

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: TRWC Meadow Restoration- PLN19-0006, CUP19-0001, MGT19-0004, EIS19-0007

Lead Agency: County of Nevada

Contact Person: Sadie Caldas

Mailing Address: 950 Maidu Avenue, Suite 170

Phone: (530) 265-1345

City: Nevada City

Zip: 95959

County: Nevada

Project Location: County: Nevada

City/Nearest Community: Truckee

Cross Streets: Hobart Mills Road, Dog Valley Road

Zip Code: 96161

Longitude/Latitude (degrees, minutes and seconds): ° ' " N / ° ' " W Total Acres: 118.78

Assessor's Parcel No.: 016-080-023

Section:

Twp.:

Range:

Base:

Within 2 Miles: State Hwy #:

Waterways: Dry Creek

Airports:

Railways:

Schools:

Document Type:

CEQA: ☐ NOP

☐ Draft EIR

NEPA: ☐ NOI

Other: ☐ Joint Document

☐ Early Cons

☐ Supplement/Subsequent EIR

☐ EA

☐ Final Document

☐ Neg Dec

(Prior SCH No.)

☐ Draft EIS

☐ Other:

☒ Mit Neg Dec

Other:

☐ FONSI

Local Action Type:

☐ General Plan Update

☐ Specific Plan

☐ Rezone

☐ Annexation

☐ General Plan Amendment

☐ Master Plan

☐ Prezone

☐ Redevelopment

☐ General Plan Element

☐ Planned Unit Development

☒ Use Permit

☐ Coastal Permit

☐ Community Plan

☐ Site Plan

☐ Land Division (Subdivision, etc.)

☒ Other: Management Plan

Development Type:

☐ Residential: Units

Acres

☐ Office: Sq.ft.

Acres

Employees

☐ Transportation: Type

☐ Commercial: Sq.ft.

Acres

Employees

☐ Mining: Mineral

☐ Industrial: Sq.ft.

Acres

Employees

☐ Power: Type

MW

☐ Educational:

☐ Waste Treatment: Type

MGD

☐ Recreational:

☐ Hazardous Waste: Type

☐ Water Facilities: Type

MGD

☒ Other: Restoration Project

Project Issues Discussed in Document:

☒ Aesthetic/Visual

☐ Fiscal

☒ Recreation/Parks

☒ Vegetation

☒ Agricultural Land

☒ Flood Plain/Flooding

☒ Schools/Universities

☒ Water Quality

☒ Air Quality

☒ Forest Land/Fire Hazard

☒ Septic Systems

☒ Water Supply/Groundwater

☒ Archeological/Historical

☒ Geologic/Seismic

☐ Sewer Capacity

☒ Wetland/Riparian

☒ Biological Resources

☒ Minerals

☒ Soil Erosion/Compaction/Grading

☒ Growth Inducement

☐ Coastal Zone

☒ Noise

☒ Solid Waste

☒ Land Use

☒ Drainage/Absorption

☒ Population/Housing Balance

☒ Toxic/Hazardous

☒ Cumulative Effects

☐ Economic/Jobs

☒ Public Services/Facilities

☒ Traffic/Circulation

☒ Other: Energy and Wildfire

Present Land Use/Zoning/General Plan Designation:

Unimproved land; FR-160 (Forest, 160-acre minimum parcel size); FOR-160 (Forest, 160-acre minimum parcel size)

Project Description: (please use a separate page if necessary)

An application to the Zoning Administrator for a Conditional Use Permit and Management Plan for a 36-acre meadow restoration project along Dry Creek in Russel Valley. The Conditional Use Permit is to allow the placement of fill in a floodplain, and the Management Plan is to address disturbance within the setbacks of a waterway/wetlands. 13,072 cubic yards of fill would be used to fill 1,270 feet of gully with an average depth of 4.5 feet. The project would restore the stream to historic channels on the meadow surface and increase the floodplain area on this parcel. The total disturbance area of the project would be approximately 4.9 acres, but it would result in 7.83 acres or more of degraded and dewatered wetlands that would be restored and an additional 0.9 acres of perennial stream channel that would be restored. For the full description, please see the proposed Initial Study/MND.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X". If you have already sent your document to the agency please denote that with an "S".

S	Office of Historic Preservation
	Office of Public School Construction
S	Parks & Recreation, Department of
	Pesticide Regulation, Department of
S	Public Utilities Commission
	Regional WQCB # _____
	Resources Agency
	Resources Recycling and Recovery, Department of
	S.F. Bay Conservation & Development Comm.
	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	San Joaquin River Conservancy
	Santa Monica Mtns. Conservancy
	State Lands Commission
	SWRCB: Clean Water Grants
S	SWRCB: Water Quality
	SWRCB: Water Rights
	Tahoe Regional Planning Agency
	Toxic Substances Control, Department of
S	Water Resources, Department of
S	Other: Lahontan Water Quality Control Board
S	Other: Office of Emergency Services

Starting Date 7/27/19 Ending Date 8/26/19

Consulting Firm: _____ Applicant: Beth Christman for the Truckee River Watershed Council
Address: _____ Address: P.O. Box 8568
City/State/Zip: _____ City/State/Zip: Truckee, CA 96162
Contact: _____ Phone: (530) 550-8760
Phone: _____

Good Caliber

Date: 7/26/19

Revised 2010

Sample Summary for Electronic Document Submittal

15 copies of this document may be included when a Lead Agency is submitting electronic copies of environmental impact reports, negative declarations, mitigated negative declarations, or notices of preparation to the SCH. The SCH will still accept other summaries, such as an EIR summary prepared pursuant to CEQA Guidelines Section 15123, attached to the electronic copies of the document.

SCH # _____

Lead Agency: County of Nevada

Project Title: TRWC Meadow Restoration- PLN19-0006, CUP19-0001, MGT19-0004, EIS19-0007

Project Location: Truckee

Nevada

City

County

Please provide a Project Description (Proposed Actions, location, and/or consequences).

An application to the Zoning Administrator for a Conditional Use Permit and Management Plan for a 36-acre meadow restoration project along Dry Creek in Russel Valley, located in the northeastern area of Nevada County. The Conditional Use Permit is to allow the placement of fill in a floodplain, and the Management Plan is to address disturbance within the setbacks of a waterway/wetlands. 13,072 cubic yards of fill would be used to fill 1,270 feet of gully with an average depth of 4.5 feet. The project would restore the stream to historic channels on the meadow surface and increase the floodplain area on this parcel. Currently, the main gully channel has an average width of 73 feet, and the floodplain has had a historic width of 317 feet. Fill would be taken from other offsite restoration projects, from the removal of an on-site berm (previous railroad berm), and from on-site borrow pits. The total disturbance area of the project would be approximately 4.9 acres, but it would result in 7.83 acres or more of degraded and dewatered wetlands that would be restored and an additional 0.9 acres of perennial stream channel that would be restored. This application is part of the Dry Creek Watershed Restoration Project by the Truckee River Watershed Council (TRWC) that covers eight separate restoration sites. This project is for Site 8, which is located on private property, with all other sites being located on U.S. Forest Service land. Building Permit 181783 is associated with the restoration project for grading. The California Department of Fish and Wildlife (CDFW) issued a 1600 Streambed Alteration Agreement (1600-2018-0210-R2) on October 17, 2018, and the Lahontan Regional Water Quality Control Board (RWQCB) issued a 401 Water Quality Certification (WDID 6A291807002) on July 19, 2018. The Truckee River Watershed Council (TRWC) is also in the process of obtaining a permit from the U.S. Army Corps of Engineers. A Mitigated Negative Declaration (MND) was adopted by the Lahontan RWQCB on April 18, 2018, for CEQA compliance. This initial study tiers from the previously adopted initial study/mitigated negative declaration.

Please identify the project's significant or potentially significant effects and briefly describe any proposed mitigation measures that would reduce or avoid that effect.

Mitigation has been added to reduce dust and air quality impacts during construction, including watering soil stockpiles and unpaved roads. Mitigation has been added for biological resources to limit disturbance, control sediment, revegetate riparian areas, stabilize stream banks, relocate fish out of the project area, limit water drafting rates during construction, and surveys of the site will be required prior to disturbance for the Sierra Nevada yellow-legged frog. Construction months will be restricted to not affect fish spawning and development, to avoid nesting birds, and to prevent disturbance when yellow-legged frogs move to breeding grounds. The site will be monitored for three years after construction. Specific monitoring will take place to ensure that the American bullfrog (invasive species) does not occupy the site after project completion. Eradication efforts shall take place if bullfrogs are detected. Mitigation has also been added to prevent any adverse affects to cultural resources. Resource sites will be flagged and fenced off during construction. The project also includes a tribal and archaeological monitor during construction. Mitigation has been added to prevent erosion and runoff from the project. Best management practices for site-specific erosion and sediment control measures shall be implemented. Staging areas for equipment and refueling equipment will be in designated areas to prevent contamination from hazardous materials. Impacts to hydrology and water quality will be mitigated by limiting disturbance, stabilizing stream banks, developing a stormwater pollution prevention plan, to use low impact tracked equipment in the meadow and to revegetate all disturbance areas.

If applicable, please describe any of the project's areas of controversy known to the Lead Agency, including issues raised by agencies and the public.

There is no known controversy or issues that have been raised by the public. The U.S. Fish and Wildlife Service commented on the project, stating that the project may result in a suitable breeding habitat for the American bullfrog, which is an invasive species. The Fish and Wildlife Services advised that there are no known bullfrog population in the vicinity of the project, but they are known in other areas at similar elevations of the Sierra Nevada range. Mitigation has been added to the project to require monitoring of the site for three years and immediate eradication efforts if bullfrogs are detected at the project site. The Washoe Tribe also made recommendations to protect tribal cultural resources. The recommendation have been incorporated into the project's mitigation measures. The Northern Sierra Air Quality Management District (NSAQMD) commented that a Dust Control Plan would be required, which has also been included in the mitigation measures.

Please provide a list of the responsible or trustee agencies for the project.

Building Department	US Army Corp of Engineers
Department of Public Works – Engineering	Forest Service
Environmental Health Department	US Fish & Wildlife
Northern Sierra Air Quality Mgt. District	Tsi Akim Maidu
County Counsel	United Auburn Indian Community
Town of Truckee, Comm. Dev. Dept.	Truckee Donner Historical Society
Truckee Fire Protection District	Washoe Tribe of NV & CA
Resource Conservation District	Sierra Nevada Group/Sierra Club
Fire Protection Planner	State Clearinghouse
CA Fish & Wildlife	Mountain Area Preservation Fnd.
Lahontan Water Quality Control Board	Prosser Lake Estates Assn.
Department of Water Resources	Sierra Lakes County Water District
Nevada County Historical Landmarks Comm.	Kevin Johnston
CNPS Redbud	Native American Heritage Commission
Central Valley Flood Protection Board	Department of Conservation
Departments of Parks and Recreation	CA Office of Emergency Services
California Energy Commission	Public Utilities Commission
State Lands Commission	Caltrans, District 3 N
Office of Historic Preservation	Commissioner Bullock, District V
Air Resources Control Board	Supervisor Anderson, District V
Sierra County	Tyler Barrington, Principal Planner
County Counsel	
State Water Resources Control Board, Division of Water Quality	

**NEVADA COUNTY, CALIFORNIA
INITIAL STUDY**

TO: Building Department
Department of Public Works – Engineering
Environmental Health Department
Northern Sierra Air Quality Mgt. District
County Counsel
Town of Truckee, Comm. Dev. Dept.
Truckee Fire Protection District
Resource Conservation District
Fire Protection Planner
CA Fish & Wildlife
Lahontan Water Quality Control Board
Department of Water Resources
Nevada County Historical Landmarks Comm.
CNPS Redbud
Central Valley Flood Protection Board
Departments of Parks and Recreation
California Energy Commission
State Lands Commission
Office of Historic Preservation
Air Resources Control Board
Sierra County
Property Owners within 500 feet of the Project Parcel
State Water Resources Control Board, Division of Water Quality
US Army Corp of Engineers
Forest Service
US Fish & Wildlife
Tsi Akim Maidu
United Auburn Indian Community
Truckee Donner Historical Society
Washoe Tribe of NV & CA
Sierra Nevada Group/Sierra Club
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Department of Conservation
CA Office of Emergency Services
Public Utilities Commission
Caltrans, District 3 N
Commissioner Bullock, District V
Supervisor Anderson, District V
Tyler Barrington, Principal Planner
County Counsel*
**receives full report, others receive NOA only with report available online.*

Date: July 26, 2019

Prepared by: Sadie Caldas, Associate Planner
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(530) 265-1345
Email: sadie.caldas@co.nevada.ca.us

File Number(s): PLN19-0006, CUP19-0001, MGT19-0004, EIS19-0007

Assessor's Parcel Numbers: 016-080-023

Applicant/Representative: Beth Christman for the Truckee River Watershed Council
P.O. Box 8568
Truckee, CA 96162
Telephone: (530) 550-8760

Property Owner: Jape H. Taylor, Trustee

Zoning District: FR-160 (Forest, 160-acre minimum parcel size)

General Plan Designation: FOR-160 (Forest, 160-acre minimum parcel size)

Project Location: 18888 Dog Valley Road, Truckee, CA 96161—located approximately 10 miles north of Truckee.

Project Description: An application to the Zoning Administrator for a Conditional Use Permit and Management Plan for a 36-acre meadow restoration project along Dry Creek in Russel Valley, located in the northeastern area of Nevada County. The Conditional Use Permit is to allow the placement of fill in a floodplain, and the Management Plan is to address disturbance within the setbacks of a waterway/wetlands. 13,072 cubic yards of fill would be used to fill 1,270 feet of gully with an average depth of 4.5 feet. The project would restore the stream to historic channels on the meadow surface and increase the floodplain area on this parcel. Currently, the main gully channel has an average width of 73 feet, and the floodplain has had a historic width of 317 feet. Fill would be taken from other offsite restoration projects, from the removal of an on-site berm (previous railroad berm), and from on-site borrow pits. The total disturbance area of the project would be approximately 4.9 acres, but it would result in 7.83 acres or more of degraded and dewatered wetlands that would be restored and an additional 0.9 acres of perennial stream channel that would be restored. Specific construction actions for this project include:

- Divert flows into the remnant channel system;
- Temporarily install a dewatering pipeline to divert flows from the gully during construction;
- Relocate fish to areas outside of construction activities;
- Excavate existing vegetation from bottom of gully and stockpile vegetation and topsoil;
- Generate fill from upland sources and the railroad berm—borrow sites will be located to avoid archaeological and cultural resource sites;
- Transport fill to the site and place it in the gully;
- Fill will be placed using a sloped lift technique, laying down 12-18" layers and compacting it by running equipment over the fill after it is placed;
- Fill will be placed continuously in the lower portion of the gully and in a series of plugs in the upper portion of the gully;
- Match the grade of fill in the gully to the meadow surface;
- Place stockpiled vegetation on top of the fill;
- Construct a riffle valley grade control structure at the lower end of site to ensure grade continuity with the existing culvert under Dog Valley Road;
- The valley grade structure will have a riffle pool channel, using 2-foot minus, well graded rock to promote fish passage;
- Transplant any salvaged willows to edges of the fill material to provide additional stability and roughness; and
- Seed and mulch the disturbed areas, including access routes and staging areas.

The project includes monitoring the site for a minimum of three years after construction, with an annual report that will be submitted to the Lahontan Regional Water Quality Control Board. Figure 1 on the following page shows the project site plan. Figure 2 shows a photo of the project site. This application is part of the Dry Creek Watershed Restoration Project by the Truckee River Watershed Council (TRWC) that covers eight separate restoration sites. This project is for Site 8, which is located on private property, with all other sites being located on U.S. Forest Service land. Building Permit 181783 is associated with the restoration project for grading. The California Department of Fish and Wildlife (CDFW) issued a 1600 Streambed Alteration Agreement (1600-2018-0210-R2) on October 17, 2018, and the Lahontan Regional Water Quality Control Board (RWQCB) issued a 401 Water Quality Certification (WDID 6A291807002) on July 19, 2018. The TRWC is also in the process of obtaining a permit from the U.S. Army Corps of Engineers. A Mitigated Negative Declaration (MND) was adopted by the Lahontan RWQCB on April 18, 2018, for CEQA compliance. This initial study tiers from the previously adopted initial study/mitigated negative declaration.

Figure 1: Project Site Plan

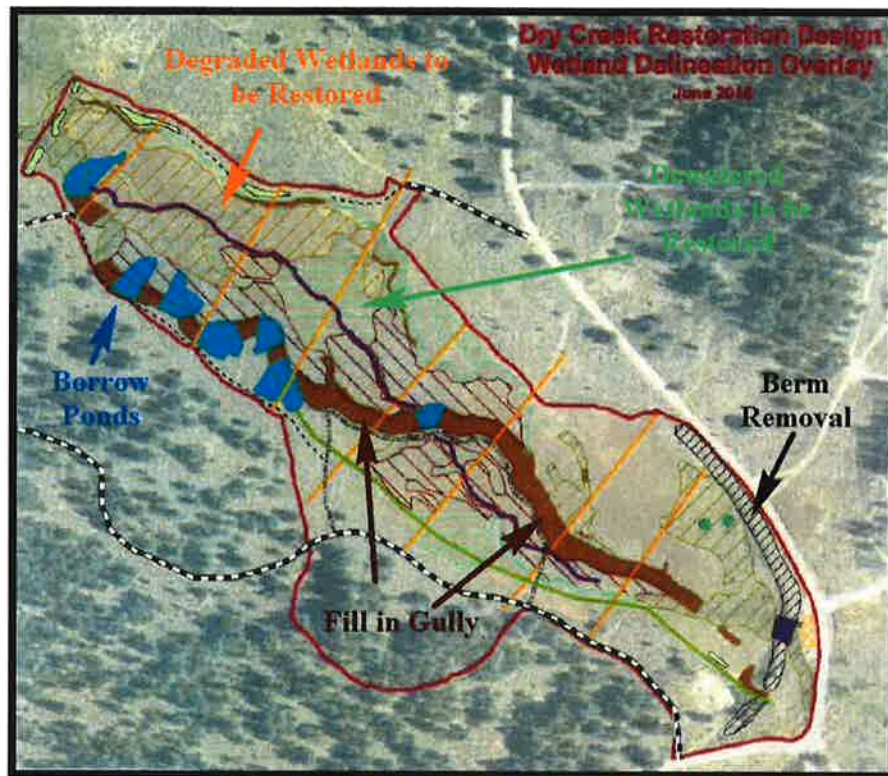


Figure 2: Project Site



Project Background: The project applicant—Truckee River Watershed Council (TRWC)—has applied for this meadow restoration project to reduce erosion, improve water-holding capacity in the meadow, and improve the habitat. The description below by the TRWC explains the background of the site and how the floodplain and habitat has changed from past and current land uses.

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, grazing practices, and the existing road and skid 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, affecting streams and meadows. Incision of stream channels through the meadows has decreased floodplain connectivity, reduced filtering capacity, lowered the seasonal water table, and affected 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. The Dry Creek watershed and surrounding areas had relatively low to moderate rates of erosion prior to human disturbance (USDA, 2013).

The impacts identified above, from the railroad, timber harvest, grazing, trail networks, and road networks have decreased the ability of the watershed to capture and store water. It has also 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.

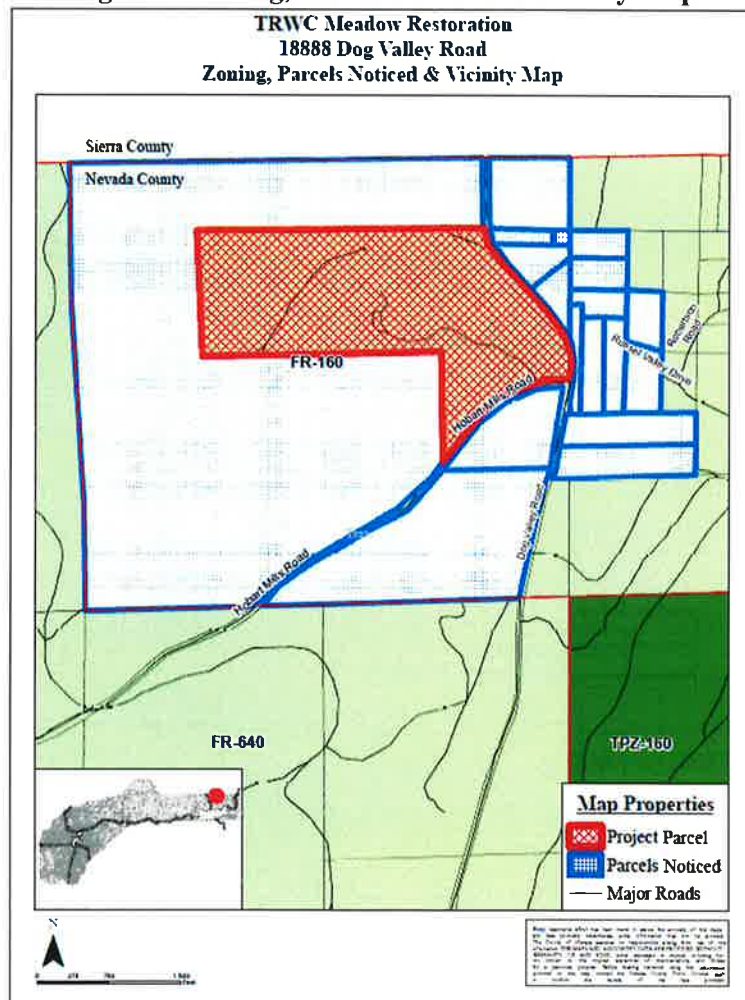
Project goals cannot be effectively attained without filling the existing gully. The current streambed elevation in the gully has been artificially lowered due to incision caused by past channelization. At present, this elevation acts as a hydrologic control, and shallow groundwater in the surrounding meadow drains to the stream channel. This process has caused the desiccation of the meadow and the conversion of approximately 7.83 acres to upland habitat. Plugging the gully and re-activating the existing shallower remnant channel system will restore the shallow groundwater table. The proposed project for Site 8 would restore the stream to historic channels on the meadow surface, promoting floodplain connectivity and reducing erosion. The project will result in a raised seasonal water table, an improved habitat by expansion of riparian and wetland vegetation, and improved floodplain connectivity.

An Initial Study/Mitigated Negative Declaration (MND) for Sites 5-8 of the Dry Creek Watershed Restoration project was completed by the Lahontan Regional Water Quality Control Board. The MND, along with a mitigation monitoring and reporting program, was adopted by the Water Board on April 16, 2018, and a Notice of Determination was filed with the State Clearinghouse. Since that time, the applicant applied for a grading permit (#181783) with Nevada County on June 15, 2018. Because this project (Site 8) takes place in a floodplain on private property and not federal land, a Conditional Use Permit from Nevada County is required. A Management Plan for disturbance within the setbacks of a waterway is also required. The applicant applied for the Conditional Use Permit and Management Plan on January 25, 2019, and the project was routed to multiple agencies for review. Agencies that have not previously reviewed the project made comments on the Use Permit and Management Plan applications that would require additional mitigation measures. This initial study tiers from the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

Project Site and Surrounding Land Uses: The project is located on a 118.78-acre parcel with Forest zoning. The project site is unimproved with permit history of boundary line adjustments in 2005 and 2010. This restoration site is a large meadow located along the main stem of Dry Creek, just below the confluence of the headwater tributaries. Disturbance from the project would occur in a 4.9-acre area of the meadow, but the area of potential effect from the project is 36.4 acres of meadow. Approximately 70 acres of the project parcel contains meadow or upland vegetation, and the remaining 48 acres is forested areas uphill of the project area.

There is a 315-acre parcel surrounding the project parcel on the northern, western and a portion of the southern side. The 315-acre parcel is unimproved federal land. All of the parcels along the eastern side and a portion southern side of the project site are privately owned parcels that range from 3.6 to 12.9 acres. Two adjacent parcels are unimproved and two other adjacent parcels are improved with residences and accessory structures. The surrounding area has the same zoning (FR-160) and General Plan Designation (FOR-160) as the project site (Figure 3). Topography in the area is very mild with approximately a one percent (1%) slope in the meadow and approximately a ten percent (10%) slope uphill of the meadow in the forested area. The site is located in Russel Valley, which is in between Stampede Reservoir in Sierra County and Boca Reservoir in Nevada County.

Figure 3: Zoning, Noticed Parcels & Vicinity Map



Other Permits, Which May Be Necessary: Based on initial comments received, the following permits may be required from the designated agencies:

1. Nevada County Building Department- Grading Permit
2. California Department of Fish and Wildlife (CDFW)- 1600 Streambed Alteration Agreement
3. Lahontan Regional Water Quality Control Board (RWQCB)- 401 Water Quality Certification
4. U.S. Army Corps of Engineers- Fill Material into Waters of the U.S.
5. Northern Sierra Air Quality Management District- Dust Control Plan

Reference and Incorporation of Other Documents: This project is part of the Dry Creek Watershed Restoration, which includes restoration activities at eight different sites. This project is Site 8 of the overall project. All other sites are located on U.S. Forest Service land. This initial study tiers from the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B), for impacts that were not examined in the first initial study. Sections of the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study have been referenced and/or inserted into this initial study in order to provide a lucid analysis. CEQA section 15150 states that an EIR or ND can incorporate by reference any document that is part of the public record or available to the public (CEQA Guidelines, § 15150, subd. (a)). The incorporated part of the referenced document must be briefly summarized or described (Id. at § 15150, subd. (b)). This Initial Study incorporates sections of the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration, and includes all support studies and reports referenced in that document. A brief summary or sections of the referenced document are provided in the environmental factors discussed below, and mitigation from the referenced document is listed for implementation and application to mitigate impacts in accordance with CEQA requirements. This initial study tiers from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration, in accordance with CEQA Sections 15152. This section allows using the analysis of a broader environmental document with a subsequent analysis with a lesser or more specific scope. The original Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration was an analysis for four different sites in the restoration project. This initial study is specifically for Site 8.

Tribal Consultation: 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, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The Lahontan Water Board stated that notification of the project was sent on December 27, 2017, to tribes affiliated with the project area and consultation was not requested. As part of the Use Permit and Management Plan application, the project was routed to the United Auburn Indian Community (UAIC), the Washoe Tribe of Nevada and California, and the Tsi Akim Maidu. The UAIC requested consultation and a conference call was held on April 16, 2019. A representative from the Washoe Tribe conducted an inspection of the project site on May 2, 2019. Recommendations from the Washoe Tribe have been included in the project and they are discussed in Sections 5 and 18 of this initial study.

SUMMARY OF IMPACTS and PROPOSED MITIGATION MEASURES

Environmental Factors Potentially Affected:

All of the following environmental factors have been considered. Those environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less Than Significant with Mitigation" as indicated by the checklist on the following pages.

—	1. Aesthetics	—	2. Agriculture / Forestry Resources	✓	3. Air Quality
✓	4. Biological Resources	✓	5. Cultural Resources	—	6. Energy
✓	7. Geology / Soils	—	8. Greenhouse Gas Emissions	✓	9. Hazards / Hazardous Materials
✓	10. Hydrology / Water Quality	—	11. Land Use / Planning	—	12. Mineral Resources
—	13. Noise	—	14. Population / Housing	—	15. Public Services
—	16. Recreation	—	17. Transportation	✓	18. Tribal Cultural Resources
—	19. Utilities / Service Systems	—	20. Wildfire	✓	21. Mandatory Findings of Significance

Summary of Impacts and Recommended Mitigation Measures:

3. **AIR QUALITY:** To offset potentially adverse air quality impacts associated with the project activities, the following mitigation measures shall be required:

Mitigation Measure 3A: Dust Control Plan. Prior to issuance of grading permits, submit a Dust Control Plan to Northern Sierra Air Quality Management District for grading at the project site. A Dust Control Plan is required when more than one (1) acre of natural surface area is to be altered or where the natural ground cover is removed. The disturbance of natural surface area includes any clearing or grading. Include the approved Dust Control Plan on the project plans using clear phrasing and enforceable conditions, under its own heading. Prior to grading permit issuance, provide documentation to the Nevada County Planning Department showing that the NSAQMD has approved the Dust Control Plan.

Timing: Prior to grading permit issuance and during construction

Reporting: Agency approval of permits or plans

Responsible Agency: Planning Department and Northern Sierra Air Quality Management District

See Mitigation Measures AIR 1-5 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

4. **BIOLOGICAL RESOURCES:** To reduce potential construction impacts to sensitive species, the following mitigation measures are recommended:

Mitigation Measure 4A: Monitor for Invasive Species. The restoration project may result in suitable breeding habitat for invasive aquatic species, especially the American bullfrog. The TRWC or a qualified professional shall monitor the project site for bullfrog colonization after completion of construction. Monitoring shall occur after project completion and for three years

after completion. Eradication efforts should be implemented immediately if bullfrogs are detected at the project site. Surveys should be conducted during the breeding season (late spring into summer). A report of the monitoring efforts shall be submitted by the end of each year to the Nevada County Planning Department to be kept on file.

Timing: *After project completion and the following three years*

Reporting: *Annual report*

Responsible Agency: *Planning Department and the Truckee River Watershed Council*

See Mitigation Measures BIO 1-18 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

5. **CULTURAL RESOURCES:** To offset potentially adverse cultural or historical resources impacts associated with the construction activities, the following mitigation measure shall be required:

Mitigation Measure 5A: Establish Environmentally Sensitive Areas (ESA) and Avoid Impacts. The three cultural resources sites shall be identified as ESAs on grading plans to ensure their protection from disturbance. Any impacts to the resource area must be avoided. The area has been surveyed, and cultural sites are located near access routes and project work. To avoid impacts to these sites, Mitigation Measures 5B and 5C will also be followed. The following note shall be included on grading plans: No grading or construction shall be allowed within the ESA.

Timing: *Prior to issuance of grading permits and during construction*

Reporting: *Approval of grading permits*

Responsible Agency: *Planning Department*

Mitigation Measure 5B: Identify Sites During Construction. Flag cultural resource sites. Two known pre-historic artifacts and one potential historic resource are located on the edge of the project footprint. These sites will be flagged and fenced off during construction to avoid any impacts to the resources. Flagging will be placed immediately before construction occurs near each artifact and flagging will be removed as soon as construction is completed near the artifacts to avoid attracting any attention to the sites. The following note shall be included on grading plans: Fencing around the ESAs must be installed before the start of construction.

Timing: *Prior to issuance of grading permits and during construction*

Reporting: *Approval of grading permits*

Responsible Agency: *Planning Department*

Mitigation Measure 5C: Tribal Monitor. A Tribal site monitor shall be on site for work in sensitive areas. A Washoe tribal site monitor will be present for work in sensitive areas. The site monitor will clear the access routes to be used prior to the start of construction and determine the treatment of any artifacts that are found on the access routes. Site monitor will also be present during removal of the small berms at the upstream-most/northwest end of the project site. These berms are likely derived from material excavated from a nearby Washoe site (outside of project area). The tribal monitor shall be present to inspect and/or catalog artifacts that may be discovered in the fill material from the berms at the northwest end of the project. Prior to the issuance of the grading permit, documentation must be provided to the Planning Department that the project applicant has coordinated with the Washoe tribe to invite the tribal monitor to the site during construction.

Timing: *Prior to issuance of grading permits and during construction*

Reporting: *Approval of grading permits*

Responsible Agency: Planning Department

Mitigation Measure 5D: Archaeological Monitor. A qualified professional, which meets the standards set by the Register of Professional Archaeologists, shall monitor the berm removal in the area of the trash scatter site during construction. The monitor shall ensure that encroachment into the trash scatter site does not occur, and to identify potential resources if there is an unanticipated discovery during construction. If resources are encountered or suspected, within 100 feet work shall be halted immediately and the Nevada County Planning Department shall be contacted. A professional archaeologist shall be retained by the applicant and consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. The applicant may choose to have a formal evaluation of the site, completed by a qualified professional, prior to the start of construction. If the evaluation determines that the site is not a historic resource, the site would not require protection or a monitor during construction. Prior to the issuance of the grading permit, documentation must be provided to the Planning Department that the project applicant has coordinated with a qualified professional to monitor to the site during construction, or that an evaluation has been completed.

Timing: Prior to issuance of grading permits and during construction

Reporting: Approval of grading permits

Responsible Agency: Planning Department

Mitigation Measure 5E: Halt Work and Contact the Appropriate Agencies if Human Remains, Cultural Resources or Paleontological Resources are Discovered during Project Construction. All grading and construction plans shall include a Note outlining the requirements provided below to ensure that any cultural resources discovered during project construction are properly managed. These requirements including the following: All equipment operators and employees involved in any form of ground disturbance shall be trained to recognize potential archeological resources and advised of the remote possibility of encountering subsurface cultural resources during grading activities. If such resources are encountered or suspected, work within 100 feet shall be halted immediately and the Nevada County Planning Department shall be contacted. A professional archaeologist shall be retained by the developer and consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. If bones are encountered and appear to be human, California Law requires that the Nevada County Coroner be contacted. Should the discovery include Native American human remains, in addition to the required procedures of Health and Safety Code Section 7050.5, Public Resources Code 5097.98 and California Code of Regulations Section 15064.5(e), all work must stop in the immediate vicinity of the find and the Nevada County Coroner must be notified. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in California Environmental Quality Act Sections 15064.5(d) and (e) shall be followed. If Native American resources are involved, Native American Organizations and individuals recognized by the County shall be notified and consulted about any plans for treatment.

Timing: Prior to issuance of grading permits and during construction

Reporting: Approval of grading permits

Responsible Agency: Planning Department

See Mitigation Measures CUL 1-4 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

7. **GEOLOGY / SOILS:** To offset potentially adverse geological impacts associated with the construction activities, the following mitigation measure shall be required:

See Mitigation Measure 5E of this initial study and Mitigation Measures BIO 2, BIO 6, BIO 13, and GEO 1-11 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

9. **HAZARDS/HAZARDOUS MATERIALS:** To offset potential impacts from hazardous materials, the following mitigation measure shall be implemented:

See Mitigation Measures HAZ 1-8 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

10. **HYDROLOGY / WATER QUALITY:** To offset potential impacts to hydrology/water quality, the following mitigation measure shall be implemented:

See Mitigation Measures GEO 1-11, HAZ 1-6, BIO 2 - 6, BIO-13, and BIO – 15 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

18. **TRIBAL CULTURAL RESOURCES: Mitigation Measures:** To offset potentially adverse tribal cultural resource impacts associated with the construction activities, the following mitigation measure shall be required:

See Mitigation Measures 5A-5E.

Mitigation Monitoring Matrix:

MEASURE #	MONITORING AUTHORITY	IMPLEMENTATION TIMING
3A	Planning Department and Northern Sierra Air Quality Management District	Prior to grading permit issuance and during construction
4A	Planning Department and the Truckee River Watershed Council	After project completion and the following three years
5A	Planning Department	Prior to issuance of grading permits and during construction
5B	Planning Department	Prior to issuance of grading permits and during construction
5C	Planning Department	Prior to issuance of grading permits and during construction
5D	Planning Department	Prior to issuance of grading permits and during construction
5E	Planning Department	Prior to issuance of grading permits and during construction
AIR 1-5 BIO 1-18 CUL 1-4 GEO 1-11 HAZ 1-8	See Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration	See Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration

INITIAL STUDY AND CHECKLIST

Introduction

This checklist is to be completed for all projects that are not exempt from environmental review under the California Environmental Quality Act (CEQA). The information, analysis and conclusions contained in the checklist are the basis for deciding whether an Environmental Impact Report (EIR) or Negative Declaration is to be prepared. If an EIR is determined to be necessary based on the conclusions of the Initial Study, the checklist is used to focus the EIR on the effects determined to be potentially significant. This Initial Study uses the following terms to describe the level of significance of adverse impacts. These terms are defined as follows.

- **No Impact:** An impact that would result in no adverse changes to the environment.
- **Less than Significant Impact:** An impact that is potentially adverse but does not exceed the thresholds of significance as identified in the impact discussions. Less than significant impacts do not require mitigation.
- **Less than Significant with Mitigation:** An environmental effect that may cause a substantial adverse change in the environment without mitigation, but which is reduced to a level that is less than significant with mitigation identified in the Initial Study.
- **Potentially Significant Impact:** An environmental effect that may cause a substantial adverse change in the environment; either additional information is needed regarding the extent of the impact to make the significance determination, or the impact would or could cause a substantial adverse change in the environment. A finding of a potentially significant impact would result in the determination to prepare an EIR.

1. AESTHETICS

Existing Setting: The proposed project is to restore a meadow located in Russel Valley. The project site is along two County maintained roads—Dog Valley Road and Hobart Mills Road. Public views of the project area are clearly visible from the roadways. There is an existing berm near the intersection of Hobart Mills Road and Dog Valley Road that blocks some of the view into the meadow. The berm is up to approximately twenty feet high and extends 885 feet along the side of the meadow. Gentle hills with forested areas are adjacent to the project area.

Except as provide in Public Resources Code Section 21099, would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Have a substantial adverse effect on a scenic vista?				✓	R
b. Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				✓	R
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓		R

Except as provide in Public Resources Code Section 21099, would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				✓	R

Impact Discussion:

- 1a,b,d 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, and therefore, there would be ***no impact*** on light, glare, or scenic vistas.
- 1c 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. Impacts to the visual character or quality of the site are anticipated to be ***less than significant***.

Mitigation: None required.

2. AGRICULTURAL/FORESTRY RESOURCES

Existing Setting: The project site is located in an area that is not mapped for important farmland. There is no important farmland or existing agricultural uses that are known on adjacent parcels. The project parcel has forested areas that are not part of the project area. The zoning on the parcel is Forest, and there are no changes to the zoning that are being proposed.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
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 Department of Conservation's Division of Land Resource Protection, to non-agricultural use?				✓	A, L, 7
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				✓	A, 18
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g)), timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				✓	A, L, 18
d. Result in the loss of forest land or conversion of forest land to non-forest use?				✓	L, 18

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
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?				✓	A, L, 7

Impact Discussion:

- 2a,b No farmland is located in the project area, and there are no changes to the use of the land or to the zoning. There would be no impact to agricultural resources. The project is to restore an existing meadow and wetlands. The project site has Forest zoning, but land is not being converted to a non-forest use. Therefore, ***no impacts*** are anticipated to agriculture or forest land.

Mitigation: None required.

3. AIR QUALITY

Existing Setting: Nevada County is located in the Mountain Counties Air Basin. The overall air quality in Nevada County has improved over the past decade, largely due to vehicles becoming cleaner. State and Federal air quality standards have been established for specific “criteria” air pollutants including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and particulate matter. In addition, there are State standards for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. State standards are called California Ambient Air Quality Standards (CAAQS) and federal standards are called National Ambient Air Quality Standards (NAAQS). NAAQS are composed of health-based primary standards and welfare-based secondary standards.

Nevada County is also Nonattainment for the PM10 CAAQS, but Unclassified for the PM10 NAAQS due to lack of available recent data. The number after “PM” refers to maximum particle size in microns. PM10 is a mixture of dust, combustion particles (smoke) and aerosols, whereas PM2.5 is mostly smoke and aerosol particles. PM2.5 sources include woodstoves and fireplaces, vehicle engines, wildfires and open burning. PM10 sources include the PM2.5 plus dust, such as from surface disturbances, road sand, vehicle tires, and leaf blowers. Some pollen and mold spores are also included in PM10, but most are larger than 10 microns. All of Nevada County is Unclassifiable/Attainment for the PM2.5 NAAQS and Unclassified for the PM2.5 CAAQS (US Environmental Protection Agency, 2015).

Ultramafic rock and its altered form, serpentine rock (or serpentinite), both typically contain asbestos, a cancer-causing agent. Ultramafic rock and serpentine are likely to exist in several areas of Nevada County; however, the area mapped to be more likely to contain naturally occurring asbestos are in the western portion of Nevada County and there are no areas mapped near the project site (California Department of Conservation, 2000).

An evaluation of project impacts related to greenhouse gas emissions is provided in Section 8 of this Initial Study.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Conflict with or obstruct implementation of the applicable air quality plan.		✓			A,G, R
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?			✓		A,G,R, 11
c. Expose sensitive receptors to substantial pollutant concentrations?		✓			A,G,L,R
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓		A,G,R
e. Generate substantial smoke ash or dust?		✓			A,G,R

Impact Discussion:

3a,c,e The proposed project site is located 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 with mitigation*. Mitigation Measure 3A requires a Dust Control Plan that must be submitted and approved by the NSAQMD, which will reduce the impact from emissions and dust to a less than significant level. The project does not include any open burning. Mitigation Measures AIR 1-5 will reduce dust by requiring unpaved roads and soil stockpiles to be watered, the traffic speed will be limited, and all disturbed areas will be revegetated. Existing vegetation in the project area that will be removed and replanted after construction.

3b,d Nevada County is in nonattainment for the State ozone standards and PM10 standards (California Air Resources Board, 2017). PM10 violations in winter are largely due to wood smoke from the use of woodstoves and fireplaces, while summer and fall violations often occur during forest fires or periods of open burning. The proposed project would result in a temporary increase in pollutants due to vehicle and equipment emissions during construction. Disturbance is limited to what is necessary to complete the restoration project and it will not be excessive in the project area, in order to protect the existing wetlands and meadow. Once construction is complete, minimal emission would result from occasional traffic trips to the site to monitor the project. Due to the project's short-term, small scale and 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. The closest residence is located approximately 450 feet away from the edge of the project area. The project does not include any open burning that would add smoke to the area, and it is located in a rural area that is distant from large populations. Due to a limited amount of disturbance for a short duration, impacts to a cumulative increase of pollutants and emissions affecting a substantial number of people are anticipated to be *less than significant*.

Mitigation Measures: To offset potentially adverse air quality impacts associated with the project activities, the following mitigation measures shall be required:

Mitigation Measure 3A: Dust Control Plan. Prior to issuance of grading permits, submit a Dust Control Plan to Northern Sierra Air Quality Management District for grading at the project site. A Dust Control Plan is required when more than one (1) acre of natural surface area is to be altered or where the natural ground cover is removed. The disturbance of natural surface area includes any clearing or grading. Include the approved Dust Control Plan on the project plans using clear phrasing and enforceable conditions, under its own heading. Prior to grading permit issuance, provide documentation to the Nevada County Planning Department showing that the NSAQMD has approved the Dust Control Plan.

Timing: Prior to grading permit issuance and during construction

Reporting: Agency approval of permits or plans

Responsible Agency: Planning Department and Northern Sierra Air Quality Management District

See Mitigation Measures AIR 1-5 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

4. **BIOLOGICAL RESOURCES**

Existing Setting: The project site is a large meadow that is approximately 36 acres located in Russel Valley, in the northeastern area of Nevada County. The site is located along the main stem of Dry Creek, just below the confluence of the headwater tributaries. The Dry Creek Watershed is a tributary to the Little Truckee River via Boca Reservoir and flows into the Truckee River. A primary remnant channel of Dry Creek flows through the meadow. There is also an incised gully with a depth of 4.5 feet has been carved through meadow. Because of water flowing through the meadow in the incised gully, the floodplain area has decreased overtime and wetlands have been dewatered and degraded. The average width of the floodplain is 73 feet, and the historic width has been 317 feet wide. The meadow currently has 5.26 acres of perennial wetlands, 4.42 acres of dewatered wetlands, and 3.41 acres of degraded wetlands. The elevation in the meadow is approximately 5,750 feet, with gentle slopes uphill of the meadow with forested areas.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
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?		✓			R,19,22, 24,26
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?		✓			R
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓			R,29

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
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?		✓			R
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓	A,R
f. Conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓	A,R
g. Introduce any factors (light, fencing, noise, human presence and/or domesticated animals) which could hinder the normal activities of wildlife?			✓		A,R

Impact Discussion:

- 4a Wildlife and botanical surveys were completed for this project in 2014 by Ashley Kula, a wildlife biologist with the Tahoe National Forest Service, and by Susan Urie, a botanist with the Tahoe National Forest Service. The surveys conducted were for CEQA compliance were to evaluate 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. The data in this section (4a-d) is originally from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration. Revisions and updates to this section have been made in this initial study, due to additional surveys that have been conducted, and comments from the U.S. Fish and Wildlife Service regarding the American bullfrog—an invasive species.

In addition to the two reports by the Tahoe National Forest Service, data from this section was also collected from reports on bird monitoring, aquatic habitat surveys, vegetation monitoring, and a Management Plan. Helen Loffland with the Institute for Bird Populations completed bird monitoring surveys in Russel Valley and the project area in 2012 and 2018, and has been approved by Nevada County as a qualified consultant to work on this restoration project. Aquatic habitat surveys for the project were conducted by a restoration ecologist, Sabra Purdy, with Trout Unlimited. Sabra Purdy has also been approved by Nevada County to work as a biological consultant for this restoration project. The aquatic habitat surveys occurred on July 9-11, 2018. On July 27, 2018, vegetation monitoring data was collected by Catherine Schnurrenberger with C.S. Ecological Surveys and Assessments for the project site. Catherine Schnurrenberger is a Nevada County pre-qualified biological consultant. In addition to the reports, this project includes a Management Plan that was prepared by a pre-qualified biological consultant, Jeff Glazner with Salix Consulting Inc.

This section 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. The following discussion includes three section for terrestrial wildlife, aquatic wildlife species and plant species. Each species that has potential to occur in the

project area is listed in the table below, with an analysis on whether or not impacts are expected to occur from the project.

Terrestrial Wildlife

Kula (2014) reported that sensitive terrestrial wildlife species that could potentially occur in the project area are included in the table below. Table 1 below identifies the potential species, the impact determination and if any mitigation measures are required.

Table 1- Terrestrial Wildlife

Species and Status ¹	Potential to Occur in Project Area	Impacts Determination	Mitigation Measures
Birds			
American Peregrine Falcon (<i>Falco peregrinus anatum</i>)- SFP	Unlikely- no suitable habitat	No Impact	None needed
American White Pelican (<i>Pelecanus erythrorhynchos</i>) - SSC	Unlikely- no suitable habitat	No Impact	None needed
Bald Eagle (<i>Haliaeetus leucocephalus</i>) - SE	Unlikely- no suitable habitat	No Impact	None needed
Bank Swallow (<i>Riparia riparia</i>) - ST	Unlikely- no suitable habitat	No Impact	None needed
Black Tern (<i>Chlidonias niger</i>) - SSC	Unlikely- no suitable habitat	No Impact	None needed
California Spotted Owl (<i>Strix occidentalis occidentalis</i>) - SSC	Unlikely- no suitable habitat	No Impact	None needed
Great Gray Owl (<i>Strix nebulosa</i>) - SE	Low potential - limited suitable nesting habitat in the project area	Less than significant impact	None needed
Greater Sandhill Crane (<i>Grus canadensis tabida</i>) -ST, SFP	Low potential - limited suitable nesting habitat in the project area	Less than significant impact	None needed

Long-eared Owl (<i>Asio otus</i>) - SSC	Medium potential - suitable habitat exists in the project area	Less than significant impact	None needed
Northern Goshawk (<i>Accipiter gentilis</i>) - SSC	Low potential - limited suitable nesting habitat in the project area	Less than significant impact	None needed
Olive-sided Flycatcher (<i>Contopus cooperi</i>)- SSC	Medium potential - suitable habitat exists in the project area	Less than significant impact	None needed
Purple Martin (<i>Progne subis</i>) - SSC	Unlikely- no suitable habitat	No Impact	None needed
Willow Flycatcher (<i>Empidonax trailii</i>) - SE	Unlikely-no suitable nesting habitat	No Impact	None needed
Yellow Warbler (<i>Dendroica petechia</i>) - 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 31
Mammals			
Fringed Myotis (<i>Myotis thysanodes</i>) - SSC	Medium potential - suitable habitat exists in the project area	Less than significant impact	None needed
Long-legged Myotis (<i>Myotis volans</i>) - SSC	Medium potential - suitable habitat exists in the project area	Less than significant impact	None needed
North American Wolverine (<i>Gulo gulo /uscus</i>) - ST, SFP	Unlikely- no suitable habitat	No Impact	None needed
Pacific Fisher (<i>Pekania pennanti</i>)- FP, SC,SSC	Unlikely- no suitable habitat	No Impact	None needed

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

¹Key:

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 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. Based on surveys conducted in 2012 and 2018 by Helen Loffland with the the Institute of Bird Populations, yellow warblers are rare in Russel Valley. One warbler was observed in 2012, and no warblers were observed in 2018. No other special status bird species were reported at the site during the monitoring. To minimize impacts, mitigation (BIO 1) has been added to limit the construction period to avoid impacts to nesting birds. 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.

Loffland (2019) also noted that the willow flycatcher—a California endangered species—is not currently breeding in Russel Valley where the project site is located. There are multiple breeding sites in the area and the restoration activities at the site could provide a habitat for this species once the natural floodplain is restored.

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

Analysis for the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration was based off surveys and a report that was completed by Forest Service staff in 2015. The surveys were on the portion of Dry Creek that is on Forest Service property, which was below the project area (Site 8). Due to proximity and similar habitat, the same state and federal sensitive species were considered for the evaluation in the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study. Since the 2015 report, aquatic habitat surveys were also conducted in the project area by a restoration ecologist, Sabra Purdy, with Trout Unlimited. The aquatic habitat surveys occurred on July 9-11, 2018, and determined that the stream reaches were dominated by sand and gravel. Pools were limited and no woody debris was found in any of the reaches. Prior to these two surveys, stream reaches in the project area and adjacent areas were electroshocked by Forest Service staff in 2012 to monitor fish populations. Speckled dace were the dominant species and there were limited trout. The 2018 surveys by Trout Unlimited confirmed that the site is still dominated by native dace and has limited non-native salmonids present.

The special status aquatic wildlife species that could potentially occur in the Project area are included in the table below (Table 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*), blackjuga 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*) because these species are not present in the Project area (USDA, 2015).

Table 2- Aquatic Wildlife Species

Species and Status ¹	Potential to Occur in Project Area	Impacts Determination	Mitigation Measures
California red-legged frog (<i>Rana aurora draytonii</i>) -FT	Unlikely- outside historic range	No impact	None needed
Lahontan cutthroat trout (<i>Oncorhynchus clarki henshawi</i>) -FT	Unlikely- not observed downstream of project area	No impact	None needed
Sierra Nevada yellow-legged frog (<i>Rana sierrae</i>) -FE, CT	Suitable Habitat	Less than significant with mitigations incorporated	BI0 7: Survey prior to ground disturbing activities. BI0 9: No construction activities from November 30 to May 30 to avoid impacts to frogs moving to breeding grounds. BI0 8 -12: Protections during construction.

¹Key:

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 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. CDFW's 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. These mitigation measures require construction to occur between August and October 31 to allow spawning and development of native fishes; fish will be relocated during construction; and drafting rates will be limited to prevent impacts to aquatic life.

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 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 by requiring a survey before construction, limiting the construction period, and by providing suitable erosion control measures. Implementation of the Project should increase the amount and duration of available aquatic habitat for SNYF.

Plant Species

Table 3 contains a list of the sensitive plant species that could potentially be found in the Project area (Urie, 2014).

Table 3- Plant Species

Species and Status¹	Potential to Occur in Project Area	Impacts Determination	Mitigation Measures
<i>Arabis rigidissima</i> var. <i>demote</i> - 1B.2	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No Impact	None needed
<i>Artemisia tripartita</i> spp. <i>tripartita</i> - 2B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No Impact	None needed
<i>Astragalus austinae</i> - 1B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No Impact	None needed
<i>Botrychium crenulatum</i> - 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
<i>Botrychium lunaria</i> - 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
<i>Botrychium minganense</i> - 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
<i>Carex davyi</i> - 1B.3	Medium potential - Habitat present. Not detected during surveys.	No impact	None needed

<i>Carex limosa</i> - 2B.2	High potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed
<i>Claytonia megarhiza</i> -2B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No impact	None needed
<i>Drosera anglica</i> - CNPS2B.3	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed
<i>Epilobium oreganum</i> -1B.2	Unlikely - Habitat present in perennially wet areas but project elevation is outside of species range.	No impact	None needed
<i>Erigeron miser</i> -18.3	Unlikely - No habitat is present.	No impact	None needed
<i>Eriogonum</i> <i>umbellatum</i> var. <i>torreyanum</i> - 18.2	Low potential - habitat present in drier areas.	No impact	None needed
<i>Hymenoxys lemmonii</i> - 28.2	Low potential - Habitat present in drier areas. Not detected during surveys.	No impact	None needed
<i>Ivesia aperta</i> var. <i>aperta</i> - 18.2	Medium potential - Habitat present in ephemerally wet areas . Not detected during surveys.	No impact	None needed

<i>Ivesia aperta</i> var. <i>canina</i> - 18.1	Medium potential - Habitat present in ephemerally wet areas. Not detected during surveys.	No impact	None needed
<i>Ivesia sericoleuca</i> - 18.2	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
<i>Ivesia webberi</i> -FT, 18.1	Medium potential - Habitat present in ephemerally wet areas. Not detected during surveys.	No impact	None needed
<i>Juncus luciensis</i> - 18.2	High potential - habitat is present in perennially wet areas. Not detected during surveys.	No impact	None needed
<i>Lewisia longipetala</i> - 18.3	Unlikely - No habitat is present due to unsuitable elevation range and substrate.	No impact	None needed
<i>Meesia triquetra</i> - 4.2	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	Less than significant	None needed
<i>Meesia uliginosa</i> - 2B.2	Medium potential - Marginal habitat present. Not detected during surveys.	Less than significant	None needed
<i>Nardia hiroshii</i> -1B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No impact	None needed

<i>Packera layneae</i> - FT, SR, 18.2	Unlikely - No habitat is present on the east side of the Tahoe NF.	No impact	None needed
<i>Potamogeton robbinsii</i> - 28.3	Low potential - No habitat present due to unsuitable substrate.	No impact	None needed
<i>Pyrrocoma /ucida</i> - 18.2	Unlikely -No habitat present due to unsuitable elevation range.	No impact	None needed
<i>Rhamnus alnifolia</i> - 28.2	Low potential - Habitat present in perennially wet areas.	No impact	None needed
<i>Rorippa subumbellata</i> - SE, 1B.1	Unlikely - No habitat present due to unsuitable substrate.	No impact	None needed
<i>Scutel/aria galericulata</i> - 2B.2	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed

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 3 includes plants that 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. Additional vegetation monitoring occurred at the site on July 27, 2018, by Catherine Schnurremberger and no special status plant species were observed at the site. The project applicant reported that the survey included five transects across the project area. The upper end of the meadow was specifically surveyed for the plant species *Ivesia sericoleuca*, which is known to occur upstream of the project area, and the species was not found on the project site. Prior to construction, additional vegetation monitoring will occur. Mitigation Measure BIO 14 requires that if this plant species is observed, it shall be flagged and avoided during construction.

Less Than Significant with Mitigation is Incorporated:

Although *Ivesia serico/euca* 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.

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.

During the review of the Use Permit and Management Plan, the Planning Department received comments from the U.S. Fish and Wildlife Service, stating that the project may result in a suitable breeding habitat for the American bullfrog, which is an invasive species. The Fish and Wildlife Services advised that there are no known bullfrog population in the vicinity of the project, but they are known in other areas at similar elevations of the Sierra Nevada range. Mitigation (MM 4A) has been added to the project to require monitoring of the site for three years and immediate eradication efforts if bullfrogs are detected at the project site.

Based on surveys of the site for special status species and with the implementation of the mitigation measures discussed above, impacts on special status species are expected to be *less than significant with mitigation*.

- 4b This following discussion has been inserted from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration.

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 4c, 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 4c below. Significant impacts to sensitive habitats will be avoided through Mitigation Measures BIO - 5, 6, and 13, which will limit disturbance, control sediment, revegetate riparian areas and stabilize stream banks.

With mitigation to limit disturbance, revegetate riparian areas, impacts to riparian habitats and natural communities are anticipated to be *less than significant with mitigation*.

- 4c The project application included a Wetlands Determination and Other Waters of the U.S. report that was prepared by a professional hydrologist, soil scientists, and botanists with the Tahoe National Forest. Surveys of the site were conducted during November 2014 and July 2015. The wetland delineation determined that the site currently has 5.26 acres of wetlands, which are referred to as perennial wetlands. There were three other areas that were not found to be wetlands and were referred to as dewatered wetlands, degraded wetlands, and sagebrush. The dewatered wetlands had the vegetation that would qualify for wetlands, but no other wetland characteristics. The degraded wetlands had no wetland characteristics, but it reported that these areas appeared to be wetlands before the stream was diverted into the incised gully. This report stated that the degraded wetlands are expected to convert back to wetland habitat after the project is implemented.

There will be temporary impacts to wetlands during construction, but the project will restore the wetland and floodplain. The total disturbance area of the project would be approximately 4.9 acres, but it would result in 7.83 acres or more of degraded and dewatered wetlands that would be restored and an additional 0.9 acres of perennial stream channel that would be restored. Vegetation removed from any disturbed wetlands will be replanted on the disturbed areas. Mitigation has been added to the project to revegetate the disturbed areas, stabilize stream banks, to minimize disturbance to the site (Mitigation Measure BIO 5) and to obtain the necessary permits from the Lahontan Regional Water Quality Control Board and the U.S. Army Corps of Engineers (Mitigation Measure BIO 15). Impacts from the project are expected to be *less than significant with mitigation*.

- 4d This following discussion has been inserted from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration.

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, by restricting the construction period, relocating fish, and limiting water drafting rates. 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.

During construction of the project, the incised gully will be dewatered with a pipeline that will bypass a majority of the gully that will be filled. Mitigation has been added to the project by the Lahontan Water Board to require fish relocation during construction activities (Mitigation Measure BIO 17), and to limit the construction activities between August 1 and October 31 (Mitigation Measure BIO 15), to allow spawning and development of native fish in the project area. Fish will be relocated to areas that will not be impacted by the restoration activities. This will include electrofishing and the use of beach seines to capture fish. The Water Board has also added mitigation (Mitigation Measure BIO 18) to control the drafting rates for fish-bearing streams. The project will affect the movement of fish for a limited time during construction. With implementation of the mitigation measures, impacts are expected to be *less than significant with mitigation*.

- 4e-f The project would not interfere with any local policies protecting biological resources or with any conservation plans. Section L-II 4.3.17 Of the Nevada County Land Use and Development Code (LUDC) requires a Management Plan for interference within the setback of wetlands or a waterway. The Management Plan has been submitted with the project application and addresses how disturbance cannot be avoided, with appropriate recommendations to minimize disturbance and implement best management practices. In order to restore the meadow there will be some disturbance to wetlands and setbacks of the waterway. This code section requires restoration at a 2:1 ratio. The project will temporarily affect 1.91 acres of wetlands in order to restore 7.83 acres or more of wetlands. The Management Plan meets the requirements in the LUDC; therefore, there would be *no impacts* on conflicts with local policies or conservation plans.
- 4g No new lighting, fencing, or domesticated animals are included in the project, and there will be no long-term increases in noise or human presence. The project construction is expected to take place over a 2-3 month period, where there will be an increase in noise and activities at the site. The project will restore a habitat with diversity that will provide a benefit wildlife. Any impacts to the normal activities of wildlife would be short-term and the project would provide benefits, long-term. Impacts to wildlife from human activities are anticipated to be *less than significant*.

Mitigation: To reduce potential construction impacts to biological resources, the following mitigation measure is required:

Mitigation Measure 4A: Monitor for Invasive Species. The restoration project may result in suitable breeding habitat for invasive aquatic species, especially the American bullfrog. The TRWC or a qualified professional shall monitor the project site for bullfrog colonization after completion of construction. Monitoring shall occur after project completion and for three years after completion. Eradication efforts should be implemented immediately if bullfrogs are detected at the project site. Surveys should be conducted during the breeding season (late spring into summer). A report of the monitoring efforts shall be submitted by the end of each year to the Nevada County Planning Department to be kept on file.

Timing: After project completion and the following three years

Reporting: Annual report

Responsible Agency: Planning Department and the Truckee River Watershed Council

See Mitigation Measures Bio 1-18 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

5. CULTURAL RESOURCES

Existing Setting: A Heritage Resource Inventory Report was prepared for the Dry Creek Watershed Assessment and Restoration Plan was prepared by Archaeological Consultant John Betts in 2013. The following information to describe the existing setting was provided by the 2013 report. The project is located in the northern Sierra Nevada and was home to the Washoe Tribe. Their campsites were usually located in open areas that were close to water. Occasional expeditions were made into the foothills to gather food or trade acorns. The tribe would travel along game trails and migrations routes. Dry Creek flows through the project site and there are documented resources on the project parcel. The Dry Creek Watershed has had multiple archaeological surveys, mostly on forest service land in the area. Based on a compilation of previous reports, approximately seventy-three percent (73%) of the Dry Creek Watershed has been surveyed. Several archaeological sites have been recorded in the project area, and a records search from the North Central Information Center (NCIC) identified the Dry Creek/Russel Valley area as having a moderate to high sensitivity for prehistoric resources. No historic sites were known by the NCIC in or adjacent to the project area.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?		✓			R
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		✓			R
c. Disturb any human remains, including those interred outside of formal cemeteries?		✓			R

Impact Discussion:

- 5a-c A Heritage Resource Inventory Report was prepared for the Dry Creek Watershed Assessment and Restoration Plan was prepared by Archaeological Consultant John Betts in 2013. The report identified four potentially significant historic and pre-historic sites. Three of the sites, including a

pre-historic campsite, pre-historic lithic scatter, and historic trash scatter will be avoided to prevent disturbance to the sites. The pre-historic campsite is located near an area where fill will be placed, but the project has been redesigned to avoid this resource. There are also small berms in this area that may have been derived from material excavated from an upstream Washoe site. Mitigation (MM 5C) has been added for a tribal monitor to be onsite during the removal of the small berms to inspect the material in case any resources are discovered. Additional mitigation measures to protect and avoid the sites include flagging and installing temporary fencing during construction (MM 5B), having a tribal monitor on-site to clear access routes and to monitor the site for disturbance near cultural resource areas (MM 5C), and halting work if there is an unanticipated discovery of cultural or tribal cultural resources (MM 5E), have been included to avoid and protect these three sites. The fourth site, which is a large berm on the southern portion of the meadow, and the historic trash scatter are discussed in more detail below.

The fourth site was first documented as a possible dam for erosion or flood control, and was described as a large earthen structure that is 885 feet long and up to twenty (20) feet high. The structure extends up to fifty (50) feet wide at the base and three (3) feet wide along the top of the structure. A culvert is located at the base of the structure to allow Dry Creek to flow through the berm. The project application included a historic structure report and national register evaluation by Architectural Historian Judith Marvin in May 2017, to determine if the berm has significance or if it may be an eligible resource under the National Historic Preservation Act of 1966. The evaluation was completed to satisfy the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) standards. Research on the berm included a review of historic maps, aerial photos, recorded documents, published and unpublished work, and multiple interviews and discussions with several agencies, archaeologists and historians. The research on the berm revealed that there was a breach sometime between 1952 and 1966. The breach is approximately twenty (20) feet by sixty (60) feet and has caused a gap in the berm that has eroded down to the natural grade. Water flows from the meadow through this gap and into culverts that go under the road and off the parcel. The research on the berm determined that it was constructed for a logging railroad, likely between the years of 1912 and 1914, and abandoned by 1936. Temporary spur lines for logging railroads were built in the area and many of them are unmapped. This berm appears to have been one of the temporary railroad spurs for logging. Due to the poor integrity of feeling and association, it was determined in the evaluation that the berm does not appear eligible for listing on the National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR) under any of the criteria, and it does not appear to be a historic resource based on CEQA standards.

The proposed project includes removal of the berm, to use the material to fill in the incised gully in the meadow. A valley grade structure to allow a transition of elevation for water flows from the meadow into the culverts that go under Hobart Mills Road and Dog Valley Road would also be constructed over an area of where the berm is currently located. Because the berm is not a historic resource, the removal of the berm would not create any conflicts to the protection of historic resources.

Alongside the berm, there is a historic trash scatter site that was identified in the 2013 Heritage Resources Inventory Report (Betts). It was reported that the site is in poor condition and has been disturbed by road construction and from sheep grazing at the site. The 2013 survey for cultural resources stated that the trash scatter was the only material observed during the investigation, but it could suggest evidence of David Russell's house from the 1860's. David Russell lived in the

area from the 1860s until 1883, and cut hay and sold it to farmers in the valley that is known as Russel Valley—where this project site is located. Mitigation Measure 5A-B requires that the trash scatter site be avoided and that construction fencing shall be placed in between the resource site and the berm during construction. Because a formal evaluation of the trash scatter site has not been conducted to determine if it has significance, Mitigation Measure 5D requires that a qualified professional (archaeologist) shall monitor the site during the removal of the berm in this location to ensure that encroachment into the trash scatter site does not occur, and to identify potential resources if there is an unanticipated discovery during construction. This mitigation also allows the applicant to have a formal evaluation of the site prior to the start of construction. If the evaluation determines that the site is not a historic resource, mitigation measures to protect the site can be disregarded.

The information sheet for the initial distribution of the project was sent to the Tsi Akim Maidu, the United Auburn Indian Community (UAIC), the Washoe Tribe of Nevada and California, the Truckee Donner Historical Society, the Nevada County Historical Landmarks Commission, the Native American Heritage Commission and the Office of Historic Preservation. The Nevada County Historical landmarks Commission commented on the project and agreed with that the berm does not appear eligible for listing as a resource and that no further work is recommended. The UAIC requested consultation and a conference call was held with Planning Department staff on April 16, 2019. The UAIC advised that another tribe may seek consultation on the project and that the UAIC specifically may not have recommendations, but the project should have input from one of the tribes. No further recommendations from the UAIC were made. The Director for the Tribal Historic Preservation Office of the Washoe tribe, Darrel Cruz, reviewed the project and conducted an inspection of the project site on May 2, 2019. The applicant and the Washoe tribe representative discussed appropriate protections for the pre-historic resources at the site. The project applicant documented the mitigation measures that would be incorporated into the project and they were confirmed by Mr. Cruz. These recommendations have been included in Mitigation Measures 5A-C, to avoid and protect the resources. No other recommendations were received by any other agencies. Mitigation measures were also applied to the project in the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration to avoid cultural resources, flag resource sites, and to stop work in the area if there is a discovery of human remains or resources (Mitigation Measures CUL 1-4), and will also be applied in this mitigated negative declaration. Mitigation Measures 5A-5C have been included as additional mitigation measures because of specific requirements to identify resources as environmentally sensitive areas on the grading plans, to add notes on the grading plans to fence resources before construction, and to require a tribal monitor for work in sensitive areas. With the implementation of the mitigation measures, impacts to cultural resources are anticipated to be *less than significant with mitigation*.

Additional discussion of cultural resources is located in the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

Mitigation Measures: To offset potentially adverse cultural or historical resources impacts associated with the construction activities, the following mitigation measure shall be required:

Mitigation Measure 5A: Establish Environmentally Sensitive Areas (ESA) and Avoid Impacts. The three cultural resources sites shall be identified as ESAs on grading plans to ensure their protection from disturbance. Any impacts to the resource area must be avoided. The area has been surveyed, and cultural sites are located near access routes and project work. To avoid impacts

to these sites, Mitigation Measures 5B and 5C will also be followed. The following note shall be included on grading plans: No grading or construction shall be allowed within the ESA.

Timing: *Prior to issuance of grading permits and during construction*

Reporting: *Approval of grading permits*

Responsible Agency: *Planning Department*

Mitigation Measure 5B: Identify Sites During Construction. Flag cultural resource sites. Two known pre-historic artifacts and one potential historic resource are located on the edge of the project footprint. These sites will be flagged and fenced off during construction to avoid any impacts to the resources. Flagging will be placed immediately before construction occurs near each artifact and flagging will be removed as soon as construction is completed near the artifacts to avoid attracting any attention to the sites. The following note shall be included on grading plans: Fencing around the ESAs must be installed before the start of construction.

Timing: *Prior to issuance of grading permits and during construction*

Reporting: *Approval of grading permits*

Responsible Agency: *Planning Department*

Mitigation Measure 5C: Tribal Monitor. A Tribal site monitor shall be on site for work in sensitive areas. A Washoe tribal site monitor will be present for work in sensitive areas. The site monitor will clear the access routes to be used prior to the start of construction and determine the treatment of any artifacts that are found on the access routes. Site monitor will also be present during removal of the small berms at the upstream-most/northwest end of the project site. These berms are likely derived from material excavated from a nearby Washoe site (outside of project area). The tribal monitor shall be present to inspect and/or catalog artifacts that may be discovered in the fill material from the berms at the northwest end of the project. Prior to the issuance of the grading permit, documentation must be provided to the Planning Department that the project applicant has coordinated with the Washoe tribe to invite the tribal monitor to the site during construction.

Timing: *Prior to issuance of grading permits and during construction*

Reporting: *Approval of grading permits*

Responsible Agency: *Planning Department*

Mitigation Measure 5D: Archaeological Monitor. A qualified professional, which meets the standards set by the Register of Professional Archaeologists, shall monitor the berm removal in the area of the trash scatter site during construction. The monitor shall ensure that encroachment into the trash scatter site does not occur, and to identify potential resources if there is an unanticipated discovery during construction. If resources are encountered or suspected, within 100 feet work shall be halted immediately and the Nevada County Planning Department shall be contacted. A professional archaeologist shall be retained by the applicant and consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. The applicant may choose to have a formal evaluation of the site, completed by a qualified professional, prior to the start of construction. If the evaluation determines that the site is not a historic resource, the site would not require protection or a monitor during construction. Prior to the issuance of the grading permit, documentation must be provided to the Planning Department that the project applicant has coordinated with a qualified professional to monitor to the site during construction, or that an evaluation has been completed.

Timing: *Prior to issuance of grading permits and during construction*

Reporting: *Approval of grading permits*

Responsible Agency: Planning Department

Mitigation Measure 5E: Halt Work and Contact the Appropriate Agencies if Human Remains, Cultural Resources or Paleontological Resources are Discovered during Project Construction. All grading and construction plans shall include a Note outlining the requirements provided below to ensure that any cultural resources discovered during project construction are properly managed. These requirements including the following: All equipment operators and employees involved in any form of ground disturbance shall be trained to recognize potential archeological resources and advised of the remote possibility of encountering subsurface cultural resources during grading activities. If such resources are encountered or suspected, work within 100 feet shall be halted immediately and the Nevada County Planning Department shall be contacted. A professional archaeologist shall be retained by the developer and consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. If bones are encountered and appear to be human, California Law requires that the Nevada County Coroner be contacted. Should the discovery include Native American human remains, in addition to the required procedures of Health and Safety Code Section 7050.5, Public Resources Code 5097.98 and California Code of Regulations Section 15064.5(e), all work must stop in the immediate vicinity of the find and the Nevada County Coroner must be notified. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in California Environmental Quality Act Sections 15064.5(d) and (e) shall be followed. If Native American resources are involved, Native American Organizations and individuals recognized by the County shall be notified and consulted about any plans for treatment.

Timing: Prior to issuance of grading permits and during construction

Reporting: Approval of grading permits

Responsible Agency: Planning Department

See Mitigation Measures CUL 1-4 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

6. ENERGY

Existing Setting: The project site is undeveloped with dirt access roads. There are no building permits for utilities or known electrical service at this site.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?				✓	A
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓	A

Impact Discussion:

- 6a-b The project would involve construction equipment at the site for 2-3 months, and then all equipment would be removed. No utilities or structures are being built, and the site will remain unimproved. Existing dirt access roads will be used for equipment to reach the project site. Due to the project only involving construction to restore a meadow, there would be no impacts to unnecessary consumption of energy resources or conflicts with state or local plans.

Mitigation: None Required.

7. GEOLOGY / SOILS

Existing Setting: The project site is located in a large meadow with approximately a one percent grade. The elevation at the site is approximately 5,750 feet. There are forested areas around the Russel Valley that have condensed areas with conifers. The project is located in an open meadow, and is mapped as having Aquolls and Borolls soil types with a 0 to 5 percent slopes. To the western side of the meadow towards the forested area on the property, the soil is mapped as Euer-Aquolls-Martis variant complex with 2 to 30 percent slopes. There is no disturbance proposed in this area, other than for construction equipment to get to the meadow through the existing dirt access roads in this area. Dry Creek flows through the meadow from the northwest and off the project parcel in the southeastern corner.

The Alquist-Priolo Earthquake Fault Zoning Act was adopted in 1972 to prevent the construction of buildings in areas where active faults have surface expression. Ground or fault rupture is generally defined as the displacement that occurs along the surface of a fault during an earthquake. The project site is located within Seismic Zone III—the High Intensity Zone of the Modified Mercalli scale—meaning the site has a high risk for major damage to structures (Nevada County, 1991). Segments of the Dog Valley Fault, which has caused several moderate magnitude earthquakes, cross within one-eighth of a mile from the project site (Goodwin, 2019). The project is within a seismically active area, but it is not located in an Alquist-Priolo Earthquake Fault Zone (California Department of Conservation, 2018).

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury or death involving: <ul style="list-style-type: none"> 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? 			✓		A,L,28,31

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
b. Result in substantial soil erosion or the loss of topsoil?		✓			R
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,L,R,28,31
d. Be located on expansive soil creating substantial direct or indirect risks to life or property?				✓	D,R
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓	A,C,R
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓			A
g. Result in substantial grading on slopes over 30 percent?				✓	A,L,9

Impact Discussion:

7a,c An engineering geology report dated January 24, 2019, was prepared for the site by Registered Professional Engineer Susan Goodwin, and was also certified by Registered Geologist John Anderson. The report discusses the geology at the project site and whether the site is adequate for the proposed project. The project is within a seismically active area, but it is not located in an Alquist-Priolo Earthquake Fault Zone (California Department of Conservation, 2018). The engineering report discusses that an earthquake hazard can be assumed to exist at the site, but the project does not involve habitable structures, engineered infrastructure or other vulnerable structures, and the seismic hazard at the site is considered minimal. The engineer determined that the site is suitable for the project because it is to restore the meadow to the natural condition, and that the fill material and compaction methods are adequate for the site. No geological hazard mitigation actions beyond standards construction and engineering practices were recommended by the engineer or geologist. The project area is on an almost level meadow, with approximately a one percent grade. Due to the site not having infrastructure and the project being to restore the meadow, impacts from seismic related events and landslides, and issues with unstable soil are anticipated to be *less than significant*.

7b The analysis for this section (7b) is from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

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 to save topsoil and replace it after construction, and BIO 5 to limit disturbance, control sediment and revegetate, 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, such as site-specific best management practices, stabilizing construction stockpiles, and to control runoff from access roads and work sites.

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, which requires mulching and revegetation, 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.

- 7d-e There are no known expansive soils at the site and the engineering geology report determined that the fill material for the project would be adequate. The project does not include the use or need for any septic tanks or sewer systems; therefore, *no impacts* are anticipated to expansive soils or soils for a sewage disposal system.
- 7f There are no known paleontological resources or unique geological features in or around the project site. Being that there will be ground disturbance for grading, Mitigation Measure 5E would require work to halt in the event that there is an unanticipated discovery of paleontological resources. Direct or indirect damage to paleontological resources is anticipated to be *less than significant with mitigation*.
- 7g The project does not include any grading on slopes that are thirty percent or more; therefore, there would be *no impact* to thirty percent slopes.

Mitigation Measures: To offset potential geological impacts such as seismic instability and erosion, the following mitigation measure shall be implemented:

See Mitigation Measure 5E of this initial study and Mitigation Measures BIO 2, BIO 6, BIO 13, and GEO 1-11 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

8. GREENHOUSE GAS EMISSIONS

Existing Setting: Greenhouse gases (GHGs) are those gases that trap heat in the atmosphere. GHGs are emitted by natural and industrial processes, and the accumulation of GHGs in the atmosphere regulates the earth's temperature. GHGs that are regulated by the State and/or EPA are carbon dioxide (CO₂), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and nitrous oxide (NO₂). CO₂ emissions are largely from fossil fuel combustion. In California, approximately 43 percent of the CO₂ emissions come from cars and trucks. Electricity generation is another important source of CO₂ emissions. Agriculture is a major source of both methane and NO₂, with additional methane coming primarily from landfills. Most HFC emissions come from refrigerants, solvents, propellant agents and industrial processes, and persist in the atmosphere for longer periods of time and have greater effects at

lower concentrations compared to CO₂. The adverse impacts of global warming include impacts to air quality, water supply, ecosystem balance, sea level rise (flooding), fire hazards, and an increase in health related problems.

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act, was adopted in September 2006 and requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through regulations to reduce emissions from stationary sources and from vehicles. The California Air Resources Board (ARB) is the State agency responsible for developing rules and regulations to cap and reduce GHG emissions. In addition, the Governor signed Senate Bill 97 in 2007 directing the California Office of Planning and Research to develop guidelines for the analysis and mitigation of the effects of greenhouse gas emissions and mandating that GHG impacts be evaluated in CEQA documents. CEQA Guidelines Amendments for GHG Emissions were adopted by OPR on December 30, 2009. The Northern Sierra Air Quality Management District (NSAQMD) has prepared a guidance document, *Guidelines for Assessing Air Quality Impacts of Land Use Projects*, which includes mitigations for general air quality impacts that can be used to mitigate GHG emissions.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓		A, G
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				✓	A, G, 20

Impact Discussion:

The analysis for this section (8a-b) is from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

- 8a Greenhouse gases will be generated during for approximately 8-12 weeks during Project construction. The amount of greenhouse gases generated from the project is expected to be less than significant because of the short duration of the construction period and no ongoing activities that would generate greenhouse gas emissions.

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.

- 8b The Project will not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions.

Mitigation: None required.

9. HAZARDS/HAZARDOUS MATERIALS

Existing Setting: The property is not within or adjacent to any hazardous materials sites compiled pursuant to Government Code Section 65962.5 (California Department of Toxic Substances Control, 2019). A majority of the project area is in a moderate fire hazard severity zone as designated by CalFire. The northwestern area of the meadow and the forested area uphill of the meadow is mapped as having a very high fire hazard severity zone. The closest school in Nevada County is approximately 5.7 direct miles (as the crow flies) from the project site, and the closest school in the adjacent county (Sierra County) is approximately 20 direct miles from the project parcel. There closest airport is the Truckee Tahoe Airport, which is approximately 8.1 direct miles from the project site.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				✓	R
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?		✓			R
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓	R
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, create a significant hazard to the public or the environment?				✓	R
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 or excessive noise for people residing or working in the project area?				✓	R
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓	R
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?		✓			R

Impact Discussion:

The analysis for this section (9a-g) is from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

9a,c-f 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.

9b 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 by controlling the location of fuel storage sites, developing an emergency spill plan, properly disposing of waste, and remediating any contaminated soil.

9g 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 by keeping fire extinguishers onsite and monitoring fire weather.

Mitigation: To offset potential impacts from hazardous materials, the following mitigation measure shall be implemented:

See Mitigation Measure HAZ 1-8 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

10. HYDROLOGY / WATER QUALITY

Existing Setting: The project site is a large meadow located in the Dry Creek Watershed. The site is located along the main stem of Dry Creek, just below the confluence of the headwater tributaries. The Dry Creek Watershed is a tributary to the Little Truckee River via Boca Reservoir and flows into the Truckee River. A primary remnant channel of Dry Creek flows through the meadow. There is also an incised gully with a depth of 4.5 feet has been carved through meadow. Because of water flowing through the meadow in the incised gully, the floodplain area has decreased overtime and wetlands have been dewatered and degraded. The average width of the floodplain is 73 feet, and the historic width has been 317 feet wide. The meadow currently has 5.26 acres of perennial wetlands, 4.42 acres of dewatered wetlands, and 3.41 acres of degraded wetlands.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		✓			R

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				✓	R
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i. result in substantial erosion or siltation on- or off-site; ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? iii. 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; or iv. impeded or redirect flood flows?		✓			A,D,9,30,31,32,33
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?		✓			L,9, 30,31,32,33
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✓	A,D
f. 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?				✓	L,9,13,32
g. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?			✓		L,13,32

Impact Discussion:

10a The analysis for this section (10a) is from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

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 for the Basin Plan and was granted by the Lahontan Water Board in the 401 Water Quality Certification. Mitigation Measures GEO 1- 11, BIO 2-6, and BIO-13 will mitigate potential erosion and sediment impacts by requiring revegetation of disturbed areas, rehabilitation of access routes, stabilizing stream banks, limiting disturbance, and implementing erosion and sediment control measures. See Mitigation Measures HAZ 1-6 for a description of control measures for other hazardous materials, which include controlling fuels storage and refueling areas, developing an emergency spill plan, disposing of waste properly and remediating soil and groundwater if contamination is encountered or suspected.

- 10b The analysis for this section (10b) is from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

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.

- 10c,d The project involves placing fill in the incised gully to restore the stream to the historic channels. The Plumas Corporation prepared a Basis of Design Report, dated June 2018, for the project. The Design Report was reviewed by Registered Professional Engineer, Susan Goodwin, with Vestra Resources, Inc. A report from the engineer was submitted with the project application, which discusses the design of the project, a roadway culvert analysis, and conclusions/recommendations. Additional reports for the project were prepared by the engineer, Susan Goodwin, regarding geology and compaction (January 24, 2019), and floodplain levels (April 23, 2019). The information below for this analysis was provided by the project's engineer and in the Design Report by Plumas Corporation.

The project has been designed to restore the meadow and historic floodplain by filling in the incised gully. It has been designed to prevent further erosion, with little chance of the incised gully being recreated. Fill will be placed in some side channels and almost the entire gully will be filled to the same grade as the meadow. There are seven borrow ponds in the meadow where fill will be taken and used for the project. The borrow ponds will remain as ponds in the meadow. Pond 1 is at the top of the meadow, and it will be used to disperse flows from the incised channel above the meadow, and into the remnant channel. Water will flow through the meadow by the remnant channel instead of through the incised gully and will flow into Pond 7, which is the last borrow pond in the meadow. Pond 7 will disperse flows into the remnant channel that will flow out of the meadow and off the property. By Pond 7 feeding the remnant channel and having the incised fully filled in, it is expected that the pond will prevent the stream from reestablishing in the incised gully. Ponds 2-6 will fill with groundwater and maintain ponded year-round. The main purpose of the borrow ponds is to use the material for filling in areas of the gully, but they have been designed to add habitat features that will create diversity in the meadow.

The fill for the project will be compacted to conform to the native soils, and not at the typical ninety percent compaction rate. The ninety percent compaction rate would not allow vegetation to grow as it does on undisturbed soil. The fill areas will be revegetated by sod mats that will be removed from the disturbance areas, and by seeding with native grasses. The main flow of travel in and out of the ponds will be across native material and not across the plugs where the fill material will be

used. Accordingly, there will not be as much pressure on the filled area and the threat of failure of the plugs is minimal. To compact the soil, the material will be distributed and compacted by driving equipment over the site. Other restoration projects that were designed by the Plumas Corporation have had the same compaction method and have been successful. A recent project by Plumas Corporation showed that the top of the plug from using fill at another site had more compaction than the undisturbed, native material. The project engineer and the design report has concluded that the project is at a very low risk of failure related to erosion or emplaced fills. If any material is mobilized, it is expected to be captured by the surrounding vegetation in the floodplain, without causing any adverse effects downstream of the project site.

At the downstream (southern) end of the meadow, there is an existing 18-inch culvert located in the berm that allows water to pass through. The upper portion of the meadow and the other side of the berm where water passes through the culvert there is a 2.5-foot drop in elevation. Because the berm and culvert are being removed with the project, a valley grade structure will be installed to allow the transition from the grade of the meadow to the drop in elevation where the water flows through other culverts that go under the road and off the property. The valley grade structure consists of three riffle-pool sequences that will slow the water down as it drops in elevation and exits the meadow. The valley grade structure will be an average of nine (9) feet wide and 0.75 feet deep. The riffles will have a two (2) percent slope, but the overall slope of the entire structure will be 1.25 percent. The Nevada County Department of Public Works reviewed the grading, drainage and erosion control measures for the project and was satisfied with the project as it is proposed. The Building Department has also reviewed and approved the grading plans; although, the grading permit has not been issued and it is pending approval of the land use permit and required conditions.

The report by the engineer discussed that at the County Road (Dog Valley Road) there are four culverts—three that are and forty-eight inches in diameter and one that is twenty-four inches in diameter—that were not designed for high flood events and overtopping of the roadway has occurred. There was also analysis to determine if the berm retains any water during high flows. Because of the breach in the berm that is approximately twenty feet wide, it was calculated by the engineer that 100-year flood flows pass through this area without any retention by the berm. The engineer determined that the project would not change the flow rate, and therefore, there would be no changes to the frequency of water overtopping the road or to the floodplain (other than the flood plain that is being restored in the meadow). The Nevada County Department of Public Works reviewed the assessment and findings of the engineered reports and agreed with the conclusion that there should be no impact on the County road or to the floodplain level.

On the project parcel, the current channel of the gully has an average width of seventy-three (73) feet and an average depth of 4.5 feet. The historic floodplain has had an average width of 317 feet. The proposed project is to purposely fill in the incised gully and to restore the meadow and the historic floodplain. The floodplain will be increased on this parcel to its natural floodplain, before trail systems, roads and other disturbance in the area has redirected flows and erosion, which has carved out the gully through the meadow. The Design Report by the Plumas Corporation calculated the inundated width and depth of the project at five cross-section through the meadow. The inundated width ranges from 310 to 370 feet and has an average depth that ranges from 0.68 to 0.81 feet. The maximum depth in these cross-sections would be 0.75 to 2.0 feet. The floodplain at this site will be restored, and due to the site being undeveloped, there would be no impact to structures being flooded or damaged at the site.

In conclusion, the floodplain will increase on the project parcel to the natural levels before the gully was carved into the meadow, and there will be no increase in flows off-site. The floodplain will not be increased off the project parcel, and the project has been designed to revegetate all of the disturbed areas and prevent erosion. Multiple mitigation measures have been added to the project to minimize vegetation disturbance (BIO 5, BIO 13, GEO 8) to develop a stormwater pollution prevent plan or erosion control plan (GEO 1), for best management practices to be used (GEO 4), to control runoff (GEO 9, GEO 10), to use low-impact tracked equipment (GEO 11), and to limit staging and equipment areas (GEO 8). With the implementation of mitigation measures, the project is expected to have a *less than significant impact with mitigation*.

10e,f The project does not include housing, or conflict with or obstruct the implementation of a water quality control plan. As discussed above, the project has been reviewed for changes in the floodplain offsite. No changes to the floodplain offsite are expected to occur; therefore, there would be *no impact* associated with the placement of the water quality control plans or with the placement of housing in the floodplain.

10g The purpose of the project is to redirect flows from the incised gully and into the remnant stream channel. The gully will be filled in with material to bring it level to the meadow, and water will flow over the meadow floor and off the parcel by culverts at Dog Valley Road. There will be no changes to the flow of water off site. The redirected flood flows will only affect the project parcel, which is proposed in order to restore the site. With flows only being redirected on the project site, impacts are anticipated to be *less than significant*.

Mitigation: To offset potential impacts to hydrology/water quality, the following mitigation measure shall be implemented:

See Mitigation Measure GEO 1-11, HAZ 1-6, BIO 2 - 6, BIO-13, and BIO – 15 of the adopted Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

11. LAND USE / PLANNING

Existing Setting: The subject property is a 118.78-acre parcel that is zoned Forest with a 160-acre minimum parcel size and has a General Plan Designation of Forest with a 160-acre minimum parcel size. The site is located in a rural area in the northeastern area of Nevada County. The project parcel is located approximately 0.5 miles from the Sierra County line. This area of Sierra County also appears to be a rural area that is south of the Stampede Reservoir. The project parcel is undeveloped with no improvements, other than dirt access roads. The closest residence is located to the east of the project site and is approximately 450 feet away from the edge of the project area.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Physically divide an established community?				✓	A,L

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓	A,R,18
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Impact Discussion:

11a-b The project is located in a rural area and it would not physically divide an established community, conflict with any land use plans, policies or regulations. Therefore, the project is anticipated to have ***no impact*** on an established community or land use plans.

Mitigation: None required.

12. MINERAL RESOURCES

Existing Setting: The project area is not mapped within a Mineral Resource Zone (MRZ), or area of known valuable mineral deposits.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
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?				✓	A, 1
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?				✓	A, 1

Impact Discussion:

12a-b The proposed project is not mapped within a known mineral resource area or MRZ and would not change existing land uses on the project site. Therefore, the project would have ***no impact*** on mineral resources.

Mitigation: None Required.

13. NOISE

Existing Setting: The project site does not have any improvements or loud noise producing uses. The project is located in a meadow, where Dry Creek flows through the project area. The project area is along Hobart Mills Road and Dog Valley Road. Unimproved federal lands surround the parcel on the west side, and there are privately owned parcels to the east of the project site that range from 3.6 to 12.9 acres. Two adjacent parcels are unimproved and two other adjacent parcels are improved with residences and accessory structures. Planning Department staff visited the site on July 5, 2019, and the noise level in the area was minimal.

Would the proposed project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess standards established in the local General Plan or noise ordinance, or applicable standards of other agencies?			✓		R
b. Generation of excessive ground borne vibration or ground borne noise levels?			✓		R
c. For a project located within the vicinity of a private airstrip or 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?				✓	R

Impact Discussion:

The analysis for this section (13a-c) is from the Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration (Appendix B).

- 13a,b 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. The hours of 7:00 AM – 7:00 PM were included as the proposed hours for the project and will be included in the project conditions of approval.
- 13c 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: None Required.

14. POPULATION / HOUSING

Existing Setting: The project site does not have any residential units. Unimproved federal lands surround the parcel on the west side, and there are privately owned parcels to the east of the project site that range from 3.6 to 12.9 acres. Two adjacent parcels are unimproved and two other adjacent parcels are improved with residences and accessory structures.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Induce substantial unplanned 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)?				✓	A

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓	A

Impact Discussion:

14a-b The project will have ***no impact*** on housing or population growth. The project is to restore a meadow that is located in a floodplain, where there are no opportunities for housing. The project does not involve extend roads or infrastructure that could affect population growth.

Mitigation: None required.

15. PUBLIC SERVICES

Existing Setting: The following public services are provided to this site:

The following public services are provided to this site:

Fire: The project is within Cal Fire's jurisdiction.

Police: The Nevada County Sheriff provides law enforcement services.

Schools: The Tahoe Truckee Unified School Districts provides education for the area.

Parks: The Truckee Donner districts provide recreational facilities and opportunities.

Water & Sewer: N/A

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Result in substantial adverse physical impacts associated with the provision of or 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 following the public services:					
1. Fire protection?				✓	M
2. Police protection?				✓	A
3. Schools?				✓	A, P
4. Parks?				✓	A
5. Other public services or facilities?				✓	A

Impact Discussion:

15a The project is not expected to interfere or affect fire or police services. The project does not add housing or have an influence on the use of schools, parks or other services. Therefore, there would be ***no impacts*** to public services.

Mitigation: None required.

16. RECREATION

Existing Setting: The project site is located within the Truckee Donner Recreation Benefit Zone, but no designated recreational facilities or designated trails occur onsite or in close proximity to the project area. There is federal land and Tahoe National Forest land adjacent to and near the project area that may be used for recreational activities.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. 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?				✓	A
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				✓	A
c. Conflict with established recreation uses of the area, including biking, equestrian and/or hiking trails?				✓	A, L

Impact Discussion:

16a-c The project would not adversely affect recreation facilities because there are no facilities on or near the project site. Forest Service land and federal land is adjacent to and near the project area, but the project would not affect adjacent parcels or the ability for recreational activities to occur on adjacent parcels. The project parcel would not change the use or demand for any recreational services. Therefore, the proposed project would have **no impact** related to these issues.

Mitigation: None required.

17. TRANSPORTATION

Existing Setting: The proposed project is located off two County maintained roads—Hobart Mills Road and Dog Valley Road. Two dirt access roads off Hobart Mills Road and Dog Valley Road lead to the meadow. The southeastern area of the meadow has a large berm that is approximately twenty feet high and 885 feet long, that runs alongside Dog Valley Road and a short distance along Hobart Mills Road.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle or pedestrian facilities?				✓	A,B

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				✓	A,B
c. Substantially increase hazards due to a geometric design feature (e.g., a sharp curve or dangerous intersection) or incompatible uses (e.g., farm equipment)?				✓	A,B,M
d. Result in inadequate emergency access:				✓	M
e. Result in an increase in traffic hazards to motor vehicles, bicyclists, or pedestrians, including short-term construction and long-term operational traffic?			✓		A,B,M

Impact Discussion:

- 17a-d The site would not conflict with any policies regarding transit, roadway, bicycle or pedestrian facilities. Existing transit service are not available in this area and would not be affected by the project. The project would not create additional traffic to the site, other than a temporary period of time during construction and would not conflict with CEQA Guidelines Section 15064.3. With the exception of the temporary increase of construction traffic and traffic to monitor the site after completion, the project is not anticipated to result in an increase in vehicle miles traveled (VMT). There are no impacts to roadways or driveways off the road, and the project does not include any new hazards. By removing the berm, the project is expected to increase visibility in the area along the intersection of Dog Valley Road and Hobart Mills Road. The site would not change access for emergency services, but includes no new structures or residences that would increase the need for services to the site. The project would have *no impact* regarding transportation policies, emergency access, or to an increase in hazards from design features.
- 17e The project is not expected to contribute to a substantial increase in traffic during the operational phase of the project. Construction may last for two to three months where there would be a slight increase in traffic to the site for the construction crewmembers. Once the project is complete, occasional traffic trips will be made to the site to monitor the project area. Monitoring will occur for a minimum of three years, and will include assessments that would occur twice a year or more. The site is already being monitored and has had a minimal amount of traffic trips to assess the meadow and floodplain, with some level of monitoring taking place at the site since 2012. There would be a slight increase in traffic hazards during and after construction for traffic entering and exiting the site. The access road is in a fairly open area and does not appear to be in a location that would create a substantial hazard. Even with an increase in traffic during construction and with occasional trips after construction to monitor the site, the impacts to traffic hazards are anticipated to be *less than significant*.

Mitigation: None required.

18. TRIBAL CULTURAL RESOURCES

Existing Setting: A Heritage Resource Inventory Report was prepared for the Dry Creek Watershed Assessment and Restoration Plan was prepared by Archaeological Consultant John Betts in 2013. The following information to describe the existing setting was provided by the 2013 report. The project is

located in the northern Sierra Nevada and was home to the Washoe Tribe. Their campsites were usually located in open areas that were close to water. Occasional expeditions were made into the foothills to gather food or trade acorns. The tribe would travel along game trails and migrations routes. Dry Creek flows through the project site and there are two documented pre-historic resources on the project parcel. The Dry Creek Watershed has had multiple archaeological surveys, mostly on forest service land in the area. Based on a compilation of previous reports, approximately seventy-three percent (73%) of the Dry Creek Watershed has been surveyed. Several archaeological sites have been recorded in the project area, and a records search from the North Central Information Center (NCIC) identified the Dry Creek/Russel Valley area as having a moderate to high sensitivity for prehistoric resources. See Section 5 for additional discussion regarding tribal cultural resources.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. 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: <ul style="list-style-type: none"> 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. 		✓			R

Impact Discussion:

- 18a The project was determined to fall within the area identified by the Washoe tribe as ancestral lands. The Lahontan Water Board stated that during the Water Board's review of the project, notification of the project was sent on December 27, 2017, to tribes affiliated with the project area and consultation was not requested. As part of the Use Permit and Management Plan application, the project was routed to the United Auburn Indian Community (UAIC), the Washoe Tribe of Nevada and California, and the Tsi Akim Maidu. The UAIC requested consultation and a conference call was held on April 16, 2019. A representative from the Washoe Tribe conducted an inspection of the project site on May 2, 2019. Recommendations from the Washoe Tribe have been included in the project and they are discussed in Sections 5 of this initial study. There are two sites in or around the project area that may be considered tribal cultural resources. The project has been designed to avoid disturbance to these sites. These resources and mitigation measures are discussed in more detail in Section 5 of this initial study, but mitigation includes protection of the resources by

identifying them as environmentally sensitive areas on grading plans, installing construction fencing around the resource areas, and to have a tribal monitor on site during construction. In addition, if any unanticipated resources are discovered during construction, mitigation requires that work shall halt and local tribes would be notified. With this protection in place, impacts to Tribal Cultural Resources would be *less than significant with mitigation*.

Mitigation: See Mitigation Measure 5A-5E.

19. UTILITIES / SERVICE SYSTEMS

Existing Setting: The project parcel is undeveloped and there are no utilities at the site. There are power poles along Hobart Mills Road and Dog Valley Road, which are alongside a portion of the project area.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Require or result in the relocation or the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?				✓	A,D
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				✓	A
c. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste goals?				✓	C
d. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				✓	C

Impact Discussion:

19a-d The proposed project would not create a need for the extension of natural gas, public water or wastewater treatment facilities, the expansion of existing facilities, or additional water supplies. There would be no increase in flows of water from the project site. The project involves restoring a meadow and it would not generate solid waste or violate any standards regarding solid waste. Fill material that is taken from borrow ponds will be used on-site to fill in a gully. The project does not include materials being transported off-site. Therefore, there would be *no impact* on utilities or service systems.

Mitigation: None required.

20. WILDFIRE

Existing Setting: The project parcel is not in a specified Fire District in Nevada County, but is located within Cal Fire's jurisdiction. A majority of the project area is in a moderate fire hazard severity zone. Uphill of the meadow and a portion of the northeastern section of the meadow is mapped as having a very high fire hazard severity zone. The project site is off two County maintained roads. Hobart Mills Road runs along the southern portion of the project area and Dog Valley Road runs along the eastern property line/project area. The site can be accessed by existing dirt access roads that are off the two County maintained roads. The site is undeveloped and does not have any structures. The meadow area is fairly level with approximately a one percent slope.

If located in or near state responsibility areas or lands classified as very high fire severity hazard zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓	A,H,M,23
b. Due to slope, prevailing winds, or other factor, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?				✓	A,B,H,M,18
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✓	A,H,M
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✓	A,H,M,12

Impact Discussion

20a-d The Safety Element of the Nevada County General Plan addresses wildlife hazards in Nevada County and has several policies to improve fire safety. Nevada County has also adopted a Local Hazard Mitigation Plan (LHMP) that was updated in August 2017. The proposed project does not pose any conflicts with the Safety Element or the LHMP, and it does not include any infrastructure that would exacerbate fire risks. Likewise, the project does not include any changes to the topography or winds that would exacerbate fire risk. The project will involve some grading to fill in an existing gully, but the project will restore dewatered and degraded wetlands. The project will allow the floodplain to expand across the meadow, where it has been historically, and it will reduce the amount of dry vegetation in the project area. The project was reviewed by the Office of the Fire Marshal and because the project does not involve any development or structures that would need to be protected by fires; the Office of the Fire Marshal did not have any conditions or additional requirements for the project. The project would not expose people to significant risks and there would be no change in floodplain levels that are downstream of the project area. Therefore, the project would have **no impact** on emergency plans or wildlife risks.

Mitigation: None required.

21. MANDATORY FINDINGS OF SIGNIFICANT ENVIRONMENTAL EFFECT

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	Reference Source (Appendix A)
a. Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California's history or prehistory?		✓			
b. Does the project have environmental effects that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of the project are considered when viewed in connection with the effects of past, current, and probable future projects.)			✓		
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		✓			

Impact Discussion:

21a,c As discussed in Sections 1 through 20 above, development of the proposed project would comply with all local, state, and federal laws governing general welfare and environmental protection. Project implementation during construction and operation would result in potentially adverse impacts to air quality, biological resources, cultural resources, geological resources, hazardous materials, hydrology/water quality, and tribal cultural resources. Due to possible impacts to biological resources and water quality, mitigation has been added to limit disturbance, use erosion and sediment control measures, to avoid any protected species, to relocate fish during construction, and to revegetate disturbed areas. The site will be monitored for three years after construction with an annual report that will be reviewed by the Lahontan Regional Water Quality Control Board, and an annual report regarding invasive species will be reviewed by the Nevada County Planning Department. Mitigation has also been added to identify and avoid cultural resources during construction and to have monitors at the site. Each of the potential adverse impacts are mitigated to levels that are ***less than significant levels with mitigation***, as outlined in each section.

21b A project's cumulative impacts are considered significant when the incremental effects of the project are "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. Reasonably foreseeable projects that could have similar impacts to the proposed project include other anticipated projects within the project vicinity that could be constructed or operated within the same timeframe as the project. However, because most of the project impacts would be short-term construction impacts that are not anticipated to be substantially adverse with mitigation, the proposed project is not anticipated to considerably contribute to cumulative impacts. Additionally, all of the proposed project's impacts, including operational impacts, can be reduced

to a less-than-significant level with implementation of the mitigation measures identified in this Initial Study and compliance with existing federal, state, and local regulations. Therefore, the proposed project would have *less than significant* environmental effects that are individually limited but cumulatively considerable.


Mitigation Measures: To offset potentially adverse impacts to air quality, biological and cultural resources, geological resources, hazardous materials, hydrology/water quality, and tribal cultural resources, see Mitigation Measures 3A, 4A, 5A, 5B, 5C, 5D, 5E, AIR 1-5, BIO 1-18, CUL 1-4, GEO 1-11, and HAZ 1-8.

RECOMMENDATION OF THE PROJECT PLANNER

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.
- X 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 a "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.


Sadie Caldas, Associate Planner


Date

APPENDIX A – REFERENCE SOURCES

- A. Planning Department
 - B. Department of Public Works
 - C. Environmental Health Department
 - D. Building Department
 - E. Nevada Irrigation District
 - F. Natural Resource Conservation Service/Resource Conservation District
 - G. Northern Sierra Air Quality Management District
 - H. Truckee Fire District
 - I. Regional Water Quality Control Board (*Lahontan* Region)
 - J. North Central Information Service, Anthropology Department, CSU Sacramento
 - K. California Department of Fish & Wildlife
 - L. Nevada County Geographic Information Systems
 - M. California Department of Forestry and Fire Protection (Cal Fire)
 - N. Nevada County Transportation Commission
 - O. Nevada County Agricultural Advisor Commission
 - P. Tahoe/Truckee Unified School District
 - Q. Gold Country Stagecoach
 - R. Appendix B- Dry Creek Watershed Sites 5-8 Restoration Project Initial Study/Mitigated Negative Declaration, including all support studies and reports referenced therein.
-
- 1. State Division of Mines and Geology. *Mineral Classification Map*, 1990.
 - 2. State Department of Fish and Game. *Migratory Deer Ranges*, 1988.
 - 3. State Department of Fish and Game. *Natural Diversity Data Base Maps*, as updated.
 - 4. Cal Fire. *Fire Hazard Severity Zone Map for Nevada County*, 2007. Adopted by CalFire on November 7, 2007. Available at: <http://www.fire.ca.gov/wildland_zones_maps.php>.
 - 5. State Division of Mines and Geology. *Geologic Map of the Chico, California Quadrangle*, 1992.
 - 6. State Division of Mines and Geology. *Fault Map of California*, 1990.
 - 7. California Department of Conservation, Division of Land Resource Protection. 2016. *Nevada County Important Farmland Data*. Available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/nev16.pdf>.
 - 8. State Dept. of Forestry & Fire Protection. *Nevada County Hardwood Rangelands*, 1993.
 - 9. U.S.G.S, *7.5 Quadrangle Topographic Maps*, as updated.
 - 10. U.S. Fish and Wildlife Service. *National Wetlands Inventory*, December 1995.
 - 11. California Air Resources Board. *Area Designations Maps/State and National*. Accessed July 11, 2019. <https://ww3.arb.ca.gov/desig/adm/adm.htm>
 - 12. U.S. Geological Service. *Nevada County Landslide Activity Map*, 1970, as found in the Draft Nevada County General Plan, Master Environmental Inventory, December 1991, Figure 8-3.
 - 13. Federal Emergency Management Agency. *Flood Insurance Rate Maps*, as updated.
 - 14. Northern Sierra Air Quality Management District. *Guidelines for Assessing Air Quality Impacts of Land Use Projects*, 2000.
 - 15. County of Nevada. *Nevada County General Plan Noise Contour Maps*, 1993.
 - 16. Nevada County. 1991. *Nevada County Master Environmental Inventory*. Prepared by Harland Bartholomew & Associates, Inc. (Sacramento, CA). Nevada County, CA.
 - 17. Nevada County. 1995. *Nevada County General Plan: Volume 1: Goals, Objectives, Policies, and Implementation Measures*. Prepared with the assistance of Harland Bartholomew & Associates, Inc. (Sacramento, CA). Nevada County, CA.
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19. Helen Loffland, Institute for Bird Populations. Using Birds to Inform Meadow Restoration at Russel Valley. March 10, 2019.
20. California Attorney General's Office. "Addressing Climate Change at the Project Level." January 6, 2010.
21. US Environmental Protection Agency. *Current Nonattainment Counties for All Criteria Pollutants*. January 31, 2015. www.epa.gov/oaqps001/greenbk/ancl.html.
22. Sabra Purdy, Trout Unlimited. *Aquatic Habitat Surveys*. July 9-11, 2018.
23. Nevada County. *Local Hazard Mitigation Plan Update*. August 2017.
<https://www.mynevadacounty.com/DocumentCenter/View/19365/Nevada-County-LHMP-Update-Complete-PDF?bidId=>
24. Catherine Schnurrenberger, C.S. Ecological Surveys and Assessments. Vegetation Monitoring Data. July 27, 2018.
25. California Department of Toxic Substances Control. Accessed July 11, 2019:
<http://www.envirostor.dtsc.ca.gov/public/>
26. Jeff Glazner, Salix Consulting Inc. *Management Plan for the 118.78-acre Dry Creek Meadow Site 8 Restoration Area*. January 25, 2019.
27. California Department of Conservation, Division of Mines & Geology. "Report 2000-19: A General Location Guide for Ultramafic Rocks in California -- Areas More Likely to Contain Naturally Occurring Asbestos." 2000.
28. California Department of Conservation. *DOC Maps: Geological Hazards*. 2018. Accessed July 16, 2019. <https://maps.conservation.ca.gov/geologichazards/#dataviewer>
29. U.S. Forest Service, David McComb et al. *Wetlands Determination and Other Waters of the U.S.* August 2015.
30. Susan Goodwin, Vestra. Engineering Review of Basis of Design Report. July 17, 2018.
31. Susan Goodwin, Vestra. Engineering Geology Report. January 24, 2019.
32. Susan Goodwin, Vestra. Floodplain Response Letter. April 23, 2019.
33. Plumas Corporation. Dry Creek Restoration Project, Russel Valley, Basis of Design Report. July 2018.

Appendix B

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:

Project Background

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.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 (<i>Falco peregrinus anatum</i>) – SFP	Unlikely – no suitable habitat	No Impact	None needed
American White Pelican (<i>Pelecanus erythrorhynchos</i>) - SSC	Unlikely – no suitable habitat	No Impact	None needed
Bald Eagle (<i>Haliaeetus leucocephalus</i>) – SE	Unlikely – no suitable habitat	No Impact	None needed
Bank Swallow (<i>Riparia riparia</i>) – ST	Unlikely – no suitable habitat	No Impact	None needed
Black Tern (<i>Chlidonias niger</i>) - SSC	Unlikely – no suitable habitat	No Impact	None needed
California Spotted Owl (<i>Strix occidentalis occidentalis</i>) - SSC	Unlikely – no suitable habitat	No Impact	None needed
Great Gray Owl (<i>Strix nebulosa</i>) - SE	Low potential – limited suitable nesting habitat in	Less than significant impact	None needed

	the project area		
Greater Sandhill Crane (<i>Grus canadensis tabida</i>) – ST, SFP	Low potential – limited suitable nesting habitat in the project area	Less than significant impact	None needed
Long-eared Owl (<i>Asio otus</i>) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
Northern Goshawk (<i>Accipiter gentilis</i>) – SSC	Low potential – limited suitable nesting habitat in the project area	Less than significant impact	None needed
Olive-sided Flycatcher (<i>Contopus cooperi</i>) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
Purple Martin (<i>Progne subis</i>) – SSC	Unlikely – no suitable habitat	No Impact	None needed
Willow Flycatcher (<i>Empidonax traillii</i>) – SE	Unlikely – no suitable nesting habitat	No Impact	None needed
Yellow Warbler (<i>Dendroica petechia</i>) - 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 31 st .
Mammals			
Fringed Myotis (<i>Myotis thysanodes</i>) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
Long-legged Myotis (<i>Myotis volans</i>) – SSC	Medium potential – suitable habitat exists in the project area	Less than significant impact	None needed
North American Wolverine (<i>Gulo gulo luscus</i>) – ST, SFP	Unlikely – no suitable habitat	No Impact	None needed
Pacific Fisher (<i>Pekania pennanti</i>) – FP, SC, SSC	Unlikely – no suitable habitat	No Impact	None needed
Pallid Bat (<i>Antrozous pallidus</i>) – 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

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

¹Key:

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 boylei*), 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 (<i>Rana aurora draytonii</i>) -FT	Unlikely – outside historic range	No impact	None needed
Lahontan cutthroat trout (<i>Oncorhynchus clarki henshawi</i>) -FT	Unlikely – not observed downstream of project	No impact	None needed

	area		
Sierra Nevada yellow-legged frog (<i>Rana sierra</i>) - 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.

¹Key:

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. CDFW's 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
<i>Arabis rigidissima</i> var. <i>demote</i> - 1B.2	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No Impact	None needed
<i>Artemisia tripartita</i> spp. <i>tripartita</i> - 2B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No Impact	None needed
<i>Astragalus austini</i> - 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.		
<i>Botrychium crenulatum</i> - 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
<i>Botrychium lunaria</i> - 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
<i>Botrychium minganense</i> - 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
<i>Carex davyi</i> - 1B.3	Medium potential - Habitat present. Not detected during surveys.	No impact	None needed
<i>Carex limosa</i> – 2B.2	High potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed
<i>Claytonia megarhiza</i> – 2B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No impact	None needed
<i>Drosera anglica</i> – CNPS 2B.3	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed
<i>Epilobium oreganum</i> - 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.		
<i>Erigeron miser</i> – 1B.3	Unlikely - No habitat is present.	No impact	None needed
<i>Eriogonum umbellatum</i> var. <i>torreyanum</i> - 1B.2	Low potential – habitat present in drier areas.	No impact	None needed
<i>Hymenoxys lemmonii</i> - 2B.2	Low potential - Habitat present in drier areas. Not detected during surveys.	No impact	None needed
<i>Ivesia aperta</i> var. <i>aperta</i> - 1B.2	Medium potential - Habitat present in ephemerally wet areas. Not detected during surveys.	No impact	None needed
<i>Ivesia aperta</i> var. <i>canina</i> - 1B.1	Medium potential - Habitat present in ephemerally wet areas. Not detected during surveys.	No impact	None needed
<i>Ivesia sericoleuca</i> - 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
<i>Ivesia webberi</i> –FT, 1B.1	Medium potential - Habitat present in ephemerally wet areas. Not detected during surveys.	No impact	None needed
<i>Juncus luciensis</i> - 1B.2	High potential - habitat is present in perennially wet areas. Not detected during surveys.	No impact	None needed
<i>Lewisia longipetala</i> - 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.		
<i>Meesia triquetra</i> - 4.2	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	Less than significant	None needed
<i>Meesia uliginosa</i> - 2B.2	Medium potential - Marginal habitat present. Not detected during surveys.	Less than significant	None needed
<i>Nardia hiroshii</i> – 1B.3	Unlikely - No habitat present due to unsuitable elevation range and substrate.	No impact	None needed
<i>Packera layneae</i> – FT, SR, 1B.2	Unlikely - No habitat is present on the east side of the Tahoe NF.	No impact	None needed
<i>Potamogeton robbinsii</i> – 2B.3	Low potential - No habitat present due to unsuitable substrate.	No impact	None needed
<i>Pyrrocoma lucida</i> - 1B.2	Unlikely -No habitat present due to unsuitable elevation range.	No impact	None needed
<i>Rhamnus alnifolia</i> - 2B.2	Low potential - Habitat present in perennially wet areas.	No impact	None needed
<i>Rorippa subumbellata</i> – SE, 1B.1	Unlikely - No habitat present due to unsuitable substrate.	No impact	None needed
<i>Scutellaria galericulata</i> - 2B.2	Medium potential - Habitat present in perennially wet areas. Not detected during surveys.	No impact	None needed

¹Key:

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 sericuleuca* 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 placed 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 Measures 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC.				
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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
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
BIO – 7	legged frog, specifically Mitigation Measure BIO-10. 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
BIO – 11	bodies). 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 <i>Ivesia sericoleuca</i> 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-

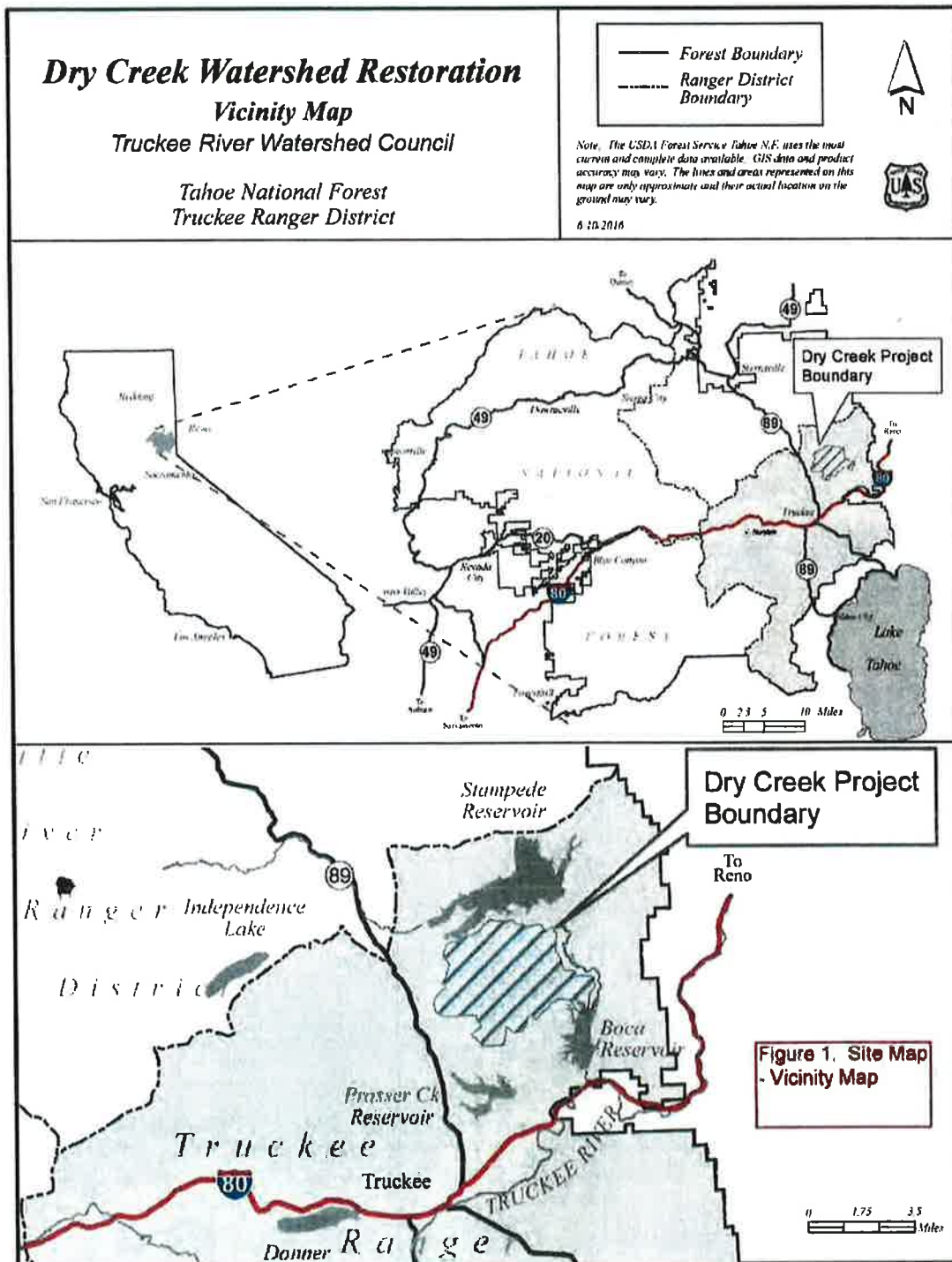
Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	the meadow surface.			maintenance.	existing conditions within five years.
GEO – 8	Limit staging of materials and equipment. Staging of materials and equipment will be limited to existing 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, outslipping (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
	<p>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.</p>			inspection and maintenance.	watercourses. Vegetation disturbance is minimized and restored to pre-existing conditions within five years.
HAZ – 1	<p>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.</p> <p>Spill Notification procedure. In the event of a diesel spill, the following parties will be notified:</p> <ol style="list-style-type: none"> 1. Call 911: <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • 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.

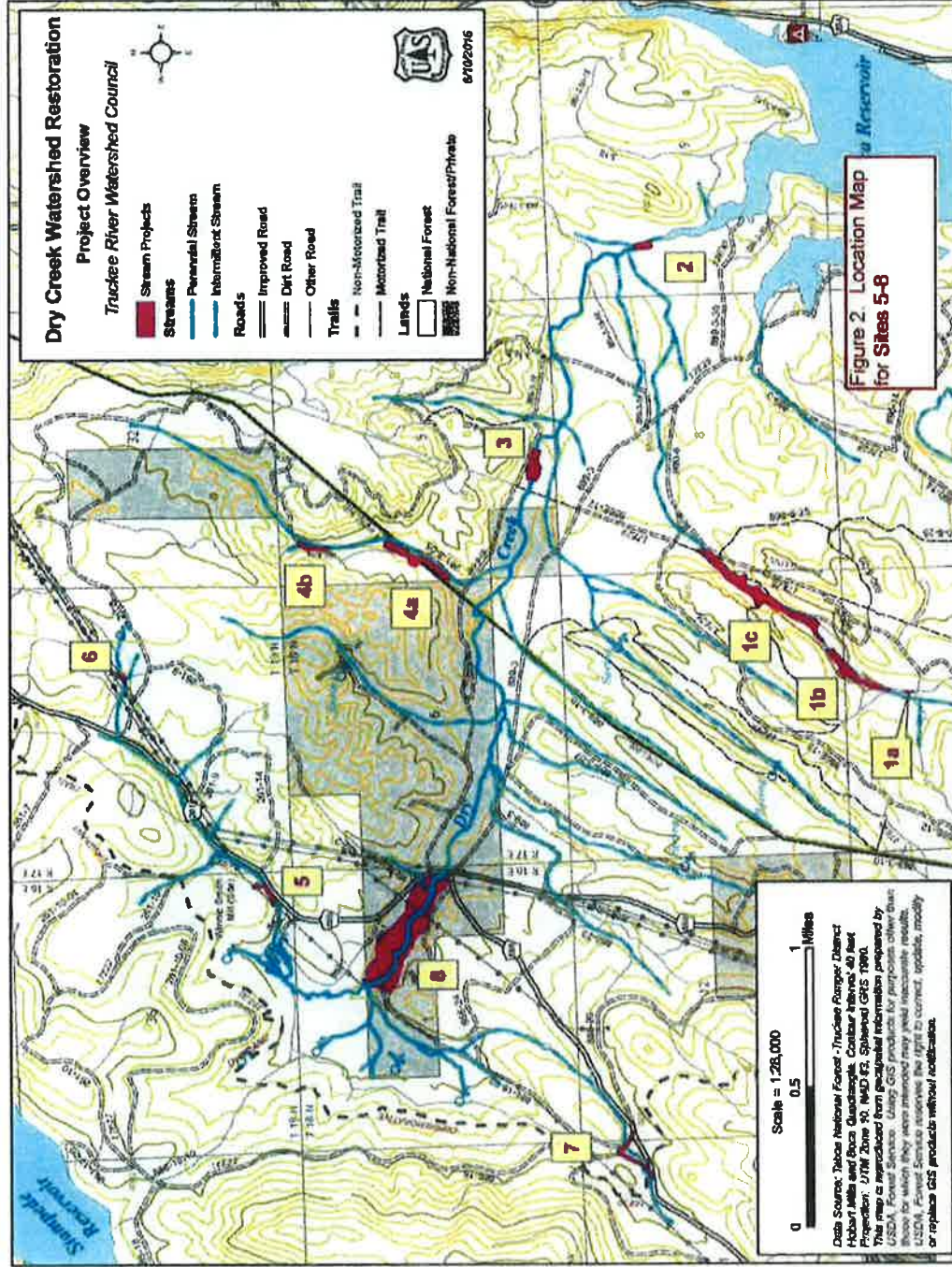
Mitigation Title	Mitigation Measure Description	Responsible Party	Timing	Monitoring and/or Reporting	Success Standards
	Board at: (530) 542-5400 <ul style="list-style-type: none"> Immediately for a major spill Within 24 hours for a minor spill 				
HAZ – 2	Control fueling and fuel storage sites. Equipment 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 shutdowns 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

- Betts, J. 2013. Heritage Resource Inventory Report for the Dry Creek Watershed Assessment and Restoration Plan. Truckee Ranger District, Tahoe National Forest, Nevada and Sierra Counties, California. TNF Report No. R2012051700081. Prepared for Truckee River Watershed Council, Truckee, CA.
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