

DRAFT

INITIAL STUDY/
NEGATIVE DECLARATION

NORTH FORK ANGORA CREEK RESTORATION
AND BRIDGE REPLACEMENT PROJECT
WASHOE MEADOWS STATE PARK



April 30, 2013



State of California
Department of Parks and Recreation
Sierra District, Resources Office
Tahoe City, California

NEGATIVE DECLARATION

PROJECT: NORTH FORK ANGORA CREEK RESTORATION AND BRIDGE REPLACEMENT

LEAD AGENCY: California Department of Parks and Recreation (DPR)

AVAILABILITY OF DOCUMENTS: The Initial Study (IS) for this Negative Declaration (ND) is available for review at:

- Sierra District Headquarters
Department of Parks and Recreation
7360 West Lake Blvd.
Tahoma, CA 96142
- South Lake Tahoe Library
1000 Rufus Allen Blvd.
South Lake Tahoe, CA 96150
- California State Parks Internet Website
www.parks.ca.gov/default.asp?page_id=981

This project will stabilize headcuts and restore floodplain connectivity along the North Branch of Angora Creek and its infeeders and construct a foot bridge over Angora Creek.

The Initial Study/Negative Declaration (IS/ND) has been prepared by DPR to evaluate the potential environmental effects of the proposed North Fork Angora Creek Restoration and Bridge Replacement Project at Washoe Meadows State Park (WMSP), El Dorado County, California. A copy of the IS is attached. Questions or comments regarding this IS/ND may be addressed to:

Cyndie Walck
California State Parks
cyndie.walck@parks.ca.gov

Pursuant to Section 21082.1 of the California Environmental Quality Act (CEQA), DPR has independently reviewed and analyzed the Initial Study and Draft Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the ND.

Marilyn Linkem
District Superintendent

Date

Cyndie Walck
Engineering Geologist

Date

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A ACRONYMS

CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

The Initial Study/Negative Declaration (IS/ND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed North Fork Angora Creek Restoration and Bridge Replacement Project at Washoe Meadows State Park (WMSP), El Dorado County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq.*, and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq.*

An IS is conducted by a lead agency to determine if a project could have a significant effect on the environment [CEQA Guidelines §15063(a)]. If there is substantial evidence that a project could have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less-than-significant level, a ND may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/ND conforms to the content requirements under CEQA Guidelines §15071.

1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is DPR. The contact person for the lead agency regarding specific project information is Cyndie Walck.

Questions or comments regarding this IS/ND should be submitted to:

Cyndie Walck
California Department of Parks & Recreation
Sierra District Resources Office
P.O. Box 16
Tahoe City, CA 96145-0016
E-mail Address: cyndie.walck@parks.ca.gov
Include "North Fork Angora Creek Restoration Project" on the subject line
Fax Number: 530-581-5849

Submissions must be in writing and postmarked or received by fax or email no later than June 4, 2013. The originals of any faxed document must be received by regular mail within ten working days following the deadline for comments, along with proof of successful fax transmission. Email or fax submissions must include full name and

address. All comments will be included in the final environmental document for this project and become part of the public record.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the proposed North Fork Angora Creek Restoration and Bridge Replacement Project at WMSP.

This document is organized as follows:

- **Chapter 1 - Introduction**
This chapter provides an introduction to the project and describes the purpose and organization of this document.
- **Chapter 2 - Project Description**
This chapter describes the reasons for the project, scope of the project, and project objectives.
- **Chapter 3 - Environmental Setting, Impacts, and Mitigation Measures**
This chapter identifies the significance of potential environmental impacts, explains the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental (IS) Checklist. Project Requirements are incorporated, where appropriate, to protect resources. DPR has created a list of Project Requirements to ensure that actions that protect both cultural and natural resources are always taken on all projects.
- **Chapter 4 - Mandatory Findings of Significance**
This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impact to humans, as identified in the IS.
- **Chapter 5 - References**
This chapter identifies the references and sources used in the preparation of this IS/ND.
- **Chapter 6 - Report Preparation**
This chapter provides a list of those involved in the preparation of this document.

1.4 SUMMARY OF FINDINGS

Chapter 3 of this document contains the Environmental (IS) Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project.

Based on the IS and supporting environmental analysis provided in this document, the proposed North Fork Angora Creek Restoration and Bridge Replacement Project would result in less than significant impacts for the following issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

In accordance with §15064(f) of the CEQA Guidelines, a ND shall be prepared if the proposed project will not have a significant effect on the environment after the inclusion of standard and specific project requirements in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after the incorporation of standard and specific project requirements, the proposed project would have a significant effect on the environment. It is proposed that a ND be adopted in accordance with the CEQA Guidelines.

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CHAPTER 2

PROJECT DESCRIPTION

2.1 INTRODUCTION

This IS/ND has been prepared by the DPR to evaluate the potential environmental effects of the proposed North Fork Angora Creek Restoration and Bridge Replacement Project at WMSP located near Meyers, in El Dorado County, California.

PROJECT SUMMARY:

DPR is proposing to restore the North Fork of Angora Creek and construct a foot bridge over Angora Creek . This project will be comprised of four main tasks (Figure 2).

Task 1 will be to construct a public access bridge over the Main Branch of Angora Creek.

Task 2 will place sod plugs and willow stakes along a section of the North Sewer Branch of Angora Creek that is currently captured by an existing sewer line.

Task 3 will stabilize a few minor headcuts which are propagating upstream along a 20 foot long reach of the Sawmill Branch of Angora Creek

Task 4 will stabilize several severe headcuts on the North Fork of Angora Creek and enhance the adjoining meadow.

These project tasks will result in decreased erosion and increased sediment deposition, water quality improvements, and improved meadow habitat. The new bridge will be built to DPR standards, reducing the negative impacts to the meadow and safety hazards, and will provide improved public recreation access and experience.

The project will help to preserve and enhance meadow habitat, and improve park visitor experience in WMSP.

2.2 PROJECT LOCATION

WMSP is located near the town of Meyers in El Dorado County, California in Section 18 T12N R18E (Figure 1). Angora Creek flows through WMSP. The main channel flows from west to east, entering the park near Mountain Trout road and is perennial. A smaller seasonal branch comes from the north (North Fork) which converges with the Main Branch of Angora Creek just upstream of a previously restored reach of Angora Creek.

The North Fork has two seasonal channels entering the park. One enters the park through a culvert under Lake Tahoe Blvd. (North Sewer Branch) and concentrates the flow directly onto the depression left in the sewer line construction from north to south. The second (Sawmill Branch) originates from Sawmill Pond and crosses under Sawmill Rd. in a culvert, and then flows along the eastern meadow edge to the south. These

two channels converge in a clump of willows just upstream of where the meadow narrows to form one channel: the North Fork of Angora Creek, near manhole number twelve (Figure 3). The project area is approximately 1.5 miles upstream from the confluence with the Upper Truckee River.

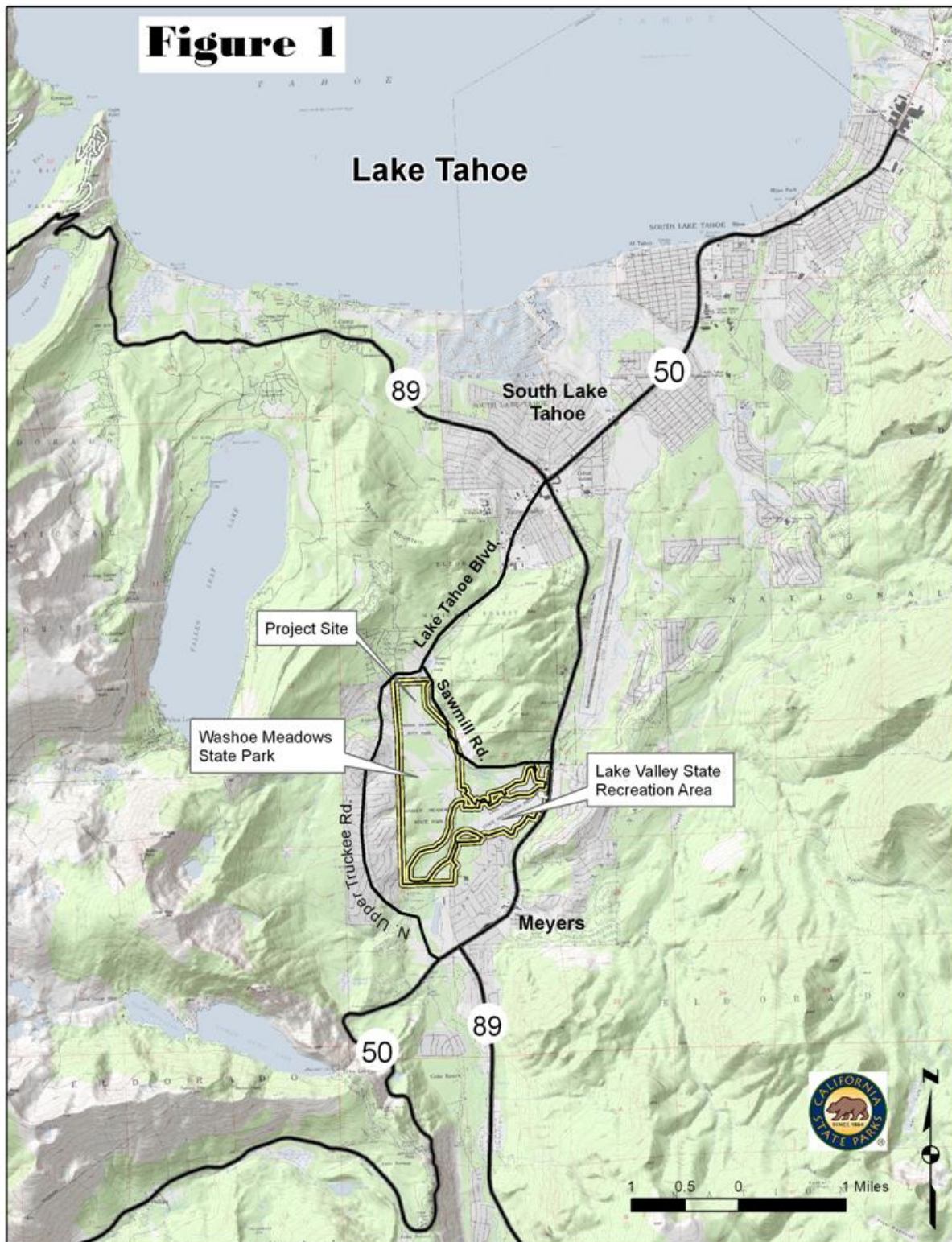
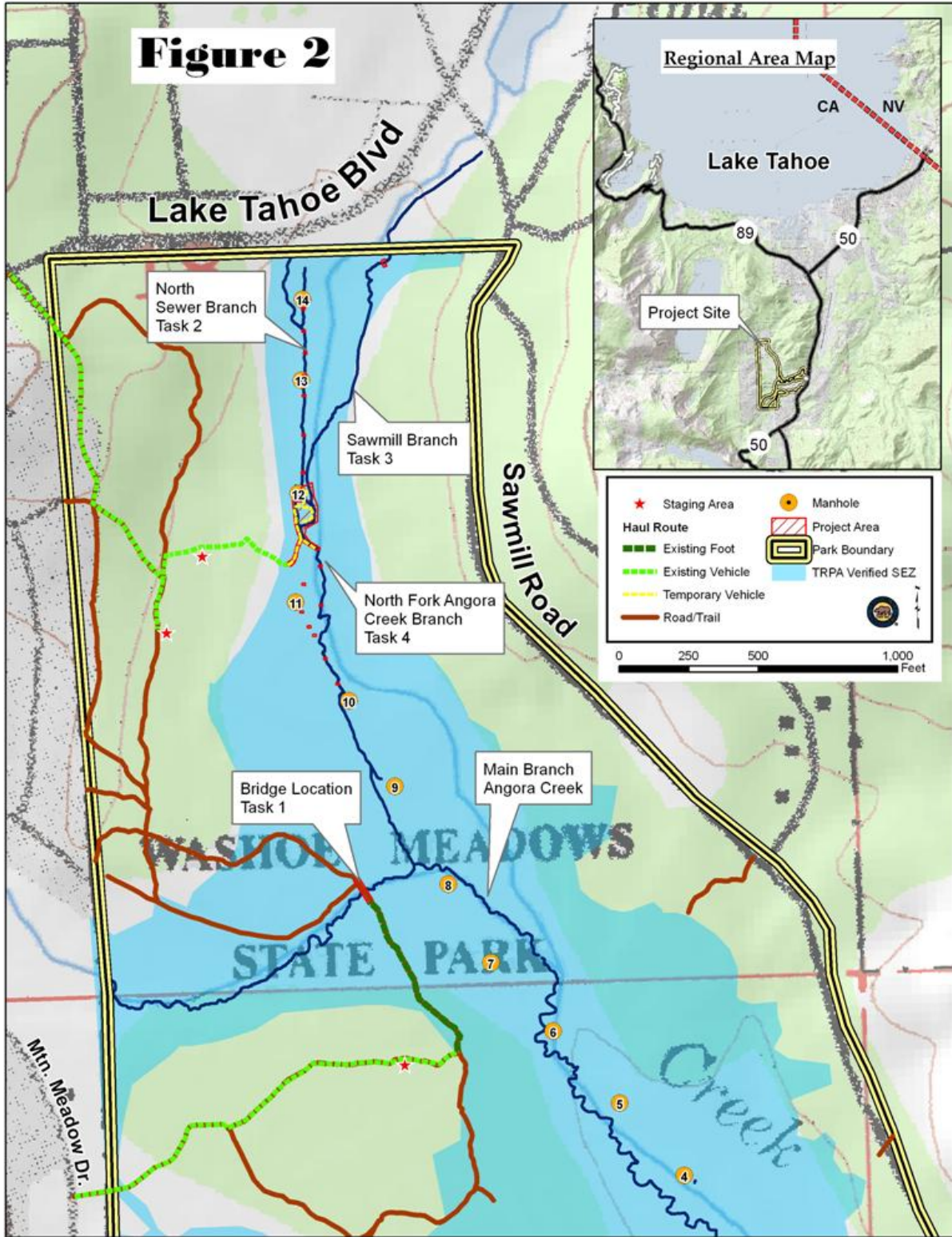


Figure 1: Regional Location Map



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Figure 2: Detailed Project Area Map

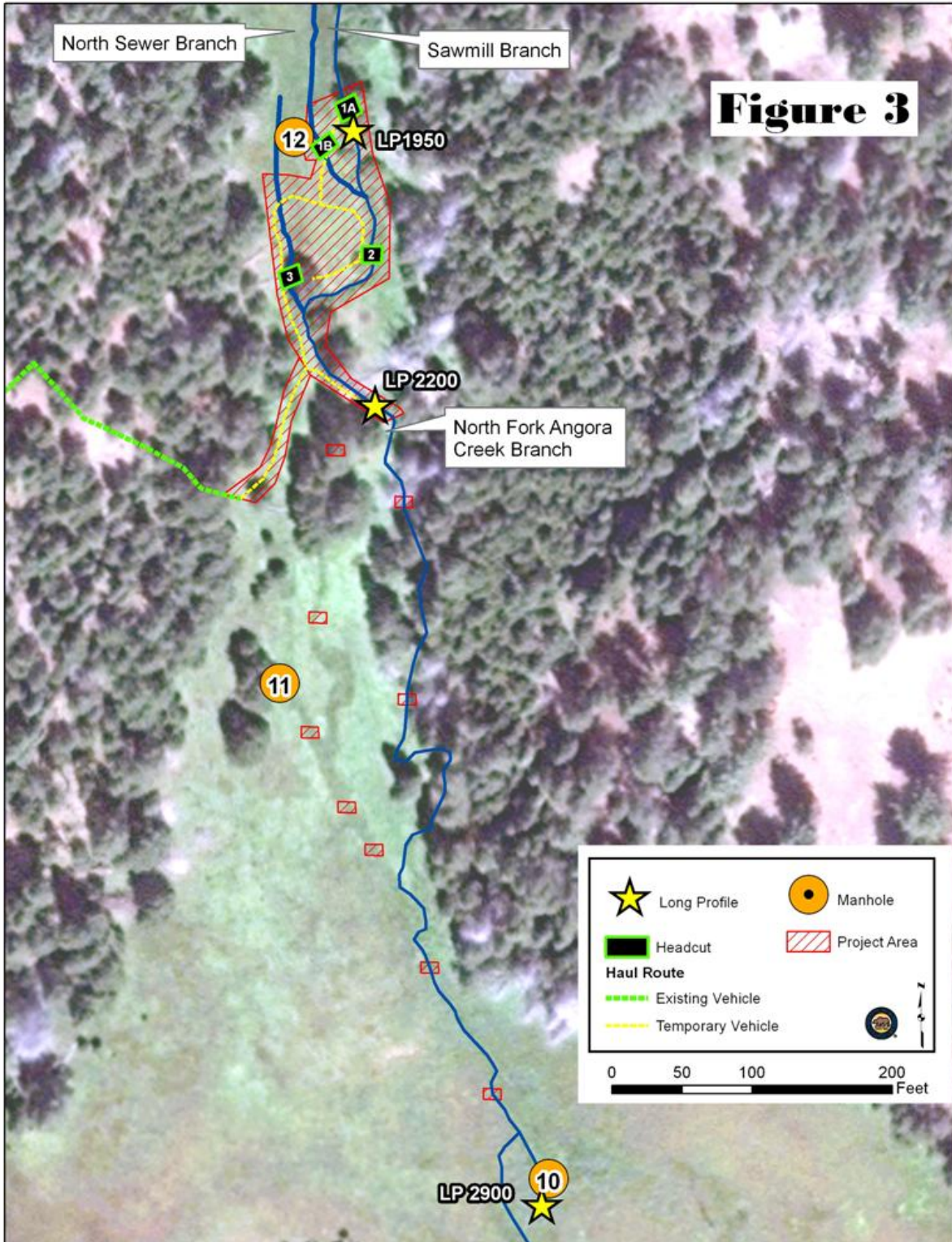


Figure 3: Long Profile and Manhole Locations in Project Area Map, North Branch section.

2.3 BACKGROUND AND NEED FOR THE PROJECT

This project is comprised of four tasks that were outlined in section 2.1 and are described in detail in section 2.5, Project Description below.

Angora Creek has had a myriad of disturbances including historical logging and meadows that have been intensely grazed. The creek flows through a residential development and has had a recent catastrophic wildfire in its watershed. Development further impacted the meadows when gravity flow sewers were constructed through the meadows, following the meadow slope.

Two reaches of Angora Creek were previously restored by DRR over the last 15 years—the Golf Course Reach and the Sewer Captured Reach. In the latter, a section of the creek had been captured by the sewer line alignment and was flowing from manhole to manhole. The creek was severely incised with poor water quality and impaired meadow habitat and function. That reach was restored in 2002.

This project treats a reach upstream of the 2002 project (North Branch) where the channel also is along the sewer and is incised; disconnecting the creek from the meadow floodplain, increasing the erosive force in the channel, and lowering the meadow water table. To prevent further incision and sewer line capture, the North Fork and the North Sewer Branch of Angora Creek can be stabilized with the plans outlined Tasks 2, 3, and 4 in this document. This project will prevent further incision of the North Fork of Angora Creek channel, stabilize eroding down-cut portions of the creek, and prevent erosional features from migrating upstream or further capture on the sewer line alignment. This project will also disperse the existing flow path of the North Branch of Angora Creek that is over the sewer line, thus decreasing a potential severe negative water quality impact of the creek and preventing the capture of additional reaches by the sewer line depression.

If the project is not implemented the North Fork Angora will continue to incise, with the headcuts migrating upstream and dewatering more of the meadow and the risk of water quality impacts from the sewer will remain.

The project will also construct a bridge over Angora Creek in an area of wet meadow that is being impacted by trail users, and a visitor created bridge poses safety risk. If the project is not implemented the temporary bridge will be removed and the meadow area will have additional way trail and trampling impacts.

Figures 4 and 5 below show the effects of channel incision on a meadow and a healthy meadow system respectively

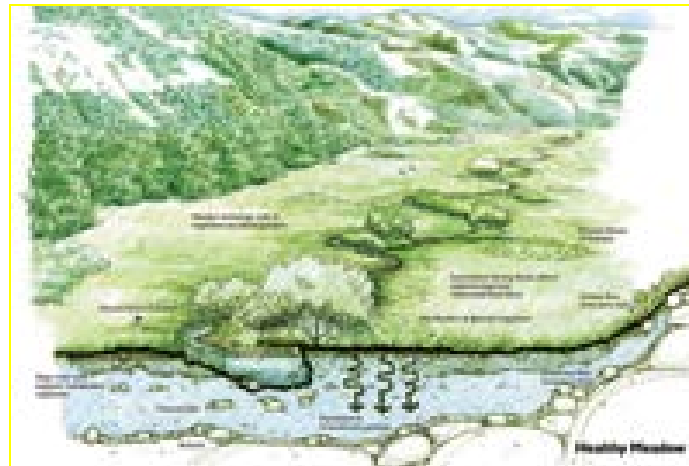


Figure 4: Diagram of a healthy meadow system with naturally meandering creek supporting native fish, lush wetland vegetation, healthy soil and high levels of groundwater which recharges streams during drier months and creates rich biological diversity. (<http://www.americanrivers.org/our-work/water-supply/storage-flows/ca-meadow-rest.html>).

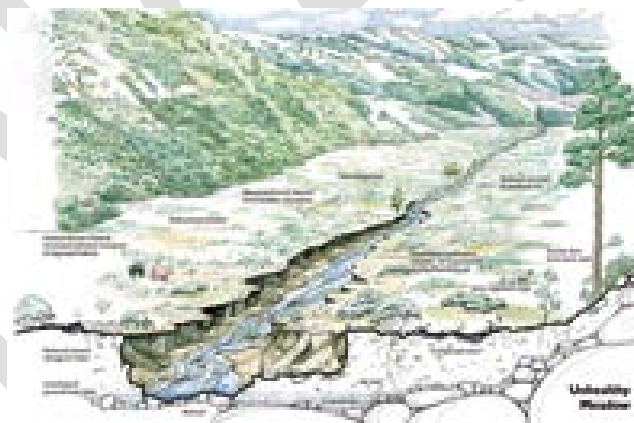


Figure 5: Diagram of a degraded meadow system with a deeply eroded stream directing snowmelt quickly downstream, and drawing down meadow water tables resulting in drier vegetation (e.g. sagebrush). Little habitat exists for meadow species. (<http://www.americanrivers.org/our-work/water-supply/storage-flows/ca-meadow-rest.html>).

Land acquired by DPR typically comes with a multitude of past and current disturbances. One of the most common inherited disturbances is roads and trails, most of which are often poorly designed and constructed. A visitor-created trail that has been in WMSP for many years crosses Angora Creek and the meadow. In the past, people would lay logs across the channel to create a creek crossing, but these would wash out

and caused impacts to the creek banks and meadow surface. A few years ago a temporary non-authorized bridge was constructed with construction scrap wood over the creek that the park visitors now use. This bridge is not built to DPR standards and poses a public safety risk. Task 1 of this project relates to this issue, improving visitor access while reducing impacts. The new bridge will be built to DPR standards and will reduce the negative impacts to the meadow, provide safe public recreation access, and improve the visitor experience.

These tasks/actions will result in decreased erosion and increased sediment deposition, water quality improvements, and improved meadow habitat.

2.4 PROJECT OBJECTIVES

The mission of the DPR is to provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality recreation. The objectives of the proposed North Fork Angora Creek Restoration and Bridge Replacement Project are to:

- Prevent the headcuts from migrating upstream and destabilizing the meadow
- Disperse the existing flow path that is over the sewer line and prevent capture of additional reaches by the sewer line depression
- Reduce negative impacts to the meadow caused by recreational use and a non-compliant bridge
- Preserve and enhance the meadow habitat and water table, and
- Stabilize the eroding down cut portion of the stream

These objectives will be met by the proposed project described in the project description below.

2.5 PROJECT DESCRIPTION

This project will stabilize headcuts and restore floodplain connectivity along the North Branch of Angora Creek and its infeeders and construct a foot bridge over Angora Creek. The project will be comprised of four main tasks (Figure 2).

Task 1: Main Branch Angora Bridge

An unofficial, visitor created trail follows and crosses the Main Branch of Angora as it travels into the park from the western boundary on Mountain Trout Road. Over the years the park visitors have put various temporary structures over the creek to create access into other regions of WMSP. These structures wash away each season with the spring floods and trampling of the meadow continues as visitors try to find a way to cross the creek. In 2009, local visitors constructed a small unauthorized bridge which spanned more of the channel and meadow (Photo 1), but it was not built to DPR standards. In 2012, a horse fell thru one of the boards raising attention to the fact that this bridge is a public safety and resource issue. The bridge needs to be replaced with a suitable structure that is designed to span the channel and immediate floodplain.

The existing sub-standard built bridge will be removed. A new bridge (Figure 6) will be

constructed in roughly the same location, but to DPR standards that will meet the recreational activity types that use the bridge. This problem must be addressed immediately due to both the public safety hazard (current bridge is unstable) and for the protection of natural resources. The new bridge will use stringers about 30 feet long to span the entire channel and immediate floodplain area. The footings for the stringers will be ten by ten inch redwood, and will be imbedded in the bank edge of the creek. No bridge structure will impede or be placed in direct flow of the creek channel. The new bridge will be constructed at approximately the same location, with minor adjustments to better accommodate the channel flow pattern. The new bridge can be moved or relocated if the future roads and trails plan indicates a different preferred location. A new raised boardwalk or causeway trail approach will be constructed to tie in with existing trails (Figure 7). This will alleviate visitor impacts and erosion issues on the surrounding meadow surface and provide for a better park visitor experience. The raised trail will extend roughly 50 feet on each side of the bridge ensuring that visitors remain dry and do not further impact the meadow surface. All of the fill material that is excavated to place the bridge and boardwalk footings will be used to fill the entrenched trail sections.



Photo 1: Unauthorized Bridge over Main Branch Angora Creek does not span the entire channel and is not constructed to DPR standards

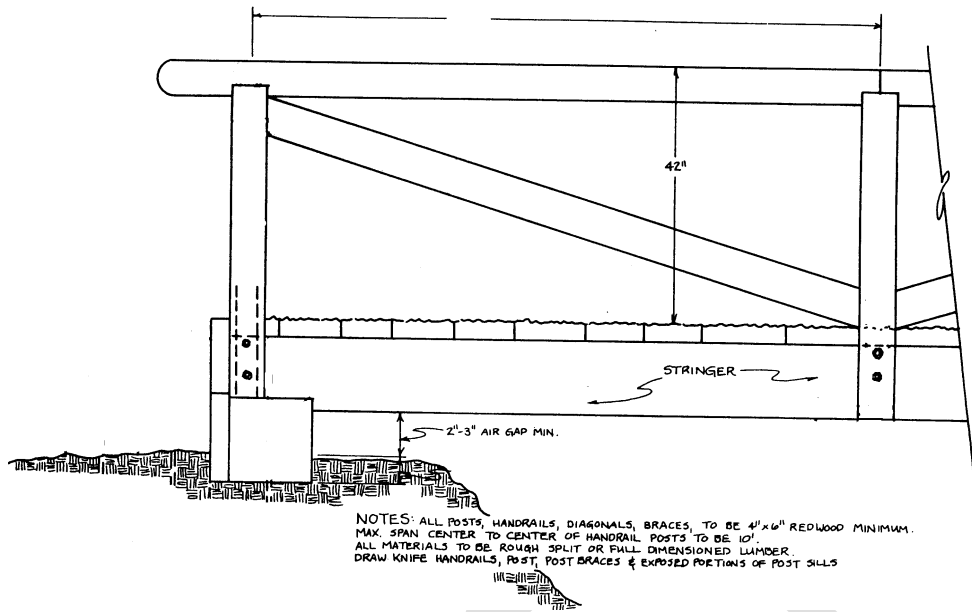


Figure 6: Typical drawing of bridge
 NOT TO SCALE

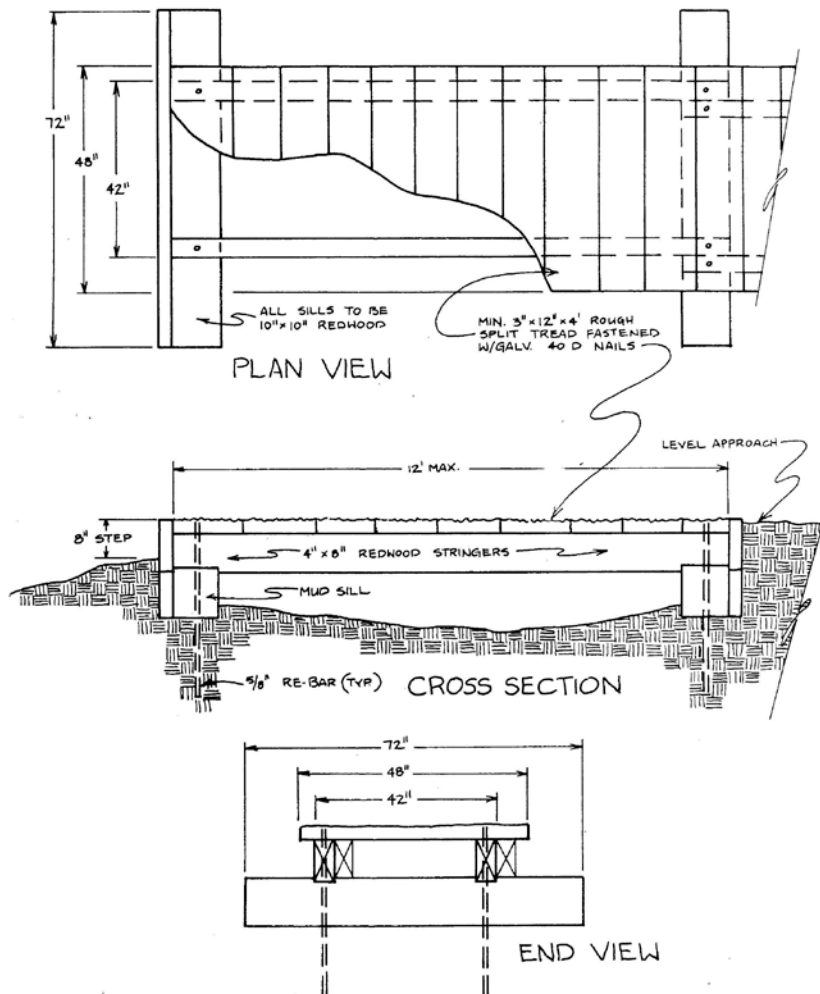


Figure 7: Typical Boardwalk Drawing

Task 1: Timing and Construction Considerations

--Bridge work may take place before August 15th, if so then Standard Project Requirements Bio 2-5 will occur.

--Construction access will be along an existing access road and trail off of Mtn. Meadow Dr. Crew, materials, tools and equipment will be brought in along the existing roads and trail. Materials will be staged in a previously disturbed logging landing away from the meadow.

--All construction activities will be conducted outside of the channel. No bridge structures will be constructed or placed directly in the channel.

--Construction will take place in the low flow and precipitation time of year.

--Standard BMPs (straw wattles, silt fence) will be used between the water and the construction activity. A diaper (hanging tarp) will be placed under the bridge to catch any construction debris from entering the creek.

Task 2: North Sewer Branch

Flow is being concentrated in the depression left over from the sewer line construction on The North Sewer Branch of Angora Creek. The creek flows directly over the sewer line from manhole to manhole (Photo 2) where it should be dispersed flow over the entire meadow surface. The concentration of flow over the sewer line leads to the potential for water quality degradation as well as increased erosive energy and a decrease in the overall meadow water table and function.



Photo 2: North Sewer Branch concentrated flow over the sewer line

The flow along the sewer depression will be interrupted by installation of a series of

raised sod humps along the profile which will act as natural dams that disperse the water onto the meadow surface as sheet flow, restoring the pre-disturbance function. The humps will essentially be sod covered dirt plugs about seven by nine square feet each and the task will require roughly eight humps to be placed along about 400 feet of sewer line between the manhole 12 and 14 (Figure 3). The sod will be salvaged from the meadow and staked on riffles in the channel at approximately fifty foot spacing. This will raise the riffle elevation to match the surrounding meadow elevation and force the water to pond and spread into the meadow. Willow stakes harvested from the surrounding meadow may also be installed along the sewer line depression and/or used to stake the sod plugs down. Sod salvage areas will be dispersed around the meadow.

Task 2: Timing and Construction Considerations

--Sod salvage and replanting will occur once water levels are low enough in the meadow; likely sometime between July and September. Irrigation will be conducted by hand if insufficient soil moisture is encountered after sod plug placement. If willows are cut for staking the sod plugs before August 15th, Standard Project Requirement Bio-5 will occur.

--The channel is intermittent and flows in response to snowmelt in the spring. It is dry during the construction season (summer and fall).

--Access will be off of Lake Tahoe Blvd. and on to the park's north entry haul road.

--Hand crew work only

Task 3: Other minor Headcuts—Sawmill Branch and swale below LP 2200

The Sawmill Branch is overall in good condition, but it does have a short section with a few 4-6 inch headcuts. Below LP 2200 on the North Branch a swale flows south along the sewer alignment, but does not currently receive any flow. Small natural brush boxes constructed out of locally harvested willow will be installed at selected headcut locations to dissipate energy and help impede the migration of the headcuts further upstream and to improve the natural functions of the meadow.

pproximately ten small brush boxes (Figure 8) consisting of native willow and conifer branches (six inches tall) will be placed along the channel at field fit locations to slow flow velocities and induce deposition. The brush box structures are very low tech, effective and natural. They will dissipate and reduce flow velocity and prevent headcuts from moving further upstream and impacting the meadow function and habitat.

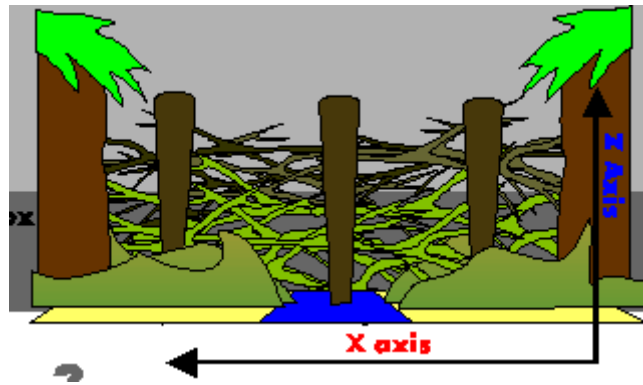


Figure 8: Typical Brush Box

Task 3: Timing and Construction Considerations

--Brush box construction will occur once water levels are low enough in the seasonal channel; likely sometime between July and September. If willows are cut for staking of the sod plugs before August 15th, Standard Project Requirement Bio-5 will occur.

--The channel is intermittent and flows in response to snowmelt in the spring. It is dry during the construction season (summer and fall).

-- Water will be drawn from a South Tahoe Public Utility District (STPUD) hydrant following permitting, or from a DPR hydrant off location for irrigation activities.

--Access will be off of Lake Tahoe Blvd. and on to the park's north entry haul road.

--Hand crew work only

Task 4: North Fork of Angora

This task involves stabilizing severe headcuts by constructing rock grade controls, planting sod, and smoothing the channel profile. This will prevent further migration of the headcuts that have formed in the channel disconnecting the channel from the meadow and lowering the water table. The bed along a 300 foot section of the incised channel will also be raised to restore meadow floodplain connectivity and to smooth discontinuities in the profile.

Just downstream of where the North Sewer Branch and Sawmill Branch join to form the North Fork of Angora Creek, the channel drops over a 2.5 foot high headcut (a.k.a. knickpoint). The headcut (Photo 3) has slowly migrated upstream and is located at approximately LP distance 1950 (Figure 3 above for LP and Manhole locations). From LP 1950 to approximately LP 2200 the channel is incised (Photo 4) with a series of headcuts both in the main channel and on a number of smaller swales that flow into it from the North Sewer Branch. The headcuts in this section are generally six inches to 1.5 feet in height. Material eroded from the headcut incision is typically deposited

immediately downstream, leaving a flat bar. These bars are generally well vegetated and are interspersed between the headcuts.



Photo 3: Looking upstream at the headcut (North Fork Angora Branch)



Photo 4: Incised channel (North Fork of Angora)
no longer connected to meadow floodplain (arm level)

The incision with respect to the meadow surface decreases to less than one foot at approximately LP 2200, and the channel flows south along the eastern meadow-forest boundary with minor local headcuts which are not as severe as the ones noted upstream. At LP 2200 a swale that is about one foot deep, with no sign of recent activity, exits the channel on the right bank and flows south over the sewer alignment.

At approximately LP 2700 the channel re-enters the meadow and is once again captured by the sewer line depression for a short distance to manhole ten before being dispersed over the meadow surface and ultimately ending up in the Main Branch of Angora Creek.

The reach from LP 1950 to LP 2200 is the most incised and has multiple headcuts in the channel and its infeeders. The project will stabilize the headcuts, preventing incision from continuing upstream and destabilizing additional sections of the channel and further degrading the meadow system. The valley in this section is narrow and the sewer line flows adjacent to the incised channel, so new channel construction is not recommended. Also, it is not recommended to bring the reach up the entire height of the three foot incision to reconnect the meadow floodplain because it would require a large amount of fill import and it would steepen the reach with respect to the downstream tie-in. Avoidance of the local over-steepening would require raising the grade of the channel all the way to manhole ten (LP 2900), which would require more fill and would result in disturbance of a large area of healthy sod and vegetation. Thus the Main emphasis of work is between LP 1950 and LP 2200, although sod plugs may be placed in the channel on riffle crests between LP 2200 and LP 2900.

The main flow drops over a headcut at LP 1950 (Headcut complex I-upstream most) that is greater than two feet high and has undercut a 24 inch diameter pine tree whose roots partially support the vertical drop into a deep plunge pool (Photo 3). Two smaller side channels to the west drop into this same plunge pool. Headcut complex II is downstream of Complex I at about LP 2050 and drops approximately 1.5 feet. Headcut complex III is at the convergence of the main channel and an infeeder on the right bank at about LP 2120 coming off the sewer alignment. This infeeder and several smaller swales are headcutting up to the sewer alignment as they drop into the incised channel.

Rock sills and aprons will be built at each of the three largest headcuts and at the upstream and downstream end of the treatment area. Rock sills of six to eight inch rock will be constructed about one foot below the scour pool depth to act as rock step grade controls (Figure 9) with an apron extending downstream. The steep headcut faces and the deep scour pools will be armored with three to eight inch rounded cobble. The plunge pool armor will tie into the downstream riffle crest elevation. The sill armor would extend laterally about 10 to 15 feet out from the banks of the channel in a vertical trench about 18 to 24 inches wide with a depth at one foot below the channel bed.

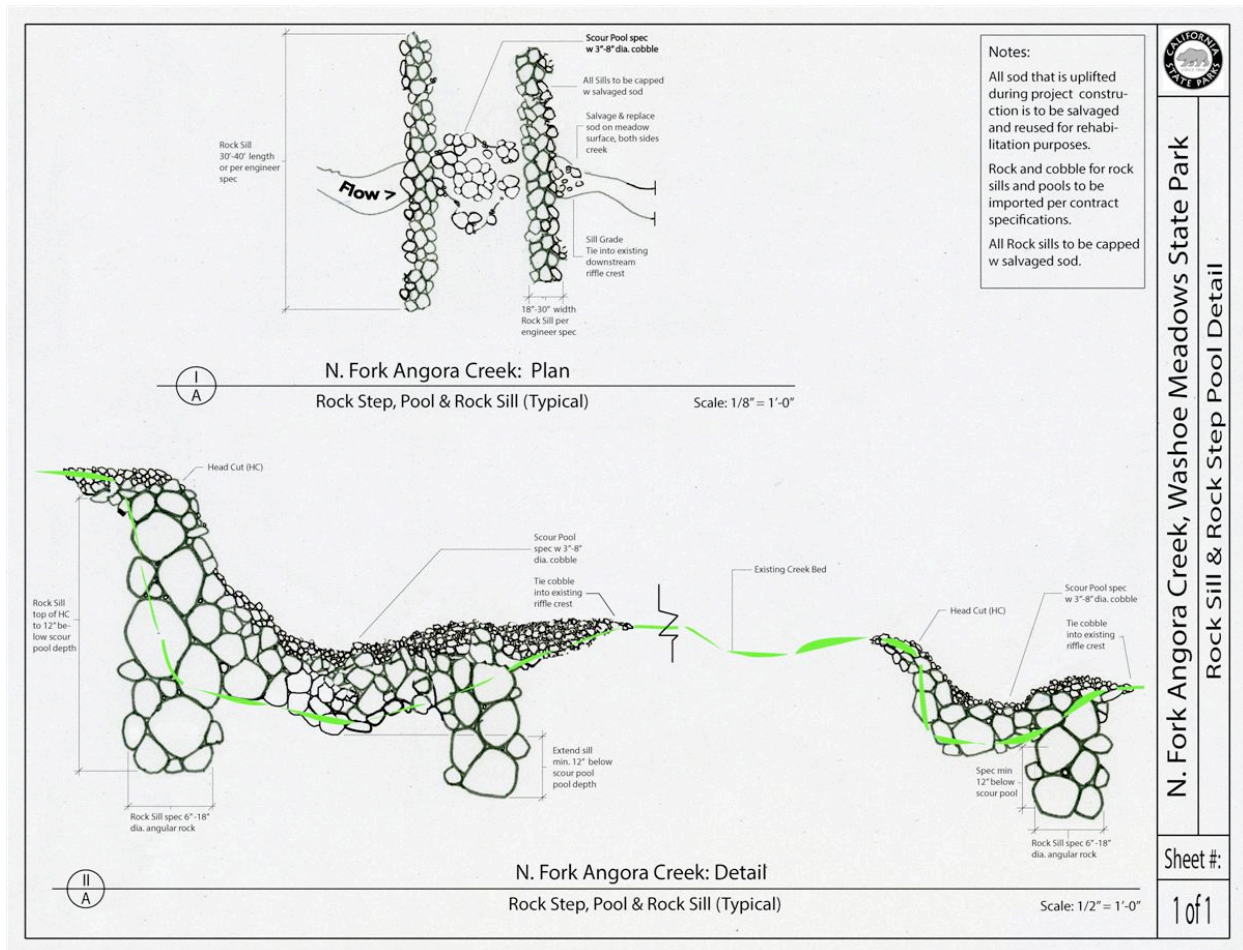


Figure 9: Typical rock sill and riffle armor

Before any construction, the sewer line will be located and “pot hole” excavation will be done by hand to ensure no damage to the sewer line will occur during the construction of the rock sills.

Any native vegetation disturbed during construction will be salvaged and re-used on site. Willow staking will occur on banks and in rock structures.

From LP 2200 downstream to LP 2900, at manhole ten, the same approach will be taken as described for the North Sewer Branch; sod-dirt plugs will be installed by hand crew on the riffle crests.

Task 4: Timing and Construction Considerations

--Channel is seasonal and flows in response to snowmelt in the spring. It is dry during the construction season (summer and fall).

--If groundwater is encountered during excavation activities for the rock stabilization structures it will be pumped and dispersed onto the meadow surface or will be used to water transplant materials. Water dispersed onto meadow will be infiltrated and no return flow will be allowed to the channel.

--Existing riparian vegetation will be avoided where possible or salvaged and transplanted within the project area.

--Any temporary access roads or staging areas constructed for the project will be restored to natural topography and mulched with native duff.

--Rock stabilization construction from LP 1950-2200 will occur after August 15th and before October 15, 2013.

--Water for construction and irrigation will be supplied by a water truck and fire hoses. The water trucks will draw from a South Tahoe Public Utility District hydrant following permitting, or from a DPR hydrant off location for irrigation activities.

--Imported gravel and rock will likely be transported along Highway 50, Sawmill Blvd. and Lake Tahoe Blvd. to the park's north entry haul road, and along that road to the site.

-- The haul road will be maintained prior to use by grading, using material stockpiled at the WMSP quarry to repair drainage of entrenched sections. This material will be transported from the quarry stockpile, out the south entrance, then along North Upper Truckee Rd. to Lake Tahoe Blvd.

--A combination of hand crews and heavy equipment will be used.

2.6 PROJECT IMPLEMENTATION

Construction of the North Fork Angora Creek Restoration and Bridge Replacement Project will begin at different times based on the task. All construction activities will end on October 15th unless a Grading Deadline Exception is needed and issued.

Access and staging for these areas will be concentrated along existing roads and disturbed areas along the west side of the meadow (Figure 2) and an old skid trail that connects the main haul road to the meadow, but will include a small section of a new temporary road. The existing roads will require grading prior to use. From where the skid trail ends to the channel, a temporary road would be constructed either of fill placed on fabric or landing mats.

The order of activities will include:

1. Install Best Management Practices (BMPs) at the direction of the Engineer/ Certified Professional in Erosion and Sediment (CPESC)
2. Hand crew work along North Sewer Branch and Sawmill Branch
3. Hand crew work construct foot bridge and boardwalk
4. Establish access, equipment staging area, and stockpile areas
5. Salvage sod and shrubs
6. Construct rock grade controls and raise riffles in incised channel reach
7. Plant salvaged sod and shrubs

8. Restore/stabilize disturbed areas
9. Remove BMPs at the direction of the Engineer/CPESC

Work will occur on weekdays during daylight hours. However, weekend work could be implemented to accelerate work, especially for winterization needs or to meet management objectives during a limited window of low flow conditions in the creek.

Areas of mature vegetation to be protected will be delineated prior to construction. DPR will use heavy equipment and construction crews with hand and mechanical tools for project construction. Heavy equipment such as excavators, bulldozers, loaders, dump trucks, and water trucks will be used. All heavy equipment that is needed for the project will be staged at the project site. A bulldozer will only be needed to prepare and grade the existing haul road off of Lake Tahoe Blvd. Once this task is complete the dozer may be hauled away and brought back at the end of construction if it is needed to remove any project impacts. The excavator, loader and ten wheel dump truck will be the on the ground day to day heavy equipment used most consistently during Task 4 of the project. The excavator will be used for excavation of the trenches for the rock stabilization structures and salvaging of any mature vegetation, the loader will be used for hauling materials around, and the dump truck will be used in transporting materials into the project site. A skidsteer may also be used. This equipment will be kept on site at the designated staging area during project construction. The water truck may be brought to the site each day for watering activities if needed or left at the staging area. Personnel vehicles will be brought back and forth to the project site daily.

Access and staging/storage sites will be authorized by DPR qualified cultural and natural resource specialists. These areas will be concentrated along existing roads and disturbed areas along the west side of the meadow (Figure 2) and an old skid trail that connects the main haul road to the meadow, but will also include a small section of a new temporary road. The existing roads will require maintenance prior to use including improving drainage by grading and filling entrenched sections. All work will be done within existing road prism. A temporary road will be constructed from the end of the skid trail to the channel. This temporary road will be constructed either of fill placed on fabric or landing mats to minimize surface erosion and soil compaction. This temporary road will be removed and restored when the construction is complete. One of the landings that will be used has been used in the past for a forestry management project. The other two are open areas that have not recently been disturbed, but will be restored and re-vegetated after completion of the project.

BMPs will be incorporated into the project design to ensure that natural and cultural resources in and around the project site are adequately protected during and after construction activities. The BMPs discussed in this document and used in the implementation of the project are obtained from the California Stormwater Quality Association (CSQA) *Stormwater Best Management Practices Construction Handbook* (CSQA 2003). Temporary BMPs will be used to keep sediment on-site throughout the duration of the project. During construction work BMPs will be checked regularly, maintained, and modified as needed. In addition, permanent BMPs will be used after construction work to stabilize the site and minimize erosion. DPR has consistently

referenced CSQA BMPs and has identified them as an acceptable standard for use in all park units of the State Park System.

Construction of the bridge will not require work in the active channel; all the work will take place along the creek banks and meadow surface. Construction in the North Fork Angora reach will be done when the stream is not flowing—it is a seasonal stream which only flows in spring and early summer and therefore the creek does not support a native fish population. Hatchery rainbow trout are planted in Sawmill Pond upstream of the project site, but where the stream enters the meadow the flow disperses with no true channel. The stream will be dry during construction, but there may be groundwater present in deep scour pools, if so these pools will be surveyed for fish and any fish encountered will be relocated back into Sawmill pond. If groundwater is present a submersible pump will be used to remove the water. It will be used for irrigation of transplants or sprayed onto the thickly vegetated meadow away from the channel for infiltration and no return flow will be allowed.

2.7 PROJECT REQUIREMENTS

Under CEQA, the DPR has the distinction of being considered a lead agency, a public agency that has a primary responsibility for carrying out or approving a project and for implementing CEQA; a responsible agency, a public agency other than the lead agency that has responsibility for carrying out or approving a project and for complying with CEQA; and a trustee agency, a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people for the State of California. With this distinction comes the responsibility to ensure that actions that protect both cultural and natural resources are always taken on all projects. Therefore, DPR has created a list of Project Requirements that are included in project design to reduce impacts to resources.

DPR has two types of Project Requirements, standard and specific. Standard project requirements are assigned to all projects state-wide, while specific project requirements are assigned based on the specific actions required to complete the project.

For example, Fire Safety Practices are included in all DPR projects; however, inadvertent discovery of archaeological artifacts would only be assigned to projects that include ground-disturbing work. While mitigation measures can be found in the specific section as required (Chapter 5 contains a list of all mitigation measures and project requirements), the following Project Requirements have been included in this project:

Table 2.2: Project Requirements

ISSUE	PROJECT REQUIREMENT
Aesthetics	
STANDARD PROJECT REQUIREMENT AES-1: SCENIC VIEWS	<ul style="list-style-type: none"> • Do not alter viewsapes to expose structures or undesirable views along scenic highways or scenic viewing locations. • Maximize the use of salvaged mature vegetation to reduce the time of re-growth.

	<ul style="list-style-type: none"> • Re-habilitate and remove all construction related impacts to pre-project or better than pre-project conditions.
Air Quality	
STANDARD PROJECT REQUIREMENT AIR-1: EMISSIONS OF FUGITIVE DUST AND OZONE	<ul style="list-style-type: none"> • All construction areas (dirt/gravel roads and surrounding dirt/gravel area) will be watered at least twice daily during dry, to reduce dusty conditions while in use by large machinery for project actions. • All trucks hauling soil or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard. • All construction related equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all state and federal requirements. • Potential dust producing actions will be suspended if sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph, or dust from construction might obscure driver visibility on public roads. • Earth or other material that has been transported onto paved roadways by trucks, construction equipment, erosion, or other project-related activity will be promptly removed. • Idling time shall be minimized to ten minutes for all diesel-powered equipment.
Biological Resources	
STANDARD PROJECT REQUIREMENT BIO-1: BIOLOGICAL MONITORING	<ul style="list-style-type: none"> • A DPR approved biologist will review and approve all locations used for staging/storage of vehicles, equipment, and/or materials used during the project. • Biological monitoring throughout the project site will be implemented at the discretion of the natural resources specialist.
SPECIFIC PROJECT REQUIREMENT BIO-2: OSPREY	<ul style="list-style-type: none"> • Any work prior to August 15th may require nesting surveys by a DPR biologist. • Prior to project activities within habitat identified as suitable for nesting for the osprey, a DPR-approved biologist will conduct surveys to ensure no reproductively active osprey are present. • If an active nest is detected, project activities will not be completed within 0.25 mile of the nest from April 1 - August 15, or until the young fledge, as determined by a DPR approved biologist. If a DPR approved biologist

	<p>determines a nest has failed, project work may commence in the vicinity prior to August 15th.</p>
<p>SPECIFIC PROJECT REQUIREMENT BIO-3: BALD EAGLE</p>	<ul style="list-style-type: none"> • Any work prior to August 15th may require nesting surveys by a DPR biologist. • Prior to project activities within habitat identified as suitable for nesting for the bald eagle, a DPR approved biologist will conduct surveys to ensure no reproductively active bald eagles are present. • If an active nest is detected, project activities will not be completed within 0.5 mile of the nest from February 15 - August 15, or until the young fledge, as determined by a DPR approved biologist. If a DPR approved biologist determines a nest has failed, project work may commence in the vicinity prior to August 15th.
<p>STANDARD PROJECT REQUIREMENT BIO-4: NORTHERN GOSHAWK</p>	<ul style="list-style-type: none"> • Any work prior to August 15th may require nesting surveys by a DPR biologist. • Prior to project activities within habitat identified as suitable for nesting for the northern goshawk, a DPR approved biologist will conduct protocol level surveys to ensure no reproductively active northern goshawks are present. • If an active nest is detected, project activities will not be completed within 0.5 mile during the limited operating period (February 15th -August 15), or until the young fledge, as determined by a DPR approved biologist. If a DPR approved biologist determines a nest has failed, project work may commence in the vicinity prior to August 15th. • No mechanical or hand crew thinning treatment will be conducted within 500 feet of a known nest unless authorized by a DPR approved biologist and consistent with all regulatory rules and regulations (i.e. CDFW, TRPA, etc.).
<p>STANDARD PROJECT REQUIREMENT BIO-5: OTHER RAPTORS, BATS, AND NESTING SONGBIRDS</p>	<ul style="list-style-type: none"> • Any work prior to August 15th may require nesting bird surveys by a DPR biologist. • A DPR approved biologist will evaluate trees for use by cavity dwelling species such as birds and bats. If determined to be actively used for reproductive activity, removal will only occur if the tree provides a hazard to life or property and removal will not occur during the breeding season. • Project activities will not deliberately result in failure of sensitive nesting songbirds (i.e. olive-

	<p>sided flycatcher and yellow warbler). Prior to activities occurring in spring or summer, a DPR approved biologist will conduct surveys. Active sensitive songbird nests will be protected by a 250 foot buffer. Any project activities within this buffer area will be authorized and/or monitored by DPR approved biologist to avoid project related nest failure.</p> <ul style="list-style-type: none"> • Active nests of forest birds not otherwise classified as sensitive but protected by the Migratory Bird Treaty Act will be protected with a 100 foot buffer area and any project activities within this buffer area will be authorized and/or monitored by a DPR approved biologist to avoid project related nest failure. • Raptors not specifically addressed in other mitigation measures will be protected by a 0.25 mile active nest buffer from April 1 to August 15th, or until young fledge, as determined by a DPR approved biologist. Any project activities within this buffer area must receive prior authorization from a DPR approved biologist.
<p>STANDARD PROJECT REQUIREMENT BIO-6: SENSITIVE PLANTS</p>	<ul style="list-style-type: none"> • Prior to activities in or near habitat which could potentially support sensitive plant species, a DPR qualified botanist will conduct special status plant species surveys during the appropriate time of year. • Any special status plants will be marked for avoidance or salvaged and replanted.
<p>STANDARD PROJECT REQUIREMENT BIO-7: INVASIVE PLANTS</p>	<ul style="list-style-type: none"> • Heavy equipment used for project activities will be washed of plant parts and soil if previously used in areas known to have invasive plants in order to prevent the introduction of invasive plants to uncontaminated areas. • Project locations will be surveyed by a DPR qualified biologist prior to activities to ensure the area does not support invasive species that could be spread by project activities. • Project areas will be surveyed by a DPR qualified biologist after project activities are completed to ensure that no weeds were introduced during project activities. • Any inadvertent weed introductions or expansions will be treated for removal.
<p>Cultural Resources</p>	
<p>STANDARD PROJECT REQUIREMENT CULT-1:</p>	<ul style="list-style-type: none"> • Prior to beginning project work, if cultural concerns are present, the DPR cultural

PRE-START MEETINGS	resource specialist and project manager will meet on the project site to discuss project implementation and conditions in place to protect cultural resources.
STANDARD PROJECT REQUIREMENT CULT-2: PROTECTED AREAS	<ul style="list-style-type: none"> • All historic properties are assumed eligible for the National Register and will be protected throughout the duration of the project. • The project manager is required to notify the DPR cultural resource specialist a minimum of three weeks prior to the start of project actions. • Cultural resources within the project area will be flagged for exclusion no more than 30 days prior to commencement of vegetation management activities. Designated flagging color will demarcate areas of avoidance. If project delays occur which exceed the 30-day limit to commencement of field activities, a DPR cultural resource specialist and/or DPR natural resources representative will check flagging to assure that it is still visible prior to field activities. Flagging will be removed after the project is completed.
STANDARD PROJECT REQUIREMENT CULT-3: ARCHAEOLOGICAL DISCOVERY	<ul style="list-style-type: none"> • In the event of an unanticipated discovery of previously-undocumented cultural resources during project activities, work will be suspended in the area until a DPR cultural resource specialist has assessed the find and has developed and implemented appropriate avoidance, preservation, or recovery measures. If avoidance is required and feasible, the project manager will modify, at the discretion of the DPR cultural resource specialist, project actions to avoid cultural resources.
SPECIFIC PROJECT REQUIREMENT CULT-4: ARCHAEOLOGICAL MONITORING	<ul style="list-style-type: none"> • Archaeological monitoring throughout the project site will be implemented at the discretion of the cultural resources specialist.
SPECIFIC PROJECT REQUIREMENT CULT-5: VEHICLES, HEAVY EQUIPMENT, STAGING, AND STORAGE AREAS	<ul style="list-style-type: none"> • Vehicles or heavy equipment are not allowed within cultural resources exclusion zones. • A DPR cultural resource specialist will review and approve all locations used for staging/storage of vehicles, equipment, and/or materials used during the project. • No staging or storage will be allowed within cultural resources exclusion zones.
SPECIFIC PROJECT REQUIREMENT CULT-6: HAND CLEARING	<ul style="list-style-type: none"> • Conifer tree removal will be limited to hand clearing in areas within and adjacent to recorded archaeological sites and cultural

	<p>resource features. Manual removal will take place first in areas of identified resources and work outward to fully identify and protect any newly documented and/or extended resources.</p> <ul style="list-style-type: none"> • A DPR cultural resource specialist will determine the extent of the hand clearing only zone.
<p>STANDARD PROJECT REQUIREMENT CULT-7: HUMAN REMAINS DISCOVERY</p>	<ul style="list-style-type: none"> • In the event that human remains are discovered during project activity, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate DPR personnel. Any human remains and/or funerary objects will be left in place. Existing law requires that project managers contact the County Coroner. If the County Coroner determines the remains are of Native American origin, both the Native American Heritage Commission (NAHC) and any identified descendants shall be notified (Health and Safety Code Section §7050.5, Public Resources Code Section §5097.97 and §5097.98). DPR staff will work closely with the United State Bureau of Reclamation to ensure that its response to such a discovery is also compliant with federal requirements including the Native American Graves Protection and Repatriation Act. • Work will not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects will be cleaned, photographed, analyzed, or removed from the site prior to determination. If it is determined the find indicates a sacred or religious site, the site will be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the NAHC/tribal cultural representatives will occur as necessary to define additional avoidance, preservation, or recovery measures, or further future restrictions.
<p>Geology and Soils</p>	
<p>SPECIFIC PROJECT REQUIREMENT GEO-1: REMEDIATION OF DISTURBED AREAS</p>	<ul style="list-style-type: none"> • Recontour and/or outslope main routes of travel if necessary to allow sheet flow of water across the landscape and reduce channelization. • All base erosion control measures must be in place, functional, and approved in an initial inspection prior to commencement of

	<p>construction activities.</p> <ul style="list-style-type: none"> • Disturbed areas are to be seeded, planted, and mulched per the revegetation plan. • All protective devices to be installed shall be in place at the end of each work day when the five-day rain probability exceeds 40 percent.
Hazardous and Hazardous Materials	
<p>STANDARD PROJECT REQUIREMENT HAZMAT-1: SPILL PREVENTION AND RESPONSE</p>	<ul style="list-style-type: none"> • Prior to the start of construction, all equipment will be cleaned before entering the project site. During the project, equipment will be cleaned and repaired (other than emergency repairs) outside the project site boundaries. All contaminated spill residue, or other hazardous compounds will be contained and disposed of outside the boundaries of the site at a lawfully permitted or authorized destination. • Prior to the start of construction, all equipment will be inspected for leaks and regularly inspected thereafter until removed from the project site. • Prior to the start of construction, a Spill Prevention and Response Plan (SPRP) will be prepared to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. This plan will include but not be limited to the following: <ul style="list-style-type: none"> ○ A map that delineates construction staging areas, and where refueling, lubrication, and maintenance of equipment will occur. ○ A list of items required in an on-site spill kit that will be maintained throughout the life of the project. ○ Procedures for the proper storage, use, and disposal of any solvents or other chemicals used during the project. ○ Identification of lawfully permitted or authorized disposal destinations.
<p>STANDARD PROJECT REQUIREMENT HAZMAT-2: WILDFIRE AVOIDANCE AND RESPONSE</p>	<ul style="list-style-type: none"> • A Fire Safety Plan will be developed by a DPR approved forester, prior to the start of construction. • Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment. • Construction crews will be required to park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, heavy equipment will be parked over, asphalt, or concrete to reduce the chance of fire.
Hydrology and Water Quality	

<p>STANDARD PROJECT REQUIREMENT HYDRO-1: EROSION AND SEDIMENT CONTROL AND POLLUTION PREVENTION</p>	<ul style="list-style-type: none"> • The DPR contractor or operator will install long-term erosion control measures for any areas where ground disturbing activities result in bare soil areas. The soil will be properly compacted and re-vegetated with appropriate native grass seed, sterile grass seed, and/or duff with the final selection made by a DPR qualified representative.
<p>SPECIFIC PROJECT REQUIREMENT WQ-1: PERMIT AND SITE PLAN ADHERENCE AND IMPLEMENTATION</p>	<ul style="list-style-type: none"> • Limit disturbance area to the necessary extent as outlined in the project plans. • Design, install, and maintain temporary BMPs for the protection of disturbed areas that may be subjected to erosion or surface run-off with the potential to release sediment, nutrients, or hazardous materials to surface or ground water sources. • Implement a de-watering plan for groundwater encountered during construction. • Use designated and established staging, re-fueling, and maintenance areas for equipment that has the required BMPs to prevent the potential for contamination of surface or ground water sources. • Any stockpiled material shall be properly BMPd according to the permitting requirements to ensure that wind and water erosion potential is eliminated. • Contractor or operator shall be familiar with the conditions of all required project permits and shall implement all required BMPs prior to commencing grading operations.
<p>Noise</p>	
<p>STANDARD PROJECT REQUIREMENT NOISE-1: NOISE EXPOSURE</p>	<ul style="list-style-type: none"> • Project related activities will generally be limited to the daylight hours, Monday through Friday. However, weekend work will be implemented to accelerate construction or address emergency or unforeseen circumstances. If weekend work is necessary, no work will occur before 8:00 a.m. or after 6:00 p.m. • Internal combustion engines used for any purpose in the project areas will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for

	<p>project related activities will utilize the best available noise control techniques (e.g., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.</p> <ul style="list-style-type: none"> • Stationary noise sources and staging areas will be located as far from visitors as possible. If they must be located near visitors, stationary noise sources will be muffled to the extent feasible, and/or where practicable, enclosed within temporary sheds.
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2.8 CONSISTENCY WITH LOCAL PLANS AND POLICIES

The project is consistent with the DPR mission and its management directives aimed at preserving the state’s extraordinary biological diversity and protecting valued natural and cultural resources. WMSP does not have a General Plan. The proposed project is consistent with local plans and policies currently in effect. Please see Chapter 3, Section IX, Land Use and Planning, for further details.

2.9 DISCRETIONARY APPROVALS

This project will be required to obtain and conform to the following regulatory permits:

- California Department of Fish and Wildlife (CDFW) Sxn.1600
- US Army Corps of Engineers (USACE) 404
- Lahontan Regional Water Quality Control Board (LRWQCB) 401 Certification and Prohibition to Exemption
- Tahoe Regional Planning Agency (TRPA) Project Review

Additional internal document reviews include compliance with Public Resources Code § 5024. DPR will acquire all necessary reviews and permits prior to implementing any project components requiring regulatory review.

2.10 RELATED PROJECTS

DPR often has other smaller maintenance programs, minor restoration, and interpretive projects planned for a park unit. Any projects proposed in areas that have not been previously discussed would occur under a separate CEQA document.

CHAPTER 3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title: North Fork Angora Creek Restoration and Bridge Replacement
2. Lead Agency Name & Address: California Department of Parks and Recreation
3. Contact Person & Phone Number: Cyndie Walck 530 581 0925
4. Project Location: Washoe Meadows State Park, South Lake Tahoe, CA
5. Project Sponsor Name & Address: California Department of Parks and Recreation
Sierra District
PO Box 266
Tahoma, CA 96142
6. General Plan Designation: Washoe Meadows SP does not have a General Plan
7. Zoning: Public Lands
8. Description of Project: Refer to Chapter 2, Section 2.1
- Surrounding Land Uses & Setting: Refer to Chapter 3 of this document (Section IX, Land Use Planning)
10. Approval Required from Other Public Agencies: Refer to Chapter 2, Section 2.9

1. 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"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input 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 | <input checked="" type="checkbox"/> None |

DETERMINATION

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 original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. 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** or its functional equivalent will be prepared.

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents.

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required.

 Tamara Sasaki
 Senior Environmental Scientist

 Date

ENVIRONMENTAL ISSUES

I. AESTHETICS.

ENVIRONMENTAL SETTING

The project area is located within an undeveloped area of WMSP. Two infeasible branches enter the park at the northern boundary and join to form the North Fork of Angora Creek. The stream flows through a meadow that is mostly a sedge monoculture with a few willows surrounded by lodgepole forest. The North Fork joins the main Angora channel in the southern part of the project area. There is a sewer line with visible manholes that runs from Lake Tahoe Blvd. south through the meadow and a depression above the line is one of the project infeasible reaches and holds water for a portion of the year.

The entire park is undeveloped, but it is used for many recreational activities and includes unmaintained volunteer trails throughout the park, but none of these trails exist in the project area. All of the trails near the project area are on forested land, thus leaving the area out of view from recreationalists. There are no TRPA-designated public recreation areas with views of the project area. The nearest TRPA-designated public recreation area is Heavenly Valley Ski Resort about seven miles northeast of the park, and the project would not be visible from the ski area.

The project area is just over a mile from Highway 50, which is the closest state scenic highway, but project activities are well out of view from it (Caltrans 2007).

The project activities will be visible along the section of Lake Tahoe Blvd. that runs along the north boundary of the park and may temporarily affect the viewshed, but this section of road is not recognized by TRPA as a State Highway or Roadway Travel Unit. The project activities visible from Lake Tahoe Blvd. only include minimal hand crew work and will not damage any scenic resources, but will enhance the quality of the meadow that dominates the viewscape once the project is completed.

WOULD THE PROJECT:	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
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"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Aesthetics is based on criteria **I a – d**, described in the environmental checklist above.

DISCUSSION

- a) **No impact** – The proposed project would involve enhancing the natural setting of the project area with conformance to the existing natural conditions and environment. All revegetation activities would use salvaged vegetation and local native collected seed mix. The project does not involve alteration or development of the landscape to less than the natural or existing conditions and with the implementation of **STANDARD PROJECT REQUIREMENT AES-1** (Chapter 2) will result in no impacts.
- b) **No impact** – The project area is not within a state scenic highway and therefore, will not impact the scenic resources associated with one.
- c) **Less than significant** – As noted in section a) above, the project will enhance the natural setting of the area to a more historically representative condition and visual character by enhancing the meadow habitat. The project will temporarily affect the view from the road with the inclusion of construction equipment within the meadow scenery, but the views will not be permanently altered and will return to the existing condition at the end of the project term in October. With implementation of **STANDARD PROJECT REQUIREMENT AES-1** (Chapter 2), impacts to the visual character or quality of the site will be less than significant.
- d) **No impact** – The proposed project does not involve the creation of any new substantial sources of light or glare.

II. AGRICULTURAL AND FOREST RESOURCES.

ENVIRONMENTAL SETTING

The proposed project is located on Angora Creek, a stream within the Sierra Nevada mountain range. This creek runs through one of the meadows in WMSP. This region supports a second growth mixed-conifer forest established on alluvial deposited soils, dry and wet meadows, and rocky slopes.

None of the land within the project area or the area immediately surrounding the project area is included in any of the Important Farmland categories, as delineated by the California Department of Conservation under the Farmland Mapping and Monitoring Program (CDOC 2008). There is no land in the vicinity of the project area that is preserved under the Williamson Act, which was created in 1965 to preserve agricultural and open space land by discouraging premature transformation to urban uses (CDOC 2010).

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT*:				
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 §4526), or timberland zoned Timberland Production (as defined by government Code § 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"/>

*In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland.

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Agricultural Resources is based on criteria **II a – e**, described in the environmental checklist above.

DISCUSSION

a - e) **No impact** - All work proposed as part of this project would be confined within park boundaries. Therefore, this project will have no impact on any category of California Farmland, conflict with any existing zoning for agricultural use or Williamson Act contract, or result in the conversion of farmland to non-agricultural use or forest land to non-forest land.

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III. AIR QUALITY.

ENVIRONMENTAL SETTING

The project site is located on the eastside of El Dorado County, which lies in the Lake Tahoe Air Basin and is under the jurisdiction of the U.S. Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the El Dorado County Air Quality Management District (EDCAQMD).

The Lake Tahoe Air Basin exceeds the state standard for particulate matter less than ten microns diameter (PM₁₀) but does not exceed either the state or federal standards for ozone (ARB 2009). Nonattainment for PM₁₀ occurs primarily in the winter months. The main sources of particulate matter causing violations in the Tahoe area are attributed to the use of wood-burning stoves, vehicle exhaust, and dust generated by road sand (Gertler et al. 2006). The nonattainment designation for ozone is thought to be due to the transport of ozone by prevailing wind from the greater Sacramento Area and the San Francisco Bay Area.

Land owners and managers within El Dorado County are subject to air quality planning programs required by the federal Clean Air Act of 1970 (CAA), its 1990 amendments, and the California Clean Air Act of 1988 (CCAA). Both the federal and state clean air statutes provide for ambient air quality standards related to air pollutants, timetables for progressing toward achieving and maintaining ambient standards, and the development of plans to guide air quality improvement efforts by state and local agencies. Ambient air pollutants called criteria pollutants are pollutants for which acceptable levels of exposure have been determined and for which an ambient air quality standard has been set.

The USEPA is responsible for setting National Ambient Air Quality Standards (NAAQS) and established national area designations for six criteria pollutants after the passage of the CAA (USEPA 2008). These pollutants include carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead, particulate matter ten microns or less in diameter (PM₁₀), and particulate matter 2.5 microns or less in diameter (PM_{2.5}). If an area does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant, it is designated as “non-attainment.” If an area meets the national primary or secondary ambient air quality standard for the pollutant, it is designated in “attainment.” An area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant is designated “unclassifiable” (USEPA 2008).

CARB is the lead state agency responsible for air quality and for assisting local air districts in California. CARB has set California area designations for ten criteria pollutants including ozone, PM₁₀, PM_{2.5}, CO, NO₂, SO₂, sulfates, lead, hydrogen sulfide, and visibility reducing particles (VRPs). If a pollutant concentration is lower than the standard, the area is classified as “attainment” for that pollutant. If an area exceeds the standard, the area is classified as “non-attainment” for that pollutant. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated “unclassified” (CARB 2011).

The TRPA uses the air quality data for the Lake Tahoe Basin to check if the air quality threshold is met. In the TRPA 2006 Threshold Evaluation Report, non-attainment of thresholds by indicators included carbon monoxide, ozone, particulate matter, regional visibility, and vehicle miles traveled (TRPA 2006).

Table III-1: Air Quality Standards Based on 2011 Lake Tahoe Air Basin Air Quality

Pollutant	State Designation	National Designation
Ozone—1-hour	Attainment	Not Applicable (NA)
Ozone—8-hour	Non-Attainment	Unclassified
PM ₁₀	Non-Attainment	Unclassified
PM _{2.5}	Attainment	Unclassified
Carbon Monoxide	Attainment	Unclassified
Nitrogen Dioxide	Attainment	Unclassified
Sulfur Dioxide	Attainment	Attainment
Sulfates	Attainment	NA
Lead	Attainment	NA
Hydrogen Sulfide	Unclassified	NA
Visibility Reducing Particles	Unclassified	NA

(ARB 2011)

Sensitive Receptors

Sensitive receptors include residential areas and schools nearby the project site. The nearest residence to the project area is about 900 feet away. Meyers Elementary School is 1.5 miles from the project site and Mt. Tallac High School is almost two miles away.

WOULD THE PROJECT*:	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
a) Conflict with or obstruct implementation of the applicable air quality plan or regulation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations (e.g., children, the elderly, individuals with compromised respiratory or immune systems)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

* Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make these determinations.

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Agricultural Resources is based on criteria **III a – e**, described in the environmental checklist above.

DISCUSSION

a) **No Impact**- The work proposed as part of the North Fork Angora Creek Restoration and Bridge Replacement Project would not conflict with, or obstruct the fulfillment of any applicable air quality plan for the EDCAQMD. No impact.

b-c) **Less than Significant Impact** - Implementation of the proposed project would not result in the ongoing operation of any new emissions sources. Conditions would remain generally unchanged, thus, there would be no impact related to long-term emissions of criteria air pollutants and ozone precursors, but there will be temporary emissions. The short duration of construction and small area of potential effect of the proposed project will result in impacts of which are not significant.

The road maintenance and construction of temporary access roads and staging areas, vegetation thinning, and materials import and export for the proposed project will temporarily generate emissions of reactive organic gas (ROG), NO_x, and PM₁₀ from site preparation (e.g. excavation, and land clearing); exhaust from construction equipment, construction workers' commute trips, and materials transport; and other miscellaneous activities. There will be approximately 20 truckloads of fill and rock material transported to the project area. The diesel-powered equipment that will be used on-site would likely include excavators, loaders, water pumps, dozers, haul trucks, and hand tools (such as chain saws).

Conifer removal and access road work will occur in the summer of 2013 just prior to the proposed creek restoration. The proposed creek restoration work will start in August and would be completed by October 15, 2013. It is assumed that soil disturbance will occur on only approximately a 0.25 of an acre and the disturbance will be minimal. Disturbance includes the compaction from the access road, excavation and filling of the creek, and sod salvaging from the meadow (approximately 250 sq. ft.). Patches of sod will be removed from the meadow during the summer and the open ground will be seeded with native vegetation and covered with mulch to prevent fugitive dust. In addition, most of the ground disturbance, which produces fugitive PM₁₀ dust, would occur during the summer, and therefore would not overlap with the time of year when the Lake Tahoe Air Basin experiences its highest levels of PM₁₀ from use of wood for heating purposes.

Potential impacts from fugitive dust emission resulting from project construction activities will be limited by implementation of **STANDARD PROJECT REQUIREMENT AIR-1** (Chapter 2). Compliance with these standards will reduce air quality emission impacts related to the project to a less than significant level.

d) **No Impact** - The nearest residence to the project area is further than 800 feet away, therefore, the project construction activities would not expose this, or any, sensitive receptor to substantial concentration of pollutants.

- e) **No Impact** - The project will not generate any long-term objectionable odors. During the construction of the project there may be short-term objectionable odors from large equipment exhaust, but the project is not near any sensitive receptors or residence, therefore, will not impact a substantial amount of people.

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IV. BIOLOGICAL RESOURCES.

ENVIRONMENTAL SETTING

The proposed project activities take place in WMSP along the banks and within the channel of Angora Creek (main stem and north fork). The creek and project area are in a wet meadow habitat and the vegetation consists of mostly Nebraska sedge (*Carex nebrascensis*) and also other species of sedge and rushes (*Carex utriculata*, *Carex aquatilis*, and *Scirpus microcarpus*). Willow scrub (*Salix spp.*) is locally present on the banks of the creek. Mesic conifer habitat borders the meadow and threatens encroachment; the dominant tree species in this habitat is lodgepole pine (*Pinus contorta*) with occasional white fir (*Abies concolour*) and Jeffrey Pine (*Pinus jeffreyi*). The park is home to many mammal and bird species with fewer reptiles and amphibians, all typical of middle elevations in the Sierra Nevada mountain range. There is a STPUD sewer line that runs through the meadow and is within the project area and is one of the focal points of the project. There is an incision of the main infeeder branch (North Fork) of the creek directly above the sewer line which threatens contamination and further erosion. The park is bordered by residential neighborhoods and Amacker Ranch. There is a history of grazing as well as other uses in the meadow.

Special-Status Species

Sensitive biological resources that occur or potentially occur in or near the proposed project site are discussed in this section. Special-status species (sensitive species) are defined as plants and animals that are legally protected or that are considered sensitive by federal, state, or local resource conservation agencies and organizations. Specifically, this includes species listed as state or federally Threatened or Endangered, those considered as candidates for listing as Threatened or Endangered, species identified by the US Fish and Wildlife Service (USFWS) and/or CDFW as Species of Special Concern, animals identified by CDFW as Fully Protected or Protected, special status species of particular concern to the United States Forest Service, Tahoe National Forest (USFS TNF), and other protected or sensitive animals. Plants considered by the California Native Plant Society (CNPS) and USFS TNF to be rare, threatened, or endangered are also included in this discussion. Habitats that are considered critical for the survival of a listed species or have special value for wildlife species and plant communities that are unique or of limited distribution are also included in this section.

All special-status species and their habitats were evaluated for potential impacts from the proposed North Fork Angora Creek Restoration and Bridge Replacement Project. Existing available data were collected and reviewed by a DPR approved biologist, to determine the proximity of special-status plants, animals, and their habitats to the project site. Queries of the California Department of Fish Wildlife's California Natural Diversity Database (CNDDDB), the California Native Plant Society's¹ On-line Inventory (CNPS 2011), and the USFWS (2011) were conducted for special-status species and habitats within the project area quadrangles (Emerald Bay) and the adjacent quadrangles within a five mile radius (Figure 3, Echo Lake, South Lake Tahoe, and Freel Peak).

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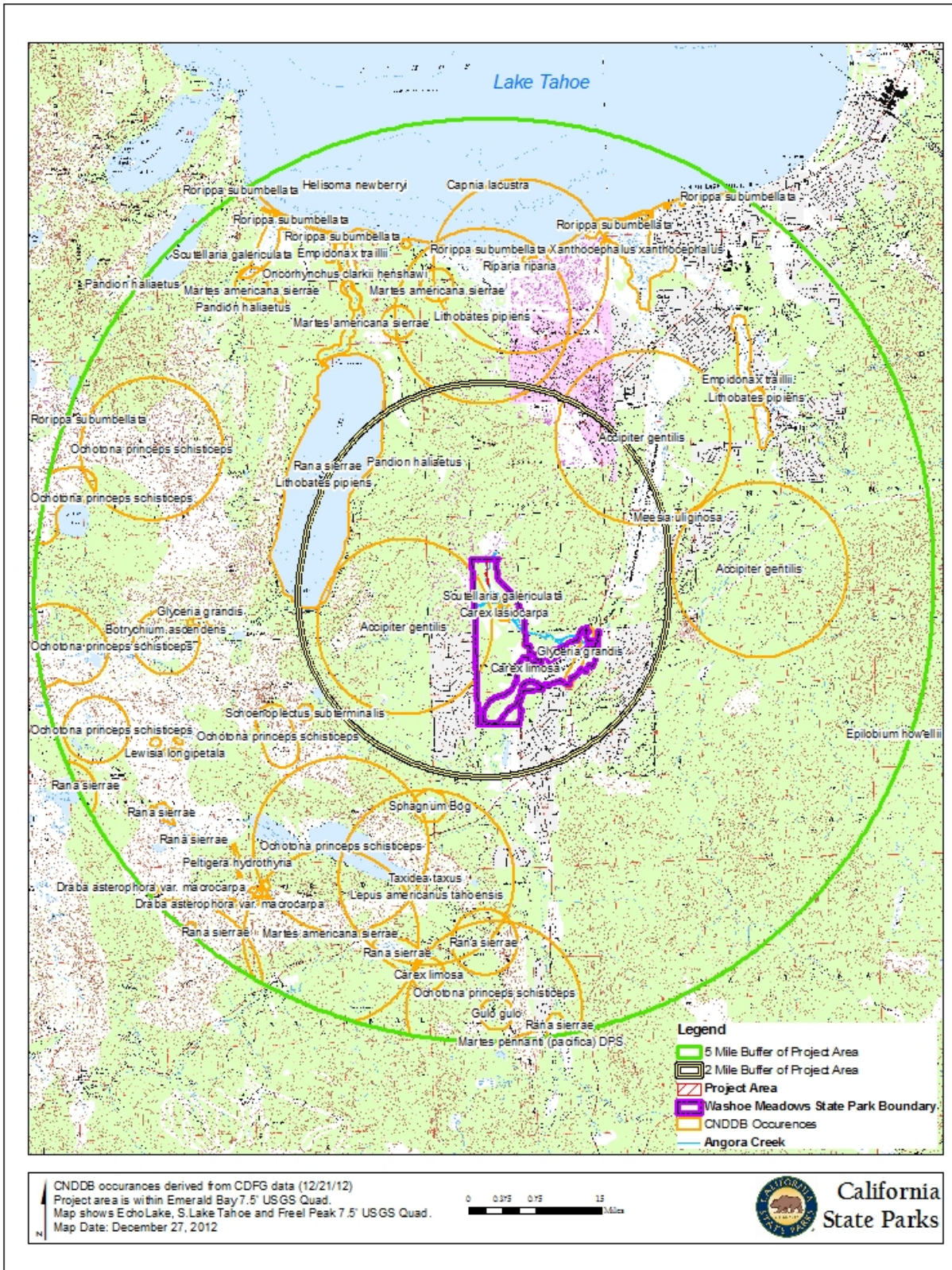


Figure 10: CNDDDB listings within five miles of the project area.

Special-status plant and animal species are described below along with their potential to occur at the project site and the impacts this project could cause to these species.

Plant Species

The initial review of available information identified 26 special-status plant, lichen, and fungi species that could occur in the region. Table 4.1 summarizes the potential for occurrence of each special-status plant species that was evaluated during this analysis. Based on a review of this list, five of the special-status plant species either have the potential to occur in or near the project area, or are known to exist in proximity to project activities.

The following table summarizes the plant species of interest for this project. It shows each species that is listed on at least one of the aforementioned plant lists, the status of each plant, and the likelihood of it occurring in the project area.

Common and Scientific Name	Regulatory Status¹	Habitat and Flowering Period	Potential for Occurrence
Tulare rockcress <i>Boechera tularensis</i>	CNPS 1B.3	Rocky slopes in montane, subalpine habitats from 6,000-11,000 feet. Blooms June-July.	None. No suitable sub alpine habitat occurs in the project area.
Upswept moonwort <i>Botrychium ascendens</i>	FSS CNPS 2.3	Grassy fields, lower montane conifer forest associated with springs and creeks from 4,900-7,500 feet. Fertile in August.	None. Suitable habitat is not present within the project area, must be spring fed.
Scalloped moonwort <i>Botrychium crenulatum</i>	FSS CNPS 2.2	Bogs, fens, meadows, seeps, freshwater marshes and lower montane conifer forest from 4,921-7,497 feet. Fertile July-August.	None. Suitable habitat is not present within the project area, must be spring fed.
Watershield <i>Brasenia schreberi</i>	CNPS 2.3	Ponds, wetlands, and slow streams from 0-7000 feet. Blooms June-September.	None. Suitable habitat is not present in the project area.
Bolander's candle moss <i>Bruchia bolanderi</i>	FSS CNPS 2.2	Lower montane conifer forest in mesic soils from 5,600-9,000 feet. Fertile period not specified.	Moderate. Suitable habitat is present near the project area, but the closest known occurrence is >6 miles away.
Davy's sedge <i>Carex davyi</i>	CNPS 1B.3	Dry often sparse meadows, slopes, subalpine coniferous forests from 4,600-10,800 feet. Blooms May-August.	None. Suitable habitat is not present in or near the project area.
Woolly-fruited sedge <i>Carex lasiocarpa</i>	CNPS 2.3	Lake, pond shores, generally standing water from 2,000– 7,000 feet. Blooms June – July.	Moderate. Suitable habitat is present in the project area, but probably not wet enough for the suitable period of time.
Shore sedge <i>Carex limosa</i>	CNPS 2.2	Upper and lower montane conifer forest, bogs, fens, meadows, marshes, seeps, and swamps; in floating bogs and soggy meadows at lake margins from 3,700-9,100 feet. Blooms June- August.	High. Suitable habitat is present in the project area, but probably not wet enough for the suitable period of time.
Alpine dusty maidens	CNPS 2.3	Lodgepole Forest, rocky or gravelly	None. Suitable habitat is

<i>Chaenactis douglasii</i> <i>var. alpina</i>		ridges, talus, fell-fields, crevices from 9,840-11,150 feet. Blooms July-September.	not present in the project area.
Subalpine cryptantha <i>Cryptantha crymophila</i>	CNPS 1B.3	Subalpine forest, rocky volcanic semi-barren soils, scree from 8,500-9,500 feet. Blooms July-August.	None. No suitable sub alpine habitat occurs in the project area.
Tahoe draba <i>Draba asterophora var. asterophora</i>	CNPS 1B.2 TRPA	Rock crevices, alpine barrens, talus from 8,500-10,800 feet. Blooms July-August.	None. No suitable sub alpine habitat occurs in the project area.
Cup lake draba <i>Draba asterophora var. macrocarpa</i>	CNPS 1B.1 TRPA	Rock crevices, alpine barrens, talus from 8,500-10,800 feet. Blooms July-August.	None. No suitable sub alpine habitat occurs in the project area.
Subalpine fireweed <i>Epilobium howellii</i>	FSS CNPS 4.3	Subalpine conifer forest. Appears restricted to wet meadows and seeps from 6,500 – 8,900 feet. Blooms July – August.	None. No suitable sub alpine habitat occurs in the project area.
Marsh willowherb <i>Epilobium palustre</i>	CNPS 2.3	Wet meadows, seeps, bogs, disturbed wet areas from 6,400-7,900 feet. Blooms July-August.	None. In California, known only in the Grass Lake area.
Jack's wild buckwheat <i>Eriogonum umbellatum var. saltuarium</i>	FSS CNPS 1B.2	Rocky, volcanic soils in meadows and upper montane conifer forest from 6,000 to 8,600 feet. Blooms July-September	None. Suitable habitat is not present in the project area.
American manna grass <i>Glyceria grandis</i>	CNPS 2.3	Bogs, fens, meadows, seeps, swamps, marshes, stream and lake margins from 50 – 6,500 feet. Blooms June – August.	Moderate. Suitable habitat is present in the project area and there is a known occurrence about a mile away on the Upper Truckee River, but the record is not recent.
Sand lily <i>Leucocrinum montanum</i>		Meadow edges into sunny upland forest from 3280-4920 feet. Blooms May-June.	Moderate. Suitable habitat is present in the project area and it is known to occur just south in the park.
Long-petaled lewisia <i>Lewisia longipetala</i>	FSS CNPS 1B.3 TRPA	Alpine boulder and rock fields, subalpine conifer forest from 8,200 – 9,600 feet. Blooms July - August.	None. No suitable subalpine habitat occurs in the project area; elevations of known occurrences exceed those on the project site.
Three-ranked hump moss <i>Meesia triquetra</i>	FSS CNPS 4.2	Bogs and fens, meadows and seeps, upper montane conifer forest on mesic soil from 4,200 – 8,200 feet. Fertile period not specified.	None. Suitable habitat is not present in or near the project area.
Broad-nerved hump moss <i>Meesia uliginosa</i>	FSS CNPS 4.2	Bogs and fens, meadows and seeps, upper montane conifer forest on mesic soil from 4,200 – 8,200 feet. Fertile period not specified.	None. Suitable habitat is not present in or near the project area.
Aquatic felt lichen <i>Peltigera hydrothyria</i>	FSS	Cold, unpolluted streams and springs in coniferous forest. Fertile period not specified.	None. No project activities will occur in suitable habitat.
Tahoe yellow cress <i>Rorippa subumbellata</i>	CE FSS (FC) CNPS 1B.1 TRPA	Decomposed granitic beaches from 6,217 – 6,234 feet. Blooms May–September.	None. Only known occurrences are along the shores of Lake Tahoe.
Water bulrush <i>Schoenoplectus subterminalis</i>	CNPS 2.3	Bogs and fens, marshes and swamps, montane lake margins in shallow water from 2,400 – 7,700	None. Suitable habitat is not present in or near the project area.

		feet. Blooms July - August	
Marsh skullcap <i>Scutellaria galericulata</i>	CNPS 2.2	Lower montane conifer forest, meadows and seeps, marshes and swamps from 0 – 6900 feet. Blooms June – September.	High. Suitable habitat is present in the project area and it is known to occur in the park less than 0.5 mile away.
Sphagnum bog <i>Sphagnum bog</i>		Sub alpine habitat from 8500-9200 feet	None. Suitable habitat is not present in or near the project area.
Slender-leaf pondweed <i>Potamogeton filiformis</i>	CNPS 2.2	Marshes and swamps, clear lakes and drainage channels, assorted shallow water from 900 – 7,000 feet. Blooms May–July.	None. Suitable habitat is not present in or near the project area.
Crème-flowered bladderwort <i>Utricularia ochroleuca</i>	CNPS 2.2	Meadows and seeps, marshes and swamps, lake margins from 4,650 – 4750 feet. Blooms June – July.	None. Only known from two populations north of Lake Tahoe.

¹ Regulatory Status Codes:

CE = California endangered

TRPA=TRPA threshold species

FSS = United States Forest Service Sensitive

FC = Federal Candidate for listing

California Native Plant Society (CNPS) Lists: List 1A = presumed extinct in California; List 1B = rare or endangered in California and elsewhere; List 2 = rare or endangered in California, more common elsewhere; List 3 = need more information; List 4 = plants of limited distribution. New threat code extensions are: .1 = seriously endangered in California; .2 = fairly endangered in California; and .3 not very endangered in California.

***Potential for occurrence** is considered the potential to breed, forage, roost, over-winter, or use the project area during migration.

Any bird or bat species could fly over the project area, but this is not considered a potential for occurrence unless the animal lands and uses the survey area for resting or foraging. The categories for the potential for occurrence include:

None: The species or natural community is known not to occur, and has no potential to occur in the project area based on sufficient surveys, the lack of suitable habitat, and/or the project area is well outside of the known distribution of the species.

Low: Potential habitat in the project area is sub-marginal and the species is not known to occur in the vicinity of the project area.

Protocol-level surveys are not recommended.

Moderate: Suitable habitat is present in the project area and the species is known to occur in the vicinity of the project area.

High: Habitat in the project area is highly suitable for the species and there are reliable records close to the project area, but the species was not observed.

Known: Species was detected in the project area or a recent reliable record exists for the project area.

Bolander's candle moss (*Bruchia bolanderi*) is a moss on the USFS Regional Forester's list for sensitive species. It is found on mesic soils in conifer forests, which border the project area. The closest known occurrence is almost seven miles away, but it was recent recorded in 2009 (CNDDDB).

Shore sedge (*Carex limosa*) and wooly-fruited sedge (*Carex lasiocarpa*) are CNPS List 2 species. These perennial herbaceous members of the sedge family (*Cyperaceae*) bloom from June to August and can be found in bogs, fens, meadows, seeps, and other saturated settings. This species has been observed in WMSP in the large undisturbed spring-fen complex area, which is much wetter. The project area is located along seasonal stream which is dry part of the year, and a crossing of Angora Creek. These areas are much drier than the fen area leaving the meadow unsuitable for these species.

American manna grass (*Glyseria grandis*) is also a CNPS List 2 species. It is found in bogs, fens, meadows, seeps, swamps, marshes, stream and lake margins. The closest known occurrence is along the Upper Truckee River in Lake Valley State Recreation Area, but this record is from 1981.

Marsh skullcap (*Scutellaria galericulata*) is a CNPS List 2 species found growing in meadows, seeps, marshes, and swamps in lower montane conifer forests. It is a perennial herb in the mint family (*Lamiaceae*). A large population was found in a meadow in WMSP in 2003 along a restored stretch of Angora Creek, just south of the project area.

Sand lily (*Leucocrinum montanum*) is not recognized as a sensitive species, but the population found in the park is outside the known range of the species and it will be protected by DPR.

Invasive Weeds

A primary purpose of DPR is to preserve the state's extraordinary biological diversity by restoring, maintaining, and protecting native species and natural communities. Invasion by exotic species is a threat to native species and the natural environment. Invasive or non-native plants can quickly inhabit and become established in areas that have been recently disturbed. Some of these invasive species, such as cheatgrass (*Bromus tectorum*), can increase risk of wildfire and rate of fire spread. There are limited distributions of invasive weeds currently within WMSP. Ground disturbance associated with heavy equipment use can create conditions that are suitable for some invasive weed species. Weeds can also be introduced to areas of native vegetation on heavy equipment or vehicles. Introduction of new weeds or spread of existing infestations could result in a significant impact to the environment.

WILDLIFE SPECIES

The following information is based on recent observations made by park staff on the proposed project in WMSP, other survey and monitoring efforts in and around the park, and information obtained from the USFWS, CNDD, the USFS Pacific Northwest Region 5 sensitive species list and other database queries.

Mammals and birds use forested areas within WMSP for concealment, cover, nesting, denning, and foraging. Large mammals using this habitat include black bear (*Ursus americanus*) and mule deer (*Odocoileus hemionus*). Medium and small mammals observed in the park include coyote (*Canis latrans*), raccoon (*Procyon lotor*), porcupine (*Erethizon dorsatum*), long-tailed weasel (*Mustela frenata*), golden-mantled ground squirrel (*Spermophilus lateralis*), lodgepole chipmunk (*Tamias speciosus*), Trowbridge's shrew (*Sorex trowbridgii*), and deer mouse (*Peromyscus maniculatus*). Common bird species include dark-eyed junco (*Junco hyemalis*), western tanager (*Piranga ludoviciana*), mountain chickadee (*Poecile gambeli*), and red-breasted nuthatch (*Sitta canadensis*).

Reptiles, amphibians, and fish comprise a relatively small percentage of the wildlife found in WMSP. In coniferous forest areas, lizard and snake species that may be found include western fence lizard (*Sceloporus occidentalis*) and western terrestrial garter snake (*Thamnophis elegans*). Most amphibians are dependent on streams, ponds, and other water bodies for reproduction and other aspects of their life. Amphibian species include Pacific tree frog (*Hyla regilla*). In Angora creek, fish species that occur include rainbow trout (*Oncorhynchus mykiss*), brook trout (*Salvelinus fontinalis*), brown trout (*Salmo trutta*), Piute sculpin (*Cottus beldingi*), and Lahonton speckled dace (*Rhinichthys osculus robustus*) (Santora 2013). Brown, rainbow, and brook trout are all non-native species.

Special-status wildlife species that have been documented in WMSP or could potentially occur in or near the project site are described below. Other species not known from the area, but included on state or federal database lists, are also discussed.

The following table summarizes the wildlife species of interest for this floodplain restoration project. It shows each species that is listed on at least one of the aforementioned sensitive wildlife lists, the status of each animal, and the likelihood of it occurring in the project area.

Common and Scientific Name	Regulatory Status¹	Habitat	Potential for Occurrence
American badger (<i>Taxidea taxus</i>)	SSC	Shrub, forest, and herbaceous habitats with friable soils.	None. Suitable habitat is not present in the project area.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	CE D – FE TRPA	Mature or old-growth trees or snags near a large body of water.	Low. Unlikely nester. May venture through the project area when foraging.
Bank swallow (<i>Riparia riparia</i>)	ST	Riparian habitats with vertical banks of fine texture soil.	None. Suitable habitat is not present in the project area, only known occurrences were at the Tahoe Keys in 1962 (10 birds) and 1976 (one bird).
California spotted owl (<i>Strix occidentalis occidentalis</i>)	SSC FSS	Old growth forests and younger forests with remnant larger trees.	None. Suitable habitat is not present in the project area. 2010 survey results imply the absence of the species.
California wolverine (<i>Gulo gulo</i>)	CT FC	Mixed conifer, wet meadow, montane chaparral.	None. Highly elusive species, closest confirmed sighting was five miles away in 1941.
Cooper's hawk (<i>Accipiter cooperii</i>)	WL	Dense stands of riparian or conifer forest near water.	High. Suitable habitat present in the vicinity of project area and may forage in the project area.
Fringed myotis (<i>Myotis thysanodes</i>)		Montane hardwood conifer forests.	Moderate. Suitable habitat is present.
Golden eagle (<i>Aquila chrysaetos</i>)	TRPA FP	Cliffs and large trees for cover and nesting, open areas for hunting.	Low. No suitable breeding habitat. May forage in the area, but unlikely due to disturbance levels and proximity of more suitable foraging habitat outside of the project area.
Gray-headed pika (<i>Ochotona princeps schisticeps</i>)		Rocky talus fields.	None. Suitable habitat is not present in the project area.
Great Basin rams-horn (<i>Helisoma newberryi</i>)		Soft mud within lakes, rivers, and spring fed creeks.	None. Suitable habitat is not present in the project area.
Lahontan cutthroat trout (<i>Oncorhynchus clarkia henshawi</i>)	FT	Cold water habitats, including streams and rivers. Flowing water with stable, vegetated	Low. Suitable habitat present, but has not been present in nearby

		banks and riffle-run areas.	watersheds in recent years.
Lake Tahoe benthic stonefly (<i>Capnia lacustra</i>)		Deep-water plant beds in Lake Tahoe.	None. Suitable habitat is not present in the project area.
Long eared owl (<i>Asio otus</i>)	SSC FSS	Dense conifer stands and riparian thickets near meadow edges.	Known. Suitable habitat present. 2010 spotted owl survey detected this species on the southwest end of the park.
Long-legged myotis (<i>Myotis volans</i>)		Forest and chaparral habitats, including early successional stages.	Moderate. Suitable habitat is present.
Mule deer (<i>Odocoileus hemionus</i>)	TRPA	Mosaic of vegetation, including dense brush, riparian, herbaceous opening, and edge habitat.	Known. Suitable habitat present, sign observed within project area.
Northern goshawk (<i>Accipiter gentilis</i>)	SSC FSS TRPA	Mature and old-growth forest stands.	Moderate. Unlikely nester, no suitable habitat present in project area, but known to occur in proximity to project area.
Northern harrier (<i>Circus cyaneus</i>)	SSC	Open wetland, grassland, and marshes, 0-9000 feet.	Known. Suitable habitat present, and has been observed near the project area in 2012.
Northern leopard frog (<i>Lithobates pipiens</i>)	SSC	Calm waters within a variety of habitats.	None. Suitable habitat is not present in the project area. Proximal populations were introduced.
Olive-sided flycatcher (<i>Contopus cooperi</i>)	SSC	Montane conifer forest.	Known. Suitable habitat is present in project area. Observed in past.
Osprey (<i>Pandion haliaetus</i>)	TRPA SSC	Riparian forest. Large snags or other suitable nesting platform within 15 miles of fishable water.	Low. Unlikely nester. Documented nesting near the project area and may be seen foraging in project area.
Pacific fisher (<i>Martes pennanti pacifica</i>)	FC	Areas of high canopy closure and large trees within coniferous forests and deciduous riparian habitats.	None. No known populations within Lake Tahoe Basin.
Sierra marten (<i>Martes americana sierrae</i>)	FSS	Mixed conifer forest with greater than 40percent crown closure, large trees and snags.	None. Suitable habitat is not present in the project area.
Sierra Nevada snowshoe hare (<i>Lepus americanus tahoensis</i>)	SSC	Montane riparian with alder and willow thickets and young conifer thickets with chaparral.	High. Suitable habitat is present. Tracks observed in the southern portion of the park in 2008 by a DPR biologist.
Sierra Nevada yellow-legged frog (<i>Rana sierrae</i>)	FC SSC	Streams, lakes, and ponds in montane riparian, lodgepole pine, and wet meadow.	None. Suitable habitat is not present in project area due to hydrologic conditions, disturbance, and predation (nonnative trout).
Townsend's big-eared bat (<i>Corynorhinus</i>)	SSC FSS	Roosts include caves, mines, and buildings while forages in mesic habitats.	Low. Suitable roosting habitat not present, may utilize project area for foraging.

<i>townsendii</i>			
Willow flycatcher (<i>Empidonax traillii</i>)	CE FSS	Wet meadow and montane riparian with willow thickets.	Low. Suitable habitat is not present within the project area. The willow population in the area is not dense enough.
Yellow-headed blackbird (<i>Xanthocephalus xanthocephalus</i>)	SSC	Emergent wetland with dense vegetation and deep water.	Moderate. Suitable foraging habitat is present in the project area, but not suitable breeding habitat.
Yellow warbler (<i>Dendroica petechia</i>)	SSC	Riparian woodland, montane chaparral, and open conifer forest with substantial shrub.	High. Suitable habitat present in the project area.

¹ Regulatory Status Codes

SSC: California Department of Fish and Game Species of Special Concern

CE: California Department of Fish and Game Endangered

CT: California Department of Fish and Game Threatened

TRPA: TRPA threshold species

D – FE: Delisted United States Fish and Wildlife Service Endangered

FSS: United States Forest Service Sensitive

FC: Candidate species for listing by United States Fish and Wildlife Service

WL: California Department of Fish and Game Watch List Species

***Potential for occurrence** is considered the potential to breed, forage, roost, over-winter, or use the project area during migration.

Any bird or bat species could fly over the project area, but this is not considered a potential for occurrence unless the animal lands and uses the survey area for resting or foraging. The categories for the potential for occurrence include:

None: The species or natural community is known not to occur, and has no potential to occur in the project area based on sufficient surveys, the lack of suitable habitat, and/or the project area is well outside of the known distribution of the species.

Low: Potential habitat in the project area is sub-marginal and the species is not known to occur in the vicinity of the project area. Protocol-level surveys are not recommended.

Moderate: Suitable habitat is present in the project area and the species is known to occur in the vicinity of the project area.

High: Habitat in the project area is highly suitable for the species and there are reliable records close to the project area, but the species was not observed.

Known: Species was detected in the project area or a recent reliable record exists for the project area.

Wildlife Species Known or Likely to Occur in WMSP and Potential for Presence at the Project Site

The following species are identified as sensitive and are known to occur within the project area..

Cooper’s hawk (*Accipiter cooperii*). This species is on the California Department of Fish and Game’s Watch List. Suitable nesting habitat is not present in the project area, but there is suitable habitat within the vicinity of the site and the project area is good foraging habitat.

Long-eared owl (*Asio otus*). This California Species of Special Concern is resident in dense conifer stands and riparian thickets near meadow edges. Breeding extends from March 1 to July 31. Long eared owls are known to nest within the Lake Tahoe Basin, although none have been observed within the proposed project area. However, suitable habitat is present. Removing or fragmenting suitable habitat or conducting forest management activities during the breeding season could result in potential impacts to this species.

Olive-sided flycatcher (*Contopus cooperi*). This California Species of Special Concern nests in open-canopy conifer forest near edge openings, usually at higher elevations (Shuford and Gardali 2008). This is a migrant species, present in the Tahoe area for breeding May 1 - August 31. Suitable habitat is present at the project site and tree removal or loud construction activities during the breeding season could impact this species.

Mule deer (*Odocoileus hemionus*). Mule deer is designated by TRPA as a special-interest species. Both the Carson River and Loyalton-Truckee deer herds occur in the Tahoe Basin during snow-free months for fawning, and summer range activities. This species uses early to mid-successional stages of several vegetation types, including riparian, meadow, and forest for summer range. Fawning habitat requirements include undisturbed meadows and riparian areas. Mule deer are not expected to fawn near the project area due to disturbance levels and nearby land uses (golf course and residential neighborhoods), but they may occasionally use the area for foraging and could be disturbed by construction activities. Deer have not been seen in the vicinity of the project during biological surveys (for other species) and the presence of dogs and other disturbance causes decrease the quality of habitat for mule deer (DPR, 2010).

Northern harrier (*Circus cyaneus*). This California Species of Special Concern nests on the ground in open grasslands, wetlands, and agricultural habitats. The species was seen regularly foraging just south of the project area in the meadow in the late summer of 2012. Northern harriers nest on the ground and human disturbance has been a source of nest failure throughout most of the species range (Shuford and Gardali 2008). The breeding season is from May-July. The individual seen may be a migrant because Northern harriers' breeding distribution is not known for this area.

Sensitive bat species. Bat species identified as medium to high conservation concern by the Western Bat Working Group with some potential to occur in or near WMSP include, but are not limited to, the Townsend's big-eared bat (*Corynorhinus townsendii*), a state species of concern, the fringed myotis (*Myotis thysanodes*) and long-legged myotis (*Myotis volans*). Roost trees and snags typical for tree-roosting bat species are often large and in some stage of decay (Brigham et al. 1997). Removal of large trees or snags will not occur during this project, but implementation of potentially disruptive project activities during the maternity period could impact these species.

Sierra Nevada snowshoe hare (*Lepus americanus tahoensis*). This California Species of Special Concern is resident in montane riparian habitat and stands of young conifer mixed with chaparral, including the early seral stages of mixed conifer forest. Sierra Nevada snowshoe hare tracks were observed in the southwest portion of WMSP by a DPR biologist (DPR, 2010).

Yellow warbler (*Dendroica petechia*). The yellow warbler is a California Species of Special Concern that typically breeds in riparian vegetation such as willows or cottonwoods close to water and also occasionally in chaparral vegetation (Shuford and Gardali 2008). The nesting season for this species is between March 1-August 31, with peak activity occurring in June. Although project activities will improve riparian habitat over the long-term, the short-term construction within occupied habitat could cause direct impacts on breeding and nesting activities, and could affect the size or viability of the local population.

Wildlife Species Occurring in or Near WMSP, but Unlikely to Occur at the Project Site

Bald eagle (*Haliaeetus leucocephalus*). This California Endangered species was recently delisted under the Federal Endangered Species Act. The bald eagle is also protected under the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act

(MBTA). Bald Eagles in California can be either year-round residents or winter migrants. Nest trees are often in very large trees in proximity to water and breeding season generally occurs between February-July (CDFG 2008). Suitable nesting and wintering habitat occurs near the proposed project site, but there is not suitable nesting habitat located within the proposed project area. There is a known nest site within proximity that may result in the species foraging in the area.

Golden eagle (*Aquila chrysaetos*). Golden eagles are habitat generalists, occupying a variety of locations including mountainous terrain. They generally nest on cliff edges or in trees in open terrain. A failed nest was located in 2009 near Angora Peak, 2-3 miles east of the project area. There are no reports of golden eagles within the project area.

Northern goshawk (*Accipiter gentilis*). This California Species of Special Concern is resident in mature and old-growth forest stands generally above 2500 feet elevation in the Sierra Nevada (Shuford and Gardali 2008). The breeding season for this species is February 15- August 15. There are historic records of northern goshawks nesting within the Cold Creek watershed, but none within proximity of the project area.

Osprey (*Pandion haliaetus*). Osprey are a migratory species and are present during the breeding season, April 1- August 15. They build large stick nests in treetops or snags in open forests within 15 miles of water used for foraging (DFG 2008). Osprey are known to nest within WMSP, but not in the project area. Suitable habitat for this species would not be altered by project activities; however project activities during the breeding season could impact this species if within a quarter mile of a nest.

Willow flycatcher (*Empidonax traillii*). The state endangered willow flycatcher is a migratory species which nests in mountain meadows with a willow component in the Sierra Nevada (Schlesinger and Holst 2000). The breeding season is from June 1- August 31. There were incidental detections of willow flycatchers in the park in 1998 on the Upper Truckee River, but not within nor proximal to the project areas. Surveys conducted by DPR biologist in 2001, 2002, and 2007 did not detect the species (DPR, 2010).

Yellow-headed blackbird (*Xanthocephalus xanthocephalus*). The yellow-headed blackbird is associated with riparian areas, nesting and foraging in emergent wetlands and along borders of lakes and ponds. Typically breeds in marshes that have tall emergent vegetation in open area near and over relatively deep water. No breeding habitat is present in the project area, but they have been observed at artificial ponds in the golf course, so they may forage in the project area.

Sensitive Natural Plant Communities

Sensitive plant communities are regionally uncommon or unique, unusually diverse, or of special concern to local, state, and federal agencies. Removal or substantial degradation of these plant communities constitutes a significant adverse impact under CEQA. There is a fen complex located in WMSP. A search of the CNDDDB did show a sphagnum bog about 2.5 miles south, but no other sensitive natural plant communities near the project area (CNDDDB 2013).

DPR also contracted CNPS to conduct a fen study in 2010 within WMSP and this sensitive habitat type was not found in or near the project area. Fens are small wet areas associated with perennial springs or seeps. Unlike a sphagnum bog, the mineral-rich water is slowing and the pH is around neutral. Fens are highly dependent on the local hydrologic regime and very susceptible to changes or disturbances of the water flow and topography. The fen at WMSP has cotton-grass (*Eriophorum gracile*), primrose monkeyflower (*Mimulus primuloides*), shore sedge (*Carex limosa*), sun dew (*Drosera rotundifolia*), Tinker's penney (*Hypericum anagalloides*), other sedges (*Carex* species), rushes (*Juncus* species), and mosses.

Wetlands and Waters of the United States

The federal Clean Water Act (CWA) defines wetlands as lands that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. USACE has jurisdictional authority of wetlands under provisions found in Section 404 of the CWA. Typically, USACE jurisdictional wetlands meet three criteria: hydrophytic vegetation, hydric soils, and wetland hydrology.

Waters of the U.S. (Other Waters) are regulated by the USACE under Sections 401 and 404 of the CWA. They are defined as all waters used in interstate or foreign commerce, waters subject to the ebb and flow of the tide, all interstate waters including interstate wetlands and all other waters such as: intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds. Waters of the U.S. are under the USACE jurisdiction.

TRPA Goals and Policy, Chapter IV: Conservation Element, Vegetation Goal #2 is to “Provide for maintenance and restoration of such unique ecosystems as wetlands, meadows, and other riparian vegetation.” TRPA’s goals and policy are implemented by TRPA and the LRWQCB by special designation for wetlands and other waters known as Stream Environment Zones (SEZs). SEZs have additional protective regulations.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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, or regulations, or by the California Department of Fish and Game or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

the U.S. Fish and Wildlife Service?

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| c) Have a substantial adverse effect on federally protected wetlands, as defined by §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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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"/> |

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Agricultural Resources is based on criteria **IV a – f**, described in the environmental checklist above.

DISCUSSION

- a. **Less than significant**- Although construction activities are not likely to have an effect on special status wildlife species due to the scattered/low-quality habitat present, if construction activities are scheduled to occur during the breeding season, there may be potential impacts.

As described in the Environmental Setting, the proposed project would enhance the meadow habitat. In order to protect sensitive, candidate, and special status species, a list of DPR Standard Projects Requirements has been incorporated into project planning and design (Section 2.7).

(i) **Sierra Nevada snowshoe hare** is a sensitive species that has been recorded present in the vicinity of the project area and has suitable habitat within the project site. Destruction of habitat (i.e. burrows) and construction disturbance during breeding season could negatively impact this species. However, this species requires dense shrubs for breeding and this habitat will not be impacted by project activities. All potential impacts on this species would be temporary and no impacts to potential breeding sites would occur; no long-term degradation of habitat would occur as a result of project implementation. Therefore, the impact on this species will be less than significant.

(ii) **Yellow Warbler, Olive-sided Flycatcher, Bats, and Other Raptors** may be present in the project area. Specifically, there are two sensitive songbird species (Yellow Warbler and Olive-sided Flycatcher) that are likely to be present in the project area, and could be reproductively active in the vicinity of the project. Removal of occupied nesting habitat

would be a direct and significant impact if yellow warblers were taken or deterred from occupying breeding and nesting locations. Cooper's hawks may venture through the project area when foraging. Raptors and songbirds are protected by the federal Migratory Bird Treaty Act (16 U.S.C. 703-712), and by the California Fish and Game Code (Sections §3503, §3503.5, and §3513). Impacts to trees actively used for nesting or roosting could result in significant impacts to these species. Implementation of **STANDARD PROJECT REQUIREMENT BIO-5** (Chapter 2) will reduce potential effects of project activities on these species to a less than significant level.

(v) **Northern goshawk** is a sensitive raptor species that has been known to nest in the vicinity of the park, but these records are not recent. There are no known nest sites within the proposed project area or suitable nesting habitat. It is possible that the species may forage within the project area, but implementation of **STANDARD PROJECT REQUIREMENT BIO-2** (Chapter 2) will reduce potential effects of project activities on this species to a less than significant level.

(viii) **Sensitive plant species** may be present in the project area, although it is unlikely, including Marsh skullcap (*Scutellaria galericulata*) and Shore sedge (*Carex limosa*). A pre-project reconnaissance by a botanist resulted with no findings of these or any sensitive plant species. Although there is very limited suitable habitat in the project area to support these species, there is a possibility that they are present. Implementation of **STANDARD PROJECT REQUIREMENT BIO-7** will reduce the impact to these species to a less than significant level.

(ix) **Invasive plant species** may be present in the project area and there is a potential for them to be introduced to disturbed areas during construction via transfer from equipment moving in and out of the area. Implementation of **STANDARD PROJECT REQUIREMENT BIO-8** will reduce the impact to a less than significant level.

b) **Less than significant**- The purpose of this project is to increase the quality of meadow habitat, so it will result in a substantial beneficial impact. During construction there will be some short term impacts to the riparian area, but per the project description mature riparian vegetation will be avoided to result in a less than significant impact. An important ecological benefit from the project includes enhancement of the wet meadow habitat. Meadows provide flood attenuation, water filtration, support of biodiversity, and water storage. The montane meadow in the park is dominated by sedges that commonly have long dense roots and rhizome networks that produce a sod inherently resistant to erosion. In areas where the creek is incised the roots have been stranded above the water table. The project will help maintain the water level of the meadow and prevent further creek incision, which would cause the water level to lower, thus making it unsuitable for sedge species and allowing other plant species to propagate. Other species' roots would not have the same ability to combat erosion. The enhanced meadows would also act as a wide floodplain, proficient at holding large volumes of water, thereby reducing peak flows and turbidity downstream. By allowing the stream flow to spread out and slow down, sediment can be deposited in the meadow where it adds mass and nutrients (Kattleman and Embury 1996). During summer, montane meadows are one of the single most important habitats for bird species in the Sierra Nevada (Graber 1996).

c) **Less than significant-** This project is designed to enhance federally protected wetlands as defined by §404 of the Clean Water Act. Sensitive habitat areas within and adjacent to project activities will be protected with incorporation of **SPECIFIC PROJECT REQUIREMENT GEO-1, STANDARD PROJECT REQUIREMENT HAZMAT-1, and STANDARD PROJECT REQUIREMENT HYDRO-1** (Chapter 2). Implementation of these actions will result in a less than significant impact.

d) **Less than significant impact-** This project will not result in substantial interference with migratory wildlife species or with established native resident or migratory wildlife corridors. Angora Creek is not considered to be a known deer migration corridor, but they are present in the area. This project will be a short-term, small scale project that will not impede the movement of migrating deer populations. The rest of the park is open wild land and provides ample area for the species' movement.

The North Branch of Angora Creek is a seasonal stream, does not support native fish populations, and is generally dry from mid-summer to fall. Hatchery fish are planted upstream in Sawmill pond and could travel down the sawmill branch in spring flow. The channel however dissipates onto the meadow with no defined flow path or connectivity to the North Fork channel. There may be groundwater in isolated pools however. In the unlikely event that fish are present in these pools they will be relocated out of the project area and a net placed to prevent re-entry. Any DFG permit requirements (DFG permit) or DFWS requirements will be incorporated as project requirements. Therefore, the project will have a less than significant impact.

e-f) **No Impact-** There are no Habitat Conservation Plans or Community Conservation Plans for this area. Therefore, there will be no impact.

V. CULTURAL RESOURCES.

ENVIRONMENTAL SETTING

The Washoe people are the original inhabitants of *Da ow aga* (Lake Tahoe) and all the lands surrounding it. Tahoe is the mispronunciation of *Da ow*, meaning “lake.” Washoe ancestral territory consists of a nuclear area with Lake Tahoe at its center, extending north to Honey Lake and south to Sonora Pass. These peripheral areas were shared with neighboring tribes such as Paiute and Shoshone to the east and Maidu and Miwok to the west. The territory incorporates two distinct ecosystems: the western arid Great Basin region of Nevada and the forested Sierra Nevada Mountains in California. The variability in climate, geography, and altitude within the territory allowed it to provide a great diversity of foods and other materials essential to life.

Archaeological information of Lake Valley suggest occupation as early as 8000 to 9000 years ago, with continuous use of the Tahoe Basin by Native Americans until incoming Euroamericans encountered Washoe people in the 1840s. Pre-Archaic remains discovered in the Truckee River Canyon suggest occupation by about 9000 years ago (Tahoe Reach Phase). Other Pre-Archaic to Early Archaic occupation dating from about 7,000 years ago was documented at Spooner Lake (Spooner Phase) near Spooner Summit overlooking Lake Tahoe. The most intensive period of occupation in the region may have occurred at varying intervals between 4000 and 500 years ago (Martis Phases during the Early and Middle Archaic, and Early Kings Beach Phase), also of Lake Archaic times, may date roughly from 500 years ago to historic contact.

As a strategy for survival, Washoe individuals and family groups developed close relationships with their Euroamerican employers. Ranchers, in particular, needed Indian labor and, in exchange, Washoe people were paid wages and/or given food. Washoe ranch hands created niches as contract laborers, such as cutting and hauling firewood. Timber harvest and sawmill operations in the Meyers area provided viable employment for men well into the 20th century, longer than in forest stands elsewhere in the Tahoe Basin that had been clear cut during the Comstock Era. The lumber business provided opportunities for Washoe wage-labor that usually included housing or camping privileges and occasionally involved year-round residence.

Cattle ranching and dairy farming began in the region in the 1850s, becoming one of the most important industries in the county by the 1870s. Ancillary to supporting the raising of cattle, the growing of grain likewise became a lucrative endeavor. In 1870, the Lake Valley Township reported production of 100,600 pounds of butter and 228 tons of hay. After international decline in grain prices in the 1890s, grain was produced mostly for use by farmers and ranchers for their own use. One of the most well-known dairy operations was that run by the Celio family. From 1870 to 1917 they operated their summer dairy in Hope Valley and sold their products from their Placerville Dairy in Placerville, on Washington Street. George Celio, one of the sons of the original pioneer Carlo Guiseppi Celio, was in charge of the dairy. They sold milk, eggs, and cream commercially, but the bulk of their business was in producing butter. In 1917 George and wife Anna later moved the summer dairy operation to Lake Valley to the property the family had purchased from the Meyers. The Celios built a two-story residence, a dairy barn, a butter house, and stables. The

buildings were later moved to another Celio property, with the exception of the dairy barn, which is outside the project area. The dairy barn remains as the only standing structure in the park.

Cultural Resources Inventory

A full accounting of known cultural resources within the project area was achieved through a comprehensive literature review and records search of DPR archives by DPR staff . Records searches undertaken for this project had two primary purposes: to determine whether known archaeological or historic resources are located within the study area; and to determine the likelihood of unrecorded resources based on the distribution and characteristics of known archaeological sites.

A cultural resource survey and inventory of WMSP was conducted by Pacific Legacy in 2003 (Shapiro, et. al.). This inventory identified 22 archaeological sites (15 prehistoric, seven historic), six linear features (e.g., road beds, fence lines, ditches), and several isolated finds (e.g., historic can, prehistoric waste flake). Archaeological data acquired during the inventory suggest that prehistoric use within the park began about 7000 years ago and continued to historic contact. Ethnographic and historic accounts confirm Washoe presence in the area into the 20th century.

Prehistoric sites at WMSP consist of bedrock milling features and flaked stone scatters. The milling sites predominantly exhibit grinding slicks rather than mortar/pestle technology. Prehistoric land use at the park appears to have been seasonal, short-term and recurrent, and directly tied to procuring and processing locally derivable resources (vegetable, fish).

The historic themes of dairying/ranching, and to a lesser extent logging, are recurrently portrayed by historical archaeological resources in the park. Archaeological surveys of park land have not been exhaustive due to intermittent ground cover and there is a high probability that additional Native American sites exist within WMSP, although no sites have been found within the project area.

CALIFORNIA ENVIRONMENTAL QUALITY ACT AND PUBLIC RESOURCE CODE

CEQA requires that projects financed by, or requiring the discretionary approval of public agencies in California, must consider the effects that a project has on historical and unique archaeological resources (Public Resources Code [PRC] Section 21083.2). PRC Sections 50201, 5024.1, 5097.98 and 21083.2, Executive Order W-26-92, and California State Health and Safety Code, Section 7050.5 provide guidance.

When a project will affect state-owned historical resources, as described in Public Resource Code (PRC) Section 5024, and the lead agency is a state agency, the lead agency will consult with the California State Historic Preservation Officer prior to approval of a proposed project (14 California Code of Regulations [CCR] Section 15064.5(b)(5)).

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Cultural Resources is based on criteria **V a – c**, described in the environmental checklist above.

DISCUSSION

a-c) The Sacred Lands Inventory review by the NAHC did not identify any recorded sacred sites, native plant gathering locations, traditional cultural properties, or other special resources that may be affected by the proposed project. However, not all sensitive cultural resources are known or mapped. There is a potential for the project to impact culturally sensitive artifacts and/or features due to ground disturbance associated with project activities. Heavy equipment and vehicles could potentially impact cultural resources if they were driven off of existing roads or out of authorized work areas. Implementation of **STANDARD PROJECT REQUIREMENTS CULT-1 AND CULT-2 AND SPECIFIC PROJECT REQUIREMENT CULT-5** (Chapter 2) will notify workers of sensitive resources, delineate areas to avoid, and establish allowable areas for vehicles, heavy equipment, staging, and storage of materials. **SPECIFIC PROJECT REQUIREMENT CULT-4** (Chapter 2) will allow monitoring to ensure these measures are being followed throughout project activities. These measures will reduce potential impacts of ground disturbance to a less than significant level. Implementation of **STANDARD PROJECT REQUIREMENTS CULT-3 AND CULT-6** (Chapter 2) will provide protection in the case of an unanticipated discovery and bring the potential of impacting these resources to a less than significant level.

VI. GEOLOGY AND SOILS.

ENVIRONMENTAL SETTING

The Tahoe Basin is located in the northern Sierra Nevada, between the Sierra crest to the west and the Carson Range to the east. The Sierra Nevada is the most prominent mountain range in California, and in conjunction with the Central Basin, forms part of the Sierra Nevada microplate, an element of the broad Pacific–North American plate boundary (Argus and Gordon 1991). Before becoming part of the transform plate margin, the Sierra Nevada was the site of a Cenozoic volcanic arc, with related deposits draping over pre-Cenozoic metamorphic and plutonic rocks (Wakabayashi and Sawyer 2000:173). The general asymmetry of the Sierra Nevada reflects uplift and gentle westward tilting, evidenced by the mountain range sloping gently westward and abruptly eastward from its crest to west of the study area.

The Tahoe Basin was formed more than two million years ago by a combination of faulting and volcanism. As a result, the basin contains a combination of granitic, metamorphic, and volcanic rock. The predominant bedrock the basin is Cretaceous granodiorite of the Sierra Nevada batholith. Cretaceous rock formed during the later period of the Mesozoic Era, characterized by the development of flowering plants and ending with the sudden extinction of dinosaurs and many other forms of life. Pre-Cretaceous metamorphic rocks are found in localized areas. Over the past 1.5 million years, the Tahoe region has been altered by glacial activity. During this activity, valley glaciers dammed the Truckee River Canyon, raising the water level of Lake Tahoe. Lacustrine sediments were deposited in the bays and canyons around the lake as a result of the rising lake levels. The faulting, folding, and in some cases overturning of rock formations that have taken place during various periods of geologic activity, in combination with erosion, deposition, and subsequent cementation of rock materials that have occurred during relatively quiet periods, have left a complex arrangement of geologic rock types and structures in the area. However, the extraordinary clarity of Lake Tahoe is related to the prevalence of resistant granitic bedrock in the Tahoe Basin and an unusually small drainage basin relative to the size of the lake.

The project area is located within an area of Holocene-age (10,000 years ago to present) floodplain deposits composed of gravelly to silty sand and sandy to clayey silt (Saucedo 2005). The area is located on the U.S. Geological Survey Emerald Bay and Echo Lake, California, 7.5-minute quadrangle maps. The study area is located in a relatively flat area; elevations range from approximately 6,300 to 6,460 feet above mean sea level.

Soils

Soil profile formation within the study area is a result of the interplay of geomorphic and hydrologic processes, vegetation, and in situ chemical processes. All of the soils in the project area are classified as Tahoe Watah soils. These are generally deep soils on gently sloping surfaces, very poorly drained. The area is an alluvial floodplain landform. Soil generally has parent of alluvium derived from mixed sources and has mucky silty loam texture.

Seismicity

The study area is located approximately five miles south of the southern shore of Lake Tahoe within a regionally significant downfaulted graben (i.e., trench-like geologic feature),

sometimes referred to as a half-graben. The study area is in Uniform Building Code Seismic Zone 3. It is not located near any active faults, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the California Department of Conservation, Division of Mines and Geology (now California Geological Survey) (Hart and Bryant 1999). However, the Geologic Map of the Lake Tahoe Basin, California and Nevada (Saucedo 2005) shows that several unnamed faults mapped near the study area.

According to the Earthquake Potential Map for Portions of Eastern California and Western Nevada, the Tahoe area is considered to have a relatively low to moderate potential for shaking caused by seismic-related activity (CGS 2005). Estimates of the peak ground acceleration have been made for the Tahoe Basin based on probabilistic models that account for multiple seismic sources. Under these models, consideration of the probability of expected seismic events is incorporated into the determination of the level of ground shaking at a particular location. The California Geological Survey has estimated the expected peak horizontal acceleration (with a ten percent chance of being exceeded in the next 50 years) generated by any of the seismic sources potentially affecting the study area as 0.275 (CGS 2003). The Nevada Seismological Laboratory catalog lists eight earthquakes with Richter magnitudes (M) of 4.2 or greater that have occurred since 1950, within approximately 18 miles of the center of Lake Tahoe. These include an M 4.5 earthquake (at Tahoe Vista, approximately 40 miles northwest of the study area) on June 3, 2004. The 2004 event has been attributed to an increase in upper crustal seismicity following a deep dike swarm of 1,611 earthquakes in the Tahoe Vista area, at the site of a deep magma injection event beneath Lake Tahoe (Smith et al. 2004:1278).

Glaciation

The glacial history of the Upper Truckee River watershed was reviewed by SH+G (2004) and River Run Consulting (2006). Tioga glaciers (about 18-26k years before present [ybp]) do not appear to have progressed further downslope than Meyers. However, Tahoe moraines (60-90k ybp) are mapped on the west edge of the project area, and pre-Wisconsin moraines are found to the east. Much of the valley floor through the project area is composed of outwash and reworked till from these glaciations and subsequent entrenchment and fluvial reworking during interglacials. Much of the sediment available locally to the modern river is found in outwash terraces, particularly in the reach upstream of the study area and in the upper third of the study area.

Changing lake levels throughout the Pleistocene and early Holocene have also strongly influenced sedimentology of the valley flat along the lower river. Evidence for this high lakestand includes a prominent bench at about elevation 6,800 feet throughout the Lake Tahoe basin, though Birkeland (1963) notes that lakestands at this elevation may have been due to volcanic flows. He also notes that deltaic sands and gravels just north of Ward Creek at an elevation of 6,440, near the top of the Ward Creek alluvial fan, are pre-Wisconsin in age.

Birkeland (1963) also suggests that Tahoe glaciation tills in the Truckee River canyon are evidence for lakestands up to 6,440 feet, or about 210 feet above current lake level. However, there is no evidence for a lakestand at this elevation in the Lake Tahoe basin, although there are several terraces around the lake at 6,320 feet, or about 90 feet above current lake level. Birkeland (1963) concludes that if the higher lakestands occurred during

the Tahoe glaciation, they did not persist for long periods, and that the evidence supports maximum lake levels of around 90 feet. There is also a prominent 40-foot (elevation 6,280 feet) high terrace in several locations around Lake Tahoe, and Birkeland attributes this to Tahoe glaciation high lakestands as well. He notes that evidence of Tioga glacial advances in the Truckee River canyon suggests that ice may have caused local damming, but was unlikely to have substantially raised the surface of Lake Tahoe. It is important to note that the high lakestands produced by glacial damming would have been relatively ephemeral; because ice is lighter than water; glacial dams tend to fail as the lake behind them fills. The resulting floods, termed jokulhlaups, often are of extremely high magnitude. Within the project area, the lower portion is mapped as lacustrine deposits, grading into Tahoe morainal deposits at the upstream end. The upstream end of the project area is near the upper end of Tahoe stage high lakestands. There was likely a delta in this area in Tahoe times, with coarser outwash deposits grading into fine-grained lacustrine deposits. Tioga and recent floodplain processes have reworked these deposits. Upstream of the Tahoe delta, the more recent fluvial processes have entrenched within the older Tahoe outwash, resulting in the modern floodplain entrenched within Tahoe and Tioga outwash terraces.

Land Capability and Coverage

The TRPA classifies land within the Tahoe Basin into Land Capability Districts (LCD) and limits the amount of development, aka “coverage” that is allowed. The project area is all within LCD 1b, as verified by TRPA in 2008 (TRPA file number LCAP2008-006)

There is no existing coverage within the project area, but there are dirt roads in the forest adjacent to the meadow. These existing roads will be used to transport materials and a temporary road will connect from the forest edge to the creek over the meadow. This road will be removed and restored upon project completion. There will be no change to coverage.

WOULD THE PROJECT:	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
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 type="checkbox"/>	<input checked="" 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 (1997), 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 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"/> |
| f) 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"/> |

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Geology and Soils is based on criteria **VI a – f**, described in the environmental checklist above.

DISCUSSION

a) No Impact The potential for earth shaking activity to occur is low to moderate according to probabilistic modeling for the area. No structures that are designed for human occupancy are located at the project site. The proposed bridge is 30 feet long and less than 3 feet above the stream channel and meadow. Therefore, there is no expected adverse effect on people or structures with regard to earthquake rupture as a result of implementation of this project.

b) Less than significant- Soil erosion could occur during project activities during construction. To minimize the potential for erosion during or after construction activities, implementation of **Standard Project Requirement Hydro -1** (Chapter 2) and the following project requirements will result in a less than significant level.

SPECIFIC PROJECT REQUIREMENT GEO-1: REMEDIATION OF HIGH DISTURBANCE AREAS
<ul style="list-style-type: none"> • All excavated areas for stream channel excavation, sill construction, bridge construction and floodplain construction, access roads and landing/staging areas will be re-vegetated or treated to recover to pre-construction conditions or better. • Where feasible access routes will be limited to previously disturbed areas. • Temporary access routes will be re-contoured to restore natural drainage patterns. • All base erosion control measures must be in place, functional, and approved in an initial inspection prior to commencement of construction activities. • Disturbed areas are to be seeded, planted, and mulched.

- c) **No impact** - Project location is located on very low angle slopes and on soils that are not subject to liquefaction. There are no structures to be impacted by subsidence. Therefore, there will be no impact from this project.
- d) **No impact** - Expansive soils are those soils that have high clay content that swell when wet and shrink when dry. Soils on the project area site do not have high clay content, are therefore not expansive, and would not result in a substantial risk to life and property.
- e) **No impact** - The project does not involve the installation of any waste disposal systems. Therefore, there would be no impact to onsite soils from this project.
- f) **No impact** - No known unique paleontological or geological resources are known to exist at the project site.

DRAFT

VII. GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE

ENVIRONMENTAL SETTING

The project area is located in the eastern portion of El Dorado County, California, within the Lake Tahoe Air Basin (LTAB). Air quality within the El Dorado County portion of the LTAB is regulated by the U.S. Environmental Protection Agency (EPA), California Air Resources Board (ARB), TRPA, and the El Dorado County Air Quality Management District (EDCAQMD).

Greenhouse Gases

Greenhouse gas emissions (GHG) are those gases that trap heat in the atmosphere. GHG are emitted by natural and industrial processes, and the accumulation of GHG in the atmosphere regulates the earth's temperature. It is widely supported that GHG contributes to global climate change, however, the extent of the change or the exact contribution of GHG, including emissions from construction activities remain in debate. In the case of greenhouse gas emissions, those emissions do not have direct environmental impact on the local area but rather a cumulative impact that affects all of the State of California and the world at large.

The State of California has taken the lead to reduce greenhouse gas emissions in California. In addition to other legislative acts and executive orders, Governor Arnold Schwarzenegger in September 2006 signed Assembly Bill 32 (AB32), the California Global Warming Solutions Act of 2006. AB32 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. CARB 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 California Office of Planning and Research to develop guidelines for the analysis and mitigation of the effects of greenhouse gas emissions (Trout 2010).

The greenhouse gases CO₂, CH₄, and N₂O are emitted during the combustion of fossil fuels in mobile sources. For most transportation modes, N₂O and CH₄ emissions comprise a relatively small proportion of overall transportation related GHG emissions (approximately 2% combined). As an interim step toward development of required guidelines, in June of 2008, OPR published a technical advisory, entitled "CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review." OPR recommends that the lead agencies under CEQA make a good-faith effort, based on available information, to estimate the quantity of GHG emissions that would be generated by a proposed project, including the emissions associated with vehicular traffic, energy consumption, water usage, and construction activities, to determine whether the impacts have the potential to result in a project or cumulative impact and to mitigate the impacts where feasible (OPR 2008). In that document, OPR acknowledged that "perhaps the most difficult part of the climate change analysis will be the determination of significance," and noted that "OPR has asked ARB technical staff to recommend a method or setting criteria which will encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the state." ARB has not yet completed this task at the time of writing.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environmental?	<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 checked="" type="checkbox"/>	<input type="checkbox"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to GHG is based on criteria **VII a – b**, described in the environmental checklist above.

DISCUSSION

a) **Less than significant-** Currently, the State has not developed specific GHG thresholds of significance for use in preparing environmental analyses under CEQA, although the State has provided guidance to lead agencies in determining significant impacts from GHG emissions as described above. For this project it is estimated that 800 gallons of diesel fuel will be used by heavy equipment, transportation of materials, and the equipment operators daily round trip to the site. The EPA (EPA, 2005) estimates 22.2 lbs of CO2 is emitted per gallon of diesel consumed. Thus a total of 17760 pounds of carbon dioxide would be generated by diesel fuel consumption. In addition other DPR staff travel to the site is estimated to use 100 gallons of gas. The EPA estimates 19.4 pound of CO2 per gallon of fuel, resulting in 1940 pounds of CO2. Thus the project is estimated to generate 19700 pounds, or 8.9 metric tons of CO2 during construction. 1 metric ton of CO2 equals 0.2727 metric tons of carbon; thus the project would result in 2.4 lbs of carbon equivalent.

The proposed creek restoration project includes enhancement of a degraded stream channel. As part of the project, habitat, vegetation, and ecosystem function would be improved. Land use creation or entitlement, energy creation, agriculture, industrial uses or other primary contributors to GHG are not proposed. GHG emissions associated with the project are limited to human activity-minimal use of diesel, operating heavy equipment, etc., over a short time period (less than one month). Also, through re-vegetation and enhancement of meadow habitat, the same plant material available to capture carbon dioxide and reduce potential GHG emissions will be increased. The amount of GHG emitted as a result of the project will be less than significant.

b) **Less than significant-** The EDAQMD has not adopted significance criteria for analyzing GHG emissions generated by development, or a methodology for analyzing impacts related to GHG emissions or global climate change therefore, the project will not conflict with any regulations.

VIII. HAZARDS AND HAZARDOUS MATERIALS.

ENVIRONMENTAL SETTING

The investigation and cleanup of hazardous materials or wastes that have been released to the environment are regulated by several State and federal laws (e.g., Resources Conservation and Recovery Act (RCRA), Comprehensive Environmental Response Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA)). In California, the U.S. Environmental Protection Agency (USEPA) has granted most enforcement authority over federal hazardous material and hazardous waste regulations to the California Environmental Protection Agency's (Cal/EPA) offices, boards, and departments. The Department of Toxic Substances Control (DTSC) and LRWQCB, provide oversight in investigation and remediation of sites affected by hazardous materials released in Meyers. Oversight is also provided by El Dorado County Environmental Management Department.

WMSP is an undeveloped park, without any facilities, and there are no hazardous materials that are stored there.

An assessment of the potential presence of hazardous materials was conducted using the State databases, Geotracker and EnviroStor (DTSC Hazardous Waste and Substance Site List). There is one site listed within a quarter-mile radius of the project site. The former Texaco station, located at the intersection of Lake Tahoe Blvd. and Sawmill Rd. is documented as a Geotracker LUST (leaking underground storage tank) site, but the cleanup was completed and the case was closed in 1992 (SWRCB 2013). According to DTSC EnviroStor database, no hazardous waste generators or Superfund sites are located within a quarter-mile of the project area (DTSC 2013).

Lake Tahoe Environmental Science Magnet School and Mt. Tallac High School are both more than 1.5 miles away from the project area. The Lake Tahoe Airport, a public air strip, is located 1.6 miles from the project area, but is well outside of the airports' comprehensive land use plan boundary.

The entire WMSP and areas surrounding the park are considered to be in a high fire hazard severity zone as defined by the California Department of Forestry (CDF) (CalFire 2007). There are urbanized residential areas adjacent to park wildlands that could pose a threat, but much of the forested lands in the park have been treated (thinned) including the forested access road area nearest to the project.

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	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 §65962.5, and, as a result, create a significant hazard to the public or environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Be 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? If so, 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) Be located in the vicinity of a private airstrip? If so, 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 from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Hazards and Hazardous Material is based on criteria **VIII a – h**, described in the environmental checklist above.

DISCUSSION

- a) **Less than Significant Impact-** Construction of the proposed project would involve the routine transport and handling of hazardous substances such as diesel fuels, lubricants, and solvents. Handling and transport of these materials could result in the exposure of workers to hazardous materials. No hazardous materials would be used or stored on the project site after project construction. Because the proposed project would be in compliance with applicable federals, state, and local laws pertaining to the handling, transport, storage, and disposal of hazardous materials, including California Occupational Health and Safety Administration requirements, this impact would be less than significant.

- b) **Less than Significant Impact-** During the project, hazardous substances could be released to the environment from construction related vehicle or equipment fluid spills or leaks. Implementation of the **PROJECT REQUIREMENT HAZMAT-1** and **PROJECT REQUIREMENT HYDRO-1** (Chapter 2) will reduce the risk to on-site workers, the public, and the environment to a less than significant level.
- c) **No Impact-** No existing, or proposed schools are located within a quarter-mile of the project area. Therefore, no impacts would occur related to emissions or handling of hazardous materials within a quarter-mile of an existing or proposed school.
- d) **No Impact-** There are no current hazardous materials sites compiled pursuant to Government Code § 65962.5 sites within a quarter-mile of the project site that could pose as a significant hazard to the public or environment.
- e-f) **No Impact-** The site is not located within two miles of a private airstrip or within the land use plan or safety areas. Therefore, there are no safety hazards for the people residing or working in the project area related to air traffic.
- g) **No Impact-** The project provides water quality improvements to the area. Emergency vehicles will be given access if required through the project area.
- h) **Less than Significant Impact-** The proposed project would not result in any uses or changes that would create a greater fire risk than currently exists. Chainsaws would be used minimally to fell a few trees to complete the access road, to cut lumber for the bridge construction, but these processes will only last a few days. Improperly outfitted exhaust systems or friction between metal parts and/or rocks could generate sparks that could result in wildfire. The previous forest management accomplishment in the park and the implementation of **PROJECT REQUIREMENT HAZMAT-2** (Chapter 2) will help prevent wildland fires. Therefore, this impact would be less than significant.

IX. HYDROLOGY AND WATER QUALITY.

ENVIRONMENTAL SETTING

Watershed Overview

Angora Creek drains a 5.9 square mile subwatershed of the Upper Truckee River originating from Angora Lakes and flows through residential areas and large meadows before entering the river along its west bank at the downstream end of the Lake Tahoe Golf Course. It is the largest tributary to The Upper Truckee River which in turn is the largest stream flowing into Lake Tahoe. Angora Creek, a perennial stream, flows from west to east through WMSP entering the park near Mountain Trout Rd. A smaller seasonal branch (North Fork) comes from the north and converges with the main branch just upstream of the previously restored reach of Angora Creek. The project area is mostly along the North Fork of Angora Creek and it's infeeders aside from the bridge site on the main stem of Angora.

The North Fork of Angora Creek is formed by two seasonal channels entering the park: one enters through a culvert under Lake Tahoe Blvd. (North Sewer Branch), and this water follows the depression left in the sewer alignment from north to south. The second (Sawmill Branch) originates at Sawmill pond, crosses under Sawmill Blvd. in a culvert, and then flows along the eastern meadow edge to the south. These two channels converge in a clump of willows just upstream of where the meadow narrows to form one channel: the North Fork of Angora Creek, near manhole 12. The project area is approximately 1.5 miles upstream from the confluence with the Upper Truckee River, and includes approximately 1,600 feet of the North Fork of Angora Creek, and a bridge site on the main channel.

The major landform is a broad low gradient meadow. The creek may have historically been multichannel and spread over the meadow, but the channel or channels would have been sinuous and would spill onto the floodplain annually and inundate the meadow during spring and early summer months. Sewers, culverts and trails have impacted the creek and led to areas of erosion and incision, disconnecting the channel from the floodplain in part of the project area. A section of the creek is captured along the sewer alignment and the straightened channel has higher slope and energy causing the channel to develop headcuts and incise.

Streamflow

The Tahoe Basin's climate is typified by cool, dry summers and cold, wet winters. Average annual precipitation ranges from 23 inches on the north end of the Upper Truckee River watershed (at Lake Tahoe) to 49 inches just south of Meyers (DWR 2004:1). The bulk of precipitation occurs as snow during winter and early spring, November- April (SH&G 2004a: III-1). There are periods of rainfall at either end of the winter season and during summer thunderstorms that may occasionally be intense (up to one inch of rain in a few hours). Infrequently, large, warm rainstorms during the winter months, dubbed "Pineapple Express" storms, bring large volumes of water and melt preexisting snowpack, producing extreme streamflows and flooding (SH&G 2004a:III-1).

The seasonal snowmelt process creates annual streamflow peaks in late spring to early

summer (May or June). The snowpack at lower elevations can melt completely and generate runoff in the urban areas and valley floors near the lake, before the snow at the headwaters melts. The minimum streamflows occur during late summer and fall.

Angora Creek and its tributaries are small drainages and ungauged; there is no U. S. Geological Survey (USGS) real time streamflow data for this creek. However DPR has collected flow monitoring information on the main stem of Angora Creek. The peak discharge generally occurs in May with snow melt and ranges from eight to ten cubic feet per second (cfs). The North Branch is much smaller and probably has a peak discharge in most years between one and three cfs.

The designs of the project will reconnect the North Fork channel to its meadow floodplain. This will inundate the meadow during spring and early summer and raise the water table during the mid to late summer.

Groundwater

The study area is within the Tahoe Valley South Subbasin of the Tahoe Valley Groundwater Basin, a water supply source for domestic and public water uses with elevations ranging from 6,225 feet at lake level to above 6,500 feet in the south (DWR 2004:1). There are a few domestic wells along Sawmill Rd. just north of the Upper Truckee River and Angora Creek confluence, and one public well south of the study area adjacent to U.S. 50 near Meyers, California (Rowe and Allander 2000:20). The California Department of Water Resources (DWR) has monitored several wells in the Tahoe Basin since the 1960s and, with the exception of some localized decreases in groundwater levels near the urban wells related to pumping, there has been no long-term change or decrease in water levels (DWR 2004:2). Groundwater levels and flow patterns in the North Branch section of Angora Creek are degraded relative to natural conditions as a result of past direct actions such as grazing and sewer development and the stream’s geomorphic response to those actions which caused the stream to incise and water tables to lower.

Water Quality

As this is a small stream with no adjacent development, here is no data on water quality for the project area. The proposed project would reduce bed and bank erosion and increase floodplain connectivity, and stabilize the channel in the vicinity of the sewerline to prevent further capture and incision. Water quality will be enhanced by the reduction of sediment supply, and the reduced the risk of contamination by sewage.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 that would not support existing land uses or planned uses for which permits have been granted)?

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Substantially alter the existing drainage pattern of the site or area, including through 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 on- or off-site flooding? | <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 type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) 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 structures that would impede or redirect flood flows within a 100-year flood hazard area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Result in inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Hydrology and Water Quality is based on criteria **IX a – j**, described in the environmental checklist above.

DISCUSSION

a) **Less than significant** - Short-term adverse impacts to water quality could occur during project construction related activities in or near the stream channel. By scheduling construction of any construction activities within the floodplain and channel during low flow or no flow periods in late summer/early fall, and implementing **SPECIFIC PROJECT REQUIREMENTS GEO-1 and WQ-1** and **STANDARD PROJECT REQUIREMENT HYDRO-1**, the risk of water quality impacts during construction will be less than significant. The project would be required to

obtain and comply with multiple permitting/regulatory agencies permits and conditions prior to project implementation. This permitting requirement is developed to minimize the risk of water quality degradation from sediment and other potential hazardous materials used during project construction.

- b) **No impact**– The project will not significantly alter or deplete local groundwater. Local groundwater may be encountered during some excavation activities; this will not impact the groundwater flow, recharge or direction within the project area. Groundwater encountered will be used for watering transplants, pumped to natural depressions or dispersed at a distance not less than 100 feet from the channel and no return flow will be allowed to the channel. The project may slightly raise groundwater levels in the headcut section.
- c) **Less than significant**– The existing channel profile will be stabilized with a combination of native sod and rock sills at local headcuts. Revegetation of the disturbed areas on the stream banks and floodplain will stabilize soils. Implementation of **STANDARD PROJECT REQUIREMENT HYDRO-1, SPECIFIC PROJECT REQUIREMENT GEO-1 AND SPECIFIC PROJECT REQUIREMENT - WQ-1** (Chapter 2) will reduce the potential impact to construction related on or off-site erosion or siltation to a less than significant level.
- d) **Less than significant**– The placement of sod and stabilization of the headcuts will improve floodplain connectivity. The meadow area may have a longer inundation period during spring and summer, but there are no structures that will be affected by flooding.
- e) **No Impact**- The project would not contribute runoff water that would exceed existing or planned stormwater drainage basin capacity, because there are currently no stormwater drainage systems in the project area.
- f) **Less than significant**– As discussed in sections A-E above, the project will not substantially degrade water quality. Along with **STANDARD PROJECT REQUIREMENT HAZMAT-1** (Chapter 2) that will minimize the impact of vehicle or equipment fluid spills, implementation of **STANDARD PROJECT REQUIREMENT HYDRO-1, SPECIFIC PROJECT REQUIREMENTS GEO-1 AND WQ-1** (Chapter 2) will reduce the potential impact to water quality to a less than significant level.
- g) **No impact** – There are no structures in the vicinity and project does not involve the construction of any housing in the 100-year floodplain nor does the project create the circumstance of introducing existing housing into the 100-year flood hazard map.
- h) **No Impact**- the project will not impede 100 year flows
- i) **No impact**– There are no dams or levees within the project area.
- j) **No impact**– The project is not located within a region that would be affected by seiche, tsunami, or mudflow.

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X. LAND USE AND PLANNING.

ENVIRONMENTAL SETTING

WMSP lies approximately 1.5 miles southwest of the city of South Lake Tahoe. In proximity to this sub-urban area with a population of over 20,000, WMSP offers a wide array of recreational opportunities for locals and visitors.

WMSP is in El Dorado County. However, El Dorado County does not have jurisdiction over use of state lands. The *El Dorado County General Plan* is designed to incorporate El Dorado County's regulations with those of the TRPA within the Tahoe Basin (El Dorado County 2004). El Dorado County has accepted TRPA's plan area statements (PAS), which define land use classification, planning considerations, special policies, and permissible uses of land in the Tahoe Basin. The area of potential effect is located within PAS 119 (Country Club Meadow). TRPA Code of Ordinances requires that all projects be consistent with the provisions of a particular area's applicable PAS (TRPA 2011). PAS 119 included that area from the Upper Truckee River near the airport to the bridge at the bottom of the Echo Summit grade. The current land use designation is recreation with a special designation of Scenic Restoration Area. Almost 80 percent of the existing environment is classified as SEZ. Permissible recreational uses in the PAS are cross-country skiing courses, day use areas, riding and hiking trails, outdoor recreation concessions, golf courses, snowmobile courses, and visitor information centers. Allowable resource management uses in PAS 119 include fuels treatment, nonstructural wildlife habitat management, prescribed fire management, erosion control, sensitive plant management, runoff control, and SEZ restoration. The planning statement for PAS 119 is "This area should be managed for outdoor recreation and natural resource values to include opportunities for SEZ restoration" (TRPA 2005).

Land within and adjacent to WMSP is made up of and surrounded by a checkerboard of owners and uses, comprised of public, residential, and forest lands. The land has also been subjected to other substantial human and livestock disturbances throughout time to include grazing, dairy operations, gravel extraction, timber harvesting, and utilities.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
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 the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a 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"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Land Use and Planning is based on criteria **X a – c**, described in the environmental checklist above.

DISCUSSION

- a) **No impact** – The project is located entirely within the property boundaries of WMSP, which is used for recreation and contains no residential or commercial development.
- b) **No impact** – As noted in the Environmental Setting and DISCUSSION (a) above, the proposed project sites occur within a state park unit within the Lake Tahoe Basin. No project elements are in conflict with the zoning, regulatory policies, land use plans, conservation plans, or ordinances for this area. All appropriate interagency coordination, consultation and permits would be completed or obtained, in compliance with all applicable local, state, and federal requirements.
- c) **No impact** – There are no applicable habitat conservation plans or natural community conservation plans in effect for the park units.

XI. MINERAL RESOURCES.

ENVIRONMENTAL SETTING

Under the Surface Mining and Reclamation Act (SMARA), the State Mining and Geology Board may designate certain mineral deposits as being regionally significant to satisfy future needs. The board's decision to designate an area is based on a classification report prepared by the California Division of Mines and Geology (CDMG) and on input from agencies and the public. The study area is underlain by silt, silty sand, sandy to clayey silt, sand and gravel, and artificial fill of varying composition.

According to the map of Important Mineral Resource Areas published by: California Department of Conservation (2003) found in the *El Dorado County General Plan*, there are no important mineral resource zones present in or in proximity to the project area (El Dorado 2004).

DPR policy does not permit the commercial extraction of mineral resources due to impacts to resources and in accordance with the Public Resources Code § 5001.65

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Result in the loss of availability of a known mineral resource that is or 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"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Mineral Resources is based on criteria **XI a – b**, described in the environmental checklist above.

DISCUSSION

a-b) **No impact** – No significant mineral resources have been identified within the boundaries of the state park unit and all project actions would occur within DPR lands. The project would not change land use activities on the site and would therefore not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. As stated in the Environmental Setting above, under PRC § 5001.65, mining within any unit of the State Park System is prohibited.

XII. NOISE.

ENVIRONMENTAL SETTING

WMSP consists of a natural area with volunteer trails and unpaved service access roads. The project area is surrounded by the community of Meyers, residential neighborhoods to the west, Amacker ranch and Sawmill Rd. area to the east, and Lake Tahoe Blvd. and U.S. Forest Service land to the north. Generally, low-density residential land uses to the west and mostly open undeveloped land to the north and east.

The existing noise environment within the project area is influenced by vehicle traffic from Lake Tahoe Blvd, park visitors, service and maintenance crews, and natural sources, such as birds, rustling leaves, and wind. The average noise level is about 43dBA (DPR, 2010).

The proposed project's location is within an undeveloped section of WMSP where only dispersed recreational opportunities exist for the park visitor. This area is bordered by residential areas.

Sound is any detectable fluctuation in air pressure and generally is measured on a logarithmic scale in decibels (dB). When unwanted sound (i.e., noise) is measured, an electronic filter is used to de-emphasize extreme high and low frequencies to which human hearing has decreased sensitivity. Resulting noise measurements are expressed in weighting frequencies called A-weighted decibels (dBA). While zero dBA is the low threshold of human hearing, a sustained noise equal or greater than 90 dBA is painful and can cause hearing loss (Table XII-1, Bearden 2000).

Table XII-1: Sound Levels Generated by Various Sources of Noise

Sound Level	dBA
Quiet library, soft whispers	30
Living room, refrigerator	40
Light traffic, normal conversation, quiet office	50
Air conditioner at 20 feet, sewing machine	60
Vacuum cleaner, hair dryer, noisy restaurant	70
Average city traffic, garbage disposals, alarm clock at 2 feet	80
Constant exposure to the following sound levels can lead to hearing loss	
Subway, motorcycle, truck traffic, lawn mower	90
Garbage truck, chain saw, pneumatic drill	100
Rock band concert in front of speakers, thunderclap	120
Gunshot blast, jet plane	140
Rocket launching pad	180

(Bearden 2000)

The Federal Transit Administration released a report "Transit Noise and Vibration Impact Assessment" in May 2006. This manual provides guidance for preparing and reviewing the noise and vibration sections for environmental documents. The table below outlines selected equipment that may be used in the proposed project and their associated noise levels (Table XII-2, FTA 2006)

Equipment	Noise Level in dBA at 50 feet
Dozer	85
Loader	85
Saw	76
Truck	88
Excavator	85
Pump	77

Source: FTA, May 2006

Noise is further described according to how it varies over time and whether the source of noise is moving or stationary. Background noise in a particular location gradually varies over the course of a 24-hour period with the addition and elimination of individual sounds. Several terms are used to describe noise and its effects. The equivalent sound level (L_{eq}) describes the average noise exposure level for a specific location during a specific time period, typically over the course of one hour. The Community Noise Equivalent Level (CNEL) is a 24 hour average of L_{eq} with an additional five dBA penalty for noise generated between the hours of 7:00 p.m. and 10:00 p.m. and a ten dBA penalty during the hours of 10:00 p.m. and 7:00 a.m. The penalties account for how much more pronounced a noise is at night when other sounds have diminished. Federal, state, and local governments have defined noise and established standards to protect people from adverse health effects such as hearing loss and disruption of certain activities. Noise is defined in the California Noise Control Act, Health and Safety Code, California Code of Regulations (CCR) § 46,022 as excessive or undesirable sound made by people, motorized vehicles, boats, aircraft, industrial equipment, construction, and other objects.

The Lake Tahoe Airport airstrip is about 1.6 miles away from the project area, and the project is well out of the airport comprehensive land use plan boundaries (Brand and French 2007).

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generate or expose people to excessive ground borne vibrations or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

in excess of noise levels existing without the project?

- e) Be 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? If so, would the project expose people residing or working in the project area to excessive noise levels?
- f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels?

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Noise is based on criteria **XII a – f**, described in the environmental checklist above.

DISCUSSION

- a) **Less than significant** – The use of chainsaws and other various powered hand tools will be used in the cutting and removal of trees within the meadow access road area. Trucks and heavy equipment such as loaders, dozers, and excavators will be used in the construction activities. Trucks will be transporting excavated fill materials and excavators shaping the channel and constructing sills. The project area would be closed to public access during the construction time period by issuing a DPR Superintendents Closure Order. Working hours will be restricted to between 7:00 a.m. and 6:00 p.m. Noise associated with the proposed project is considered to have a potentially significant short-term impact to nearby noise-sensitive receptors. Implementation of **STANDARD PROJECT REQUIREMENT NOISE-1** for noise exposure will reduce potential impacts of the project to a less than significant level.
- a) **Less than significant** – Project related activities would not involve the use of explosives, pile driving, or other intensive construction techniques that could generate significant ground vibration or noise. Minor vibration adjacent to heavy equipment, such as the excavator, during construction work would be generated only on a short term basis, and the area affected by ground borne vibrations would be closed to the public during the construction time period. Therefore, ground-borne vibrations and noises would have a less than significant impact.
- c) **No impact** – After the final construction of the project, all the heavy equipment and sources of project related ambient noises would be removed from the site. The project would not create any source of noise that would contribute to a substantial permanent increase in noise levels in the vicinity of the project areas.
- d) **Less than significant** - See descriptions above in sections A and C. Implementation of **STANDARD PROJECT REQUIREMENT NOISE-1** will reduce any potential impacts to a less than significant level.
- e) **No impact** –The project it is not within the airport comprehensive land use plan boundaries and, therefore, workers would not be affected by the noise.

f) **No impact** - The project is not located within two miles of any privately owned airstrip.

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XIII. POPULATION AND HOUSING

ENVIRONMENTAL SETTING

The project site is located approximately 1.5 miles from Meyers CA. The California Department of Finance (DOF) published the following estimates of population and housing in South Lake Tahoe as of January 1, 2012: Total Population – 21,343, Total Housing Units – 15,105, Occupied Housing Units – 8,928 (DOF, 2012).

Washoe Meadows is an undeveloped park and does not provide any housing or public infrastructure. It is in the TRPA (PAS) 119, Country Club Meadow. The land use classification for PAS 119 is recreation.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
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"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis for determining the significance of impacts of the Proposed Action to Population and Housing is based on criteria **XIII** a-c, described in the environmental checklist above.

DISCUSSION

a, b, c) **No impact** – The project does not involve any increase or reduction in available housing, or infrastructure that would lead to population growth, or the displacement of people.

XIV. PUBLIC SERVICES.

ENVIRONMENTAL SETTING

WMSP is located roughly three miles from the community of Meyers. The USFS and CalFire provide fire protection to the project site. The Lake Valley Fire Protection District station is located approximately two miles away from the project site. Law enforcement in the project area is provided by DPR Rangers. The Eldorado County Sheriff's Department responds to emergency calls and assists with criminal investigations. The nearest school, Lake Tahoe Environmental Science Magnet School (1095 E San Bernardino Ave., South Lake Tahoe) is located approximately 1.5 mile southeast of the project site.

DPR rangers are peace officers under state law with authority similar to city police or county sheriff personnel. The ranger's primary responsibility is to enforce park policies and regulations within WMSP. The Lake Sector office (also the unit office for this park) is located at 7595 West Lake Blvd., Tahoma. Four rangers are assigned to the Lake Sector, which includes several other park units. Response times vary due to the distance of the patrolling ranger(s), potential road closures, and employee shortages.

The California Highway Patrol has primary authority on traffic-related issues on all roads in the unincorporated county and on all state highways in California (DPR et al., 2010). The highway patrol has a station at 2063 Hopi Avenue, South Lake Tahoe, within 1.5 miles of the project area.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis for determining the significance of impacts of the Proposed Action to Public Services is based on criteria **XIV a**, described in the environmental checklist above.

DISCUSSION

- a) i) **No Impact-** The proposed project would not result in any changes to the projected population of the area, nor would it involve the construction of any structures that would require additional fire protection services. The project would not change the demand for fire protection services in the project area. Because demand for fire protection services would not increase, there would be no impact on fire services.
- ii) **No Impact-** The proposed project would not increase the population in the project area, and public access to the project site would remain the same as existing conditions. Therefore, the project would not cause an increase in demand for police services beyond existing conditions.
- iii) **No Impact-** The project would not increase the population or housing in the project area; therefore, it would not increase the number of students in the project area. The project would have no impact on schools.
- iv) **No Impact-** The project site is located within a state park unit, but the specific project area does not provide a recreational habitat that is recognized by visitors. There will be no development of facilities associated with the project that would increase the need for DPR staff services. Although recreation does occur near the project site, the proposed project would not increase the demand for park facilities beyond the existing conditions. Therefore, the proposed project would have no impact on parks.
- v) **No Impact-** The proposed project would have no impact on other public facilities because no additional residences or businesses would be constructed that could lead to increased demand on public facilities.

XV. RECREATION.

ENVIRONMENTAL SETTING

WMSP has a wide range of undeveloped recreational opportunities for visitors. The park is popular with local residents for dispersed recreational activities within a short distance from their homes. The proposed project location is within an undeveloped section of WMSP, and receives very light recreational activity in the area surrounding the project. There are no formal trailheads, trails, or roads within the project area to facilitate recreational opportunities, because it is a sensitive wet meadow. The Upper Truckee River that runs through the south end of the park, and is about 1.5 miles away from the project, is a popular fishing and swimming location. There is no destination of significance located in or near the project area.

Elsewhere in the park, year-round recreational opportunities are available. The park is used for hiking and biking during the summer months, and informal cross-country skiing and snowshoeing are popular when snow is on the ground. Most recreationalists in these areas are locals from the surrounding neighborhoods.

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Recreation is based on criteria **XV a – b**, described in the environmental checklist above.

DISCUSSION

a-b) **No Impact-** The proposed project will not include the construction of any recreational facilities. There are no trails or recreational facilities in the project area, therefore, the project will not increase the use of existing recreational facilities.

XVI. TRANSPORTATION/TRAFFIC.

ENVIRONMENTAL SETTING

The project area is located in an undeveloped state park, WMSP. There are no improved public roads or parking areas within or the project area. There are several gated unpaved roads that enter the park and will be used as haul roads during project construction. These unmaintained roads are used by park personnel to perform park maintenance and enforcement activities. STPUD uses the park roads to access the sewer line manholes for utility management (Figure 2). The project location roadway network is depicted in Figure 10 below. Material transport to the site and personnel access to the site will be along Highway 0, Lake Tahoe Blvd. and Sawmill Road.

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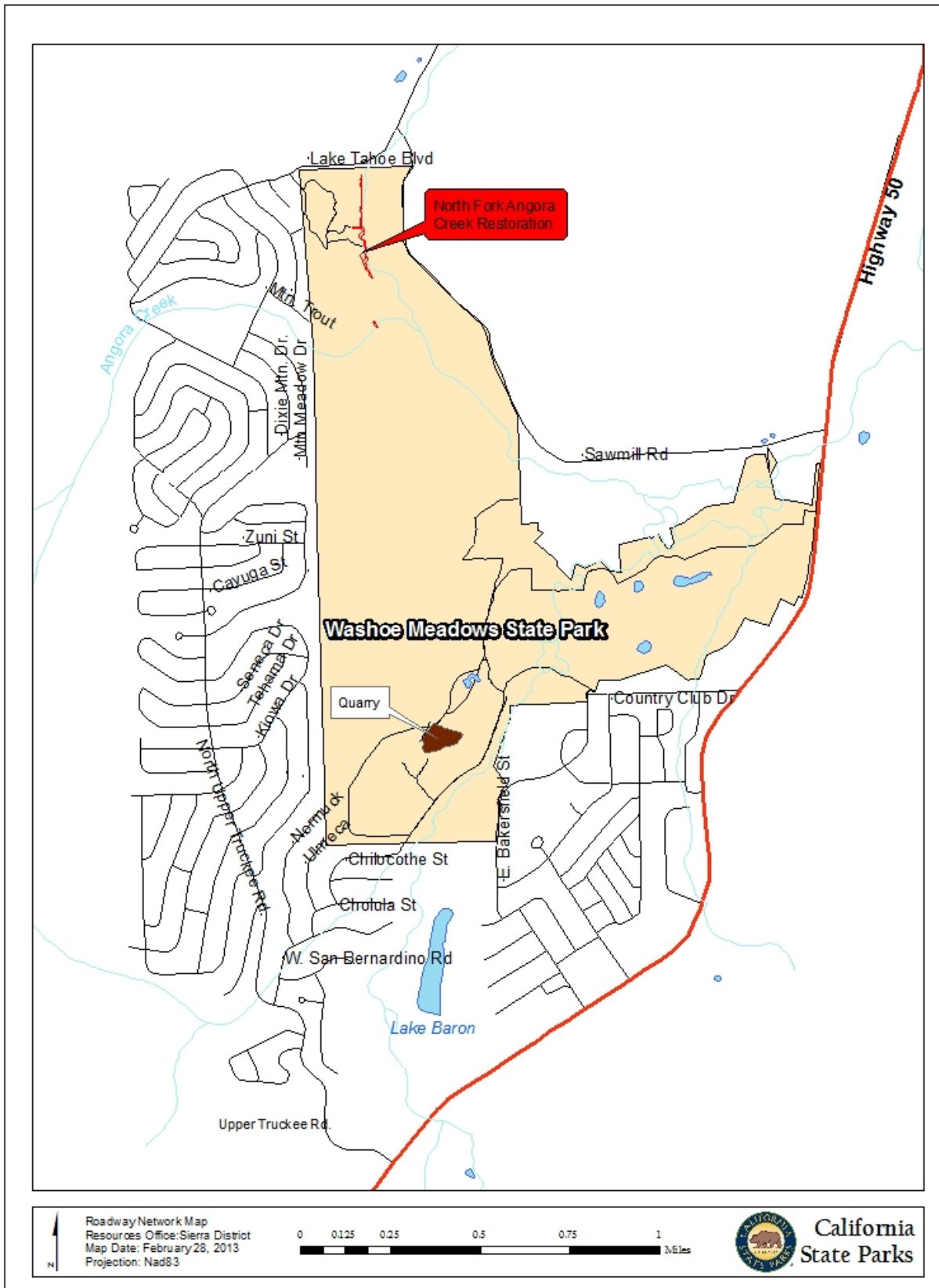


Figure 11: Roadways and Highways in the Project Vicinity

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
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?	<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) Cause 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) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that would substantially increase hazards?	<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) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) 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"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Transportation and Traffic is based on criteria **XVI a – g**, described in the environmental checklist above.

DISCUSSION

a-g) **No impact** – Existing land uses within the project area would not be changed. Hauling of materials for maintenance of the existing road from the quarry will involve transporting the material along Upper Truckee Rd. to Lake Tahoe Blvd. and finally into the northern gated entrance road of the park. Imported rock and gravel will be over Highway 50 and then follow the same route, or may be brought over Sawmill Rd. The project itself will not interfere with the traffic on these roads because the project, including staging areas, is

away from the road and only limited hauling will occur (approximately two-six trips/day on average for about three weeks) and not during morning and evening commuting hours. Personnel associated with the project will be using Lake Tahoe Blvd. to access the construction site, this would occur during business hours on weekdays when park visitation is at a minimal level. Vehicles and equipment will be staged within the project area that will be closed to public use during construction, thus not impacting visitation or traffic patterns. The project will construct a temporary haul route that connects to other park roads but no trailhead, developed roads, developed parking, or any other infrastructure will be constructed as part of this project. Because of this, the project will maintain visitor use patterns, and levels that currently exist.

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XVII. UTILITIES AND SERVICE SYSTEMS.

ENVIRONMENTAL SETTING

The utility provider that serves the project area is the STPUD for water and wastewater service. All of the water used by STPUD comes from underground aquifers and no water is taken from Lake Tahoe or any other surface-water source. There are no STPUD water lines within the project area. There is a wastewater sewer line that runs through the project area and connects to a main transport line (Figure 11). These sewer lines serve the Upper Truckee River and Sawmill Rd. neighborhoods.

The project objective is to improve the entrenchment of the meadow above the existing sewer line to prevent contamination of the reach. The infrastructure of these lines and the utility services they provide will not be impacted by construction activities. The sewerline will be located in the project vicinity and will be avoided during construction.

Standards for water, wastewater treatment, electricity, and natural gas are set by El Dorado County. Most of these regulations can be found in Chapter 5 of the “Public services and Utilities” section of the *El Dorado County General Plan*. The proposed project will abide by these regulations.

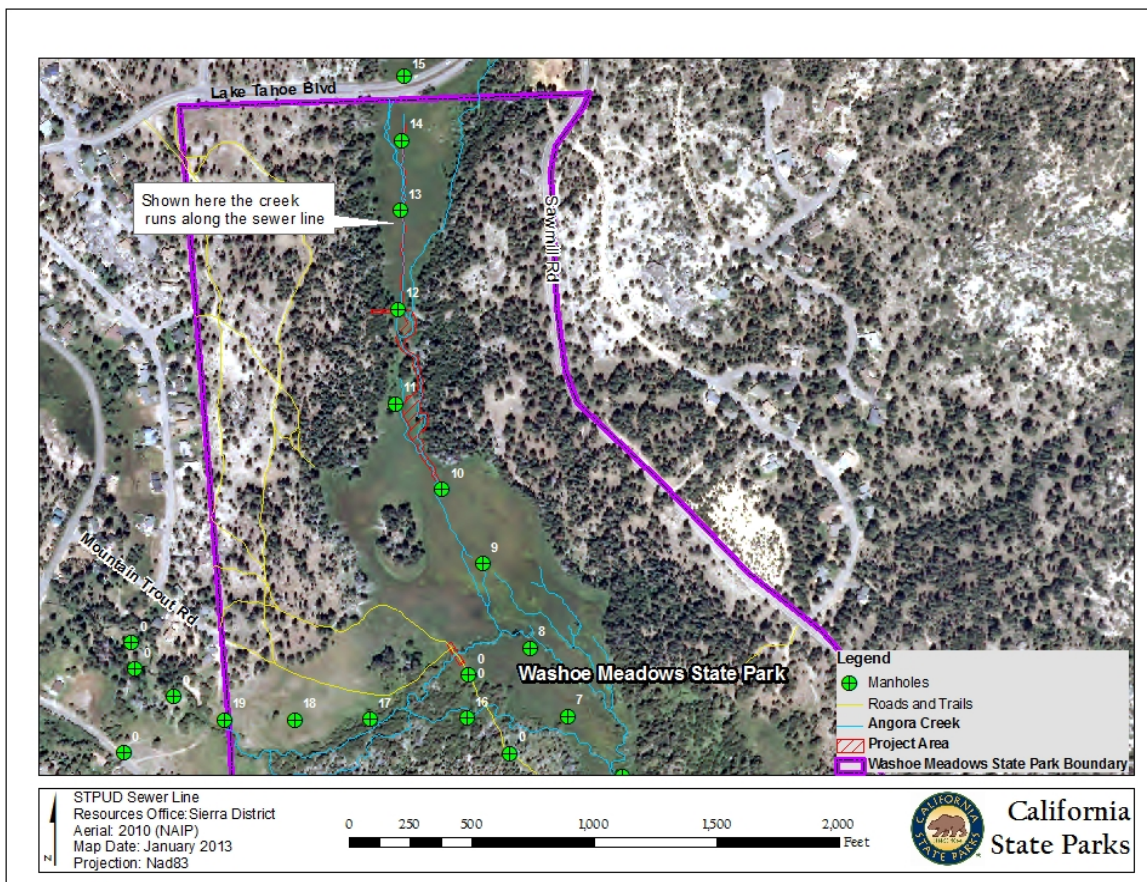


Figure 12: STPUD Sewer Line Manholes within the Project Vicinity

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
a) Exceed wastewater treatment restrictions or standards 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Would the construction of these facilities 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Would the construction of these facilities 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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination, by the wastewater treatment provider that serves or may serve the project, that it has adequate capacity to service the project's anticipated 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 as they relate to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis of determining the significance of impacts of the Proposed Action to Utilities and Service Systems is based on criteria **XVII a – g**, described in the environmental checklist above.

DISCUSSION

- a) **No Impact-** The proposed project would not generate any new sources of wastewater and, therefore, would not exceed wastewater treatment requirements of the LRWQCB. No improvements are proposed that would require wastewater treatment.
- b-c) **No Impact-** Construction or expansion of any on-site or off-site utilities facilities is not required by the proposed project. Therefore, the significant environmental effects caused by the construction of such, would not occur, no impact.
- d) **Less than significant-** During construction, water for dust suppression would be provided via a district water source located at Sugar Pine Point State Park if needs exceed this resource then a metered STPUD hydrant will be used. A permit will be needed to use STPUD hydrant water. No additional water would be needed during

project operation. Because DPR would be required to comply with all applicable permitting and metering requirements of the LRWQCB pertaining to use of water for dust suppression, this impact would be less than significant.

- e) **No Impact-** The project site is not directly served by any wastewater treatment facilities, nor would wastewater be generated at the project site; therefore, the project would not affect the capacity of any wastewater treatment facilities. The existing STPUD sewer line will be avoided during construction. There would be no impact.
- f-g) **No Impact-** As proposed, the project will comply with federal, state, and local statutes and regulations as they relate to solid waste.

DRAFT

CHAPTER 4 MANDATORY FINDINGS OF SIGNIFICANCE

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
WOULD THE PROJECT:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probably future projects?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) The proposed project was evaluated for potential significant adverse impacts to the natural environment and its plant and wildlife communities (Biological Resources, Hydrology and Water Quality). The project site potentially supports certain special status animal species and natural communities. DPR has determined that the project could have the potential to degrade the quality of the habitat and/or reduce the number or restrict the range of sensitive animals. The project also could have the potential to degrade water quality by causing erosion, sedimentation, and release of pollutants, such as vehicle fluids and elevated metal concentrations into the environment. However, full implementation of all project requirements incorporated into this project would reduce those impacts, both individually and cumulatively, to a less than significant level.

- b) The proposed project was evaluated for potential significant adverse impacts to the cultural resources of DPR lands within WMSP. DPR has determined that proposed project activities do not have the potential to cause significant adverse impacts to historic and archaeological resources, as there are none present in the project area. In addition, full implementation of the project requirements incorporated into this document would reduce impacts to previously unidentified archaeological sites and features to a less than significant level.

- c) The project would involve the enhancement of the meadow habitat surrounding Angora Creek. All of the project's impacts would be less than significant. Many project impacts are site specific (e.g., soils) and would not combine with the impacts of other projects in the area to be a cumulative impact. This is true for the following resource areas: aesthetics, agricultural resources, geology and soils, hazards and hazardous materials, mineral resources, noise, population and housing, public services, and utilities and service systems. Therefore, the impacts to these resource areas will not be increased and remain at a less than significant level.
- d) Most project-related environmental effects have been determined to pose a less than significant impact on humans. However, possible impacts from fugitive dust (Air Quality), construction accidents, spills, construction-generated noise (Noise), though temporary in nature, have the potential to result in significant adverse effects on humans. These potential impacts would be reduced to a less than significant level with the implementation of all project requirements incorporated into this project.

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CHAPTER 6

REPORT PREPARATION

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Silver Hartman -- Forestry Aid

Denise Jaffke – Archeologist

Ashli Lewis – Forestry Aid

Tamara Sasaki – Sr. Environmental Scientist

Nathan Shasha – Environmental Scientist

Dan Shaw – Environmental Scientist

Cyndie Walck – Engineering Geologist

APPENDIX A
ACRONYMS

BGEPA	Bald and Golden Eagle Protection Act
BMP	Best management practices
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDOC	California Department of Conservation
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDF	California Department of Forestry
CDMG	California Division of Mines and Geology
CDPR	California Department of Parks and Recreation
CDWR	California Department of Water Resources
Cal/EPA	California Environmental Protection Agency
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
CNDD	California Natural Diversity Database
CSQA	California Stormwater Quality Association
CRHR	California Register of Historic Resources
CO	carbon monoxide
CAA	Clean Air Act
CWA	Clean Water Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CNEL	Community Noise Equivalent Level
cfs	Cubic feet per second
CNPS	California Native Plant Society
CPESC	Certified Professional in Erosion and Sediment
Db	decibels
dBA	A-weighted decibels
DPR	Department of Parks and Recreation
DTSC	Department of Toxic Substance Control
EDCAQMD	El Dorado County Air Quality Management District
ft	feet
GHG	greenhouse gas emissions
GPS	Global Positioning System
IS	Initial Study
L _{eq}	equivalent sound level

LP	Long Profile
LOS	Level of Service
LRWQCB	Lahontan Regional Water Quality Control Board
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	Negative Declaration
NRHD	National Register of Historic Places
MBTA	Migratory Bird Treaty Act
mph	miles per hour
NAHC	Native American Heritage Commission
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
OHP	Office of Historic Preservation
O ₃	ozone
PAS	Plan Area Statement
PM10	particulate matter less than 10 microns diameter
PRC	Public Resources Code
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gas
SEZ	Stream Environment Zone
SMARA	Surface Mining and Reclamation Act
SP	State Park
SPRP	Spill Prevention and Response Plan
STPUD	South Tahoe Public Utility District
SRA	State Recreation Area
SO ₂	sulfur dioxide
SARA	Superfund Amendments and Reauthorization Act
TNF	Tahoe National Forest
TMDL	Total Maximum Daily Load
TRPA	Tahoe Regional Planning Agency
USACE	United States Army Core of Engineers
US/EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USFS	United States Forest Service
USGS	United States Geological Survey
VRPs	Visibility Reducing Particles
WMSP	Washoe Meadows State Park