet of road will be decommissioned by removing fill from an ephemeral drainage.

- Reconstruct drainage. The drainage will be shaped to restore its natural path.
- Disturbed areas outside of the immediate flow path will be seeded and mulched.

Site 7

Forest System Road (FSR) 886-18 connects with County Road 886 at two separate locations; as road 886-18 nears road 886, it splits and two intersections are formed approximately 1/8 mile apart on road 886. The more northern spur of FSR 886-18 is an old railroad grade which crosses an intermittent channel and associated meadow. This spur is redundant to the use of FSR 886-18 and has channelized flow in the meadow, leading to gully formation. Two acres of meadow habitat have been directly or indirectly impacted at this site.

Site 7 involves removing the redundant road segment (FSR 886-18) constructed through the meadow (Figure 5). Excess fill from this site will be used at other Project Sites. The remaining road segment will be upgraded to improve usability. Removing the road will increase floodplain area and remove a source of constriction on the stream channel, reducing erosion and improving meadow function. Work in wetlands/waters includes reshaping the wetland area and drainage features after the fill and existing culvert are removed. The disturbance size at Site 7 is approximately 2 acres.

Specific construction actions:

- Remove road segment bisecting meadow. Excavate fill from meadow surface and remove existing culvert. Any excess fill will be used within the Project area at other locations.
- Reconnect existing drainage path across removed road. Match grade to meadow surface.
- Revegetation. Spread seed and mulch on disturbed area. Transplant sod plugs if available. Revegetation will be completed utilizing a combination of CCC crews, USFS personnel, and TRWC volunteers.

Site 8

Site 8 is a large meadow located along the mainstem of Dry Creek, just below the confluence of the headwater tributaries. The stream channel through the meadow has been modified by historical land management activities including grazing, timber harvest, and railroad and road construction. These modifications have resulted in incision, floodplain disconnection, and subsequent conversion of meadow vegetation to upland plant communities. The lower part of the drainage is affected by the present-day road network and an abandoned railroad grade.

The proposed Project would restore the stream to historic channels on the meadow surface, promoting floodplain connectivity and reducing erosion. This would be accomplished by filling or partially filling the incised gully that currently conveys the flow of Dry Creek. The stream would then re-occupy its former channels. The Project would result in a raised seasonal water table and expansion of riparian and wetland vegetation. The disturbance size at Site 8 is approximately 5 acres.

Specific construction actions:

- Divert flows into remnant channel system.
- Excavate existing vegetation from bottom of gully and stockpile vegetation and topsoil.
- Generate fill from upland sources and railroad grade. Borrow sites will be located to avoid archaeological and cultural resource sites.
- Transport fill to site and place in gully, match grade to meadow surface.
- Place stockpiled vegetation on top of fill, water to maintain viability.
- Construct grade control structure at lower end of site to ensure grade continuity with the existing culvert under Nevada County Road 889.
- Seed and mulch disturbed areas including access routes and staging areas.

Borrow sources may include the abandoned railroad grade at the lower end of the site, nearby upland locations, and material stockpiled at the Hobart Mills work station. The material stockpiled at the Hobart Mills work station would be generated from a local restoration project, Truckee Meadows.

Attachment A contains a summary of mitigation measures to be implemented as part of the Project.

9. Surrounding land uses and setting: Briefly describe the project's surroundings.

The Dry Creek watershed is approximately 7,304 acres in size. The area has mostly flat to moderately steep terrain, with steeper upper slopes draining into broad flat valley bottoms. Elevations range from approximately 5,600 feet, where the outflow enters Boca Reservoir, up to 6,994 feet at the top of Billy Hill on the northwest boundary of the Dry Creek area. However, the majority of the area is between 5,800 and 6,200 feet in elevation. The area encompasses the community of Russel Valley and borders the community of Tahoe Timber Trails.

The Forest Service owns approximately 89 percent of the land within the watershed. Much of the privately-owned land is residentially developed to various extents, mostly in large acreage parcels. Some of the private parcels are managed as forest. Several utility corridors pass through the area including multiple electric transmission and distribution lines, a buried fiber optic line, and a buried petroleum pipeline. The area is popular with dispersed recreationists. Uses include motorcycle riding, mountain biking, road biking, horseback riding, snowmobiling, cross country skiing, and driving for pleasure. The area includes both the historical and Commemorative Overland Emigrant Trails, official and unofficial bicycle trails, and off-highway vehicle trails. Stampede Reservoir is just over the ridge, and roads and routes in the Dry Creek area serve as the main means of access to the reservoir.

10. Public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

Permits:

- U.S. Army Corps of Engineers
- Lahontan Water Board
- California Department of Fish and Wildlife

Financing:

- California Department of Fish and Wildlife

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

The Lahontan Water Board sent notification of the Project to tribes affiliated with the Project area pursuant to Public Resources Code section 21080.3.1 on December 27, 2017. No consultation was requested.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology /Soils
☐ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials	☒ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

_____ _____

Signature Date

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Answers to checklist questions a, b, d – No Impact

The Project is not located in or adjacent to a designated scenic vista or along a scenic highway. The Project would not result in the development of new sources of light or glare.

Answer to checklist question c – Less Than Significant Impact

The Project would have minor visual impacts during construction. The users of the area expect a relatively natural experience and the presence of heavy equipment would be out of character. However, the construction period will be limited to approximately 2-3 months during the late summer and early fall.

After construction, the visual character of the restoration sites will be improved. Short term impacts will be limited by revegetation activities, and the long term effects of the restoration work will be enhanced meadow habitat and reduced erosion through the Project sites.

Mitigation measures

No mitigation is required.

II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Answers to checklist questions a-e – No Impact

No farmland is located in the Project area. There would be no impact to agricultural resources. The Project will not affect the adjoining forest areas or result in any changes to land use.

Mitigation measures

No mitigation is required.

III. AIR QUALITY. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

Answer to checklist question a and b – Less Than Significant with Mitigation Incorporated

The proposed Project site is located in Nevada County, California, which is in the Northern Sierra Air Quality Management District (NSAQMD). There is a potential for temporary, localized impacts on air quality associated with fugitive dust and engine emissions during construction activities. The construction related impacts would be less than significant. Mitigation measures AIR 1- 5 will reduce the impact from emissions and dust to a less than significant level.

Answer to checklist questions c and e – No Impact

The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Due to its short-term, small scale, low-intensity nature, it would not result in a cumulatively considerable net increase of pollutants. Objectionable odors may arise from diesel fuel, however most work will take place away from existing residences in the Project area.

Answer to checklist question d - Less Than Significant with Mitigation Incorporated

There is a potential for construction-related fugitive dust or diesel emissions to reach residents of Russel Valley during construction. Equipment transport will be on existing paved and chip sealed roads. The closest house is approximately 500 feet from the construction area. As such, emissions and dust from

construction could affect local residents if necessary precautions are not taken. Mitigation measures AIR 1- 5 (described below), along with GEO 1 – GEO-11, will reduce the impact from emissions and dust to a less than significant level.

Mitigation Measures

AIR –1. All areas (including unpaved roads) with vehicle traffic must be watered as necessary for stabilization of dust emissions. Care must be taken to avoid excessive watering that could cause a discharge to surface waters.

AIR –2. On-site vehicle speeds will be limited to 15 miles per hour on unpaved surfaces.

AIR –3. Inactive soil stockpiles will be watered or covered during windy conditions.

AIR –4. Disturbed areas will be revegetated as per Mitigation Measures BIO- 2 – BIO - 6. If immediate permanent re-vegetation is impractical due to factors such as poor seasonal timing, then temporary measures such as adequate covering with mulch will be implemented.

AIR –5. Construction activities will comply with EPA air quality standards on dust and condensed fumes, so that emissions do not exceed hourly levels as regulated per processing weight.

IV. BIOLOGICAL RESOURCES. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Answer to checklist questions e and f – No Impact

The proposed Project does not conflict with any local, regional, or state biological protection policies or conservation plans.

Answer to checklist question a – Less Than Significant with Mitigation Incorporated

Wildlife surveys and botanical completed for this Project evaluated potential effects of the proposed action on species listed as threatened, endangered, candidate, and proposed species by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Surveys were completed by U.S. Forest Service staff (Kula, 2014; Urie, 2014).

The following information summarizes potential effects of the proposed action on biological resources, including special status species, and mitigation measures that are expected to reduce potential adverse effects to a less than significant level.

Terrestrial Wildlife

Sensitive terrestrial wildlife species that could potentially occur in the Project area are included in the table below (BIO-1).

Table BIO-1. Sensitive Terrestrial Wildlife Species that could potentially occur in the Project area (Kula, 2014).

Species and Status[1]	**Potential to Occur in Project Area**	**Impacts Determination**	**Mitigation Measures**
Birds			
American Peregrine Falcon (*Falco peregrinus anatum*) – SFP	Unlikely – no suitable habitat	No Impact	None needed
American White Pelican (*Pelecanus erythrorhynchos*) - SSC	Unlikely – no suitable habitat	No Impact	None needed
Bald Eagle (*Haliaeetus leucocephalus*) – SE	Unlikely – no suitable habitat	No Impact	None needed
Bank Swallow (*Riparia riparia*) – ST	Unlikely – no suitable habitat	No Impact	None needed
Black Tern (*Chlidonias niger*) - SSC	Unlikely – no suitable habitat	No Impact	None needed
California Spotted Owl (*Strix occidentalis occidentalis*) - SSC	Unlikely – no suitable habitat	No Impact	None needed
Great Gray Owl (*Strix nebulosa*) - SE	Low potential – limited suitable nesting habitat in	Less than significant impact	None needed

	the project area		
Greater Sandhill Crane (*Grus canadensis tabida*) – ST, SFP	Low potential – limited suitable nesting habitat in the project area	Less than significant impact	None needed
Long-eared Owl (*Asio otus*) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
Northern Goshawk (*Accipiter gentilis*) – SSC	Low potential – limited suitable nesting habitat in the project area	Less than significant impact	None needed
Olive-sided Flycatcher (*Contopus cooperi*) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
Purple Martin (*Progne subis*) – SSC	Unlikely – no suitable habitat	No Impact	None needed
Willow Flycatcher (*Empidonax trailii*) – SE	Unlikely – no suitable nesting habitat	No Impact	None needed
Yellow Warbler (*Dendroica petechia*) - SSC	Low potential – limited suitable nesting habitat in the project area	Less than significant impact with mitigation incorporated	BIO-1: limit construction period to after July 31st.
Mammals			
Fringed Myotis (*Myotis thysanodes*) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
Long-legged Myotis (*Myotis volans*) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
North American Wolverine (*Gulo gulo luscus*) – ST, SFP	Unlikely – no suitable habitat	No Impact	None needed
Pacific Fisher (*Pekania pennanti*) – FP, SC, SSC	Unlikely – no suitable habitat	No Impact	None needed
Pallid Bat (*Antrozous pallidus*) – SSC	Low potential – limited suitable habitat in project area	Less than significant impact	None needed
Sierra Nevada Red Fox	Unlikely – no	No Impact	None needed

(*Vulpes vulpes necator*) – ST	suitable habitat		
Sierra Nevada Snowshoe Hare (*Lepus americanus tahoensis*) – SSC	Low potential – limited suitable habitat in project area	Less than significant impact	None needed
Spotted Bat (*Euderma maculatum*) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
Townsend's Big-eared Bat (*Corynorhinus townsendii*) – SC, SSC	Unlikely – no suitable habitat	No Impact	None needed
Invertebrates			
Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) - FT	Unlikely – no suitable habitat	No Impact	None needed

[1]Key:

Federal: (USFWS)
FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government
FP = Proposed for Listing by the Federal Government
FC = Candidate for Listing by the Federal Government

State: (CDFW)
SE = Listed as Endangered by the State of California
ST = Listed as Threatened by the State of California
SC = Candidate for listing by the State of California
SFP = California Fully Protected Animals
SSC = California Species of Special Concern

Potential habitat for long-eared owl, olive-sided flycatcher, yellow warbler, fringed myotis, long-legged bat, and spotted bat occurs in the project area. Any long-eared owl, olive-sided flycatcher, fringed myotis, long-legged bat, and spotted bat that may occur in the area would mainly use the Project area as foraging habitat and the surrounding analysis area as potential nesting/roosting sites. The yellow warbler on the other hand may potentially use the Project Site 8 as nesting habitat.

Project implementation may impact suitable foraging habitat for the long-eared owl, olive-sided flycatcher, fringed myotis, long-legged bat, and spotted bat in the short-term, however, the Project would result in improved habitat quality in the long-term. The habitat quality would mainly improve for prey species which could produce an increase in prey availability for the aforementioned species. The beneficial impacts of the Project to these special-status species would result in less than significant impacts.

Project implementation may impact marginally suitable habitat for yellow warbler. There are a few willow clumps in the wet meadow in Site 8 that the yellow warbler may utilize for breeding and foraging. Project activities may lead to disturbance of perching or nesting sites or disrupt foraging and/or nesting behavior. Mitigation Measure BIO-1, considered in conjunction with the fact that the wet meadow habitat within the Project area is marginal, will reduce potential impacts to yellow warbler to less than significant.

Habitat within the Project area provides potential nesting and foraging habitat for migratory songbirds and raptors. Project implementation may impact these species during the breeding season. Mitigation Measure BIO-1 would reduce potential impacts on nesting songbirds and raptors to less than significant.

Aquatic Wildlife Species

Aquatic wildlife surveys were not conducted specifically on the Site 8 Project area, but were completed for the length of Dry Creek below the Site 8 on Forest Service property (Urich, 2015). Due to proximity and similar habitat, the same state and federal sensitive species were considered for this evaluation. Sites 5, 6, and 7 only have intermittent or ephemeral flows and do not support abundant riparian habitat. Special status aquatic wildlife species that could potentially occur in the Project area are included in the table below (BIO-2).

The proposed Project restoration actions are outside the historic range and therefore would not affect any of the following species: California red-legged frog (*Rana aurora draytonii*), northwestern pond turtle (*Clemmys marmorata marmorata*), foothill yellow-legged frog (*Rana boylii*), black juga snail (*Juga nigrina*), hardhead (*Gila conocephala*), and California floater mussel (*Anodonta californiensis*) (USDA 2015). In addition the Project would not affect the Lahontan lake tui chub (*Gila bicolor pectinifer*) or Great Basin rams-horn snail (*Helisoma newberryi newberryi*) because these species are not present in the Project area (USDA 2015).

Table BIO-2. Special status aquatic wildlife species that could potentially occur in the Project area.

Species and Status[1]	**Potential to Occur in Project Area**	**Impacts Determination**	**Mitigation Measures**
California red-legged frog (*Rana aurora draytonii*) -FT	Unlikely – outside historic range	No impact	None needed
Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*) -FT	Unlikely – not observed downstream of project	No impact	None needed

	area		
Sierra Nevada yellow-legged frog (*Rana sierra*) -FE, CT	Suitable Habitat	Less than significant with mitigations incorporated	BIO-7: Survey prior to ground disturbing activities. BIO-9: LOP November 30 to May 30 to avoid impacts to frogs moving to breeding grounds. BIO-8 -12: Protections during construction.

[1]Key:

Federal: (USFWS)
FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government
FP = Proposed for Listing by the Federal Government
FC = Candidate for Listing by the Federal Government

State: (CDFW)
SE = Listed as Endangered by the State of California
ST = Listed as Threatened by the State of California
SC = Candidate for listing by the State of California
SFP = California Fully Protected Animals
SSC = California Species of Special Concern

Of the sensitive aquatic species that could potentially occur in the Project area (Table BIO-2), the Project would only potentially affect Sierra Nevada yellow-legged frog (SNYF). However, because of the recent Lahontan cutthroat trout (LCT) stocking activity in Boca Reservoir, a brief discussion of the potential presence of LCT is included as well.

Lahontan cutthroat trout

In 2012 and 2013, the California Department of Fish and Wildlife (CDFW) initiated a stocking program to introduce LCT within its historical range. CDFWs goal is to provide a recreational fishing opportunity for native species within its native range. In 2013, approximately 25,000 LCT fingerlings were stocked into Boca reservoir, and approximately 25,000 fingerlings were planted into Stampede Reservoir. CDFW regularly stocks kokanee, lake, rainbow and brown trout into these two reservoirs. Populations of large fish of these species are providing a successful angler experience, but the presence of these competing, predatory, and hybridizing nonnative species throughout the area makes the likelihood of LCT persistence low (Urich, 2015).

Dry Creek enters the northwestern arm of Boca Reservoir. Reservoir drawdown and the annual low flows of Dry Creek disconnect the creek from the reservoir yearly.

Despite the recent stocking activities, the Project will not impact this species for the following reasons: (1) Fish surveys conducted by the CDFW post stocking have not detected survival of the 2013 fingerling stocking event, (2) the presence of competing large predatory and hybridizing nonnative species present within Boca Reservoir makes the likelihood of LCT presence low to non-existent, (3) off-site sedimentation movement from Project activities is not expected to reach the reservoir, avoiding indirect impacts to LCT, and (4) mitigation measures BIO 16 – 18 are expected to reduce potential adverse effects to a less than significant level.

Sierra Nevada yellow-legged frog

The Project area is located within the presumed historic range of SNYF, although there are no documented historical or recent sightings within the Dry Creek watershed (Urich, 2015). Recent survey efforts and results are discussed below. The Project area includes perennial and intermittent drainages which are defined as suitable habitat for the species. Suitable habitat, as defined in the US Fish and Wildlife Service Biological Opinion (BO) for the species includes: "permanent water bodies or those hydrologically connected with permanent plunge pools within intermittent creeks, and pools, such as a body of impounded water contained above a natural dam. Suitable habitat includes adjacent areas, up to a distance of 82 feet. When water bodies occur within 984 feet of one another, as is typical of some high mountain lake habitat, suitable habitat for dispersal and movement includes the overland areas between lake shorelines. In mesic areas such as lake and meadow systems, the entire contiguous or proximate areas are suitable habitat for dispersal and foraging" (USFWS, 2014).

As defined by the BO, suitable habitat will be considered for SNYF for Project analyses as occupied or utilized habitat. Suitable Habitat consists of one or a combination of "utilized habitat," "utilization unknown habitat," and/or "unutilized potential habitat". The Dry Creek watershed is considered "utilization unknown" since there is suitable breeding habitat present for SNYF, SNYF has not been observed, and three protocol surveys by qualified biologist have not been conducted during the previous 10 years.

Sierra Nevada yellow-legged frogs are known to have been present within a number of locations in the Tahoe National Forest, but now exist in only a few populations in ponds and streams and generally in small numbers (USFWS 2003, the Tahoe National Forest GIS database). Jennings and Hayes (1994) indicate that the species was extinct by 1992 in a number of locations based on re-surveys of historic locations.

The Tahoe National Forest initiated herpetological surveys in 1996 in cooperation with the California Academy of Sciences, which included areas likely to support mountain yellow-legged frogs (please note, until recently the species designation "mountain yellow-legged frog" included the Sierra Nevada yellow-legged frog. These names are used interchangeably below). These surveys continued through 1999, and included a systematic search of historical museum records for the four counties encompassing the Tahoe National Forest (Vindum et al. 1997, Vindum and Koo 1999a, Vindum and Koo 1999b). The review

of historical herpetological specimens found that mountain yellow-legged frogs were historically collected from 33 localities in the Tahoe National Forest (Vindum et al. 1997). During ensuing surveys from 1997-1999, Sierra Nevada yellow-legged frogs were found in two additional localities (Vindum et al. 1997, Vindum and Koo 1999a, Vindum and Koo 1999b). Mountain yellow-legged frog surveys were also conducted in cooperation with the USGS Biological Division, Pt. Reyes, from 1997 through 2000, and continue periodically (data on file with the Tahoe National Forest). Since 1997, mountain yellow-legged frog sightings have been routinely recorded, either incidentally during stream and other biological surveys or during amphibian-focused surveys.

The Tahoe National Forest GIS database shows that since 1993 there have been mountain yellow-legged frogs documented in 4 general localities on Truckee Ranger District, 6 general localities on Sierraville Ranger District, and 10 general localities on Yuba River Ranger District. Although Dry Creek Site 8 is not located on Tahoe National Forest property, it is surrounded by USFS lands, making the National Forest surveys the most complete and relevant resource for this species.

The Project could have direct and indirect impacts on SNYF, if frogs are present. With mitigation measures incorporated these impacts are less than significant.

The operation of equipment within SNYF habitat could trample, harass, or kill individuals; temporarily remove vegetation; and cause short term sedimentation. Mitigation Measures BIO – 2 – 6 describe the revegetation measures that will prevent impacts from sedimentation. Mitigation measures BIO-7 – 12 will reduce these potential direct impacts on SNYF. Implementation of the Project should increase the amount and duration of available aquatic habitat for SNYF.

Plant Species

Table BIO-3 contains a list of the sensitive plant species that could potentially be found in the Project area.

Table BIO – 3. Sensitive Plant Species and status considered for Analysis (Urie, 2014).

Species and Status[1]	**Potential to Occur in Project Area**	**Impacts Determination**	**Mitigation Measures**
Arabis rigidissima var. *demote*- 1B.2	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No Impact	None needed
Artemisia tripartita spp. *tripartita* - 2B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No Impact	None needed
Astragalus austiniae - 1B.3	Unlikely - No habitat present due to unsuitable	No Impact	None needed

Species and Status[1]	Potential to Occur in Project Area	Impacts Determination	Mitigation Measures
	elevation range and substrate.		
Botrychium crenulatum - 2B.2	Medium potential - Habitat present in perennially wet areas. Assume presence because this species is not reliably visible, even when present.	Less than significant	None needed
Botrychium lunaria - 2B.3	Medium potential - Habitat present in perennially wet areas. Assume presence because this species is not reliably visible, even when present.	Less than significant	None needed
Botrychium minganense - 2B.2	Medium potential - Habitat present in perennially wet areas. Assume presence because this species is not reliably visible, even when present.	Less than significant	None needed
Carex davyi - 1B.3	Medium potential - Habitat present. Not detected during surveys.	No impact	None needed
Carex limosa – 2B.2	High potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed
Claytonia megarhiza – 2B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No impact	None needed
Drosera anglica – *CNPS 2B.3*	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed
Epilobium oreganum - 1B.2	Unlikely - Habitat present in perennially wet areas	No impact	None needed

Species and Status[1]	Potential to Occur in Project Area	Impacts Determination	Mitigation Measures
	but project elevation is outside of species range.		
Erigeron miser – 1B.3	Unlikely - No habitat is present.	No impact	None needed
Eriogonum umbellatum var. *torreyanum* - 1B.2	Low potential – habitat present in drier areas.	No impact	None needed
Hymenoxys lemmonii - 2B.2	Low potential - Habitat present in drier areas. Not detected during surveys.	No impact	None needed
Ivesia aperta var. *aperta* - 1B.2	Medium potential - Habitat present in ephemerally wet areas. Not detected during surveys.	No impact	None needed
Ivesia aperta var. *canina* - 1B.1	Medium potential - Habitat present in ephemerally wet areas. Not detected during surveys.	No impact	None needed
Ivesia sericoleuca - 1B.2	High - Habitat present in ephemerally wet areas. Not detected during surveys, but one occurrence is known adjacent upstream from project area.	Less than significant with mitigations incorporated	BIO-14: Flag and avoid any observed plants
Ivesia webberi –FT, 1B.1	Medium potential - Habitat present in ephemerally wet areas. Not detected during surveys.	No impact	None needed
Juncus luciensis - 1B.2	High potential - habitat is present in perennially wet areas. Not detected during surveys.	No impact	None needed
Lewisia longipetala - 1B.3	Unlikely - No habitat is present due to unsuitable	No impact	None needed

Species and Status[1]	Potential to Occur in Project Area	Impacts Determination	Mitigation Measures
	elevation range and substrate.		
Meesia triquetra - 4.2	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	Less than significant	None needed
Meesia uliginosa - 2B.2	Medium potential - Marginal habitat present. Not detected during surveys.	Less than significant	None needed
Nardia hiroshii – 1B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No impact	None needed
Packera layneae – FT, SR, 1B.2	Unlikely - No habitat is present on the east side of the Tahoe NF.	No impact	None needed
Potamogeton robbinsii – 2B.3	Low potential - No habitat present due to unsuitable substrate.	No impact	None needed
Pyrrocoma lucida - 1B.2	Unlikely -No habitat present due to unsuitable elevation range.	No impact	None needed
Rhamnus alnifolia - 2B.2	Low potential - Habitat present in perennially wet areas.	No impact	None needed
Rorippa subumbellata – SE, 1B.1	Unlikely - No habitat present due to unsuitable substrate.	No impact	None needed
Scutellaria galericulata - 2B.2	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed

[1]Key:

Federal: (USFWS)
FE = Listed as Endangered by the Federal Government

FT = Listed as Threatened by the Federal Government

State: (CDFW)
SE = Listed as Endangered by the State of California
ST = Listed as Threatened by the State of California
SR = California Rare Plant

California Native Plant Society: (CNPS)
1A = Plants presumed extinct in California
1B = Plants rare, threatened, or endangered in California
2 = Plants rare, threatened, or endangered in California, but more common elsewhere
3 = plants about which we need more information
4 = plants of limited distribution
CNPS suffixes/threat ranks:
X.1 = Seriously threatened in California
X.2 = Moderately threatened in California
X.3 = Not very threatened in California

Table BIO-3 includes plants which have been given special status by the U.S. Fish and Wildlife Service, California Fish and Wildlife Service, or California Native Plant Society. These plant species are those that could occur in this particular region and are expected to be considered under the California Environmental Quality Act (CEQA) under the Biological Resource Checklist. Field surveys were completed in July of 2014 by a professional botanist to determine their presence or absence (Urie, 2014). The special status species on the lists above were evaluated based on the surveys and knowledge of any previously known occurrence.

Less Than Significant with Mitigations Incorporated

Although *Ivesia sericoleuca* does not occur in the Project area it does occur nearby (Urie, 2014). Due to the very low dispersal ability of this plant, it is extremely unlikely that the population could have spread into the Project area. However, in order to prevent any impacts to this species, Mitigation Measure BIO-14 will be employed and it is expected to reduce potential adverse effects to a less than significant level. If any plants are found during Project layout, they will be flagged and avoided.

Less Than Significant Impacts

The determination of "Less-than-Significant Impact" was made based on the analysis of tables above and field surveys. Surveys were done during the appropriate seasons for finding the sensitive plant species within the proposed Project area and the access routes in 2014. The moss species *Meesia triquetra* and *Meesia uliginosa* have potential habitat in the area and so do the moonwort species *Botrychium crenulatum*, *Botrychium lunaria*, and *Botrychium minganense*. No known occurrences for these species were found or have been documented as occurring within close proximity to the Project area. These species are typically very small and although thorough surveys were previously conducted, these species may not have been visible during any predictable timeframe. Since only marginal habitat

is present within the Project area and none of these special status plants were found to occur, impacts were determined to be "Less than Significant". If any of these plants are present, there would not be a substantial number since the habitat is marginal.

No Impacts

The determination of "No Impacts" was made based on the analysis of tables above and field surveys. Either the special status species were "unlikely" to have potential habitat within the Project area or species were not found to be present during the plant surveys.

Answer to checklist question b – Less Than Significant with Mitigation Incorporated

Plant communities present in the Project area include floodplain, terraces, sagebrush scrub, and eastside pine. Specific impacts to wetlands found in the floodplain habitat are addressed under question IV.c, below. Only limited riparian habitat is present in the floodplains of the Dry Creek channel – dominated by sedges, rushes, and grasses with occasional willow patches.

The Project will have temporary impacts in riparian areas. However, areas of disturbance to riparian habitat will be limited to the maximum degree possible. Where vegetation is disturbed, it will be salvaged and replanted along the newly restored flow paths.

The Project will have a net positive benefit on riparian and wetland areas. Both benefits and potential impacts to riparian areas are considered with the discussion of wetlands in the answer to checklist question IV.c below.

Significant impacts to sensitive habitats will be avoided through Mitigation Measures BIO - 5, 6, and 13.

Answer to checklist question c – Less Than Significant with Mitigation Incorporated

The Project will have temporary impacts on wetlands in the Project area. Wetland vegetation is present in the existing gullied stream channel at Site 8. The existing Dry Creek channel in Site 8 will be filled in order to restore flow to the remnant channels and reconnect floodplain surfaces. This will impact up to 2 acres of existing wetlands.

The Project will lead to a net increase in wetlands and will enhance existing wetlands. Attachment B Figure 4 shows the current extent wetlands in the Project area. Areas marked as "degraded wetlands" are not currently jurisdictional or functional wetlands. These areas, a total of 3.4 acres, are predicted to fully recover wetland function. A significant portion of the meadow area – 5.4 acres - has fully converted to upland sagebrush habitat. Much of this area will eventually convert to meadow or wetland habitat.

Flow will be returned to approximately 5,000 feet of remnant channel which will greatly improve floodplain connectivity across the site.

Vegetation removed from any disturbed wetlands will be replanted on the disturbed areas. One of the Project outcomes is to elevate the water table across the entire meadow at Site 8. Once the current

incision is closed off, the stream channel will no longer drain the adjoining meadow. Groundwater is expected to rise to within the rooting zone of wetland plants after Project implementation, allowing for the development and maintenance of wetland vegetation over most of the meadow, including the areas disturbed and filled during construction.

The filled area will be graded to match the meadow surface elevation and will be planted from wetland vegetation salvaged during construction. This will enable the filled areas to function as wetlands after the Project is completed.

Implementation of Mitigation measures BIO-5, 6, 13, and 15 will ensure that no permanent impacts to wetlands occur; and mitigation measures are expected to reduce potential adverse effects to a less than significant level.

Answer to checklist question d – Less Than Significant with Mitigation Incorporated

The proposed Project could potentially interfere with the movement of native fish or aquatic species. It would not significantly interfere with the migration of any terrestrial wildlife species.

In 2012, fish surveys were conducted in all wetted portions of Dry Creek below the Site 8 Project area. A total of 18 transects were completed with transect lengths equaling approximately 100 meters utilizing a backpack electro-fisher. Species encountered during the survey were predominately native fish which included red-sided shiners, speckled dace, Tahoe and mountain suckers, with one rainbow, and seven brown trout included in the capture.

Mitigation Measures BIO 16 – 18 are expected to reduce potential adverse effects to a less than significant level.

The Project will eliminate some headcuts that may be limiting fish passage leading to an overall benefit for fish populations.

Water drafting for dust control and compaction of fill material could potentially reduce stream flows to a level that would impact aquatic life movement. Mitigation measures BIO – 12 and BIO – 18 dictate drafting procedures, including a minimum flow to be maintained at all time, to prevent any adverse impacts from drafting.

Mitigation Measures

BIO - 1. Limited operating period to avoid impacts to nesting birds. Based on the potential for impacts to yellow warbler and other migratory birds that may be nesting within the treatment area, Project implementation should not occur until after July 31st. Implementing Project activities in the late season would reduce the potential impacts to any nesting yellow warblers and other migratory birds that may be in the area.

BIO – 2. Mulch and revegetate disturbed areas. Soils lacking adequate ground cover because of exposure or other disturbances caused by the Project will be mulched with available native on-site

materials such as pine needles, tree bark, and branches; or with imported mulch such as certified weed-free straw. In addition, areas denuded during construction will be actively revegetated with appropriate native plant species, using plant materials (i.e., seed, container stock, transplant plugs, pole cuttings) collected from local sources. Slash and logs from the site may also be distributed over the disturbed area to provide additional soil cover, retain sediment, provide a microclimate to speed up the soil development and revegetation process, and discourage motorized use.

BIO – 3. Decommission abandoned staging areas. Equipment staging areas used during construction and abandoned as a result of the proposed work will be restored by loosening or scarifying the soil, seeding or planting with native species, and mulching with native and/or weed-free material.

BIO – 4. Rehabilitate all access routes and block from future use. Loosen compacted soil, and install proper drainage structures as needed. Mulch and revegetate.

BIO – 5. Limit disturbance, control sediment, and re-vegetate within riparian areas. Ground disturbance will be minimized and confined to the marked Project area. All disturbed areas will be mulched with native material or weed-free straw (e.g., rice straw) and seeded with native species. Where needed, excavation sites will have perimeter containment installed around the site's lower perimeter to contain any eroded material. Native vegetation such as willows and sedges would be transplanted if they need to be removed as part of the Project. All disturbed areas will be revegetated with approved native vegetation.

BIO – 6. Stabilize subject stream banks. Stream banks in areas where the stream will be diverted over exposed soils will be stabilized and protected from erosion using a combination of structural and biotechnical methods. The specific methods used will vary depending on site conditions, but likely will include one or more of the following: adjustment of stream bank slopes; installation of rock slope protection (riprap); installation of biodegradable erosion control blankets; transplanting vegetation such as sod and willows from disturbed areas, installation of willow wattles (live fascines); and/or the use of pole cuttings, container stock, and seed collected from local sources to reestablish native stream zone vegetation. These measures would be in compliance with protection measures to prevent impacts to Sierra Nevada Yellow-legged frog, specifically Mitigation Measure BIO-10.

BIO – 7. Sierra Nevada Yellow-legged Frog (SNYF) Protection, field surveys. Field surveys for SNYF will be completed by qualified biologists in 2017 and again in 2018 (prior to construction).

BIO – 8. Sierra Nevada Yellow-legged Frog (SNYF) Protection, protect individuals. If SNYF is encountered within a Project site, stop all activities in the surrounding area that may have the potential to result in the harassment, injury, or death of the individual. The situation shall be assessed by a qualified biologist in order to select a course of action that will minimize adverse effects to the individual.

BIO – 9. Sierra Nevada Yellow-legged Frog (SNYF) Protection, Limited operating period. Within potential SNYF habitat or breeding areas, require no ground disturbing activities between November 30 to May 30. This limited operating period is needed to avoid possible interference with SNYF during a time when they may move away from stream courses to breeding sites.

BIO – 10. Sierra Nevada Yellow-legged Frog (SNYF) Protection, erosion control materials. Tightly woven fiber netting or similar material, plastic mono-filament netting or similar material shall not be used not be used for erosion control or other purposes within suitable habitat (82 feet of perennial or intermittent water bodies).

BIO – 11. Sierra Nevada Yellow-legged Frog (SNYF) Protection, stream crossings. Culverts and stream crossings will not create barriers except for the benefit of the SNYF.

BIO – 12. Sierra Nevada Yellow-legged Frog (SNYF) Protection, drafting sites. Drafting sites shall be located to minimize sediment and maintain riparian resources, channel condition, and SNYF habitat. Water drafting sites will be located to avoid adverse effects to instream flows and depletion of pool habitat. To avoid impacts to SNYF, prior to use each year, water drafting sites where frog habitat is present, a survey will be conducted by an aquatic biologist to determine if frogs are present.

If SNYF is found to be present, the use of low velocity water pumps and screening for pumps will be utilized during drafting to prevent mortality of eggs, tadpoles, juveniles, and adult frogs. Use suction strainers with screens less than 2 mm in size. Place draft suction strainer in a bucket to avoid substrate and amphibian disturbance. Draft from deepest water source, near bottom.

BIO – 13. Minimize ground and vegetation disturbance. Ground and vegetation disturbance will be minimized during implementation. Activities will be confined to designated marked access routes and work sites. There will be a project manager or representative on site at all times during work within the floodplain or stream channels. The contractor will be instructed on the importance of avoiding disturbance of anything not necessary to meet Project goals. Use planned disturbance sites as access routes where possible. Plan access routes carefully.

BIO – 14. Sensitive Plant Protection. If any *Ivesia sericoleuca* are observed in the Project area, flag and avoid populations.

BIO – 15. Obtain necessary permits. Prior to implementation, secure permits for work in wetlands and other Waters of the United States from the U.S. Army Corps of Engineers and the Lahontan Regional Water Quality Control Board.

BIO – 16. Fish Protection. Watershed restoration activities will occur between approximately August 1 and October 31. This will permit spawning and development of native fishes that occur at these locations.

BIO – 17. Fish Relocation. Native fish will be relocated to areas where harm will be decreased during construction activities. Experienced personnel will employ techniques that will include electrofishing and use of beach seines to capture fish. Fish will be transported via buckets to areas not affected by restoration activities.

BIO – 18. Drafting rates for fish-bearing streams. When drafting from fish-bearing streams, the water drafting rate will not exceed 350 gallons per minute for streamflow greater than or equal to 4.0 cubic

feet per second (cfs). For streamflow less than 4.0 cfs, drafting rates will not exceed 20% of surface flows. Water drafting will cease when bypass surface flows drop below 1.5 cfs.

V. CULTURAL RESOURCES. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Field surveys were completed in cooperation with the U.S. Forest Service to cover the Dry Creek watershed. Field work was completed in 2012, overseen by the U.S. Forest Service- Tahoe National Forest Heritage Program Manager, Carrie Smith (Betts, 2013).

Answer to checklist question a – Less Than Significant with Mitigation Incorporated

Both historic and pre-historic resources were located in and near the Project area. Pre-historic resources are discussed under V.b. below. All resources potentially affected by Project implementation are listed in Table CUL-1.

Site 05-17-65-227 was initially identified as an abandoned dam (Betts, 2013) and subsequently re-evaluated and determined to be a railroad grade (Marvin, 2017).

The Primary Record (Betts, 2013) for this site includes the following description:

"A large earthen structure extends across the western portion of Russel Valley. This structure measures 885 feet long, up to 20 feet high, 60 feet wide at the base, and about 3 feet wide along the top. A light historic trash scatter extends along the northeast edge of the earthen structure and a few additional potentially historic artifacts are widely distributed over the rest of the site area. The exact age and function of the earthen structure has not been determined, but an earthen dam possible for erosion or flood control seems to be the most likely explanation for this structure."

The site was described as being in poor condition, due to a variety of impacts. Dry Creek has breached the dam on the southern end (breach measuring 6 m by 18 m). A portion of the structure is also eroded away directly over culverts place in the dam (Betts, 2013).

The Project design includes removing the dam and using it as fill to block the existing gully. However, because the dam is greater than 50 years old, it required evaluation by an architectural historian to determine if it has historical significance.

Evaluation of the site was completed in May, 2017 by Judith Marvin of Foothill Resources. Marvin is a Registered Professional Historian (No. 525) and meets the Secretary of the Interior's professional qualification standards as an architectural historian. After extensive research, Marvin determined that the structure was actually a portion of a railroad grade for a briefly used logging railroad spur (Marvin, 2017).

The berm was determined to be ineligible for listing on the National Register of Historic Places or the California Register of Historical Resources under any of the specified criteria (Marvin, 2017).

Given the historic use of the Project area, there is the potential during ground disturbing construction activities associated with the Project to unearth significant historical or cultural resources. To reduce the potential for construction activities to cause a substantial adverse change to any undiscovered resources mitigation measure CUL-4 will be implemented.

Answer to checklist question b – Less Than Significant with Mitigation Incorporated

Several pre-historic sites were found near the Project area (Table CUL-1). These sites are located on upland areas, away from the restoration work area. They are located in areas that could potentially serve as borrow sites to generate fill. These areas will not be used to generate fill to prevent any impacts to these sites, as per Mitigation Measure CUL-1. Any sites located near disturbance areas will be flagged as per Mitigation Measure CUL-2.

Given the historic use of the Project area, there is the potential during ground disturbing construction activities associated with the Project to unearth significant historical or cultural resources. To reduce the potential for construction activities to cause a substantial adverse change to any undiscovered resources mitigation measure CUL-4 will be implemented.

Table CUL- 1. Cultural Resource sites found within the Dry Creek Watershed Restoration Project area.

FS Site Number	Type*	Site Description	Potential for Impact	Mitigation Measures
05-17-65-227	H	Railroad grade, previously identified as an earthen dam. Determined to be ineligible for inclusion in the NRHP or CRHR.	Less than significant	None needed
05-17-65-228	P	Pre-historic campsite.	Site will be completely avoided. Work will only occur in streambed.	CUL – 1: Avoidance
05-17-65-229	P	Pre-historic lithic scatter	Site will be completely avoided. Work will only occur in streambed.	CUL – 1: Avoidance,

*P=prehistoric, H=historic

Answers to checklist questions c – No Impact

Based upon cultural resource surveys conducted for the Project, no paleontological or unique geologic features are present in the Project area.

Answers to checklist questions d – Less Than Significant with Mitigation Incorporated

There are no known sites with human remains in the Project area. However, given the historic use of the Project area, there is the potential during ground disturbing construction activities associated with the Project to unearth human remains. To reduce the potential for construction activities to cause a substantial adverse change to any undiscovered resources mitigation measure CUL-3 will be implemented.

Answers to checklist questions e – Less Than Significant with Mitigation Incorporated

The Lahontan Water Board provided notice of the Project to tribes who have requested such notice pursuant to Public Resources Code 21080.3.1. Notification to tribes was sent on December 27, 2017. Consultation was not requested.

Ethnographically the Dry Creek area was used by the Northern Washoe. The Washoe Tribe of Nevada and California is a federally recognized tribe and was consulted by the Tahoe National Forest throughout the collaboration, planning, and public input phases of the development of the Dry Creek EA. There are no known traditional cultural properties or places of religious or cultural importance in the Dry Creek EA project area (USDA 2015, FONSI).

Given the historic use of the Project area, there is the potential during ground disturbing construction activities associated with the Project to unearth significant historical or cultural resources. To reduce the potential for construction activities to cause a substantial adverse change to any undiscovered resources mitigation measure CUL-4 will be implemented.

Mitigation Measures

CUL – 1. Avoid cultural resources in the Project area. The area has been surveyed, so the location and extent of cultural sites is known. There are resources potentially near access routes and/or borrow sites. Borrow sites and access routes will be located away from cultural sites. To completely avoid these sites, Mitigation Measure CUL-2 will also be followed.

CUL – 2. Flag cultural resource sites. If access routes or borrow sites are identified near to existing cultural resources, the sites will be flagged so that contractors can avoid this sensitive area.

CUL – 3. Unanticipated discovery of human remains. In the event of discovery of human remains during construction activities, all work in the immediate area of the discovery shall stop and the TRWC Project Manager and County Coroner will be contacted. The area shall be flagged and protected until the area can be inspected by a qualified archeologist and the County Coroner.

CUL – 4. Unanticipated discovery of cultural or tribal cultural resources. In the event of discovery of cultural or tribal cultural resources during construction activities, all work in the immediate area of the discovery shall stop and the TRWC Project Manager will be contacted. The area shall be flagged and protected until the TRWC Project Manager or representative and a qualified archeologist can assess the site.

VI. GEOLOGY AND SOILS. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Answers to Checklist Questions a, c, d, and e – No Impact

The Project does not include construction of structures for human occupancy and therefore would not subject people or structures to adverse effects due to the rupture of a known fault, liquefaction, or landslides. The proposed Project is not located in an Earthquake Fault Zone or on a geologic unit which is unstable or that would become unstable as a result of the Project. The Project is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code. Question e. is not applicable to the proposed Project.

Answer to Checklist Question b – Less Than Significant with Mitigation Incorporated

The Project will not result in the loss of topsoil over the long term, however there may be short term impacts. All topsoil excavated from the Project area will be salvaged and re-used for revegetation. Mitigation Measured GEO – 7 and BIO -5 address the preservation and re-use of topsoil.

There is potential for a short-term increase in soil erosion during implementation of restoration actions. Specifically, soil erosion could be increased through excavating fill to block off the eroded gullies, placing fill in the eroded gullies, repairing headcuts within the active channel of Dry Creek, and developing temporary access routes and staging areas. Mitigation Measures GEO- 1 – GEO-11 address construction related sediment control measures to prevent erosion.

The highest potential for erosion from the proposed Project areas are in locations where the new channel segments readjust to the flow. For high flow situations this potential sediment transport should be lower than present-day instream erosion from the existing confined system. The newly restored channel will have greater floodplain access, reinstating the natural overbank sediment deposition process and reducing in-channel erosion. Long-term vegetation vigor in the Project area will increase, thereby also reducing the potential for erosion.

Erosion from access routes across the meadow could also occur. Equipment access and operations will be limited in meadow areas as described by Mitigation Measure GEO – 11 to prevent any adverse impacts. Previous experience shows with implementation of these Mitigation Measures the meadow can resist erosion and quickly recover from any impacts.

The revegetation and mulching requirements identified by Mitigation Measures BIO 2- 6 will aid in controlling sediment. Revegetation of bare soil will be implemented as soon as possible after construction. With successful revegetation, and sediment control measures applied prior to the snow and runoff season, erosion from the Project area will be minimized. With normal runoff it is expected that by the second runoff season following implementation, the sites will have a significantly reduced potential for erosion transport.

Improved hydrologic function will aid in revegetation efforts and therefore long term erosion reduction. Water distribution across the meadow and riparian areas should increase, thereby improving vegetative vigor. In similar restoration projects, a notable increase in vegetation vigor is typically observed in the first year after implementation, with substantial improvements in erosion resistance by the second year.

The Project is designed to stabilize eroding drainages and reconnect the water table and floodplain with the adjacent meadow surface. These actions will stabilize and normalize the sediment transport regime by restoring stream function and efficiently routing flood waters. In the long term, the Project will result in a reduction of instream scour and rates of sediment transport.

Temporary construction BMPs may include silt fences, hay bales, and straw wattles at any disturbed site where runoff could potentially reach stream channels. These erosion control devices will be employed around ground disturbance resulting from construction activities, access roads, construction spoils, borrow areas or other places where appropriate, and will be in compliance with Resource Protection Measures for Fisheries and Aquatic Resources for the protection of the Sierra Nevada yellow-legged frog.

The source for earthen fill for the project is primarily adjacent hillslopes, and old railroad grades. Hillslope borrow sites will be constructed so that the topsoil is removed and piled at the base of the slope to act as a berm catching any sediment that may be transported down slope. For most of the period during borrow, the slope will have a low basin at the base of the borrow area that can be substituted as a sediment pond if needed during a storm event. When borrow is spent the site will be re-graded to match the surroundings, topsoil with vegetative materials will be reapplied over the site, and additional native mulch will be added as necessary to control erosion. A native seed mix will be applied. No construction spoils are anticipated, however in the event excess fill material is present, all spoils not used during construction will be hauled offsite and deposited in stable areas once construction is complete.

Permanent BMPs to be implemented at each site where necessary, include but are not limited to, eliminating unstable stream reaches through plugging gullies and returning flow to remnant stable channels, minimizing vegetation disturbance, re-vegetating temporary disturbance areas, and addressing run-on and runoff from roads.

Mitigation Measures BIO- 2 through BIO – 6 and BIO – 13 describe revegetation activities related to preventing soil erosion and loss of topsoil.

Mitigation Measures

GEO – 1. Obtain necessary permits from the Lahontan Regional Water Quality Control Board and the US Army Corps of Engineers. Permits will include development of a Stormwater Pollution Prevention Plan or erosion control plan that will detail construction BMPs and other measures to prevent erosion. Implement all erosion control requirements as stated in the permits.

GEO – 2. Limit timing of activities. Watershed restoration activities will occur from late summer to fall, when the meadows and ephemeral channels are dry and the stream channel is at minimum flow. Restoration activities will be timed to avoid the period of highest rainfall, streamflow, and erosion potential. During periods of inclement weather, operations will be shut down until streamflow is sufficiently low and soil/channel conditions are sufficiently dry and stable to allow for construction to

continue without the threat of substantial soil compaction, erosion, sedimentation, and offsite sediment transport.

GEO – 3. Control operations. Stop operations during periods of inclement weather and implement temporary erosion control measures as needed until the site is dry enough to resume work and there is no potential for off-site sediment transport.

GEO – 4. Site-specific Best Management Practices (BMPs) to retain sediment on-site and prevent sediment from reaching waterways. Temporary BMPs will be used during construction and permanent BMPs will be incorporated into final design.

GEO – 5. Implement erosion and sediment control BMPs on temporarily delayed Project elements. Appropriate erosion and sediment control BMPs will be applied to all disturbed ground during temporary construction delays caused by inclement weather or other circumstances. Measures applied will vary with conditions, but are likely to include (1) the placement of readily available mulch materials (e.g., pine needles, branches, coarse woody debris) and/or imported mulch materials (e.g., certified weed-free rice straw) to protect disturbed surfaces from raindrop impact, reduce runoff velocity, and reduce erosion, (2) the placement of tarps to cover exposed soil in case of an unexpected thunderstorms and (3) the installation of straw wattles, silt fences, and/or hay bales to reduce runoff velocity and intercept sediment. These measures would be in compliance with Resource Protection Measures for Fisheries and Aquatic Resources for the protection of the Sierra Nevada yellow-legged frog.

GEO – 6. Stabilize construction stockpiles and borrow areas. Earthen spoils imported during the construction will be temporarily stockpiled in stable areas located outside of meadow and riparian areas. Straw wattles, silt fences, or hay bales will be installed around the base of temporary stockpiles to intercept runoff and sediment draining from the stockpiles. Tarps will also be kept on hand to cover spoils in the event of an unexpected thunderstorm during the construction season. If necessary, the stockpiles will be further stabilized by mulching them with available forest materials or an appropriate geotextile material. These measures would be in compliance with Resource Protection Measures for Fisheries and Aquatic Resources for the protection of the Sierra Nevada yellow-legged frog.

GEO – 7. Avoid loss of topsoil during excavation. Save topsoil during any excavation and replace topsoil over completed re-contoured construction sites. Use available vegetation from under fill sites to vegetate the meadow surface.

GEO – 8. Limit staging of materials and equipment. Staging of materials and equipment will be limited to existing disturbed areas outside of wetland and riparian zones where soils are already compacted and vegetation has been cleared. New disturbance will be created for borrow areas and these sites will also be used for staging and stockpile areas. Following Project completion, any non-permanent sites will be tilled, seeded, and mulched. Areas such as permanent roads, pullouts and trails will be restored to design level within the Project area.

GEO – 9. Control concentrated runoff from modified access road surfaces to reduce erosion. Methods to reduce erosion and disperse drainage from off-site will include properly spaced water bars, cross drains, outsloping (10–12%), tilling the road prism to break up the impervious surface and enable water infiltration and revegetation. Bare areas will be mulched. Run-on from off-site will be prevented from flowing through areas that have been disturbed by construction.

GEO – 10. Control concentrated runoff from work sites. Contour all work sites to allow for natural sheet flow and infiltration into the soil. Do not concentrate flow. Mulch and revegetate all bare soil. Break up compacted soil areas.

GEO – 11. Reduce potential for erosion in meadow areas during construction. Use low impact tracked equipment on the meadow surface with limited designated tracking routes. Keep equipment within or near the proposed disturbed area as much as possible. Place equipment in areas where excavator swing is most efficient to prevent additional movements. Cross the meadow only when needed and keeping disturbance area within areas where the potential for surface flow is minimal. Restore tracked area including in place lifting (using tines of excavator bucket) of the vegetation after tracking to restore roughness, reduce compaction and aerate the meadow sod.

VII. GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Answer to checklist question a – Less Than Significant

Greenhouse gases will be generated during for approximately 8-12 weeks during Project construction. The amount of greenhouse gases expected to be generated from construction will be less than significant.

There will be no permanent increase to greenhouse gas emissions as a result of the Project, and the Project may actually decrease greenhouse gas emissions once the meadow habitat and stream channels are restored. The Project will improve habitat, vegetation, and ecosystem function. Land use changes, energy creation, agriculture, industrial uses, or other primary contributors to GHG are not proposed. Greenhouse gas emissions associated with the Project are limited to human activity-use of diesel, operating heavy equipment, etc. Through re-vegetation and enhancement of the wetland and riparian area, plant material available to capture carbon dioxide should increase in the Project area.

Answer to checklist question b – No Impact

The Project will not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions.

Mitigation Measures

None required.

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐

Answers to checklist questions a, c, d, e, f, g – No Impact

The proposed Project would not routinely transport, use, or dispose of hazardous materials. It is not located near locations listed in questions c, d, e, or f. It would not affect emergency plans.

Answers to checklist question b – Less Than Significant with Mitigation Incorporated

The proposed Project is not expected to result in the creation of health hazards, potential health hazards or expose people to potential health hazards since the proposed Project is a small construction project located in a remote area. During construction, the use of construction equipment may have the potential to release hazardous substances, such as oil and diesel, or may contaminate exposed soil. Mitigation Measures HAZ - 1 – 6 will reduce the risk from hazardous substances to a less than significant level.

Answer to checklist question h – Less Than Significant with Mitigation Incorporated

The Project area is located near a rural residential area. The area is also used for recreation. The Project is located in an area of moderate-high wildfire threat. The proposed Project could have an initial impact on potential ignitions of wildfire because of construction equipment; however, the work will be mostly within floodplain/meadow areas where there is less fire hazard. Mitigation measures HAZ – 7 and HAZ – 8 will reduce the risk to less than significant.

Mitigation Measures

HAZ – 1. Define specific plans for all products and chemicals used on the Project sites, including a spill notification procedure. Diesel fuel is the primary chemical that will be used in any of the operation phases. Any diesel stored on-site will be in appropriate containers and stored away from any aquatic habitat. The MSDS for all materials will be available on site.

Spill Notification procedure. In the event of a diesel spill, the following parties will be notified:

1. Call 911:

- For spills that involve injury requiring medical treatment
- For spills that involve fire or explosion hazards
- For spills that are potentially life threatening
- For spills that occur after work hours

2. Call Nevada County Environmental Health at: (530) 265-1222.

- For chemical spill situations which do not require 911 assistance
- For spills that cannot be cleaned up by personnel on site

3. Call Lahontan Regional Water Quality Control Board at: (530) 542-5400

- Immediately for a major spill

- Within 24 hours for a minor spill

HAZ – 2. Control fueling and fuel storage sites. Equipment will not be refueled within riparian areas or stream zones. Specify fueling and fuel storage areas in a safe location.

HAZ – 3. Develop an emergency spill plan. Strict onsite handling rules will be implemented to minimize spills and keep potentially contaminated materials out of the drainage waterways. If a spill occurs implement containment measures immediately and follow spill plan procedures. MSDS sheets for all chemicals will be part of the spill plan.

HAZ – 4. Properly dispose of wastes and petroleum products. Waste and petroleum products used during construction will be collected and removed from the Project site in accordance with federal Occupational Safety and Health Administration (OSHA) standards.

HAZ – 5. Remediate contaminated soil. If contaminated soil and/or groundwater are encountered, or if suspected contamination is encountered during construction, work will be halted in the area, and the type and extent of the contamination shall be identified. A qualified professional, in consultation with the appropriate federal, state, and/or local regulatory agencies, will then develop an appropriate method to remediate the contamination.

HAZ – 6. Prevent discharges of hazardous substances from refueling and maintenance. All equipment refueling and maintenance activities will occur outside Water Body Buffer Zones and located a safe distance from water bodies to minimize the potential to negatively affect water quality. The equipment will be inspected daily for leaks.

HAZ – 7. Keep fire tools onsite. Fire extinguishers and tools shall be required onsite during Project activities.

HAZ – 8. Monitor fire weather. Daily monitoring of fire weather and U.S. Forest Service Fire Activity Level will occur during construction. If certain thresholds are reached, construction will be shut down.

IX. HYDROLOGY AND WATER QUALITY. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant	☐	☐	☐	☒

risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Answer to checklist question b – No Impact

The Project should improve groundwater storage in the immediate area. Restoration actions will increase the water holding capacity of the floodplain and riparian areas by blocking off degraded stream channels that currently drain the meadow water tables.

Answer to checklist questions g, i, j – No Impact

The Project will not create any housing. The Project will not expose people or structures to impacts from flooding or inundation by seiche, tsunami, or mudflow.

Answer to checklist questions a and c – Less Than Significant with Mitigation Incorporated

There is a potential for construction related water quality impacts that could violate water quality standards or waste discharge requirements as the Project work involves direct filling, excavation, and modification of ephemeral, intermittent, and perennial stream courses. Potential pollutants include sediment, turbidity, and to a lesser degree oil and grease (from construction equipment). The Project has been designed to minimize these potential impacts through implementation of temporary and permanent BMPs and permit conditions.

The Project will involve placing fill within the 100-year floodplain of tributaries to the Little Truckee River which is a prohibition of the Basin Plan. However, the Lahontan Water Board encourages restoration projects that are intended to reduce or mitigation existing sources of soil erosion, water pollution, or impairment of beneficial use. The Project meets the qualifications for a 100-year floodplain prohibition exemption. Information regarding the floodplain prohibition exemption will be provided with the 401 Water Quality Certification application to Lahontan (Mitigation Measures BIO - 15 and GEO – 1).

The Project will alter the existing drainage patterns of the area to reduce soil erosion both within the Project area and downstream of the Project area. At Site 8, the Project involves altering the existing drainage pattern of Dry Creek to restore the stream to its existing historic channels. The present day channel is incised and eroding. By placing and stabilizing fill within the eroded gully, the restoration actions would bring the drainage up to grade and partially or completely eliminate the existing gully.

Mitigation Measures GEO 1- 11, BIO 2-6, and BIO-13 will mitigate potential erosion and sediment impacts. See Mitigation Measures HAZ 1-6 for description of control measures for other hazardous materials.

Answer to checklist question d – Less Than Significant

At Site 8, the Project will alter the existing drainage pattern of the area to improve overbanking of the channel flow and distribute water across the meadow. This will result in seasonal flooding of the immediate meadow system but will not result in flooding outside of the Site 8 area. The goal at Site 8 is to reconnect the stream to the floodplain, this will improve riparian conditions and meadow habitat.

Answers to Checklist Questions e and f – Less Than Significant

The Project would not affect existing or planned stormwater drainage systems. The primary goal of the proposed Project is to improve the watershed function and water quality by restoring watercourses to original channels and repair eroding headcuts. Under any construction activity there is a potential for additional sediment to be delivered off the project area. In order to attain the goal of zero discharge, mitigation measures, best management practices and a revegetation plan will be implemented (Mitigation Measures GEO 1-11, BIO 2-6 and BIO-13).

Answer to checklist question h – Less Than Significant

The Project requires work in the 100-year floodplain as described in the answer to question IX.a. The project by design will redirect flood flows to a more natural pattern, reducing potential for damaging flooding within and downstream of the Project area.

Mitigation Measures

See GEO 1-11, HAZ 1-6, BIO 2 – 6, BIO – 13, and BIO – 15.

X. LAND USE AND PLANNING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Answers to checklist questions – No Impact

The Project will not physically divide an established community, conflict with any land use plans, policies or regulations, or conflict with any habitat conservation or natural community conservation plans.

Mitigation Measures

None required.

XI. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Answers to Checklist Questions – No Impact

The proposed Project would not affect the availability of any mineral resources.

Mitigation Measures

None required.

XII. NOISE. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Answers to checklist questions a, b, and d – Less Than Significant

During construction, Project-related noise or vibrations could disturb individuals; however the additional noise would be a temporary disturbance. Construction will take place between the hours of 7:00 AM – 7:00 PM to limit disturbance to nearby residences.

Answers to checklist questions c, e, and f – No Impact

The Project will not result in a permanent increase in noise levels. The Project is not located within an airport land use plan, within two miles of a public airport, or within the vicinity of a private airstrip.

Mitigation Measures

No mitigation is required.

XIII. POPULATION AND HOUSING. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Answers to checklist questions – No Impact

The Project will not have an impact on population growth or housing. There are no growth-inducing aspects of this Project.

Mitigation Measures

None needed.

XIV. PUBLIC SERVICES. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Answers to checklist questions – No Impact

Construction activities are not expected to interfere with police and fire access. In addition, the Project would have no effect on schools or other public facilities, since none are located in the Project area.

Mitigation Measures

No mitigation is required.

XV. RECREATION. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Answers to checklist questions – No Impact

The Project does not have an effect on existing recreational facilities and does not include recreational facilities. The Project will not increase recreational use of the area.

Mitigation measures

None required.

XVI. TRANSPORTATION/TRAFFIC. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Answers to Checklist Questions – No Impact

The Project would have no impacts on traffic or circulation in the manner described. The relevant transportation plan for most of the Project area would be the Tahoe National Forest Travel Management Plan. The Project was designed to be compatible with this plan.

Mitigation Measures

No mitigation is required.

XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Answers to checklist questions – No Impact

The Project would not impact any utilities or service systems in the manner described.

Mitigation Measures

None required.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Answer to checklist question a – Less Than Significant with Mitigation Incorporated

With the previously discussed mitigations incorporated, the Project will not substantially degrade the environment in the manner described above. See Section IV, Biological Resources, for a complete discussion. Mitigation Measures BIO 1 – 18 will prevent any significant impacts to plant and animal species. See Section V, Cultural Resources for a complete discussion of historic and prehistoric resources. Mitigation measures CUL - 1 – 4 will prevent any impacts to cultural resources.

Answer to checklist question b – No Impact

The Dry Creek Watershed Assessment (USDA, 2013) identified several different restoration sites. It was determined that implementing the entire suite of watershed improvement projects would provide a net benefit to watershed function. The projects on Forest Service land were analyzed for cumulative impacts under NEPA (USDA, 2015), and it was determined that with resource protection measures included in the project plan (and reiterated here as Mitigation Measures) the potential for adverse cumulative impacts would be eliminated.

This current Project was evaluated within the context of the other proposed work in the watershed. Due to consistency in project design, coordination with other projects, and implementation of common resource protection measures, restoration at Site 8 will not lead to cumulative adverse impacts.

Answer to checklist question c – No Impact

The Project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

Dry Creek Watershed Restoration
CEQA Checklist Attachments

A. Mitigation Measure Summary Table
B. Figures
    1. Vicinity map
    2. Project Area map
C. Project Site Photos
D. References

Attachment A

Mitigation Monitoring and Reporting Program

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
AIR –1	All areas (including unpaved roads) with vehicle traffic must be watered as necessary for stabilization of dust emissions. Care must be taken to avoid excessive watering that could cause a discharge to surface waters.	Truckee River Watershed Council (TRWC)	During construction	During construction, TRWC representatives shall perform regular inspections and reports shall be kept on file.	Visible dust is kept to the lowest practicable level.
AIR –2	On-site vehicle speeds will be limited to 15 miles per hour on unpaved surfaces.	TRWC	During construction	During construction, TRWC representatives shall perform regular inspections and reports shall be kept on file.	
AIR –3	Inactive soil stockpiles will be watered or covered during windy conditions.	TRWC	During construction	During construction, TRWC representatives shall perform regular inspections and reports shall be kept on file.	
AIR –4	Disturbed areas will be revegetated as per Mitigation Measures BIO- 2 – BIO - 6. If immediate permanent re-vegetation is impractical due to factors such as poor seasonal timing, then temporary measures such as adequate covering with mulch will be implemented.	See BIO-2 – BIO 6	See BIO-2 – BIO 6	See BIO-2 – BIO 6	See BIO-2 – BIO 6
AIR –5	Construction activities will comply with EPA air quality standards on dust and condensed fumes, so that emissions do not exceed hourly levels as regulated per processing weight.	TRWC	During construction	During construction, TRWC representatives shall perform regular inspections and reports shall be kept on file.	Equipment waiting and idling will be minimized.
BIO - 1	Limited operating period (LOP) to avoid impacts to nesting birds. Based on the potential for impacts to yellow warbler and other migratory birds that may be	TRWC	Pre-construction scheduling	Documentation of project start and end dates.	Project implementation occurs after LOP.

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	nesting within the treatment area, project implementation should not occur until after July 31st. Implementing project activities in the late season would reduce the potential impacts of the project to any nesting yellow warblers and other migratory birds that may be in the project treatment area.				
BIO – 2	Mulch and revegetate disturbed areas. Soils lacking adequate ground cover because of exposure or other disturbances caused by the project will be mulched with available native on-site materials such as pine needles, tree bark, and branches; or with imported mulch such as certified weed-free straw. In addition, areas denuded during construction will be actively revegetated with appropriate native plant species, using plant materials (i.e., seed, container stock, transplant plugs, pole cuttings) collected from local sources. Slash and logs from the site may also be distributed over the disturbed area to provide additional soil cover, retain sediment, provide a microclimate to speed up the soil development and revegetation process, and discourage motorized use.	TRWC	During and post-construction	The TRWC shall document the when construction occurs, as well as how and where revegetation occurred. A brief technical memorandum documenting vegetation disturbance and revegetation shall be prepared by TRWC and kept on file.	Vegetation disturbance is minimized and restored to pre-existing conditions within five years.
BIO – 3	Decommission abandoned staging areas. Equipment staging areas used during construction and abandoned as a result of the proposed work will be restored by loosening or scarifying the soil, seeding or planting with native species, and mulching with native and/or weed-free material.	TRWC	Post-construction	The TRWC shall prepare and keep on file a brief technical memorandum documenting restoration of staging areas.	Vegetation disturbance is minimized and restored to pre-existing conditions within five years.
BIO – 4	Rehabilitate all access routes and block from future use. Loosen compacted soil, and install proper drainage structures as needed. Mulch and revegetate.	TRWC	Post-construction	The TRWC shall prepare and keep on file a brief technical memorandum	Vegetation disturbance is minimized and restored to pre-

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
				documenting restoration of staging areas.	existing conditions within five years.
BIO – 5	Limit disturbance, control sediment, and re-vegetate within riparian areas. Ground disturbance will be minimized and confined to the marked project area. All disturbed areas will be mulched with native material or weed-free straw (e.g., rice straw) and seeded with native species. Where needed, excavation sites will have perimeter containment installed around the site's lower perimeter to contain any eroded material. Native vegetation such as willows and sedges would be transplanted if they need to be removed as part of the project. All disturbed areas will be revegetated with approved native vegetation.	TRWC	During and post-construction	The TRWC shall monitor construction activities to ensure disturbance is confined to minimum necessary. TRWC shall prepare and keep on file a brief technical memorandum documenting restoration areas.	Vegetation disturbance is minimized and restored to pre-existing conditions within five years.
BIO – 6	Stabilize subject stream banks. Stream banks in areas where the stream will be diverted over exposed soils will be stabilized and protected from erosion using a combination of structural and biotechnical methods. The specific methods used will vary depending on site conditions, but likely will include one or more of the following: adjustment of stream bank slopes; installation of rock slope protection (riprap); installation of biodegradable erosion control blankets; transplanting vegetation such as sod and willows from disturbed areas, installation of willow wattles (live fascines); and/or the use of pole cuttings, container stock, and seed collected from local sources to reestablish native stream zone vegetation. These measures would be in compliance with protection measures to prevent impacts to Sierra Nevada Yellow-	TRWC	During and post-construction	The TRWC shall monitor construction activities to ensure disturbance is confined to minimum necessary. TRWC shall prepare and keep on file a brief technical memorandum documenting restoration areas.	Vegetation disturbance is minimized and restored to pre-existing conditions within five years.

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	legged frog, specifically Mitigation Measure BIO-10.				
BIO – 7	Sierra Nevada Yellow-legged Frog (SNYF) Protection, field surveys. Field surveys for SNYF will be completed by qualified biologists in 2017 and again in 2018 (prior to construction).	TRWC	Prior to construction	TRWC shall document surveys are completed by a qualified biologist, and whether or not mitigations specific to SNYF are implemented.	The presence or absence of special status botanical species shall be documented and if found, they shall be handled according to Mitigation Measure BIO-8-12.
BIO – 8	Sierra Nevada Yellow-legged Frog (SNYF) Protection, protect individuals. If SNYF is encountered within a project site, stop all activities in the surrounding area that may have the potential to result in the harassment, injury, or death of the individual. The situation shall be assessed by a qualified biologist in order to select a course of action that will minimize adverse effects to the individual.	TRWC	During construction	TRWC shall document location and course of action as recommended by a qualified biologist.	The avoidance and/or relocation of the special status species shall be documented and shall be handled according to the qualified biologist.
BIO – 9	Sierra Nevada Yellow-legged Frog (SNYF) Protection, Limited operating period (LOP). Within potential SNYF habitat or breeding areas, require no ground disturbing activities between November 30 to May 30. This limited operating period is needed to avoid possible interference with SNYF during a time when they may move away from stream courses to breeding sites.	TRWC	Pre-construction scheduling	Documentation of project start and end dates.	Project implementation occurs outside of LOP.
BIO – 10	Sierra Nevada Yellow-legged Frog (SNYF) Protection, erosion control materials. Tightly woven fiber netting or similar material, plastic mono-filament netting or similar material shall not be used not be used for erosion control or other purposes within suitable habitat (82 feet of perennial or intermittent water	TRWC	During construction	TRWC shall inspect the types of erosion control materials used.	Only materials suitable to meet the needs of SNYF will be used.

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	bodies).				
BIO – 11	Sierra Nevada Yellow-legged Frog (SNYF) Protection, stream crossings. Culverts and stream crossings will not create barriers except for the benefit of the SNYF.	TRWC	During construction	TRWC shall inspect the culverts and stream crossings used.	Only designs and materials suitable to meet the needs of SNYF will be used.
BIO – 12	Sierra Nevada Yellow-legged Frog (SNYF) Protection, drafting sites. Drafting sites shall be located to minimize sediment and maintain riparian resources, channel condition, and SNYF habitat. Water drafting sites will be located to avoid adverse effects to instream flows and depletion of pool habitat. To avoid impacts to SNYF, prior to use each year, water drafting sites where frog habitat is present, a survey will be conducted by an aquatics biologist to determine if frogs are present. If SNYF is found to be present, the use of low velocity water pumps and screening for pumps will be utilized during drafting for project treatments to prevent mortality of eggs, tadpoles, juveniles, and adult frogs. Use suction strainers with screens less than 2 mm in size. Place draft suction strainer in a bucket to avoid substrate and amphibian disturbance. Draft from deepest water source, near bottom.	TRWC	Prior to construction	TRWC shall document surveys are completed by a qualified biologist, and whether or not mitigations specific to SNYF are implemented.	The presence or absence of SNYF shall be documented and if found, they shall be handled according to Mitigation Measure BIO-8-12.
BIO – 13	Minimize ground and vegetation disturbance. Ground and vegetation disturbance will be minimized during project implementation. Activities will be confined to designated marked access routes and well-marked project work sites. There will be a project manager or representative on site at all times during work within the floodplain or stream channels. The contractor will be instructed on the importance of avoiding disturbance of anything not necessary to meet project	TRWC	During and post-construction	The TRWC shall monitor construction activities to ensure disturbance areas are marked and maintained to the minimum necessary.	Disturbance and access routes are marked in the field and adhered to by contractors.

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	goals. Use planned disturbance sites as access routes where possible. Plan access routes carefully.				
BIO – 14	Sensitive Plant Protection. If any *Ivesia sericoleuca* are observed in the project area, flag and avoid populations.	TRWC	Prior to construction	TRWC shall document surveys are completed by a qualified biologist, and whether or not the species is present.	If found, special status botanical species shall be protected and avoided.
BIO – 15	Obtain necessary permits. Prior to project implementation, secure permits for work in wetlands and other Waters of the United States from the U.S. Army Corps of Engineers and the Lahontan Regional Water Quality Control Board.	TRWC	Prior to construction	TRWC shall prepare a brief letter on compliance with environmental permits.	Obtain appropriate permits.
BIO – 16	Fish Protection. Watershed restoration activities will occur between approximately August 1 and October 31. This will permit spawning and development of native fishes that occur at these locations.	TRWC	Pre-construction scheduling	Documentation of project start and end dates.	Project implementation occurs between August 1 - October 31.
BIO – 17	Fish Relocation. Native fish will be relocated to areas where harm will be decreased during construction activities. Experienced personnel will employ techniques that will include electrofishing and use of beach seines to capture fish. Fish will be transported via buckets to areas not affected by restoration activities.	TRWC	During construction at Site 8.	TRWC shall monitor and document fish relocation activities. TRWC.	Minimize harm to native fish during relocation.
BIO – 18	Drafting rates for fish-bearing streams. When drafting from fish-bearing streams, the water drafting rate will not exceed 350 gallons per minute for streamflow greater than or equal to 4.0 cubic feet per second (cfs). For streamflow less than 4.0 cfs, drafting rates will not exceed 20% of surface flows. Water drafting will cease when bypass surface flows drop below 1.5 cfs.	TRWC	During construction at Site 8.	TRWC shall monitor drafting activities to ensure compliance with drafting rates.	Water drafting will not impact in-stream aquatic life.

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
CUL – 1	Avoid cultural resources in the project area. The area has been surveyed, so the location and extent of cultural sites is known. There are resources potentially near access routes and/or borrow sites. Borrow sites and access routes will be located away from cultural sites. To completely avoid these sites, Mitigation Measure CUL-2 will also be followed.	TRWC	Prior to and during construction	TRWC will inspect the project area prior to construction and document compliance.	Known cultural resource sites are avoided.
CUL – 2	Flag cultural resource sites. If access routes or borrow sites are identified near to existing cultural resources, the sites will be flagged so that contractors can avoid this sensitive area.	TRWC	Prior to and during construction	TRWC will inspect the project area prior to construction and document compliance.	Known cultural resource sites are avoided.
CUL – 3	Unanticipated discovery of human remains. In the event of discovery of human remains during construction activities, all work in the immediate area of the discovery shall stop and the TRWC Project Manager and County Coroner will be contacted. The area shall be flagged and protected until the area can be inspected by a qualified archeologist and the County Coroner.	TRWC	During construction.	TRWC will prepare and submit to the Lahontan Water Board a report detailing the recording, location, evaluation, and treatment of human remains.	The proper recording, evaluation, and treatment of newly identified human remains.
CUL – 4	Unanticipated discovery of cultural or tribal cultural resources. In the event of discovery of cultural or tribal cultural resources during construction activities, all work in the immediate area of the discovery shall stop and the TRWC Project Manager will be contacted. The area shall be flagged and protected until the TRWC Project Manager or representative and a qualified archeologist can assess the site.	TRWC	During construction.	TRWC will prepare and submit to the Lahontan Water Board a report detailing the recording, location, evaluation, and treatment of cultural and tribal cultural resources.	The proper recording, evaluation, and treatment of newly identified cultural and tribal cultural resources.
GEO – 1	Obtain necessary permits from the Lahontan Regional Water Quality Control Board and the US Army Corps of Engineers. Permits will include development of a Stormwater Pollution Prevention Plan or erosion control plan that will detail construction BMPs and	TRWC	Prior to construction	TRWC shall submit annual reporting as required by the construction storm water permit.	Obtain appropriate permits.

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	other measures to prevent erosion. Implement all erosion control requirements as stated in the permits.				
GEO – 2	Limit timing of activities. Watershed restoration activities will occur from late summer to early fall when the meadows and ephemeral channels are dry and the stream channel is at minimum flow. Restoration activities will be timed to avoid the period of highest rainfall, streamflow, and erosion potential. During periods of inclement weather, operations will be shut down until streamflow is sufficiently low and soil/channel conditions are sufficiently dry and stable to allow for construction to continue without the threat of substantial soil compaction, erosion, sedimentation, and offsite sediment transport.	TRWC	Pre-construction scheduling and during construction.	Documentation of project start and end dates, and periods of temporary shut-downs for inclement weather.	Complete work during late summer to early fall. Minimize on- and off-site erosion and sediment delivery to watercourses.
GEO – 3	Control operations. Stop operations during periods of inclement weather and implement temporary erosion control measures as needed until the site is dry enough to resume work and there is no potential for off-site sediment transport.	TRWC	During construction	TRWC shall maintain documentation of BMP implementation, inspection and maintenance.	Minimize on- and off-site erosion and sediment delivery to watercourses.
GEO – 4	Site-specific Best Management Practices (BMPs) to retain sediment on-site and prevent sediment from reaching waterways. Temporary BMPs will be used during construction and permanent BMPs will be incorporated into final design.	TRWC	During and post-construction	TRWC shall maintain documentation of BMP implementation, inspection and maintenance.	Minimize on- and off-site erosion and sediment delivery to watercourses.
GEO – 5	Implement erosion and sediment control BMPs on temporarily delayed Project elements. Appropriate erosion and sediment control BMPs will be applied to all disturbed ground during temporary construction delays caused by inclement weather or other circumstances. Measures applied will vary with conditions, but are likely to include (1) the placement of readily available mulch materials (e.g., pine	TRWC	During construction	TRWC shall maintain documentation of BMP implementation, inspection and maintenance.	Minimize on- and off-site erosion and sediment delivery to watercourses.

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	needles, branches, coarse woody debris) and/or imported mulch materials (e.g., certified weed-free rice straw) to protect disturbed surfaces from raindrop impact, reduce runoff velocity, and reduce erosion, (2) the placement of tarps to cover exposed soil in case of an unexpected thunderstorms and (3) the installation of straw wattles, silt fences, and/or hay bales to reduce runoff velocity and intercept sediment. These measures would be in compliance with Resource Protection Measures for Fisheries and Aquatic Resources for the protection of the Sierra Nevada yellow-legged frog.				
GEO – 6	Stabilize construction stockpiles and borrow areas. Earthen spoils imported during the construction will be temporarily stockpiled in stable areas located outside of meadow and riparian areas. Straw wattles, silt fences, or hay bales will be installed around the base of temporary stockpiles to intercept runoff and sediment draining from the stockpiles. Tarps will also be kept on hand to cover spoils in the event of an unexpected thunderstorm during the construction season. If necessary, the stockpiles will be further stabilized by mulching them with available forest materials or an appropriate geotextile material. These measures would be in compliance with Resource Protection Measures for Fisheries and Aquatic Resources for the protection of the Sierra Nevada yellow-legged frog.	TRWC	During construction	TRWC shall maintain documentation of BMP implementation, inspection and maintenance.	Minimize on- and off-site erosion and sediment delivery to watercourses.
GEO – 7	Avoid loss of topsoil during excavation. Save topsoil during any excavation and replace topsoil over completed re-contoured construction sites. Use available vegetation from under fill sites to vegetate	TRWC	During construction	TRWC shall maintain documentation of BMP implementation, inspection and	Vegetation disturbance is minimized and restored to pre-

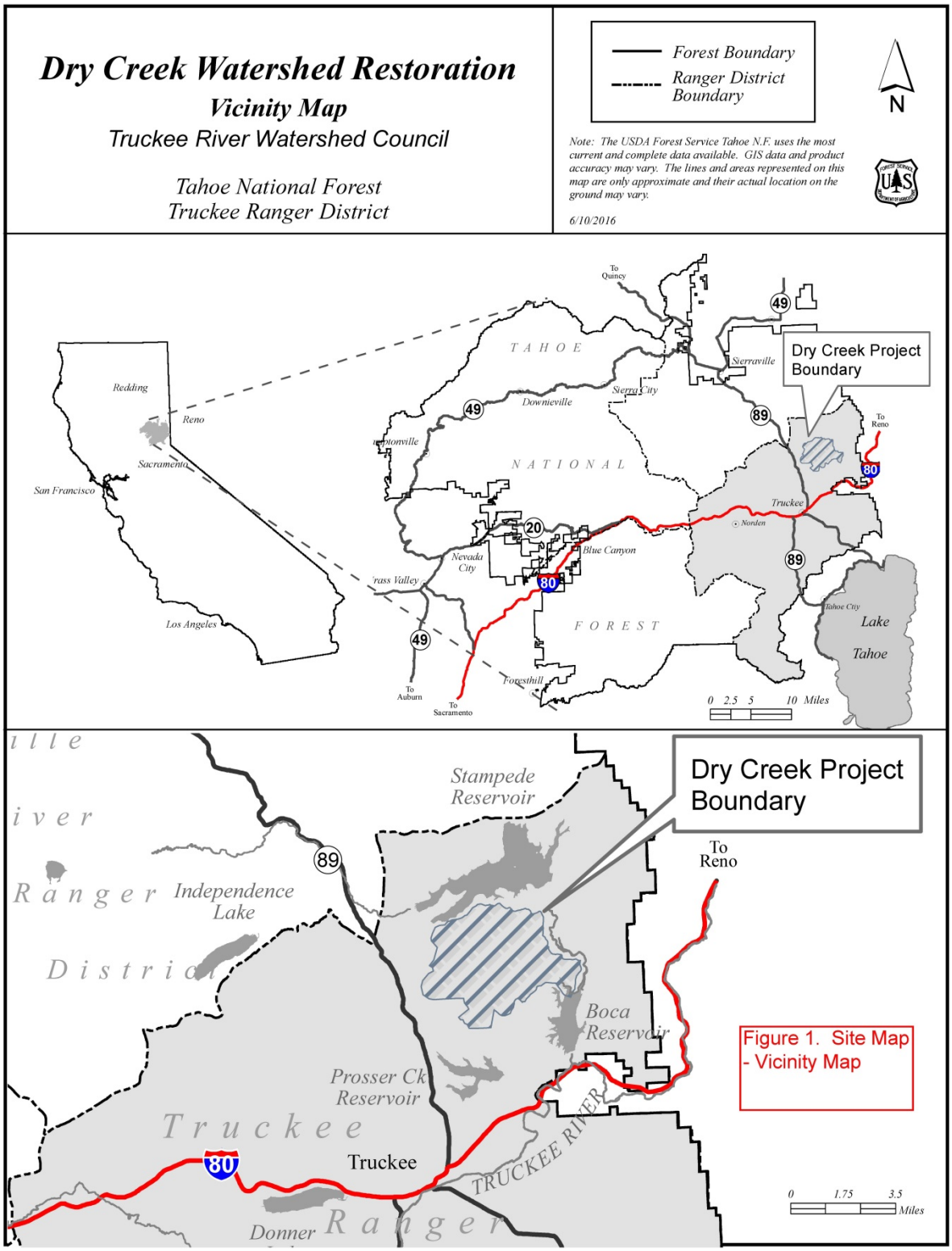
Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	the meadow surface.			maintenance.	existing conditions within five years.
GEO – 8	Limit staging of materials and equipment. Staging of materials and equipment will be limited to existing disturbed areas outside of wetland and riparian zones where soils are already compacted and vegetation has been cleared. New disturbance will be created for borrow areas and these sites will also be used for staging and stockpile areas. Following Project completion, any non-permanent sites will be tilled, seeded, and mulched. Areas such as permanent roads, pullouts and trails will be restored to design level within the Project area.	TRWC	During and post-construction	TRWC shall maintain documentation of BMP implementation, inspection and maintenance.	Vegetation disturbance is minimized and restored to pre-existing conditions within five years.
GEO – 9	Control concentrated runoff from modified access road surfaces to reduce erosion. Methods to reduce erosion and disperse drainage from off-site will include properly spaced water bars, cross drains, outsloping (10–12%), tilling the road prism to break up the impervious surface and enable water infiltration and revegetation. Bare areas will be mulched. Run-on from off-site will be prevented from flowing through areas that have been disturbed by construction.	TRWC	During and post-construction	TRWC shall maintain documentation of BMP implementation, inspection and maintenance.	Minimize on- and off-site erosion and sediment delivery to watercourses. Vegetation disturbance is minimized and restored to pre-existing conditions within five years.
GEO – 10	Control concentrated runoff from work sites. Contour all work sites to allow for natural sheet flow and infiltration into the soil. Do not concentrate flow. Mulch and revegetate all bare soil. Break up compacted soil areas.	TRWC	During and post-construction	TRWC shall maintain documentation of BMP implementation, inspection and maintenance.	Vegetation disturbance is minimized and restored to pre-existing conditions within five years.
GEO – 11	Reduce potential for erosion in meadow areas during construction. Use low impact tracked equipment on the meadow surface with limited designated tracking	TRWC	During construction	TRWC shall maintain documentation of BMP implementation,	Minimize on- and off-site erosion and sediment delivery to

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	routes. Keep equipment within or near the proposed disturbed area as much as possible. Place equipment in areas where excavator swing is most efficient to prevent additional movements. Cross the meadow only when needed and keeping disturbance area within areas where the potential for surface flow is minimal. Restore tracked area including in place lifting (using tines of excavator bucket) of the vegetation after tracking to restore roughness, reduce compaction and aerate the meadow sod.			inspection and maintenance.	watercourses. Vegetation disturbance is minimized and restored to pre-existing conditions within five years.
HAZ – 1	Define specific plans for all products and chemicals used on the Project sites, including a spill notification procedure. Diesel fuel is the primary chemical that will be used in any of the operation phases. Any diesel stored on-site will be in appropriate containers and stored away from any aquatic habitat. The MSDS for all materials will be available on site. Spill Notification procedure. In the event of a diesel spill, the following parties will be notified: 1. Call 911: • For spills that involve injury requiring medical treatment • For spills that involve fire or explosion hazards • For spills that are potentially life threatening • For spills that occur after work hours 2. Call Nevada County Environmental Health at: (530) 265-1222. • For chemical spill situations which do not require 911 assistance • For spills that cannot be cleaned up by personnel on site 3. Call Lahontan Regional Water Quality Control	TRWC	Prior to and during construction	TRWC shall develop and implement a management plan for all products and chemical used on site. The plan shall be maintained on site and available in project files.	Minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances.

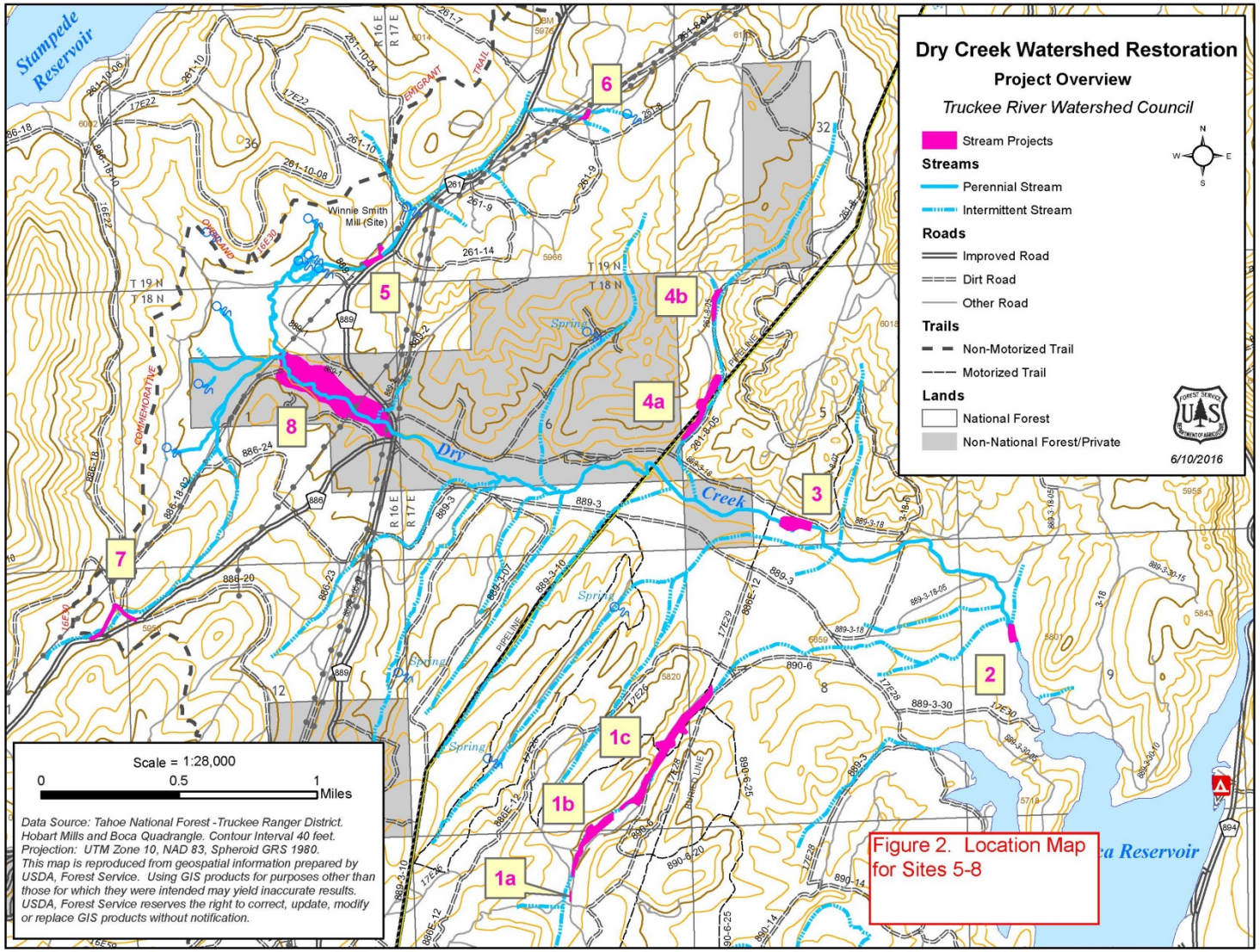
Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	Board at: (530) 542-5400 • Immediately for a major spill • Within 24 hours for a minor spill				
HAZ – 2	Control fueling and fuel storage sites. Equipment will not be refueled within riparian areas or stream zones. Specify fueling and fuel storage areas in a safe location.	TRWC	During construction	TRWC shall inspect work sites to monitor compliance with fueling and fuel storage activities.	Minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances.
HAZ – 3	Develop an emergency spill plan. Strict onsite handling rules will be implemented to minimize spills and keep potentially contaminated materials out of the drainage waterways. If a spill occurs implement containment measures immediately and follow spill plan procedures. MSDS sheets for all chemicals will be part of the spill plan.	TRWC	Prior to and during construction	TRWC shall develop and implement a management plan for all products and chemical used on site. The plan shall be maintained on site and available in project files.	Minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances.
HAZ – 4	Properly dispose of wastes and petroleum products. Waste and petroleum products used during construction will be collected and removed from the Project site in accordance with federal Occupational Safety and Health Administration (OSHA) standards.	TRWC	During construction	TRWC shall inspect work sites to monitor compliance with waste management activities.	Wastes and petroleum products will be removed from site.
HAZ – 5	Remediate contaminated soil. If contaminated soil and/or groundwater are encountered, or if suspected contamination is encountered during construction, work will be halted in the area, and the type and extent of the contamination shall be identified. A qualified professional, in consultation with the appropriate federal, state, and/or local regulatory agencies, will then develop an appropriate method to remediate the contamination.	TRWC	During construction	If contaminated soils are encountered, TRWC will prepare and submit to the Lahontan Water Board a report describing the contamination and remediation activities.	Contaminated soils are handled per federal, state, and local requirements.

Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
HAZ – 6	Prevent discharges of hazardous substances from refueling and maintenance. All equipment refueling and maintenance activities will occur outside Water Body Buffer Zones and located a safe distance from water bodies to minimize the potential to negatively affect water quality. The equipment will be inspected daily for leaks.	TRWC	During construction	TRWC shall inspect work sites to monitor compliance with fueling and maintenance activities.	Minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances.
HAZ – 7	Keep fire tools onsite. Fire extinguishers and tools shall be required onsite during Project activities.	TRWC	During construction	TRWC shall inspect work sites ensure proper tools are on site.	Prevent project from causing a fire.
HAZ – 8	Monitor fire weather. Daily monitoring of fire weather and U.S. Forest Service Fire Activity Level will occur during construction. If certain thresholds are reached, construction will be shut down.	TRWC	Prior to and during construction	TRWC will determine fire hazard thresholds before construction, and implement shut-downs when the thresholds are triggered.	Work is temporarily suspended if fire thresholds are reached.

Attachment B – Figure 1



Attachment B – Figure 2 Sites



Attachment C – Site Photos

Photo 1 – Site 5, headcuts migrating upstream

Photo 2 – Site 6, ephemeral drainage coming onto road

Photo 3 – Site 6, drainage running on road

Photo 4 – Site 7, road and culvert to be removed

Photo 5 – Site 7, culvert to be removed

Photo 6 – Site 8, looking upstream at meadow

Attachment D -
Dry Creek Watershed Restoration References

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