# FINAL

# Environmental Impact Report for the Greenhorn Sediment Removal at Rollins Reservoir Project State Clearinghouse No. 2017052054 July 2019

*Prepared for:*

**Nevada Irrigation District**

*Prepared by:*

Janelle Nolan & associates

*With assistance from:*

Cardno®

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## Acronyms and Abbreviations

| | |
|---|---|
| AB | Assembly Bill |
| CEQA | California Environmental Quality Act |
| EIR | Environmental Impact Report |
| MMRP | Mitigation, Monitoring, and Reporting Plan |
| NAHC | Native American Heritage Commission |
| NID | Nevada Irrigation District |
| Project or Proposed Project | Greenhorn Sediment Removal at Rollins Reservoir Project |
| SA | Staging Area |
| UAIC | United Auburn Indian Community |

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# CHAPTER 1
# INTRODUCTION

The Nevada Irrigation District (NID) has prepared this Final Environmental Impact Report (EIR) to address comments received on the Draft EIR for the Greenhorn Creek Sediment Removal at Rollins Reservoir Project (Proposed Project or Project). The purpose of the Proposed Project is to remove and dispose of sediments that have accumulated in the Greenhorn Arm of Rollins Reservoir to maintain and/or restore the reservoir's water storage capacity, prevent further migration of suspended sediment, and restore recreational opportunities.

Under the California Environmental Quality Act (CEQA), the lead agency for a proposed project is required, after completion of a Draft EIR, to consult with and obtain comments from public agencies with legal jurisdiction concerning the proposed project, and to provide the general public with opportunities to comment on the Draft EIR. As the lead agency for the Project, the NID must prepare a Final EIR for consideration by its Board before they may take action on a project. This document has been prepared as a companion to the Draft EIR, as allowed by State CEQA Guidelines Section 15088(d). Taken together, this document and the Draft EIR constitute the Final EIR. However, for ease of reference and to distinguish it from the Draft EIR component, this document will be referred to as the "Final EIR." The Draft EIR is therefore, incorporated by reference into this Final EIR.

The Final EIR contains:

- Comments received during the public review period (April 16 to May 16, 2019) on the Draft EIR:
- Written responses to the comments;
- Revisions to the Draft EIR in response to the comment.

The NID Board of Directors must review both this document and the Draft EIR and certify their adequacy before taking action on the Project. Copies of this Final EIR and the Draft EIR are available for review at the following address during normal business hours and on the NID website at https://nidwater.com/greenhorn-sediment-removal-project/.

**Nevada Irrigation District –** Front Desk, Main Business Entrance
1036 West Main Street
Grass Valley, California 95945

## 1.1 ORGANIZATION OF THE FINAL EIR

This Final EIR is organized as follows:

- **Chapter 1. Introduction** – Describes the purpose and organization of this Final EIR.
- **Chapter 2. Comments on the Draft EIR and Responses to Comments** – Contains the comment letters on the Draft EIR followed by responses to the comments. Each letter and each comment within a letter have been assigned a number. The responses are numbered to correspond to the appropriate comment.
- **Chapter 3. Revisions to the Draft EIR** – Consists of the sections of the Draft EIR that were revised to address comments. Revisions are provided in redline/strikeout.
- **Chapter 4. Mitigation, Monitoring, and Reporting Plan** – Provides the final Mitigation, Monitoring, and Reporting Plan (MMRP) based on comments received on the Draft EIR.
- **Chapter 5. List of Organizations/Individuals Consulted** – Contains a list of organizations and individuals consulted in development of the Final EIR that were not already listed in the Draft EIR.

# CHAPTER 2
# COMMENTS ON THE DRAFT EIR AND RESPONSES TO COMMENTS

## 2.1 LETTER 1 – DEPARTMENT OF TRANSPORTATION

**LETTER 1**

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

**DEPARTMENT OF TRANSPORTATION**
DISTRICT 3
703 B STREET
MARYSVILLE, CA 95901
PHONE (530) 741-4286
FAX (530) 741-4245
TTY 711
www.dot.ca.gov/dist3

*Making Conservation a California Way of Life.*

May 16, 2019

GTS# 03-NEV-2019-00110
03-NEV-174 PM 35.8
SCH#2017052054

Kris Stepanian
Nevada Irrigation District
1036 West Main Street
Grass Valley, CA 95945

Greenhorn Sediment Removal

Dear Kris Stepanian:

Thank you for including the California Department of Transportation (Caltrans) in the Certification of the Draft Environmental Impact Report review process. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

The Project includes the annual removal of sediment from the Greenhorn Arm of Rollins Reservoir. Due to the annual migration of aggregate from Greenhorn Creek into the Project Site, the Project will be ongoing, with the ultimate goal of maintaining water storage capacity in Rollins Reservoir. Ultimately, the Nevada Irrigation District (NID) would like to restore historic water storage capacity in Rollins Reservoir, returning the Project Site to pre-1965 conditions (following construction of Rollins Reservoir). However, with the extent of sediment build-up and the annual migration of aggregate to the Greenhorn Arm of Rollins Reservoir, it is unlikely that NID will be able to fully restore historic water storage capacity. Three primary Project components will be implemented annually: (1) notification/mobilization; (2) sediment removal; and (3) demobilization. The Project site encompasses all areas necessary for implementation of the Project. This includes the access road, staging areas, haul roads, stockpile area, and sediment removal area (i.e., Work Area). In addition, the Project includes implementation of a water quality and methylmercury monitoring program. The project site is in unincorporated Nevada County, California, approximately 6 miles north of the city of

Colfax on the Greenhorn Arm of Rollins Reservoir. The following comments are based on the documents received.

***Traffic Operations***

This project will not have a significant impact on the State highway network. Truck volumes entering the highway will be moderate most of the time and will be spread out over the course of the work day. The higher volumes that occur every six years on average, are not expected to meet the level of significance. 1-1

We do not request any changes to the draft EIR; however, we would like to provide the following minor comments for information only:

- There are several mentions of the Caltrans Safety Project on Route 174. The current schedule is to construct this project in 2020 and 2021. However, it is a complex project, so further delay is possible. 1-2
- Page ES-18 and page 3.12-21, the term "sighting distance" is used. The correct term regarding roadways is "sight distance." 1-3
- Page 3.12-16 mentions four surrounding cities/population centers: Grass Valley, Nevada City, Penn Valley and Relief. There is an area called "Relief" in Nevada County, but it's the first time we have heard of it; it is definitely not a population center. The only other major population center in Nevada County is Truckee, which would likely be accessed via Interstate 80. 1-4

Please provide our office with copies of any further actions regarding this project or future development of the property. We would appreciate the opportunity to review and comment on any changes/updates related to this project. 1-5

If you have any question regarding these comments or require additional information, please contact Kena Sannar, Intergovernmental Review Coordinator for Nevada County, by phone (530) 634-7613 or via email to kena.sannar@dot.ca.gov.

Sincerely,

KEVIN YOUNT, Branch Chief
Office of Transportation Planning
Regional Planning Branch—East

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

## Comment 1-1

NID agrees that the Project will not have a significant impact on the State highway network and the truck volumes entering the highway will be moderate most of the time and will spread out over the course of the workday. NID also agrees that the higher volumes that occur every 6 years on average are not expected to meet a level of significance.

## Comment 1-2

The schedule for the Caltrans Safety Project on State Route (SR) 174 has been updated in Chapter 3.12 Transportation. Refer to Chapter 3 for the revised Draft EIR section.

## Comment 1-3

All references to "sighting distance" in Chapter 3.12 have been changed to "sight distance". Refer to Chapter 3 for the revised Draft EIR section.

## Comment 1-4

Relief has been removed from the list of surrounding cities/population centers. Refer to Chapter 3 for the revised Draft EIR section.

## Comment 1-5

NID will provide the Department of Transportation, Office of Transportation Planning notification of future Project actions under the CEQA. This will include notification of the availability of the Final EIR, including notification prior to certification.

## 2.2 LETTER 2 – COUNTY OF NEVADA COMMUNITY DEVELOPMENT AGENCY, DEPARTMENT OF PUBLIC WORKS

LETTER 2


**COUNTY OF NEVADA**
**COMMUNITY DEVELOPMENT AGENCY**
**DEPARTMENT OF PUBLIC WORKS**
**950 MAIDU AVENUE, NEVADA CITY, CA 95959-8617**
**(530) 265-1411 FAX (530) 265-9849** www.mynevadacounty.com

Sean Powers
Community Development Agency Director

Trisha Tillotson
Director of Public Works


May 16, 2019

Greenhorn Sediment Removal at Rollins Reservoir
c/o Kris Stepanian
1036 West Main Street
Grass Valley, CA 95945

**VIA EMAIL: stepaniank@nidwater.com**

Re: Greenhorn Sediment Removal at Rollins Reservoir Project

Dear Ms. Stepanian:

Thank you for the opportunity to comment on NID's Draft Environmental Impact Report (EIR) for the proposed Greenhorn Sediment Removal at Rollins Reservoir Project (Project).

The Project will remove sediment from the Greenhorn arm of Rollins Reservoir and prevent further migration of suspended sediment. Removal of materials will occur annually in perpetuity to remove accumulated sediments entering the reservoir during the wet season. After removal, materials will be processed using a grizzly and screens to sort the material into various sizes of aggregate. Truck traffic will primarily use the north-to-south haul road up Greenhorn Creek, although Greenhorn Access Road will also be utilized for approximately two weeks each year. Trips will be distributed among the Hansen Brothers aggregate processing facility to the north of You Bet, west out You Bet Road, and north and south on State Route (SR) 174. Operations will occur from July through December each year, including mobilization and de-mobilization. Affected County roads include You Bet Road and Greenhorn Access Road, and NID proposes to use County right of way for a staging area up to 6 months out of the year.

The Nevada County Public Works Department has the following comments on the Draft EIR.

1. Staging Area 1: We have confirmed that Staging Area 1 is located within County-owned and maintained right of way. Any use of this land, if permitted by the County, will require both an encroachment permit and a lease agreement with the County that would include maintenance, repair, payment, and other applicable terms for long-term, regular use of the site (approximately half of each year). Staging Area 1 is currently used as a public access and parking area for Greenhorn Creek. It also serves as access to a residence, and is used as the

2-1

solid waste pickup location by residents. The EIR should include an analysis of the impacts to recreationists and residents who use this parking area.

Please also clarify why this staging area has been chosen when other staging areas appear to be available, including Staging Area 2 or other areas within the lease area to the south of the bridge, and land within the Hansen Brothers site to the north. In the event that the County and NID cannot reach an agreement as to the terms of use of this site, it may be advisable to identify an alternate staging area in the EIR. 2-1

2. Trip Distribution (page 3.12-12): Indicates that approximately 30 percent of material will be transported "for local sales in Nevada County via SR-174." Please identify the roads this traffic will travel on, including whether Brunswick Road or La Barr Meadows Road will be used. If so, how much truck traffic can be expected on a daily basis on these roads? 2-2

3. Road Maintenance (page 3.12-20, MM-TRA-1): As the owner and responsible entity for County roads, the County must have funds available for and be able to determine when the roads require repair, maintenance, or improvement, and be able to act on these decisions quickly. Rather than coordinating with NID on the repairs necessary for the continued safety and use of County roads, Nevada County will require a tonnage fee commensurate to the project's impacts, similar to the one collected for aggregate mining projects (note that a single fully loaded dump truck is known to be the equivalent of up to 10,000 standard automobiles in terms of wear and tear on the road.) This fee will then be used by the County at its discretion to repair the roads as needed. We are in the process of determining anticipated road maintenance costs for the impacted roadways and wish to see a response to item 2 above prior to determining the cost of road improvements. 2-3

4. Sight Distance (page 3.12-21, MM-TRA-2): Sight distance should be evaluated for project traffic egressing from the staging area/haul road onto or across You Bet Road, as well as project traffic egressing onto SR 174 from You Bet and Greenhorn Access Roads. This analysis should be done at this stage of the project to identify whether adequate sight distance is possible, and what the specific mitigation measures would be to minimize the traffic hazards associated with inadequate stopping sight distance.

   a) *Haul Road/You Bet Road*: The County is in the process of a 5-year procedural update to the speed surveys for You Bet Road and has collected recent speed data at the area immediately east of the Greenhorn Creek bridge. The 85th percentile speed at this location is 40 mph (rounded). The County's adopted sight distance standard for this speed is 490 feet. Available sight distance from the haul road looking east is approximately 350 feet with some clearing, and looking west is approximately 450 feet with clearing. Specific mitigation should be identified to bring the sight distance up to standards. We also request that MM-TRA-2, third bullet, have the following language added to it: "where deficiencies occur, install warning signs and ~~convex high visibility mirrors,~~ conduct vegetation removal and cutting back of slopes, or other similar measures with the local transportation agency's approval for those actions occurring within the right of way." Note that Nevada County Public Works does not typically allow the installation of mirrors in the right of way. 2-4

LETTER 2



b) *You Bet Road/SR 174*: Sight distance exiting You Bet Road onto SR 174 is 450 feet to the west and 290 feet to the east. The speed limit in this section is 45 mph, which has a corresponding sight distance standard of 360 feet (Table 201.1, *Caltrans Highway Design Manual*). Rather than relying on unspecified Caltrans improvements to SR 174, the EIR should identify improvements needed to reach a stopping sight distance of 360 feet.

c) *Greenhorn Access Road/SR 174*: Sight distance from Greenhorn Access Road looking south is approximately 150 feet and looking north is approximately 200 feet. The same sight distance and comments apply to this intersection as above in item 4b.

2-4

5. Shoulder Maintenance (page 3.12-21, MM-TRA-2): Please add to MM-TRA-2, bullet 3, that the contractor will be responsible for ensuring that gravel, sand, soil, and other debris from the project site is removed promptly from the County roadbed and shoulders for the life of project operations.

2-5

If you have any questions, please contact me at 265-1254 or Jessica.Hankins@co.nevada.ca.us.

Sincerely,

Jessica Hankins
Public Works Project Manager

## Comment 2-1

Staging Area 1 (SA-1) was selected as a staging area because it is a predisturbed site that provides direct access from You Bet Road to the upper end of the Project Site. NID and Hansen Bros. Enterprises currently maintain a locked gate at the south end of SA-1 which controls access to the existing access road and the Work Area. NID proposes to use SA-1 to stage a Project office trailer and portable restrooms, and for parking personal vehicles of construction staff (up to six vehicles). In addition, SA-1 may be used as a designated vehicle fueling area (fuel would be stored in a mobile tanker truck).

Section 3.12, Transportation (including mitigation measure MM-TRA-2), has been revised to include the requirement for both an encroachment permit and a lease agreement from Nevada County for long-term use of SA-1. The lease agreement will specify maintenance, repair, and fee payment. The agreement will also include NID's obligation to maintain access through the site for local residents and to maintain an area for continued solid waste pickup. If NID and Nevada County opt not to pursue the lease agreement for SA-1, NID will instead use SA-2 and/or the existing access road.

Section 3.11, Recreation (Impact 3.11-1) has also been revised to include an analysis of potential impacts to the public using SA-1 as a parking area for river-based recreation. Considering that the Project will be implemented when Greenhorn Creek flows have receded to base levels, and thus river-based recreation opportunities are minimal under existing conditions; and that public access to SA-1, while reduced, would be maintained during Project implementation, impacts related to NID's use of SA-1 and the potential for displacement of recreation to other areas of the reservoir would be considered less than significant.

## Comment 2-2

Article 10 of the CEQA Guidelines provides information regarding the level of detail and specificity required when preparing an EIR. CEQA Guidelines §15144 states that some degree of forecasting is necessary in disclosing impacts; but acknowledges that, while an agency must use its best efforts to find out and disclose what it can, foreseeing the unforeseeable is not possible. The degree of specificity in disclosing an impact should correspond to the specificity involved in the activity (CEQA Guidelines §15146); however, speculation beyond a reasonable degree is not required (CEQA Guidelines §15145).

NID will seek entities willing to purchase the 30 % of excavated material estimated to be distributed for local sale within Nevada County. However, the specific destination of this material is unknown at this time; and further, will change over time (possibly even on an annual basis). NID has disclosed in Section 3.12, Transportation, the estimated truck trips that will be required in years in which 50,000 tons of material would be removed and for years in which 200,000 tons of material would be removed. As described in the EIR, the actual amount of material excavated

each year will be based, in part, on whether willing purchasers have been identified. NID has acknowledged that use of County roads for hauling and distribution of aggregate will result in degradation of road conditions; and has committed to payment of both Traffic Impact Mitigation Fees and tonnage fees (refer to the response to Comment 2-3).

Based on similar projects that distribute aggregate within the County, NID estimates that, of the 30% to be sold to local entities, 50% will be distributed along SR 174 into Grass Valley and vicinity; and the other 50% would be distributed along Brunswick Road (from SR 174) to be sold in areas around Nevada City, including, potentially, the Nevada County Airport (which has accepted reservoir sediments in the past for use along runways). NID will prioritize distribution based on proximity to the Project Site. La Barr Meadows Road may also be used for distribution of aggregate.

Given that local entities willing to purchase excavated material have not yet been identified and will change over the term of the Project, it is not possible to identify in advance the specific roads to be used for the transport of sediment within Nevada County; and provision of greater specificity than provided above would be considered speculative. The EIR acknowledges that the increase in haul truck traffic associated with the Proposed Project could affect the condition of local roads, and proposes to mitigate for these effects through implementation of mitigation measure MM-TRA-1.

## Comment 2-3

Mitigation measure MM-TRA-1 has been revised to state that NID shall pay to Nevada County a reasonable tonnage fee commensurate to the Project's impacts and to similar projects being conducted in Nevada County. The fee will be used by the County, at its discretion, to repair the roads as needed. As indicated in Comment 2-2, it is speculative at this point for NID to state specific roads to be used to deliver sediment within Nevada County over the term of the Project. Therefore, each year prior to initiation of Phase 2 of the Project, NID proposes to provide to Nevada County a list of County roads that will be used for the distribution of sediment that year (as well as in future years, if this information is available in advance).

## Comment 2-4

As noted in the Draft EIR, the Project Site is located immediately downstream of the Hanson Bros. Enterprises facility, which currently uses You Bet Road and SR 174 for the hauling of sediments excavated from Greenhorn Creek (existing condition). The EIR acknowledges that the increase in haul truck traffic associated with the Proposed Project could result in construction-related traffic safety hazards on affected roadways. In mitigation measure MM-TRA-2, NID has committed to develop and implement (in coordination with the Office of Emergency Services, Caltrans and the Placer and Nevada County Public Works Departments) and a Traffic Management Plan to minimize construction-related traffic safety hazards. Mitigation measure MM-TRA-2 includes the

commitment to evaluate sight distances along You Bet Road. In response to the County's comment, mitigation measure MM-TRA-2 has been clarified to state that this evaluation will include the three locations as requested in the County's comment (haul road/You Bet Road; You Bet Road/SR 174; Greenhorn Access Road/SR 174), and states that, with appropriate approvals, NID will correct any deficiencies by installing warning signs and conducting vegetation removal and cutting back or slopes, or other similar measures. The reference to the convex mirror in mitigation measure MM-TRA-2 has been deleted. Note that the results of the above-referenced study and any proposed measures to correct deficiencies will be included in the Transportation Management Plan, and will be provided to the County for review and approval prior to implementation.

## Comment 2-5

Mitigation measure MM-TRA-2 has been modified to state that the contractor is, for the life of the Project, responsible for ensuring that gravel, sand, soil, and other debris from the Project Site is removed promptly from the surface and shoulders of all County roads.

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## 2.3 LETTER 3 – UNITED AUBURN INDIAN COMMUNITY OF THE AUBURN RANCHERIA

LETTER 3

MIWOK MAIDU United Auburn Indian Community of the Auburn Rancheria

Gene Whitehouse, Chairman | John L. Williams, Vice Chairman | Calvin Moman, Secretary | Jason Camp, Treasurer | Gabe Cayton, Council Member

RECEIVED
MAY 20 2019
NEVADA IRRIGATION DISTRICT

May 14, 2019

Kris Stepanian
Nevada Irrigation District
1036 W. Main Street
Grass Valley, CA 95945

Subject: Notice of Availability and Public Comment Period for the Greenhorn Sediment Removal at Rollins Reservoir Project Draft Environmental Impact Report (DEIR)

Dear Kris Stepanian,

Thank you for providing additional information regarding the above mentioned project. We have reviewed this information, and believe that additional information or follow-up is needed in order to determine whether the proposed project may affect cultural resources of importance to the United Auburn Indian Community (UAIC).

After reviewing the Draft Environmental Impact Report (DEIR), we are concerned because the DEIR was prepared before concluding AB 52 consultation and because the document contains incorrect information regarding tribal consultation with the UAIC and the absence of Tribal Cultural Resources (TCR).

3-1

Page 3.4-1 of the DEIR states that "No Tribal cultural resources were identified within the Project Site during previous studies or during recent Native American consultation." However, UAIC sent a written letter and an e-mail communication in May 2017 requesting consultation and asserting that TCR *are* present within the project area. This UAIC response is referenced in the DEIR, but the follow-up requested in our written correspondence has not been completed. We ask that the DEIR is corrected to reflect that TCR *were* identified during Native American consultation.

3-2

The Tribal Cultural Resources that are within the project area include the sites that are documented with the California Historical Resources Information System as P-29-3960, P-29-3946, and P-29-3971. We would like to have a conference call to discuss how to avoid impacts to these sites during project activities, with the goal of developing mitigation measures for avoidance of the TCRs. Specifically, we were concerned to read *Impact 3.4-1* on page 3.4-17, which states that the proposed work would lead to the potential to remove cultural items or soils from TCR P-29-3971, with the justification that these items "lack locational integrity". We consider this to be an adverse effect to the integrity of location, setting, materials, feeling, and association of this TCR. We do not consider the lack of locational integrity described in the DEIR to be a lack of site integrity. Rather, we would like to discuss how to recover and return (via reburial) any impacted soils, and how to avoid further impacting the site through project activities.

3-3

Tribal Office 10720 Indian Hill Road Auburn, CA 95603 (530) 883-2390 FAX (530) 883-2380

LETTER 3

Because this is a sensitive area, we are also concerned about the potential for the unanticipated discovery of TCR. We request that the Nevada Irrigation District incorporate the two attached mitigation measures that address the unanticipated discovery of TCRs and a worker awareness training so that project staff are able to identify TCRs should the encounter them unexpectedly. 3-3

In practice, we consider AB 52 consultation to be closed once we have come to an agreement on the appropriate California Environmental Quality Act (CEQA) document and once the CEQA agency has agreed to incorporate the mitigation measures for TCRs that are recommended by UAIC. We concur with your choice of CEQA documents and recommend the two previously mentioned mitigation measures for TCRs are incorporated. We believe that through a short conference call we should be able to identify a third mitigation measure for the appropriate avoidance of the three TCRs that are present within your project area. 3-4

We look forward to coordinating the above-requested follow-up. Please continue to send us copies of the project's environmental documents. The information gathered will provide us with a better understanding of the project and any cultural resources that may be in or near the project area and is invaluable for consultation purposes. Finally, please contact us if you find any Native American cultural resources in, or around, your project area. 3-5

Thank you again for taking these matters into consideration, and for involving the UAIC in the planning process. Please contact Melodi McAdams, Cultural Resources Supervisor, at (530) 328-1109 or email at mmcadams@auburnrancheria.com if you have any questions.

Sincerely,

Gene Whitehouse,
Chairman

CC: Matthew Moore, UAIC Tribal Historic Preservation Officer

Tribal Office 10720 Indian Hill Road Auburn, CA 95603 (530) 883-2390 FAX (530) 883-2380

LETTER 3

## Inadvertent Discoveries Mitigation Measure

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR's to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

LETTER 3

## Tribal Cultural Resource – Awareness Training - Mitigation Measure

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

## If Human Remains are Found

The protocols for human remains discoveries are similar for other discoveries. **It is important to treat any human remains and the situation in which they are discovered with sensitivity, dignity, and respect.**

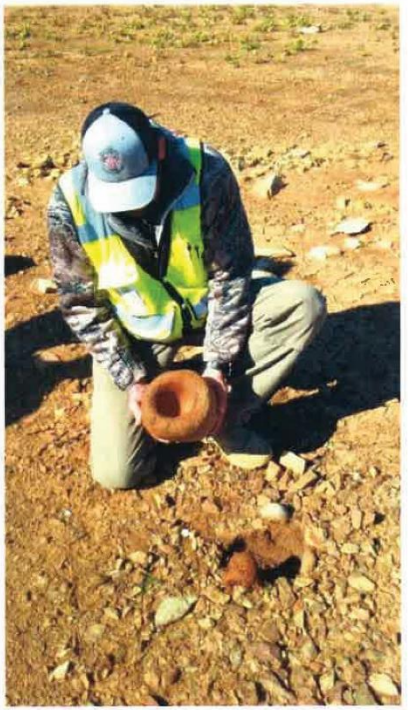
1. All work within 100 feet of the find will immediately stop. Work will also stop in areas where there is reason to believe additional human remains could be located (generally determined by a tribal monitor or qualified archaeologist).
2. UAIC and the on-site project/construction will be notified immediately.
3. **The location of any Native American Human remains must stay confidential.**

## *The United Auburn Indian Community*

The United Auburn Indian Community is comprised of Miwok and Southern Maidu (Nisenan) people who are traditionally and culturally affiliated with this geographic area. The Tribe's area of geographic traditional and cultural affiliation encompasses all of Amador, El Dorado, Nevada, Placer, Sacramento, Sutter and Yuba counties, as well as portions of Butte, Plumas, San Joaquin, Sierra, Solano and Yolo counties; which includes the project area.

Contact us at
**530-883-2394**
https://www.auburnrancheria.com/

United Auburn Indian Community
of the Auburn Rancheria
10720 Indian Hill Road
Auburn CA, 95603



## *Respect on the Project for Native American Culture*

*Prepared by:*
The United Auburn Indian Community
Preservation Department

LETTER 3

**LETTER 3**

## Protection Measures and Protocols

The United Auburn Indian Community has developed the measures listed below to protect any unanticipated finds of tribal cultural resources and achieve compliance with federal and state cultural and environmental laws.

1. All work must stop IMMEDIATELY at that location and within 100 feet of the find. Work may be stopped by the tribal monitor or a qualified archaeologist. Work can continue on the rest of the project, as long as project activities stay at least 100 feet away.
2. The on-site project/construction manager will immediately be informed of the possible find and contact a qualified archeologist or tribal monitor of the find.
3. Under NO circumstances will any contractor or employee collect the archaeological material.
4. Over the next days or weeks following the discovery, a number of visitors may be present in order to investigate and evaluate the find. These may include: agency officials, the County Coroner, professional archaeologists, members of the tribe or the California Native American Heritage Commission, the California Office of Historic Preservation, and local representatives of the historical society (if the find is historic in nature). It is important for the integrity of the find and for culturally-appropriate treatment, and so that there is no violation issued, that reasonable methods be taken to ensure that there is no disturbance or damage (including theft) to the find and its context and surrounding areas.
5. It is important to respect the direction of the tribal monitor or other authorized tribal representative regarding identification and treatment of finds and to have some flexibility regarding where work might be able recommence outside of the find location area.
6. The location and nature of the discovery will be strictly confidential, shared only with individuals that need to know.

## Cultural Resource Examples

There are many types of archaeological resources. The most common kind of artifacts, or markers of human activity that are found include stone tools, shell, beads, plant remains, animal bones, and a type of dark soil called midden. Archaeology from the historic era can also be found: these kinds of artifacts and features can include bottles, cans, ceramics, building foundations, bricks, and many more.

## Comment 3-1

NID completed all required Assembly Bill (AB) 52 consultation prior to issuance of the Draft EIR. The EIR has been clarified to provide greater detail on each step of the consultation, summarized here as follows:

- March 2017, NID initiated the AB 52 consultation process by contacting the Native American Heritage Commission (NAHC) in Sacramento and requesting a list of suitable tribal organizations and individuals, and a search of the NAHC Sacred Lands Files.
- April 4, 2017: The NAHC responded indicating the Sacred Lands Files search revealed that no properties possessing culturally significant associations for the present-day Native American community were known to exist within or near the Project Site. The NAHC also provided contact information for the following groups and individuals from the Project vicinity:
  - Mr. Gene Whitehouse, Chairman – United Auburn Indian Community (UAIC) of the Auburn Rancheria
  - Mr. Darrel Cruz, Tribal Historic Preservation Officer – Washoe Tribe of Nevada and California
  - Mr. Don Rydberg, Chairman – Tsi Akim Maidu
  - Mr. Grayson Coney, Cultural Director – Tsi Akim Maidu
- April 2017: NID mailed letters to each of the individuals noted above to solicit information regarding sensitive cultural resources in and near the Project Site and to determine if they or their respective tribal organizations had an interest in or concerns with, the Proposed Project.
  - The Nevada City Rancheria responded to NID by letter on June 1, 2017, and requested consultation for the Proposed Project.
  - The UAIC also responded to NID in two letters (both dated May 30, 2017) requesting consultation, copies of existing cultural resource assessments and records searches conducted in the Project area, and that a UAIC monitor be present during Project-related ground-disturbing activities and surveys. UAIC's response also indicated that their preservation committee identified cultural resources in and around the Project area.
- April 2017 to October 2017: The Proposed Project was put on temporary hold.
- October 16, 2017: NID contacted UAIC (Marcus Guerrero) and Nevada City Rancheria (Shelly Covert) via phone to notify them that the Project was moving forward and to reestablish communication regarding tribal consultation for the Project. Neither tribal contact was available, so a voicemail was left. Neither tribe returned the call.

- October 27, 2017: NID responded to UAIC's original request for consultation and information by providing electronic copies of all existing cultural resource assessments and record searches conducted in the Project area, proposed mitigation measures for review, and responses to requests/recommendations. This information was simultaneously mailed to Nevada City Rancheria as well. NID's letter requested input from UAIC and Nevada City Rancheria on or before November 15, 2017 so that NID could move forward with the AB 52 and CEQA compliance process. No response was received.
- April 9, 2019: The Draft EIR for the Proposed Project was released for a 30-day public review period.

On June 4, 2019, in response to the UAIC's comment on the Draft EIR, representatives from NID and its consultants (JNA-Consulting and Cardno, Inc.) conducted additional consultation with UAIC. This included a conference call with Melodi McAdams, UAIC Cultural Resources Supervisor, to follow-up regarding concerns that the Proposed Project may affect cultural resources of importance to UAIC. Refer to the response to Comment 3-3 for further information regarding the conclusions of this conference call.

## Comment 3-2

The introduction to Section 3.4, Cultural Resources was revised to state that tribal cultural resources were identified during Native American consultation for the Project.

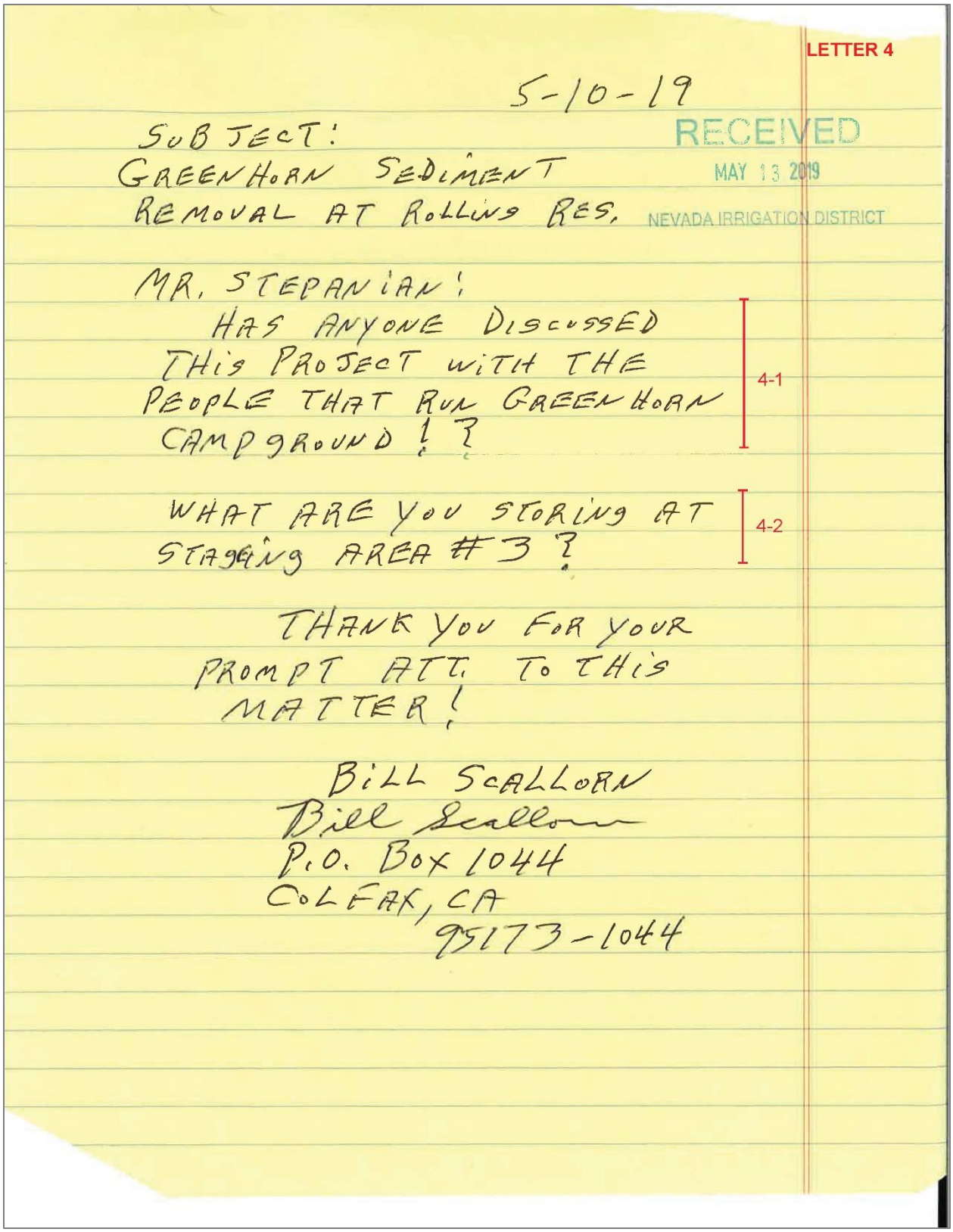
## Comments 3-3 and 3-4

As described above, a conference call with UAIC's Cultural Resources Supervisor was conducted on June 4, 2019. During the meeting, Cardno provided an overview of the AB 52 process; reviewed key concerns in UAIC's comment letter; and reviewed cultural resource mitigation measures included in the Draft EIR and revisions to those mitigation measures that NID proposes to include in the Final EIR, at the request of UAIC. The primary goal of the meeting was to reach agreement on cultural resource mitigation measures for the Project. During the meeting UAIC requested a few additional revisions to the measures, which were provided to UAIC for review and comment following the meeting. In an email dated June 10, 2019, UAIC approved the revised measures included in Section 3.4.5, Mitigation Measures (refer to Chapter 3 revised Draft EIR section). In addition, Final EIR Section 3.4.1.6, Native American Community Consultation was revised to include a summary of AB 52 consultation completed for the Project, and the discussion under Impact 3.4-5 was revised to include acknowledgement that tribal cultural resources are present in the Project area.

## Comment 3-5

NID will continue to communicate with UAIC regarding Project implementation and will contact UAIC in the event that any Native American cultural resources are found in, or around, the Project area.

## 2.4 LETTER 4 – BILL SCALLORN



LETTER 4

5-10-19

RECEIVED
MAY 13 2019
NEVADA IRRIGATION DISTRICT

SUBJECT:
GREENHORN SEDIMENT
REMOVAL AT ROLLINS RES.

MR. STEPANIAN:

HAS ANYONE DISCUSSED THIS PROJECT WITH THE PEOPLE THAT RUN GREENHORN CAMPGROUND!? 4-1

WHAT ARE YOU STORING AT STAGING AREA #3? 4-2

THANK YOU FOR YOUR PROMPT ATT. TO THIS MATTER!

BILL SCALLORN
Bill Scallorn
P.O. BOX 1044
COLFAX, CA
95713-1044

## Comment 4-1

Greenhorn Campground is a NID-owned campground that is independently operated by a concessionaire. As part of the EIR process, NID staff have notified concessionaires that they are conducting environmental review of the Greenhorn Sediment Removal at Rollins Reservoir Project and that they would like to remove sediments to maintain water storage capacity, make progress in restoration of the historic water storage capacity, to further prevent migration of sediment to the Greenhorn Arm of Rollins Reservoir, and to restore recreational opportunities to the Greenhorn Arm.

As described in the Draft EIR (Chapter 2, Section 2.4.2), as part of the Project, NID will keep the concessionaires at Greenhorn Campground and at the other three independently operated campgrounds apprised of water surface elevation conditions and other construction-related activities in the Greenhorn Arm. This will include annual notification of the Project schedule and activities in a format that can be posted onsite at the reservation window, at information boards within the campgrounds, and at boat docks. Information will also be posted on NID's website (www.nidwater.com) to ensure that prospective recreation visitors are informed of Project activities.

## Comment 4-2

Staging Area 3 (SA-3) is located in a portion of the Greenhorn Boat Launch Parking Area. SA-3 will only be used for a 2-week period in July of those years in which the barge is launched for installation or moving of the sediment barrier. Materials that will be stored during use of SA-3 would include interlocking steel sheet piles that will be used for the sediment barrier; barge for installation of the sediment barrier; pile driver; buoys and signage to be installed following installation of the sediment barrier; work crew personal vehicles; a portable restroom; and mobile tanker truck for storage of fuels. SA-3 may also be used to store heavy equipment for use in sediment removal activities in years when the sediment barrier is installed. A list of anticipated equipment is provided in the Draft EIR Chapter 2.0, Section 2.4.2.

# CHAPTER 3
# REVISIONS TO THE DRAFT EIR

This chapter provides, in redline/strikeout, revisions and clarifications that have been incorporated into the Draft EIR based on the public comments provided in Chapter 2. Corrections of minor errata have also been incorporated. The following Draft EIR sections have been revised and are included herein:

- Executive Summary
- Chapter 3.4, Tribal and Cultural Resources
- Chapter 3.11, Recreation
- Chapter 3.12, Transportation

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# EXECUTIVE SUMMARY

## E.1 INTRODUCTION

The Nevada Irrigation District (NID) has prepared this Draft Environmental Impact Report (EIR) to inform the general public, the local community, responsible agencies, trustee agencies, other interested public agencies, and NID's decision-making body (Board of Directors) regarding the potential significant environmental effects resulting from implementation of the Greenhorn Creek Sediment Removal at Rollins Reservoir Project (Proposed Project), and to identify measures or alternatives that would reduce or avoid those significant effects. The purpose of the Proposed Project is to remove and dispose of sediments that have accumulated in the Greenhorn Arm of Rollins Reservoir to maintain and/or restore the reservoir's water storage capacity, prevent further migration of suspended sediment, and restore recreational opportunities. This EIR was prepared in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.). This EIR is a "Project EIR," pursuant to CEQA Guidelines, Section 15161. A Notice of Preparation (NOP) was circulated for public and agency review from May 19 through June 19, 2017. The NOP and comments received during the scoping period are included as Appendix A of the EIR.

This Draft EIR is being circulated for public review and comment for a period of 30 days. During this period, the general public, organizations, and public agencies can submit comments to the lead agency on the accuracy and completeness of the Draft EIR. Release of this Draft EIR marks the beginning of a 30-day public review period pursuant to CEQA Guidelines, Section 15105. The 30-day public review period for the Draft EIR will begin on the day the Notice of Availability is published. The public can review the Draft EIR at the following address during normal business hours or on the NID website at http://www.nidwater.com.

**Nevada Irrigation District**
1036 West Main Street
Grass Valley, California 95945

**Madelyn Helling Library**
980 Helling Way
Nevada City, California 95959

The NID encourages all commenters to submit their comments on the Draft EIR in writing. All comments or questions regarding the Draft EIR should be addressed to:

Greenhorn Sediment Removal at Rollins Reservoir
c/o Kris Stepanian
Nevada Irrigation District
1036 West Main Street
Grass Valley, California 95945
Phone: 530.273.6185
E-mail: stepaniank@nidwater.com

## E.2 BACKGROUND

Following construction of the Rollins Reservoir Dam in 1965, sediments have accumulated in Rollins Reservoir. An estimated 10,000 acre-feet (AF) of storage capacity (17%) has been lost in Rollins Reservoir, which had a capacity of 65,998 AF upon its completion in 1965.

Sediment accumulation in the Greenhorn Arm of Rollins Reservoir can occur very quickly depending on water year type and flows from Greenhorn Creek. In July 2014 sediments extended in the Greenhorn Arm approximately 9,300 feet from the intersection of You Bet Bridge and the existing access/haul road. In late 2016, sediment build-up extended into the main body of the reservoir (extending an additional 980 feet).

Between You Bet Road and the Hansen Bros. Enterprises Lease Boundary, Hansen Bros. Enterprises operates the Greenhorn Gravel Extraction Project. This project consists of harvesting aggregate material from the streambed of Greenhorn Creek and processing the material into marketable products. Aggregate mining on the deposit began in 1878 and has been continuously mined since that time. Aggregate mining of the site in its current capacity began in 1971 when the facility was owned by Terex Corporation. Hansen Bros. Enterprises acquired the property and the operation in 1973, has improved the facility throughout their time of ownership, and expanded the operation in 1994.

In October 2013, NID entered into an agreement with Hansen Bros. Enterprises to remove sediment from Greenhorn Creek during record low water levels. During the work, it was discovered that foothill yellow-legged frogs (FYLF) were present along the haul route in the Greenhorn Arm of Rollins Reservoir. Accordingly, work was halted until NID and Hansen Bros. Enterprises could prepare a Corrective Action Plan (CAP) to protect the frogs. The CAP was completed at the end of November 2013; however, no additional sediment removal has occurred and sediment has continued to be deposited in the Greenhorn Arm and subsequently transported into the reservoir during high-flow events.

## E.3 PROJECT LOCATION

The 108-acre Project Site is located in unincorporated Nevada County, California, approximately 6 miles north of the City of Colfax on the Greenhorn Arm of Rollins Reservoir, approximately latitude 39°11'14.52" N and longitude 120°56'30.77" W. The Project is located within Sections 2, 3, 10, and 11 of Township 15N and Range 9E on the Chicago Park 7.5-minute U.S. Geological Survey (USGS) topographic quadrangle.

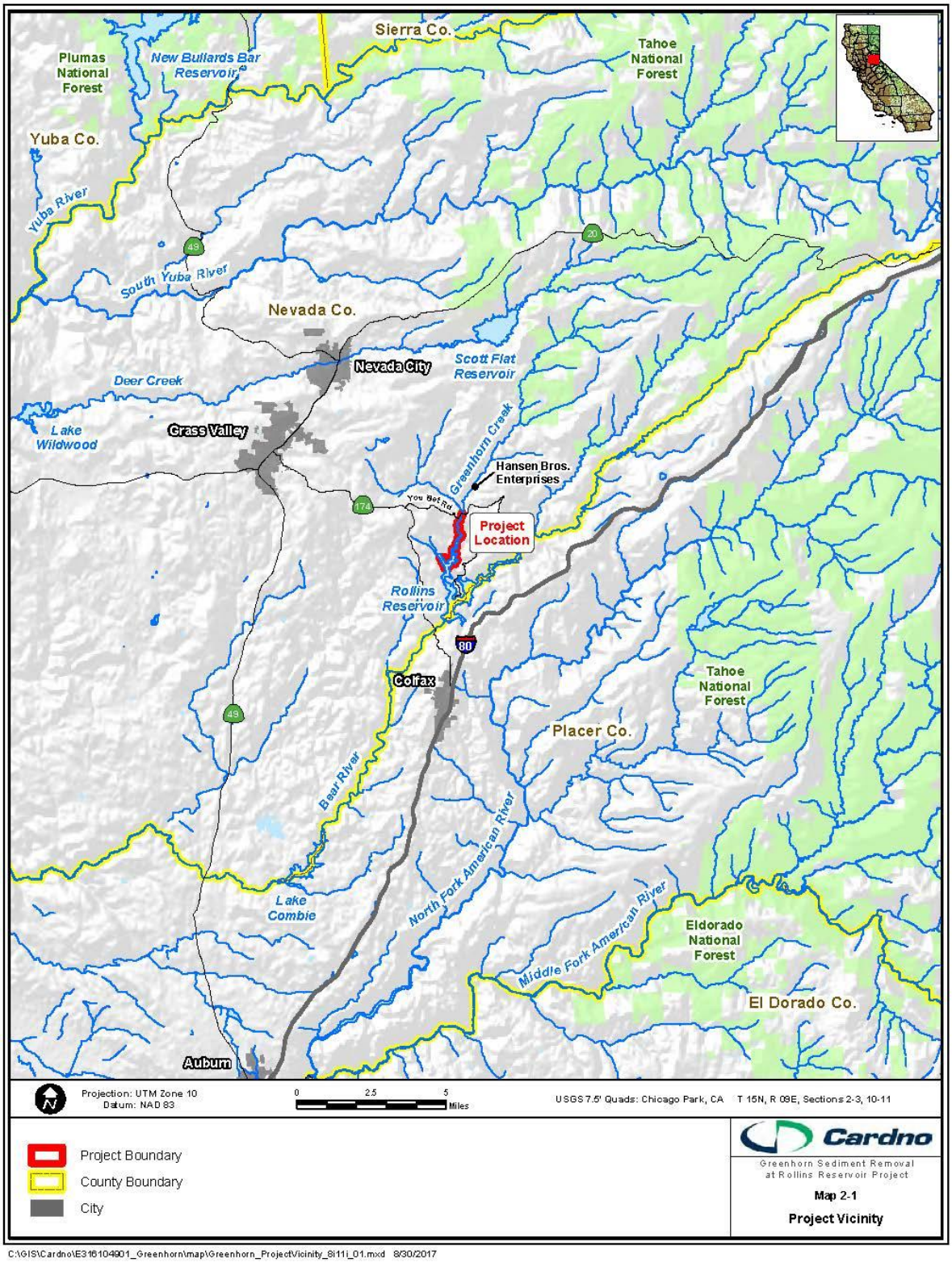
The Project Site is located within the Federal Energy Regulatory Commission (FERC) Project boundary for Nevada Irrigation District's (NID) Yuba-Bear Hydroelectric Project (FERC Project No. 2266) (Map ES-1).

## E.4 PROJECT OVERVIEW

The Project includes the annual removal of sediment from the Greenhorn Arm of Rollins Reservoir. Due to the annual migration of aggregate from Greenhorn Creek into the Project Site, the Project will be ongoing with the ultimate goal of maintaining water storage capacity in Rollins Reservoir. Ultimately, NID would like to restore historic water storage capacity in Rollins Reservoir, returning the Project Site to pre-1965 conditions (following construction of Rollins Reservoir). However, with the extent of sediment build-up and the annual migration of aggregate to the Greenhorn Arm of Rollins Reservoir, it is unlikely that NID will be able to fully restore historic water storage capacity. Three primary Project components will be implemented annually: (1) notification/mobilization; (2) sediment removal; and (3) demobilization.

1. Notification/Mobilization
    - Notify public of Proposed Project and Work Area restrictions.
    - Transport equipment and material to staging areas.
    - Establish Work Area boundary.
    - Initiate the Water Quality Monitoring Plan (WQMP), which requires NID to document: (1) pre-Project conditions; (2) conditions during Project implementation, including upstream, within, and downstream of the Work Area; and (3) allow for management actions to rapidly respond to any water quality issues.
2. Sediment Removal
    - Install a sediment barrier, consisting of interlocking steel sheet piles, from a barge to prevent further migration of sediment into Rollins Reservoir. The location of the sediment barrier may change as sediment is removed over time, and the barrier would eventually move from the main body of the reservoir into the Greenhorn Arm.

**Map ES-1 Project Vicinity**



- Re-establish access/haul road to the Work Area, including installation of bridges/culverts to allow access across Greenhorn Creek (multiple crossing may be necessary because the creek meanders through the Work Area).
- Channelize the creek within the inundation zone of Rollins Reservoir away from the designated sediment removal area by creating a long berm and channel on one side of the Greenhorn Arm to re-route the creek (placement of the berm and channelization of the stream may change annually depending on previous sediment removal activities completed and the extent of "new" sediment that has entered the reservoir arm during high flows).
- A valve assembly and aeration system will be installed in the existing creek bed upstream of the excavation area and will connect to the dewatering pipes/channels to allow for controlled release of water saturated with oxygen to continually flush the dewatering pipes/channels and reduce the potential for methylation of mercury. This will also reduce the potential for development of an anaerobic environment.
- Once the creek is re-routed, install a corrugated pipe or excavate a dewatering channel parallel to the original stream channel through the berm to collect and direct subsurface water into the channelized creek bed.
- Install dewatering pipes or excavate dewatering channels in the designated sediment removal area, parallel to the berm and running the extent of the Work Area, to facilitate draining/drying of the sediments necessary for removal and to reduce the potential for methylation of mercury. A dewatering pipe may also be placed within the dry creek channel, or the channel may be backfilled.
- Conduct sediment removal activities by skimming dry sediment, above the water table, using scrapers, excavators, and/or front end loaders.
- Transport material to stockpile area, and conduct soil sampling and analysis every 2,000 CY. Process sediment through various sized mesh screens to remove debris and sort. The sorted material will be loaded into dump trucks and either transported to an approved off-site processing center for disposal (fine sediment), or temporarily stockpiled at the site (larger aggregate) for commercial sale and/or use in a local mine reclamation project.

3. Demobilization
    - Remove equipment and material from the Work Area at the end of each work season, typically in November.

## E.4.1 Approvals Required

NID leases a large portion of the Greenhorn Arm of Rollins Reservoir to Hansen Bros. Enterprises, who currently have mining rights to the leased property under the Amended Surface Mining and Reclamation Plan for Greenhorn Creek Harvesting and Material Processing (California Mine ID No. 91-29-0006; Reclamation Plan No. RP93-001; Use Permit No. U82-20 and U93-063; Amended Reclamation Plan No. RP15-001; and Amended Use Permit No. U15-008). The activities of Hansen Bros. Enterprises are permitted activities that are not part of NID's Greenhorn Sediment Removal Project. The following identifies permits that need to be acquired by NID specific to the Greenhorn Sediment Removal Project.

The Greenhorn Sediment Removal at Rollins Reservoir Project is a reservoir maintenance project. The Project is located within the FERC Project boundary and is considered maintenance of an existing FERC facility that is authorized by FERC under the existing license. As such, NID will seek a Special Exemption under the Surface Mining and Reclamation Act (SMARA) through the Nevada County Planning Department. NID will specifically request that Nevada County approve an exemption under provisions provided by SMARA, to remove sediment from within the original 1965 limits of the Greenhorn Arm of Rollins Reservoir. NID will file the request for exemption pursuant to California Code of Regulations, Title 14, Division 2, Chapter 8, Article 1, Section 3505, Special Provisions, paragraph (a)(2).

It is anticipated that this EIR will be used by responsible agencies that may have jurisdiction over elements of the Project to process other associated permits necessary for implementation of the Project. State and local agencies that may have jurisdiction over the Proposed Project include the following:

- **U.S. Army Corps of Engineers (USACE)**. Section 404 Clean Water Act Permit for any activity within the waterway that would be considered "fill".
- **State Water Resources Control Board (State Water Board)/ RWQCB**. Section 401 Clean Water Act Water Quality Certification.
- **State Water Board/RWQCB**. Section 402 Clean Water Act National Pollutant Discharge Elimination System (NPDES) and Stormwater Pollution Prevention Plan.
- **CDFW**. Section 1600 Lake or Streambed Alteration Agreement.
- **Nevada County**. SMARA exemption, Hazardous Waste Business Plan, and/or Spill Prevention and Control Plan, ~~and~~ encroachment permit, and lease agreement for use of the County Right-of-Way at SA-1.

In addition, NID may also be required to notify or obtain authorizations from federal agencies with jurisdiction over facilities or who own lands within the Project Site.

- Notification to the FERC that sediment management would be implemented within the Greenhorn Arm of Rollins Reservoir (facility under FERC jurisdiction).
- Notification to BLM that sediment management would occur on BLM lands within the FERC Project Boundary of Rollins Reservoir.

## E.5 PROJECT OBJECTIVES

The Greenhorn Sediment Removal Project objectives are as follows:

- Maintain the water storage capacity in the Greenhorn Arm of Rollins Reservoir in perpetuity by conducting annual sediment maintenance activities to remove accumulated sediments which could enter the main reservoir during high flows.
- To the extent possible, make progress in restoration of the historic water storage capacity in the Greenhorn Arm of Rollins Reservoir.
- Prevent further migration of suspended sediment from the Greenhorn Arm of Rollins Reservoir into the main body of the reservoir.
- Restore recreational opportunities in the Greenhorn Arm of Rollins Reservoir through the removal of accumulated sediment thereby increasing water depth and improving deep-water aquatic habitat and boating access.
- Economically remove and dispose of the sediment removed from the Greenhorn Arm of Rollins Reservoir.

## E.6 SUMMARY OF IMPACTS

Table ES-1 presents a summary of the potentially significant environmental impacts that could result from the Proposed Project, proposed mitigation measures, and the level of significance of the impact after the implementation of the mitigation measures.

# E.7 ANALYSIS OF ALTERNATIVES

## E.7.1 Alternatives Considered

Two alternatives to the Proposed Project were considered, including the No Project Alternative. The No Project Alternative is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines that examines the environmental effects that would occur if the Project were not to proceed. The other alternative is discussed as part of the "range of reasonable alternatives" selected by NID. The alternatives addressed in Section 4.5.4 are summarized below:

- **No Project Alternative:** Under the No Project Alternative, no sediment removal activities would occur. Sediment would continue to build up in the Greenhorn Arm of Rollins Reservoir and recreational opportunities and aquatic habitat would be further degraded. In addition, lack of sediment removal would result in continued migration of suspended sediment from the Greenhorn Arm into the main body of the reservoir further reducing water storage capacity.
- **Reduced Project Alternative:** The Reduced Production Alternative would involve sediment removal operations similar to the Proposed Project, but limit the amount of material that could be exported from the site (by haul trucks) to 100,000 tons of material during the operating season (July through November). By contrast, under the Proposed Project it is estimated that up to 200,000 tons of material could be removed from the Work Area per year, depending on market demand; although a typical year (based on similar activities) would include removal of approximately 50,000 tons per year. It is assumed that 200,000 tons of material would be removed every 6$^{th}$ year, depending on storm events. All other components of the Proposed Project would be identical under the Reduced Production Alternative.

## E.7.2 Environmentally Superior Alternative

The No Project Alternative would result in the least environmental impacts and would be the environmentally superior alternative. All impacts associated with the Proposed Project would be reduced under the No Project Alternative. However, the No Project Alternative fails to meet any of the Project objectives. Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In this case, the environmentally superior alternative is the Reduced Production Alternative. This alternative would limit the amount of sediment removed annually to 100,000 tons, resulting in reduced impacts in terms of air quality, GHG emissions, and transportation (vehicle miles traveled). However, noise impacts under this alternative would still be significant and unavoidable. By reducing the maximum amount of sediment removed, this alternative would inhibit the timely realization of Project objectives.

**Table ES-1.**
**Impacts Summary and Mitigation, Monitoring, and Reporting Plan**

| Impact | Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility | Level of Significance After Mitigation |
|---|---|---|---|---|---|
| **Impact 3.1-3.** The Project Site is visible and would result in low to moderate visual effects on neighboring residences and recreationists. | **MM-AES-1**: At the end of each workday crews will conduct Project Site housekeeping, including moving equipment and work vehicles to one of the three staging areas and will maintain work and staging areas to ensure they are orderly and free of trash and debris. | During annual Project implementation | NID | NID | Less than Significant |
| | **MM-AES-2**: Following completion of annual sediment removal activities, the following will be removed from the Work Area: dewatering pipes/channels; valve box/pond; aeration system; construction equipment and mats; bridges and culverts; Work Area closure buoy line (depending on extent of sediment removal completed); and processing plant (grizzly). During annual demobilization, construction crews will restore staging areas disturbed by Project activities to pre-mobilization condition with the exception of the haul road and creek channelization berm which will remain in place until high spring flows redistribute the material. | Following completion of annual Project implementation | NID | NID | |
| **Impact 3.1-4** Project lighting during fall and winter months could introduce a new light source and contribute to "sky glow"—the cumulative reduction in the quality of night-sky views. | **MM-AES-3:** Lighting fixtures shall be full or semi cutoff. Overall lighting levels shall be limited to that necessary to illuminate the Work Area during the later months of the year. Incandescent and mercury vapor light sources will not be used. | During annual Project implementation | NID | NID | Less than Significant |
| **Impacts 3.2-2.** Without mitigation, maximum daily operational emissions would exceed the Northern Sierra Air Quality Management District (NSAQMD) Level C thresholds for $PM_{10}$. | **MM-AQ-1**: Per the requirements of the NSAQMD Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects the following mitigation will be required during project operations.<br>• Temporary traffic control shall be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans.<br>• Construction activities shall be scheduled to direct traffic flow to off-peak hours as much as practicable.<br>• 200,000During initial grading, earth moving, or site preparation, larger projects may be required to construct a paved, coarse gravel or dust palliative treated apron, at least 100 feet in length, leading onto the paved road(s).<br>• Wheels will be washed when project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment will be washed prior to each trip, if necessary.<br>• During years when approximately 200,000 tons of sediment is removed, all self-propelled off-road diesel-powered equipment and vehicles greater than 25 horsepower shall be equipped with an engine meeting at least Tier 1 emission standards, and the overall fleet average shall meet Tier 2 emission standards. | During annual Project implementation | NID | NID | Less than Significant |
| | **MM-AQ-2:** As required by NSAQMD Rule 226, a Fugitive Dust Plan will be prepared for the Project that, in addition to the Standard Dust Control Plan conditions, includes site watering at least twice daily during sediment removal, sorting, and hauling activities. | Prior to initial implementation of the Project | NID | NID | |
| **Impact 3.2-3** Project would not expose sensitive receptors to emissions from diesel particulate matter. | **MM-AQ-3** Owners or operators of portable equipment rated 50 bhp or greater will register the applicable equipment through the Statewide Portable Equipment Registration Program or at the local air district level, in compliance with NSAQMD, Rule 523. Proof of registration will be provided to NID prior to Project implementation. | Prior to initial implementation of the Project | NID | NID | Less than Significant |

| Impact | Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility | Level of Significance After Mitigation |
|---|---|---|---|---|---|
| **Impact 3.3-1** The Proposed Project could indirectly impact aquatic species (foothill yellow-legged frog [FYLF], Western pond turtle [WPT], fish) through increases in turbidity or release of pollutants into the stream. | **MM-HAZ-1:** Annually, prior to Project implementation, all contractor and subcontractor personnel shall receive training regarding the appropriate work practices necessary to effectively comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. | Prior to annual Project implementation | NID | NID | Less than significant |
| | **MM-HAZ-2:** A Hazardous Materials Business Plan (HMBP) will be prepared and implemented. The HMBP will be consistent with Nevada County requirements and will incorporate industry standard best management practices (e.g., Department of Water Resources' best management practices). The plan will:<br>• Identify all hazardous materials.<br>• Identify spill response materials.<br>• Specify procedures for notification and reporting, including internal management and local agencies (e.g., fire department, Department of Environmental Health), as needed.<br>• Specify measures to protect worker and public health and safety.<br>• Specify measures to manage and remediate waste, as needed. | Prior to initial implementation of the Project | NID | NID | |
| | **MM-HAZ-3:** A Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared and implemented. The SPCCP will be consistent with Nevada County requirements and will incorporate industry standard best management practices (e.g., Department of Water Resources' best management practices). The plan will:<br>• Detail fuel storage areas.<br>• Identify measures to limit and control fuel spills, including use of bermed storage areas, equipment inspections, fueling and refueling procedures.<br>• Describe the use and placement of spill kits.<br>• Specify reporting requirements in the event of a spill. | Prior to initial implementation of the Project | NID | NID | |
| | **MM-HYD-1:** Stormwater Pollution Prevention Plan. Operator shall develop and implement a stormwater pollution prevention plan (SWPPP) in accordance with State Water Resources Control Board (SWRCB) and Central Valley RWQCB (RWQCB) requirements. The SWPPP shall specify the location, type, and maintenance requirements for best management practices (BMPs) necessary to prevent stormwater runoff from carrying construction-related pollutants. BMPs shall be implemented to address potential release of fuels, oil, and/or lubricants from operational vehicles and equipment (e.g., drip pans, secondary containment, washing stations), as well as release of fine sediment from material stockpiles (e.g., sediment barriers, soil binders). The SWPPP shall be developed and implemented by a Construction General Permit Qualified SWPPP Practitioner (QSP) / Qualified SWPPP Developer (QSD) and submitted to the RWQCB as part of obtaining regulatory approval for the proposed activities (i.e., the Industrial General Permit). | Prior to initial implementation of the Project | | | |
| | **MM-HYD-2:** Water Quality Monitoring Plan. NID will prepare and implement a Water Quality Monitoring Plan (WQMP) for the Project. The WQMP will include monitoring water quality (baseline and Project conditions) in the vicinity of the Project during implementation (setup through demobilization). The WQMP will include compliance thresholds and adaptive management to address potential water quality issues should any arise. The WQMP would be implemented in any year, which sediment removal activities occur. The WQMP will include water quality monitoring for the following constituents:<br>• Water Temperature<br>• Dissolved Oxygen (DO)<br>• Turbidity<br>• Total Dissolved Solids (TDS)<br>• Total Suspended Solids (TSS)<br>• Total Mercury<br>• Methylmercury<br>To fully document baseline and Project conditions, NID will monitor water quality in Greenhorn Creek, Greenhorn Arm of Rollins Reservoir, and the main body of Rollins Reservoir. Baseline condition monitoring will be conducted prior to the initial sediment removal. Water quality monitoring compliance thresholds will be established based on consultation with the Regional Water Quality Control Board and California Department of Fish and Wildlife. Monitoring reports will be developed and provided to agencies during Project implementation. Sediment removal will be suspended, and agencies will be immediately notified (within | Prior to initial implementation of the Project | NID | NID | |

| Impact | Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility | Level of Significance After Mitigation |
|---|---|---|---|---|---|
| | 24 hours) if any constituents exceed thresholds developed through agency consultation with consideration of pre-project background levels. | | | | |
| **Impact 3.3-1 (continued)** The Proposed Project could potentially result in direct impacts to foothill yellow-legged frogs | **MM-BIO-1:** Work Period and Timing: The following restrictions for work period and timing will be observed:<br>• Ground-disturbing activities in the Work Area (including, but not limited to, construction of stream road crossings, modification/relocation of the stream channel, or sediment removal) will be restricted to the period between July and November, when stream flows are low and weather conditions are dry.<br>• Work activities in the Project Site will be timed with awareness of precipitation forecasts and likely increases in streamflow. If the National Oceanic and Atmospheric Administration (NOAA) National Weather Service forecasts a storm event that will result in more than 1 inch of rain in a 24-hour period, sediment removal activities will cease until all reasonable erosion and stormwater pollution prevention measures (including, but not limited to, measures required in the Project SWPPP) have been implemented.<br>• All work activities will be restricted to the hours between 7:00 am to 7:00 pm. | During annual Project implementation | NID | NID | Less than significant |
| | **MM-BIO-2:** Biological Monitor. NID will submit to CDFW for approval the resumes of a qualified biologist (or biologists) who will lead implementation of aquatic and/or terrestrial surveys and monitoring required for the Project. The biological monitor(s) must have the following qualifications:<br>• Academic and professional experience in biological sciences or related resource management activities;<br>• Experience with construction-level biological monitoring;<br>• For biologists conducting aquatic surveys and monitoring, the ability to recognize resident and native aquatic species and familiarity with their behaviors and habitats (species include, but are not limited to FYLF, WPT, and resident fish species);<br>• For biologists conducting terrestrial surveys and monitoring:<br>• The ability to recognize bald eagle, osprey, and other migratory birds and their nests, and familiarity with their behaviors and habitats; and<br>• Familiarity with special-status species that may inhabit burrows in the Project Site.<br>• All biological monitors will obtain any necessary authorizations prior to handling or relocating special-status species. | Prior to annual Project implementation | NID | NID | |
| | **MM-BIO-3:** Foothill Yellow-Legged Frog Breeding Surveys and Breeding Area Avoidance. A survey for FYLF (including egg masses, tadpoles, sub-adult, and adults) will be conducted by an approved biologist during the spring breeding season (e.g., April/May) prior to initiation of the Project each year. The purpose of the survey will be to determine whether and where FYLF are breeding in the Work Area. If FYLF egg masses and/or amplexing adults are found during the breeding surveys, a Breeding Area Avoidance Plan (BAAP) will be developed prior to initiation of sediment removal in the vicinity of the breeding area. The BAAP will include a description and maps/diagrams showing how the Work Area will be modified to avoid negative impacts to the breeding area(s). Modifications may include, but are not limited to, the installation of exclusionary or high visibility fencing. The BAAP will be submitted to CDFW 30 days prior to initiation of sediment removal and implemented as part of the Project**.** | Prior to annual Project implementation | NID | NID | |
| | **MM-BIO-4:** Workers Environmental Awareness Program. Construction personnel will participate in worker environmental awareness program (WEAP) designed to minimize the potential for impacts to sensitive biological resources. Under this program, workers will be informed by a qualified biologist about the potential presence of sensitive biological resources, including special-status species and habitat, and applicable measures incorporated into the Project to avoid and protect these species and their habitats. | Prior to annual Project implementation | NID | NID | |
| | **MM-BIO-5:** Delineation of Project and Environmentally Sensitive Areas. Before starting work each season, NID will clearly fence, stake, and/or flag the boundaries of the existing and new haul road, staging areas, and the Work Area within which sediment removal activities will occur. Delineation of work areas will consider avoidance and protection measures established for aquatic and terrestrial resources, including, but not limited to, breeding areas for FYLF (MM-BIO-3); special-status plants (MM-BIO-8); active bird nests and animal burrows (MM-BIO-9); and riparian vegetation (MM-BIO-10). Vehicular traffic and use of ground-based construction equipment will be confined to fenced, staked, or flagged areas. All fencing, stakes, or flags will be maintained in good condition throughout sediment removal. | Prior to annual Project implementation | NID | NID | |
| | **MM-BIO-6:** Aquatic Species Pre-Construction Survey and Species Relocation. Immediately prior to initiation of ground-disturbing activities in the Work Area (including, but not limited to, construction of stream road crossings, modification/relocation of the stream channel, or sediment removal), a pre-construction survey will be conducted by an approved biologist. Native and resident aquatic species including resident fish, FYLF (all life stages) and WPT, will be captured and immediately relocated from within | Prior to initiation of annual ground-disturbing activities | NID | NID | |

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| | the Work Area to the closest suitable aquatic habitat. Capture methods may include fish landing nets, dip nets, buckets, and by hand.<br>A record will be maintained that will include the following data for each individual rescued and relocated (or as specified in CDFW permit conditions):<br>• Date of Capture and Relocation<br>• Method of Capture<br>• Life Stage (for FYLF and WPT)<br>• Life Stage, Fork Length, and Weight (for Fish)<br>• Location of Relocation in Relation to the Project Site<br>A letter report of the results of the survey and capture/relocation data will be provided to CDFW for review within 14 days of completion of the survey. | | | | |
| | **MM-BIO-7:** *Biological Monitor On-site with Stop Work Authorization.* An approved aquatic biologist will be responsible for monitoring activities that may result in impacts to native and resident aquatic species (i.e., relocating the stream and constructing road crossings of the stream). The biological monitor will have the authority to immediately stop any activity that may harm native or resident aquatic resources and to authorize the resumption of work once individuals have moved and/or are relocated out of harm's way. All reasonable efforts will be made to capture and move all stranded species or species otherwise in the way of harm. Capture will only be conducted by the biological monitor and may include fish landing nets, dip nets, buckets and by hand. Captured aquatic life will be released within the closest suitable habitat outside of the work site.<br>Relocations of fish and aquatic species will be recorded as described under MM-BIO-6, and submitted in a letter report to CDFW at the conclusion of each work season. | During annual Project implementation | NID | NID | |
| **Impact 3.3-1 (continued)** The Proposed Project could potentially result in direct impacts to *western pond turtles* | **MM-BIO-1:** See above<br>**MM-BIO-4:** See above<br>**MM-BIO-5:** See above<br>**MM-BIO-6:** See above<br>**MM-BIO-7:** See above | | NID | NID | Less than significant. |
| **Impact 3.3-1 (continued)** The Proposed Project could potentially result in direct impacts to *resident fish in Greenhorn Creek*. | **MM-BIO-1:** See above<br>**MM-BIO-6:** See above<br>**MM-BIO-7:** See above | | NID | NID | Less than significant. |
| **Impact 3.3-2** Sediment removal activities within Greenhorn Creek within the Greenhorn Arm of Rollins Reservoir would result in effects to jurisdictional Waters of the U.S./State. | **MM-BIO-11:** Clean Water Act Permitting. Prior to implementation of the Project, NID will obtain the appropriate permits to authorize Project activities within waters of the U.S. and state. This includes the following:<br>• All proposed discharges of dredge or fill material into waters of the U.S. will first be authorized by the USACE, pursuant to Section 404 of the Clean Water Act (CWA), and all avoidance, protection, and mitigation measures associated with Corps permits will be implemented.<br>• Pursuant to Section 401 of the CWA, NID will obtain Water Quality Certification from the Regional Water Quality Control Board for the Proposed Project. Avoidance, protection, and mitigation measures identified in this certification will be implemented.<br>• Pursuant to Section 1600 of the Fish and Game Code, NID will obtain a Streambed Alteration Agreement (SAA) for the Proposed Project. Avoidance, protection, and mitigation measures identified in this SAA will be implemented. | Prior to initial implementation of the Project | NID | NID | Less than significant. |
| | **MM-HYD-1:** See above<br>**MM-HYD-2:** See above | | NID | NID | |
| | **MM-HYD-3:** Hydrologic Management Plan. NID will prepare and implement a Hydrologic Management Plan (HMP) for the Project. The HMP will include the following elements:<br>• Seasonal demobilization procedures shall include, at a minimum, removal of all operational equipment located within the limits of the 100-year flood, including temporary road crossings (bridges and culverts) and dewatering pipes.<br>• Annual visual incision monitoring and photo documentation shall be conducted upstream of the Work Area to ensure excessive project-induced channel incision (deepening of the channel from erosion) and avulsion (abandonment of the channel and formation of a new channel) is not occurring. This monitoring will be done in context of non-Project gravel extraction activities within the Hansen Bros. Enterprises Lease. If excessive channel incision or avulsion is occurring as a | Prior to initial implementation of the Project | NID | NID | |

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| | result of Project activities, then grade control measures or modification of the sediment extraction in the Work Area will be implemented. | | | | |
| **Impact 3.3-3.** Sediment removals have a low potential to affect movement of resident fish between Greenhorn Creek (upstream of the Project) and the reservoir. | **MM-BIO-1:** See above<br>**MM-BIO-6:** See above<br>**MM-BIO-7:** See above<br>**MM-HYD-3:** See above | | NID | NID | Less than significant |
| **Impact 3.3-4.** Implementation of the Project could impact special-status plants. | **MM-BIO-4:** See above<br>**MM-BIO-5:** See above | | NID | NID | Less than significant |
| | **MM-BIO-8** Special-status Plant Surveys. Protocol-level surveys for special-status plants will be completed prior to initiation of the Project and during the appropriate blooming period for the 13 plants occurring or potentially occurring at the Project Site (refer to Table 3.3-1). This will include an early-season survey in April/May and a late-season survey in July/August. Surveys will be conducted consistent with the Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). If special-status plant species are found in the Project Site and could be affected by Project implementation, a protective buffer of a minimum of 25 feet (or smaller, if approved by CDFW) will be designated around the population with stakes, fence or flagging prior to the start of each construction season. No vehicular traffic or use of ground-based equipment will be permitted within the buffer. A letter report providing the results of the special-status plant surveys will be provided to CDFW prior to initiation of construction. | Prior to initial implementation of the Project | NID | NID | |
| **Impact 3.3-4 (continued).** Implementation of the Project could disturb nesting raptors (i.e., bald eagles and osprey) or animals that use burrows (i.e., Blainville's horned lizard, Sierra Nevada mountain beaver, and American badger). | **MM-BIO-9:** Terrestrial Species Pre-Construction Surveys. A pre-construction survey will be conducted by a qualified biologist to determine if there are active bird nests or burrows of special-status species including Blainville's horned lizard, Sierra Nevada mountain beaver, and American badger present in the Project Site which could be affected by the Project. The survey will be conducted no more than 30 days prior to initiation of any Project activities. The survey would include an inspection of the following:<br>• Trees and other suitable nesting structures within 660-feet around the Project Site for bald eagles and within 500 feet of the Project Site for other raptors;<br>• Suitable nesting habitat within 100 feet around the Project Site for other migratory and non-raptorial birds; and<br>• Suitable habitat within Project Site boundaries for burrows that may potentially be used by Blainville's horned lizard, Sierra Nevada mountain beaver, and American badger.<br>• The location of active nests will be recorded and an appropriate protective buffer delineated around the nest of 660 feet for bald eagle nests; 500 feet for other raptor nests; and between 25 and 100 feet for other migratory and non-raptorial birds, as appropriate based on the species, site-specific features, and the nature and extent of construction activities proposed in the vicinity of the nest. No use of ground-disturbing equipment will be permitted within the protective buffer. If NID cannot comply with these recommended buffers, reduced buffers or other site-specific avoidance and protection measures will be developed in consultation with the appropriate resource agencies. This protective buffer does not apply to the existing osprey nest on the Drum-Bell transmission line tower (refer to Section 3.3.2.4) of the EIR.<br>• Animal burrows will be flagged and avoided to the degree possible. Any burrows that cannot be avoided will be inspected to determine whether they are actively inhabited. Uninhabited burrows that cannot be avoided will be collapsed by or in the presence of the biologist to avoid future occupation. If a burrow is inhabited and cannot be avoided, NID will consult with CDFW to determine alternative avoidance, protection, and/or exclusion measures. Such measures would depend on the species involved, site-specific conditions and nature and extent of work activities to be implemented near the burrow. Measures could include, but are not limited to, implementation of a protective buffer around the burrow or exclusion/evacuation and collapse of the burrow by a CDFW-approved biologist.<br>A letter report providing the results of the terrestrial pre-construction survey will be provided to CDFW prior to initiation of construction. The report will include (1) a map of the location of any active nests and all burrows identified, and (2) a description of buffers or other proposed avoidance and protection measures to be implemented to protect any nests or inhabited burrows that may be affected by the Project. Agreed upon buffers and/or avoidance and protection measures will be implemented as part of the Project. | Prior to annual Project implementation | NID | NID | Less than significant |
| **Impact 3.3-4 (continued).** Implementation of the Project could impact foraging bald eagles and osprey. | **MM-BIO-1**: See above<br>**MM-BIO-6**: See above<br>**MM-BIO-7:** See above<br>**MM-HYD-1:** See above | | NID | NID | Less than significant |

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| | **MM-HYD-2:** See above<br>**MM-HAZ-1:** See above<br>**MM-HAZ-2:** See above<br>**MM-HAZ-3:** See above | | | | |
| **Impact 3.3-4 (continued).** Increased human presence, use of heavy equipment, and construction vehicles could potentially disturb other nesting raptors or songbirds, if present in the Project Site. | **MM-BIO-4:** See above<br>**MM-BIO-5:** See above<br>**MM-BIO-9:** See above | | NID | NID | Less than significant |
| **Impact 3.3-4 (continued).** Implementation of the Project could impact foraging or roosting special-status bats. | **MM-BIO-1:** See above<br>**MM-HYD-1:** See above<br>**MM-HYD-2:** See above<br>**MM-HAZ-1:** See above<br>**MM-HAZ-2:** See above<br>**MM-HAZ-3:** See above | | NID | NID | Less than significant |
| **Impact 3.3-5.** The project has some potential to affect riparian habitat present along the margins of Greenhorn Creek and the Greenhorn Arm of Rollins Reservoir in the Project Site. | **MM-BIO-4:** See above<br>**MM-BIO-5:** See above | | | | Less than significant |
| | **MM-BIO-10:** Protection of Riparian Vegetation. No riparian vegetation will be removed as part of the Project. If riparian vegetation becomes established within the Project Site and may potentially be affected by Project activities, NID will establish a 25-foot-buffer around the riparian vegetation. The buffer will be flagged or fenced prior to implementation of the Project. | Prior to/during annual Project implementation | NID | NID | |
| **Impact 3.4-1.** The Project could result in damage to or destruction of significant documented cultural resources**.** | **MM-CUL-1:** Development and Implementation of a Cultural Resource Awareness Training Education ~~Worker Environmental Awareness~~ Program. NID will ~~design and~~ implement a ~~Worker Education~~Cultural Resource Awareness Training Education Program, which ~~that~~ will be provided to all Project personnel (including construction supervisors and field personnel) who may encounter and/or alter historical resources, ~~or~~ unique archaeological properties, or tribal cultural resources. No construction worker will be ~~will be~~ involved with ~~in field~~excavation activities or field operations ~~operations~~ without having participated in the Cultural Resource Awareness Training Education ~~Worker Education~~ Program. The ~~Worker Education~~ Program will include, at a minimum:<br>• A review of archaeology, history, prehistory and Native American cultures associated with historical resources in the Project vicinity;<br>• A review of applicable local, state and federal ordinances, laws and regulations pertaining to historic preservation;<br>• A discussion of avoidance and minimization measures for resources that have the potential to be located on the Project Site and procedures to be followed in the event that unanticipated cultural resources are discovered during implementation of the Project;<br>• A discussion of disciplinary and other actions that could be taken against persons violating historic preservation laws and NID policies; ~~and~~<br>• Distribution and review of a tribal cultural resources brochure and training video;<br>• A discussion of the requirement for confidentiality and culturally-appropriate treatment of a find of significance to Native Americans and behaviors, consistent with Native American Tribal values; and<br>• A statement by the construction company or applicable employer agreeing to abide by the ~~Worker~~ Cultural Resources Awareness Training Education Program, NID policies and other applicable laws and regulations.<br>The Cultural Resource Awareness Training Education ~~Worker Education~~ Program may be conducted in concert with other environmental or safety awareness and education programs for the Project, provided that the program elements pertaining to cultural resources are provided by a qualified ~~instructor~~ cultural resources specialist meeting applicable professional qualifications standards. | Prior to initial/during annual Project implementation | NID | NID | Less than significant |

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| **Impact 3.4-2.** The Project could result in damage to or destruction of significant undocumented cultural resources. | **MM-CUL-2:** Measures for the Protection of Cultural and Tribal Resources (Known and Inadvertent Discovery).<br>Protection of Known Cultural and Tribal Resources. Prior to and during Project implementation, NID will implement the following measures to protect known cultural resources adjacent to the Project Site:<br>• The boundary of sites P-29-3946, P-29-3960, and P-29-3971 will be staked with construction fencing or stakes and flagging prior to Project implementation and will be monitored during Project activities to maintain the protective barrier and to report on any violations of the protected areas.<br>• NID will notify and invite tribal representatives to participate in pre-construction cultural site demarcation and surveys.<br>• An NID Qualified Professional Archaeologist will conduct monitoring during active sediment removal activities within 50 feet of P-29-3946, P-29-3960, and P-29-3971. NID Cultural Resources Policy (No. 6085.1 Discovery of Cultural Resources) will be implemented in the event of unanticipated disturbance to these sites.<br>• NID will notify by email the tribal representatives a minimum one week prior to active sediment removal activities for work within 50 feet of P-29-3946, P-29-3960, and P-29-3971. Tribal representatives will arrange for a tribal monitor(s), and will coordinate with NID as appropriate. If items are uncovered, the tribal monitor(s) is (are) responsible for managing, documenting, recovering, and returning any cultural items to a location acceptable to the tribe.<br>Inadvertent Discovery of Previously Unknown Cultural Resources. If an inadvertent discovery of tribal cultural resources, archeological resources, or other cultural ~~materials~~ resources (e.g., unusual amounts of shell, animal bone, glass, ceramics, structure/building remains, etc.) is made during Project-related construction activities, the NID Cultural Resources Policy (No. 6085.1 Discovery of Cultural Resources) will be implemented. This policy includes a stop work order, or relocation of work by ~~communication with~~ the NID project manager, avoidance of the discovery by 150 feet, and coordination with a qualified archaeologist. Refer to Appendix C of the EIR for the NID policy.<br>As part of this policy, the archaeologist shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation in consultation with the NID, ~~and~~ the State Historic Preservation Officer (SHPO), and Native American Tribal representatives to protect the integrity of the resource and ensure that no additional resources are impacted. Mitigation could include, but not necessarily be limited to preservation in-place, archival research, subsurface testing, or data recovery.<br>Implementation of the above mitigation measure would reduce potentially significant impacts resulting from inadvertent damage or destruction of known and unknown cultural resources during construction to a less-than-significant level. | During annual Project implementation | NID | NID | Less than significant |
| | **MM-CUL-1:** See above | | NID | NID | |
| **Impact 3.4-3.** The Project could result in damage to or destruction of human remains. | **MM-CUL-3:** Unanticipated Discovery of Human Remains. In accordance with the California Health and Safety Code and NID Cultural Resources Policy (No. 6085.2 Discovery of Human Remains), if human remains are uncovered during ground-disturbing activities, all work within 150 feet of the area of the burial shall be halted. The NID project manager will be notified immediately, who in turn will notify the qualified archaeologist. The qualified archaeologist will contact the Nevada County Sheriff/Coroner to determine the nature and extent of the remains.<br>The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of Native American descent, the coroner must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC shall identify the most likely descendant (MLD). Once given the permission by NID and the land owner (if different from NID), the MLD shall be allowed on-site. The MLD shall complete their inspection and make their recommendation to NID for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code (PRC) Section 5097.98. MLD recommendations must be made within 48 hours of the NAHC notification to the MLD.<br>No additional work shall take place within the immediate vicinity of the find until the qualified archaeologist gives approval to resume work in that area. Refer to Appendix C of the EIR for the NID policy.<br>A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in-place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment, may be discussed. AB 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the landowner shall comply with one or more of the following:<br>• Record the site with the NAHC or the appropriate Information Center;<br>• Utilize an open-space or conservation zoning designation or easement; and/or<br>• Record a document with the county in which the property is located. | During annual Project implementation | NID | NID | Less than significant |

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| | The landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. Adherence to these procedures and other provisions of the California Health and Safety Code and AB 2641(e) will reduce potential impacts to human remains to a less-than-significant level. | | | | |
| **Impact 3.4-4.** The Project could result in damage to or destruction of significant undocumented paleontological resources. | **MM-CUL-4:** Unanticipated Discovery of Paleontological Resources. If an unanticipated discovery of paleontological materials is made during Project-related construction activities, all work within 100 feet (30 meters) of the discovery will be halted and redirected to another location. A qualified paleontologist will be notified regarding the discovery. The paleontologist shall determine whether the resource is potentially significant per the CEQA and develop appropriate mitigation to protect the integrity of the resource and ensure that no additional paleontological resources are impacted. Mitigation could include, but not necessarily be limited to preservation in-place, archival research, and specimen excavation and recovery.<br>Implementation of the above mitigation measure would reduce potentially significant impacts resulting from inadvertent damage or destruction of paleontological resources during construction to a less-than-significant level. | During annual Project implementation | NID | NID | Less than significant |
| **Impacts 3.7-1 and 3.7-2.** The project could potentially create a potential hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or upset and accident conditions involving the release of hazardous materials into the environment. | **MM-HAZ-1:** See above<br>**MM-HAZ-2:** See above<br>**MM-HAZ-3:** See above | | NID | NID | Less than significant |
| | **MM-HAZ-4:** NID will implement the following to ensure appropriate disposal of excavated or dredged sediments:<br>• In order to determine acceptable reuse and/or disposal procedures, sediment shall be sampled and analyzed to assess sediment quality and identify any potential hazards to the public or environment during excavation, transportation, and reuse and/or disposal of the sediment.<br>  ○ Based on the known historical environmental impacts of mining in the watershed, characterization of the sediment shall be limited to metals listed in the RWQCB General Order for Maintenance Dredging (R5-2009-0085) as the primary constituents of concern.<br>  ○ Approximately one sample will be taken per 2,000 cubic yards of sediment removed.<br>  ○ Results of the sediment sampling will be compared to applicable health screening levels issued by State and federal agencies that include:<br>  ▪ Hazardous Waste Thresholds (Title 22 Chapter 11 of California Code of Regulations),<br>  ▪ California Office of Environmental Health Hazard Assessment Human Health Screening Levels, and<br>  ▪ Federal Environmental Protection Agency (EPA) Regional Screening Levels.<br>• Disposal/reuse of dredged sediment may be subject to waste discharge requirements (WDR), and/or a waiver of WDRs for disposal of dredge material to land.<br>• If sediment is to be disposed of in a landfill, no further restrictions on disposal are required, since landfills operate under their own WDR and/or NPDES permits that are designed to protect water quality.<br>• If sediment is to be reused:<br>  ○ If concentrations exceed Hazardous Waste Thresholds, the sediment will be disposed of in accordance with relevant hazardous waste regulations.<br>  ○ If concentrations of all metals are below Hazardous Waste Thresholds, no restrictions on reuse will be implemented.<br>  ○ If concentrations of individual metals exceed Human Health Screening Levels or Regional Screening Levels, but not Hazardous Waste Thresholds, the sediment will only be reused on a site where the native soil contains equivalent or higher concentrations of these metals. That is, soil will be sampled and tested for metals for which the sediment exceeds the above thresholds at the proposed disposal/reuse site and compared to the concentrations in the sediment. If the native soil metals concentrations are higher than the sediment concentrations, the sediment can be reused/disposed of without further characterization. | During annual Project implementation | NID | NID | |

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| **Impact 3.7-6** The Project involves an increase in truck trips along public roads which could potentially affect implementation of an emergency response or evacuation plan. | **MM-TRA-2**: Hazards Due to Truck Traffic. NID shall develop and implement a Traffic Management Plan to minimize construction-related traffic safety hazards on the affected roadways. To the extent practicable, the Traffic Management Plan will conform to the latest edition of the California Manual on Uniform Traffic Control Devices for Temporary Traffic Control. NID shall coordinate development and implementation of this plan with the Nevada County Office of Emergency Services (OES), Caltrans and the Placer and Nevada County Public Works Departments, as appropriate. The Traffic Management Plan will include, but would not be limited to, the following elements:<br>• Movement of large oversized equipment and hauling of materials of oversized vehicles related to sediment barrier installation and removal shall be done by convoy using applicable roadway standards.<br>• Develop and implement a plan for notifications and a process for communication with affected Greenhorn Campground users and residents along affected roadways before the start of construction. Public notification will include posting of notices at NID website, Greenhorn Campground website, Placer and Nevada County Public Works Departments' websites, Nevada County OES, notices at the Project Site, and approved private signage of construction activities. The notifications will include the construction schedule, the location and duration of activities on each roadway (e.g., which roads/lanes, access points/driveways would be blocked on which days and for how long, and alternative vehicle routes), and contact information for questions and complaints.<br>• Maintain access for vehicles in and/or adjacent to roadways affected by construction activities at all times. The contractor is, for the life of the Project, responsible for ensuring that gravel, sand, soil, and other debris from the Project Site is removed promptly from the surface and shoulders of all County roads.<br>• ~~Evaluate~~ Evaluation of ~~sighting~~ sight distances at three locations (intersection of the Project haul road/You Bet Road; SR 174/You Bet Road, and SR 174/Greenhorn Access Road) using design criteria from the Highway Design Manual (Caltrans 2018) and Nevada County Improvement Standards. ~~along You Bet Road annually to determine if they meet the current County Policy; and, where~~ Where deficiencies occur, NID will develop site-specific measures including, but not limited to, installing warning signs, ~~convex high visibility mirrors,~~ conducting vegetation removal, cutting back slopes, or other similar measures. ~~to improve sighting distances, as necessary.~~ Measures to address sight distance deficiencies will be included in the Transportation Management Plan and provided to Nevada County for review and approval prior to implementation. | Prior to initial implementation of the Project | NID | NID | Less than significant |
| **Impact 3.7-7.** Project activities, including the use of equipment and haul trucks, introduce a potential fire risk, given the high hazard rating of the surrounding area. | **MM-HAZ-5:** The District will develop a Project-specific Fire Plan in consultation with the fire department. The Fire Plan will include (but is not limited to) the following:<br>• Appropriate contacts and procedures to be followed in case of a fire-related emergency.<br>• Vehicles will not be parked and equipment will not be placed in areas where dry vegetation could be ignited.<br>• Project work and staging areas, including the stockpiles, fuel and equipment storage, the office trailer, and accessory buildings, shall be cleared of dried vegetation or other materials that could serve as fire fuel.<br>• Any vehicles or equipment that normally include a spark arrester shall be equipped with an arrester in good working order.<br>• Vehicles will be required to carry small fire extinguishers and other equipment, as required by the fire department, while traveling throughout the site. | During annual Project implementation | NID | NID | Less than significant |
| **Impact 3.8-1 and 3.8-3** The Project potentially could result in impacts to water quality associated with release of fuels, increased erosion and turbidity, and increase in the bioavailability of mercury. | **MM-HYD-1:** See above<br>**MM-HYD-2:** See above<br>**MM-HYD-3:** See above | | NID | NID | Less than significant |
| **Impact 3.8-8.** The Project could potentially affect water quality in a manner inconsistent with the Water Quality Control Plan for the Sacramento and San Joaquin River Basins. | **MM-HYD-1:** See above<br>**MM-HYD-2:** See above<br>**MM-HYD-3:** See above<br>**MM-HAZ-1:** See above<br>**MM-HAZ-2:** See above<br>**MM-HAZ-3:** See above<br>**MM-HAZ-4:** See above<br>**MM-HAZ-5:** See above | | NID | NID | Less than significant |

| Impact | Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility | Level of Significance After Mitigation |
|---|---|---|---|---|---|
| **Impact 3.10-1.** The Proposed Project would exceed the Nevada County daytime average noise level standard of 55 dBA $L_{eq}$ and the daytime maximum noise level standard of 75 dBA $L_{max}$ at several residences adjacent to the Project Site. | **MM-NOI-1:** When purchasing or replacing equipment, NID will use backup warning devices available per current standards. To the extent feasible, the Project Site will be designed to minimize the need to operate mobile machinery in reverse causing backup warning alarms to activate. In addition, diesel generators would be equipped with silencers. | During annual Project implementation | NID | NID | Significant and unavoidable |
| | **MM-NOI-2:** The stockpile shall be designed to minimize the need for haul trucks to back up for loading and exiting. | During annual Project implementation | NID | NID | |
| | **MM-NOI-3:** Signs shall be posted to limit horn use unless required for employee and public safety. | During annual Project implementation | NID | NID | |
| | **MM-NOI-4:** Noise minimization shall be a standard topic at operations meetings. | During annual Project implementation | NID | NID | |
| | **MM-NOI-5:** Construction activities shall be limited to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. On Sundays and Federal holidays, no noise-generating construction activities shall be permitted. | During annual Project implementation | NID | NID | |
| **Impact 3.11-1.** The project could potentially increase the use of other recreational facilities on the reservoir. | **MM-REC-1:** The transport of equipment and materials along the Greenhorn Access Road to SA-3 shall not occur on the July 4th holiday, or during the weekends immediately preceding or following the July 4th holiday, except in emergency situations. | During annual Project implementation | NID | NID | Less than significant |
| | **MM-REC-2:** A line of buoys and/or signage shall be placed at a distance of 200 feet around the barge during installation of the sediment barrier to prohibit boaters from entering the barrier installation work area. Under no circumstances shall boaters be allowed to enter the work area delineated by the buoy line. | During annual Project implementation | NID | NID | |
| **Impact 3.12-1** The Project would contribute to the deterioration of road conditions on area roadways. | **MM-TRA-1:** County Road Maintenance.<br>• NID shall obtain from Nevada County an encroachment permit for use of SA-1.<br>• NID shall obtain from Nevada County a lease agreement for long-term (half-year) use of SA-1. The lease agreement will specify maintenance, repair, and fee payment. The agreement will also include NID's obligation to maintain access through the site for local residents and to maintain an area for solid waste pickup.<br>○ If NID and Nevada County do not pursue the lease agreement for SA-1, NID will instead use SA-2 and/or portions of the existing access road.<br>• NID shall pay to Nevada County all Traffic Impact Mitigation Fees required per Board Resolution 18-206. Payment of these fees would ensure that the Project contributes its fair share of the cost of necessary future improvements to the regional roadway network.<br>• NID shall pay to Nevada County a reasonable tonnage fee commensurate to the Project's impacts and to other similar projects in Nevada County. The fee will be used by the County, at its discretion, to repair the roads as needed.<br>• Each year, prior to initiation of Phase 2 of the Project (i.e., excavation and hauling of sediments), NID shall provide to Nevada County a list of roads that will be used for the distribution of excavated materials for local sales within County.<br>~~• NID shall document road and shoulder conditions along You Bet Road prior to Project implementation to provide a baseline against future evaluations of road and shoulder conditions. Every five years, or a timeframe deemed appropriate by Nevada County Public Works, road and shoulder conditions will be evaluated. Based on the results of evaluation and in consultation with Nevada County Public Works, NID may be required to repair roads and/or shoulders that have been affected by increased truck traffic associated with the Project.~~<br>• Gravel, sand, soil, and other debris from the Project Site and affected roadways is promptly removed from roads and shoulders. | • Prior to initial Project implementation (permits and leases);<br>• Prior to annual Project implementation (provision of lists of roads)<br>• During annual Project implementation (removal of material from roadsides)<br>~~Prior to initial Project implementation (baseline establishment)~~ | NID | NID | Less than significant |
| **Impact 3.12-4** The Project could result in hazardous conditions associated with truck traffic entering and existing You Bet Road, and conflicts between boat launch traffic and truck traffic since the campground roadway has limited two-way capacity. | **MM-TRA-2:** See above | | NID | NID | Less than significant |
| **Impact 3.12-5** The Project could impact emergency access as a result of increased truck use during the fire season and along You Bet Road, which does not provide adequate turnouts to allow trucks to yield to oncoming emergency vehicles. | **MM-TRA-3:**<br>NID shall notify the Nevada OES annually at least 30 days prior to commencing work. The Nevada County OES is responsible for coordinating with local fire, police, and the Nevada County Public Works Department regarding maintaining safe conditions during project implementation. | Prior to initial Project implementation (consultation with public agencies) | NID | NID | Less than significant |

| Impact | Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility | Level of Significance After Mitigation |
|---|---|---|---|---|---|
| | | • Prior to annual Project implementation (notification) | | | |
| **Impact 3.13-5 and 3.13-6 (Public Utilities)** Solid waste generated by the Project will be disposed of consistent with federal, state, and local standards | **MM-HAZ-2:** See above<br>**MM-HAZ-4:** See above | | NID | NID | Less than significant |
| **Impact 3.14-1 . 3.14-2, 3.14-3** The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan and would not require installation of infrastructure that would exacerbate fire risk.. | **MM-HAZ-5:** See above<br>**MM-WF-1:** In the event that the County, state, or other authorities declare a state of emergency that involves evacuation on I-80 or other routes that may be used during implementation of the Project, all non-essential operation of Project vehicles that could affect evacuation routes would cease until the evacuation is no longer in effect. | During annual Project implementation | NID | NID | Less than significant |

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## E.8 AREAS OF CONTROVERSY

Section 15123 (b)(2) of the CEQA Guidelines requires the Executive Summary of an EIR to disclose areas of controversy known to the lead agency that have been raised by the agencies and the public. A public scoping meeting was held on June 1, 2017, and NID circulated an NOP to solicit agency and public comments on the scope and environmental analysis to be included in the EIR between May 19 and June 19, 2017. A total of seven comment letters were received during the NOP public review period. Copies of the NOP and the NOP comment letters received by NID are included in Appendix A of the EIR. The following issues were raised in the public meeting and in written responses to the NOP:

- Traffic, road conditions, and routes of sediment removal;
- Number of truck trips;
- Hours and days of sediment removal/operation;
- Vibration and noise during Project implementation; and
- Signage and notification.

Comments received during the public scoping meeting and NOP comment period are addressed in the Draft EIR.

## E.9 ISSUES TO BE RESOLVED BY LEAD AGENCY

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain a discussion of issues to be resolved. With respect to the Proposed Project, the key issues to be resolved include decisions by NID, as lead agency, as to:

- Selection of a feasible alternative;
- Feasibility of recommended mitigation measures; and
- Whether or not to proceed with the Proposed Project.

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# 3.4 CULTURAL AND TRIBAL RESOURCES

This section discusses the existing conditions and potential impacts on cultural and tribal resources that could result from implementation of the Greenhorn Sediment Removal at Rollins Reservoir Project (Proposed Project or Project). It presents the methods and results of cultural resources studies conducted within the Project vicinity.

There are seven cultural resources adjacent to the Project Site, two of which are unevaluated for listing in the California Register of Historical Resources (CRHR). Five cultural resources were previously determined not eligible. The analysis concludes that impacts on cultural resources will be less than significant. Incorporation of the mitigation measures described in Section 3.4.5 will further minimize potential less-than-significant impacts on cultural resources. TNo tribal cultural resources were identified within the Project areaSite during previous studies or during recent Native American consultation. The Project's potential impacts on cultural and tribal resources were evaluated using the significance criteria set forth in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

The Rollins Reservoir area and surrounding vicinity contain evidence of past human activity ranging from early Native American sites and artifacts to historic-era mining, ranching, and logging. Cultural resources are protected under various state and local regulations including CEQA and the Nevada County General Plan.

## 3.4.1 Existing Conditions

A brief outline of the archaeological, ethnographic, and historic context of the region is provided below. This context aides in understanding their significance, as well as the potential impacts on these cultural resources.

### 3.4.1.1 Prehistoric Archaeology

This section describes, in general terms, broad patterns in the prehistory of north-central California, focusing on major environmental, technological, and adaptive changes evident in the archaeological record of this region. The Project area spans transitional geography from the Sierra Nevada foothills to the Sacramento Valley. However, general trends of cultural development can be discerned across the region, although some variation may exist within subregions. These general cultural periods are described below.

### *North-Central Sierra Nevada – Late Pleistocene Pattern (Prior to 10,000 Years Before Present [B.P.]*

Evidence of earliest human occupation in the foothills and eastern Sacramento Valley is practically nonexistent. Possible exceptions consist of archaeological CA-SAC-370 and CA-SAC-379, located near Rancho Murrieta in Sacramento County. The SAC-370, and SAC-379 assemblages include numerous chipped stone artifacts including bifaces and cores, and lithic raw materials (which may be indicative of prehistoric quarrying operations) from gravel strata estimated to be between 12,000 and 18,000 years in age (Moratto 1984). It is possible that cultural deposits dating to this time period within the valley are covered with several meters of alluvium and have yet to be discovered. Identifying these sites may be difficult because the artifact assemblages are often redeposited and no organic materials suitable for radiocarbon dating have been encountered.

### *Early Holocene Pattern and Period (10000–7000 B.P.)*

Human settlement during Early Holocene is referred to the Western Pluvial Lakes Tradition (WPLT) (Jackson and Ballard 1999). The WPLT reflects a human adaptation to lake, marsh, and grassland environments, which were prevalent around 11000 B.P. However, as the environment became warmer and drier, these ecosystems changed and the WPLT slowly disappeared by ca. 8000–7000 B.P.

### *Archaic Pattern and Period (7000–3200 B.P.)*

With a warmer and drier climate, milling stones became abundant, suggesting an emphasis on the exploitation of plant resources that were newly available. Sites from this time frequently contain numerous mortar fragments, indicating that acorns and/or various seeds were relatively important food items (Moratto 1984). This emphasis was accompanied with a reduced focus on hunting. Chipped stone tools were primarily made on locally available lithic materials.

One of the most notable cultural occurrences during this time consists of the Windmiller pattern that dates to as early as 4750 B.P. and possibly as late as 2500 B.P. Materials recovered from Windmiller sites suggest that a great deal of trade was taking place as evidenced by the presence of nonlocal obsidian, Haliotis and Olivella shell beads and ornaments, quartz crystals, and other exotic materials, which are frequently found in archaeological assemblages (Heizer 1949, 1974; Moratto 1984). While primarily a Sacramento Valley and lower foothill phenomenon, similar cultural elements are found at elevations up to 3,000 feet in the foothills of the west slope, suggesting that the people who resided here were in the middle of this trade network (Bennyhoff and Heizer 1958; Bennyhoff and Hughes 1983).

### *Sierran Pattern (CA. 3200–150 B.P.)*

This broad time period, comprised of the Early, Middle, and Late Sierran, exhibits an increased use of obsidian, which may indicate an expansion in regional land use, and the regular use of

certain locales (Bouey and Basgall 1984). This pattern begins with a return to cool/moist climatic conditions, where forays into the Sierra may have been made by groups with resident populations in the western Sierran foothills, Central Valley and/or Great Basin. Jackson and Ballard (1999:45) suggest that increased level of land use during this time was concurrent with a reliance upon acorns and heavy exploitation of large game. Using a model of site patterning first proposed by Jackson (1984), the increased exploitation of resources during the later portion (ca post 1,400 B.P.) of this time period is marked by the adoption of mortar technology. Based on their distribution, use of mortars is most intense below the snow line, with high usage continuing within the black oak and sugar pine woodlands above the snow line, and decreasing within the alpine zone. Models of toolstone acquisition suggest east/west trade routes existed during this period between the Sierran crest and the Central Valley of California.

By the time of the Late Sierran Period in the foothill region, archaeological village sites generally correspond to those identified in the ethnographic literature. Diagnostic artifacts found in these late sites include small contracting-stemmed points, clam shell disk beads, and trade beads marking the arrival of European groups into the region (Beardsley 1954:77-79; Elsasser 1978:44; Fredrickson 1984).

#### 3.4.1.2 Ethnographic Context

The Project Site is situated within the traditional territory of the Nisenan (sometimes referred to as the Southern Maidu) sphere of influence. Kroeber (1925) recognized three Nisenan dialects including Northern and Southern Hill, and Valley Nisenan. The Nisenan territory included the drainages of the Yuba, Bear, and American rivers, and the lower drainages of the Feather River, extending from the crest of the Sierra Nevada to the banks of the Sacramento River. The southern boundary with the Miwok was probably a few miles south of the American River, bordering a shared area used by both Miwok and Nisenan groups that extended to the Cosumnes River.

Within the Nisenan territory, several political divisions constituting tribelets had their respective headmen in the larger villages. However, which of these larger population centers wielded more influence than others is not known, although they were all located in the foothill areas. In general, more substantial and permanent Nisenan villages were not established on the valley plain between the Sacramento River and the foothills, although this area was utilized as a rich hunting and gathering ground. According to Kroeber (1925:831), the larger villages could have had populations in excess of 500 individuals, although small settlements consisting of 15 to 25 people and extended families were common.

Three ethnographic Hill Nisenan village sites have been recorded in the vicinity of the Project. The closest of these (approximately half a mile west of the Project Site) was recorded as *Topnimkum* by Littlejohn in 1928. Littlejohn (1928) also recorded (from south to north along present-day Highway 174), the sites of *Tohi*, *Yolsian*, and *Poydok*. Little is known of these sites and their current locations do not appear to have been more thoroughly investigated by Littlejohn

or subsequent researchers. Wilson and Towne (1978) also identify the village site of *Siponi* just about a mile northeast of the Project Site. This site appears to have consisted of a larger settlement than the other local villages and boasted a significant dance house which was used for a wide variety of social and political events.

As with most valley and foothill groups, the Nisenan exploited a wide variety of floral and faunal food sources. The primary staple food was acorn and gathering expeditions were organized seasonally, although hunting, fishing, and the gathering of other floral foodstuffs occurred throughout the year. The seasonal harvests were often communally shared and important social behaviors were intricately related to these harvests. Various roots, nuts, wild onion, wild sweet potato and many varieties of grasses, berries, and fruits were also gathered when seasonally available. Many were processed and stored for winter use, although fresh fruits such as various berries, wild plums, grapes and other native fruits were also consumed fresh. Studies within the Project area indicate that Native Americans deliberately burned the meadows to increase forage and improve the habitat, clear the areas around habitations, kill insects, improve wild seed crops and facilitate travel and hunting.

Reluctance on the part of traditional Nisenan and the virtual destruction of the culture in the nineteenth century make discussions regarding Nisenan spiritual beliefs and practices difficult to discuss in any detail. However, historic records document a number of observances and dances, some of which are still performed today, that were important ceremonies in early historic times. In general, the basic religious system noted throughout central California, the Kuksu cult, appeared among the Nisenan. Cult membership was restricted to those initiated in its spirit and deity-impersonating rites. The Kuksu cult, however, was only one of several levels of religious practice among the Nisenan. Various dances associated with mourning and the change of seasons were also important. One of the last major additions to Nisenan spiritual life occurred sometime shortly after 1872 with a revival of the Kuksu cult as an adaptation to the Ghost Dance religion (Wilson and Towne 1978).

#### 3.4.1.3 Historic Period Setting

Although a number of early Spanish and Mexican period expeditions traveled through the foothill and Central Valley regions, none appear to have focused on the Project or its vicinity. Various trapping parties working for the Hudson's Bay Company or other organizations likely extended their reach into the area now occupied by Rollins Reservoir but there are no known accounts detailing such travels. While the historic period in northern California can be said to have begun in northern California as early as the 1760s when the first of the Spanish expeditions struck out for the interior wilderness of Alta California, it wasn't until the Gold Rush that a sustained Euro-American presence was established within and in the vicinity of the Project Site.

### *Local Mining*

The earliest and most significant historic-era settlement to have developed in the vicinity of the Project was the town of Little York, which was situated on a narrow ridge between Steephollow Creek and the Bear River. In the winter of 1850, a small group of miners traveled up the ravine and built a cabin (which would become the first house to be built in the town). By the time they packed up and left in the spring, the men had made just under $10,000. Their success inspired other miners to pursue work in the gravel beds, which were exposed in an extensive cut of "blue cement". By the time they arrived, the easy gold had already been recovered. While small flecks of gold were clearly visible across the entire face of the cut, the rudimentary mining techniques available at the time made extraction of such small quantities of gold simply not economically feasible.

In the spring of 1852, William Starr and John Robinson came to the area to prospect in the gravel banks and dug the first mine tunnel in the region. Robinson also began prospecting lower down from Starr along the face of what was known as Cousin Hill. After only tunneling for a short distance, Robinson realized that he had found a place where money could be made. It did not take long for the miners to locate the entire gravel range, which was extensive and traveled through many nearby hills. Once the largest of the deposits were discovered, the town Little York was on the map and was divided into lots which were distributed among the miners. The construction of sawmills, stores, saloons, a meeting house, and even a theater were soon under way. A town meeting was called in August of 1852 to elect a Recorder and to formally name the township. By September of 1852, Little York had nearly all the amenities of a large town and a population of approximately 600. However, in keeping with the boom-and-bust pattern so typical of mining towns in the foothills, once the gold began to play out, the towns began to disappear. Within months of the town's rise, the mines began to close and soon, Little York essentially ceased to exist as the population quickly left for better opportunities.

Despite the exhaustion of the local diggings and the collapse of Little York, mining continued at a brisk pace throughout the region during the middle and latter decades of the 19$^{th}$ century. One of the richest ledges of quartz ever found in the area was discovered in the late 1860s and by 1870, plans were in the works to cut a tunnel through the Colfax Divide near Secret Town (just north of the Project Site). The tunnel would be low enough to tap into the Bear River and a sluice was planned off of the substantial tailings that ran alongside the river for several miles. Later discoveries included those of F.C. Gayety & Son who established a quartz claim near Secret Town, approximately 7 miles north of Colfax. By 1896, the Gayety & Son's Secret Town Mine appeared in the California State Mining Bureau's State Mineralogist Report. It was described as a quartz mine located 3 miles south of Gold Run at an elevation of 2,875 feet above mean sea level (amsl), with a 2-foot quartz vein striking northwest and dipping 60 degrees northeast in a slate formation.

### *The Chicago Park Colony*

While mining served as the primary economic driver in the region, agriculture, and livestock ranching was perhaps a close second and emigrants were arriving in droves to seek out prime agricultural and grazing lands. In response, in 1887, plans were announced to start dividing up a large number of tracts and lots in an area that became known as the Chicago Park Colony, which was strategically located along the narrow- gauge railroad line between Sacramento and Grass Valley near the town of Colfax. It was purported to be "the first real colony in the northern part of this State" and to be populated by "actual new settlers, most of whom will come from the city of Chicago or its immediate vicinity." Once enough land in the colony had been sold, Chicago Park was touted as a success, with the sale of its lands "doubly assured." According to a report in the Sacramento Daily Union, the colony was established by Morris Lobner and W.B. Hayford of Colfax, who convinced nine men from Chicago to join them in a syndicate, which purchased 6,700 acres of land approximately 3 miles from Colfax on the Nevada County side of the Bear River (just over a mile southwest of the Project Site). Large lots were sold on the condition that at least 5 acres be improved and planted in the coming year. By 1887, approximately 2,000 acres had already been sold to support at least 100 families. The Chicago Park Colony was viewed as a place that would draw attention to the Sierra Foothills (SDU 1887).

### *Nevada Irrigation District and Rollins Reservoir*

The Nevada Irrigation District (NID) was formed on August 15, 1921 by Nevada County voters in response to the local need for a reliable water supply. When it was first established approximately 202,000 acres were designated as NID land. In 1926, residents of adjacent Placer County opted to join the NID and an additional 66,500 acres were added. Shortly after its formation, the Bear River Water and Power Company, founded by Dr. Jarret Laban Rollins in 1900, joined with the NID to construct a new water storage and conveyance system. Rollin's firm and the NID acquired numerous private water systems in the 1920s through the 1950s. While a public water system was already developed to supply water from the Yuba and Bear River watersheds to farmers and their crops on the western slope, a complete network of pipes and canals was still lacking.

In the 1950s, Pacific Gas and Electric Company (PG&E) prompted an initiative to harness the powers of the Yuba and Bear Rivers. As a result, NID partnered with PG&E to develop the Yuba-Bear Hydroelectric Project. As California began to embrace the idea of hydroelectric power plants to help meet the state's high demand for energy, NID district leaders rallied enough support to pass a $65 million bond to construct the Yuba-Bear River Power Project in 1962. The project included four areas of development: Bowman, Dutch Flat, Chicago Park, and Rollins (NID 2005). The project broke ground on August 23, 1963 at what would become the site of Rollins Reservoir. Most of the project was completed between the years 1963 and 1966 (NID 2005). Dying of a heart attack in 1933, Dr. Rollins never saw the entire water system completed but Rollins Reservoir was named in his memory during the facility's dedication ceremony on May 7, 1966 (Barrett 2008).

### 3.4.1.4 Documented Cultural Resources

The Project Site and vicinity at Rollins Reservoir were subjected to an intensive cultural resources survey for the Yuba-Bear Hydroelectric Project Federal Energy Regulatory Commission (FERC) relicensing effort in 2011 (NID 2011a). This survey identified a total of 48 prehistoric and historic-era cultural resources within the FERC project boundary for the Rollins Reservoir. Of these 48 cultural resources, seven are located adjacent to the Project Site.

The FERC determined that five of the resources (P-29-3928, P-29-3929, P-29-3937, P-29-3958, and P-29-4283) were not eligible for listing in the National Register of Historic Places (NRHP) (see Table 3.4-1); a finding concurred with by the State Historic Preservation Officer (SHPO)[1]. The CRHR generally follows NRHP determinations, so these resources may be considered not eligible for listing in the CRHR as well. All five resources were associated with the historic era.

**Table 3.4-1**
**Evaluated Cultural Resources within the Project Site**

| Site Number[1] | Site Type[2] | Description | Site Function/Category | Landowner[3] | CRHR Status[4] |
|---|---|---|---|---|---|
| P-29-3928 | H | Concrete check dam | Water Conveyance | PRV | NE |
| P-29-3929 CA-NEV-2005H | H | Prospect pits, historic refuse scatter (ca. 1914-1930) | Mining | NID | NE |
| P-29-3937 | H | Stone retaining wall | Structural | NID | NE |
| P-29-3958 CA –NEV-2023H | H | Earthen pad, possible privy pit, prospect pit, and tailings pile | Mining | NID | NE |
| P-29-4283 CA-NEV-2111H | H | Dimensioned lumber scatter | Refuse Deposit | PRV | NE |

1 Primary No., Trinomial
2 P = prehistoric; H = historic; P/H = prehistoric and historic
3 BLM = Bureau of Land Management; NID = Nevada Irrigation District; TNF = Tahoe National Forest; PG&E = Pacific Gas and Electric Company; PRV= Private; SPI= Sierra Pacific Industries; SPTC = Sierra Pacific Transportation Company
4 NE= not eligible, evaluated; PE= potentially eligible, unevaluated; TE= treated as eligible without evaluation. CRHR eligibility recommendation as per NID 2011a.

The NID determined that effects from continued operation and maintenance of the Yuba-Bear Hydroelectric Project would not impact one cultural resource (P-29-3946), within the Greenhorn Arm of Rollins Reservoir, and decided to treat the site as eligible without conducting evaluation (Table 3.4-2). P-29-3946 is a prehistoric site consisting of bedrock milling outcrops. Furthermore, the NID determined this site would be included in a routine site monitoring program to be defined

[1] During supplement tribal consultation conducting during the public comment period, an additional resource, P-29-3960, was identified by the UAIC as a Tribal Cultural Resource (May 2019). This resource is located adjacent to the Project Site. During the Yuba-Bear Hydroelectric Project relicensing effort, this isolate was recommended ineligible for inclusion in the National Register of Historic Places (NRHP).

and implemented under the Historic Properties Management Plan (HPMP) developed for the project (Maniery 2012).

The remaining cultural resource (P-29-3971) was categorized as potentially eligible and required further research (NID 2011a). P-29-3971 is a multi-component site consisting of historic refuse scatter, railroad track, bedrock milling outcrop, and basalt core, which is unevaluated (NID 2011a). Effects from continued operation and maintenance of the Yuba-Bear Hydroelectric Project were determined at P-29-3971 (NID 2011a). The NID recommended further investigations at the site, to be completed under the HPMP that would be implemented at such time FERC may issue to the Licensee a new operating license (NID 2011a:116).

**Table 3.4-2**
**Unevaluated Cultural Resources within the Project Site**

| Site Number[1] | Site Type[2] | Description | Site Function/Category | Landowner[3] | CRHR Status[4] |
|---|---|---|---|---|---|
| P-29-3946 CA-NEV-2015 | P | Bedrock milling outcrops | Resource processing | NID | TE |
| P-29-3971 CA-NEV-2031/H | P/H | Refuse scatter, railroad track, bedrock milling outcrop, basalt core | Resource processing/ Refuse deposit/ Transportation | NID | PE |

[1] Primary No., Trinomial
[2] P = prehistoric; H = historic; P/H = prehistoric and historic
[3] BLM = Bureau of Land Management; NID = Nevada Irrigation District; TNF = Tahoe National Forest; PG&E = Pacific Gas and Electric Company; PRV= Private; SPI= Sierra Pacific Industries; SPTC = Sierra Pacific Transportation Company
[4] NE= not eligible, evaluated; PE= potentially eligible, unevaluated; TE= treated as eligible without evaluation. CRHR eligibility recommendation as per NID 2011a.

### 3.4.1.5 Paleontological Resources

A search of the University of California Museum of Paleontology (UCMP) database indicated that no paleontological specimens have been documented within or in the immediate vicinity of the Proposed Project (UCMP 2017). The underlying geologic formations at Rollins Reservoir consist of Paleozoic and Mesozoic metavolcanics (Saucedo and Wagner 1992) which typically do not contain paleontological remains. In general, Nevada County is not sensitive for paleontological resources with the exception of an area in the immediate vicinity of Chalk Bluff. Chalk Bluff is located in Township 16 North, Range 10 East, Section 29 on the Chicago Park U.S. Geological Survey (USGS) topographic quadrangle approximately 5 miles northeast of the Project Site where specimens of Tertiary period Magnoliopsida (a class of flowering plants) have been identified. Several examples of Filicopsida (ferns), and Liliopsida (a type of lily) were also documented from the Buckeye Diggings area about 7 miles northeast of the Project Site in Sections 17–20 of Township 16 North, Range 10 East on the Chicago Park USGS quadrangle.

### 3.4.1.6 Native American Community Consultation

As part of the Yuba-Bear Hydroelectric Project (between 2006 and 2011)~~Additionally~~, NID ~~had previously~~ conducted traditional cultural properties (TCP) studies in the Project Site ~~as part of the NID Yuba-Bear Hydroelectric Project (between 2006 and 2011)~~ (NID 2011b). Archival research and interviews with tribal informants for the Yuba-Bear Hydroelectric Project did not identify any resources that meet the definition of a TCP or that meet the NRHP criteria for listing on the NRHP.

As part of the Proposed Project, and ~~I~~in accordance with the consultation requirements of Assembly Bill 52 (AB-52), ~~Cardno~~NID ~~initiated~~ the consultation process with appropriate Native American groups with a possible interest in the cultural resource studies and the Proposed Project. In March 2017, ~~Cardno~~NID contacted the Native American Heritage Commission (NAHC) in Sacramento and requested a list of suitable tribal organizations and individuals, and a search of the NAHC Sacred Lands Files. The NAHC's response, dated April 4, 2017, indicated ~~T~~the Sacred Lands Files search revealed that no properties possessing culturally significant associations for the present-day Native American community were known to exist within or near the Project Site. The NAHC also provided contact information for the following groups and individuals from the Project vicinity:

- Mr. Gene Whitehouse, Chairman – United Auburn Indian Community of the Auburn Rancheria
- Mr. Darrel Cruz, Tribal Historic Preservation Officer – Washoe Tribe of Nevada and California
- Mr. Don Rydberg, Chairman – Tsi Akim Maidu
- Mr. Grayson Coney, Cultural Director – Tsi Akim Maidu

In April 2017, NID ~~sent~~ mailed letters to each of the individuals noted above to solicit information regarding sensitive cultural resources in and near the Project Site and to determine if they or their respective tribal organizations had an interest in or concerns with, the Proposed Project. Two entities responded to NID's outreach; the United Auburn Indian Community (UAIC) and the Nevada City Rancheria.

The Nevada City Rancheria responded to NID by letter on June 1, 2017, and requested consultation for the Proposed Project. The UAIC also responded to NID in two ~~by~~ letters (both dated May 30, 2017) requesting consultation, copies of existing cultural resource assessments and records searches conducted in the Project area, and ~~and~~ that a UAIC monitor be present during Project-related ground-disturbing activities and surveys. UAIC's response also indicated that their preservation committee identified cultural resources in and around the Project area.

Following this initial outreach, the Proposed Project was put on hold. In early October 2017, NID reinitiated Project activities. On October 16, 2017, NID contacted UAIC (Marcus Guerrero) and

Nevada City Rancheria (Shelly Covert) via phone to notify them that the Project was moving forward and to reestablish communication regarding tribal consultation for the Project. Neither tribal contact was available so a voicemail was left. Neither tribe returned the call. On October 27, 2017, NID responded to UAIC's original request for consultation and information by providing electronic copies of all existing cultural resource assessments and record searches conducted in the Project area, proposed mitigation measures for review, and responses to requests/recommendations. This information was simultaneously mailed to Nevada City Rancheria as well. NID's letter requested input from UAIC and Nevada City Rancheria on or before November 15, 2017 so that NID could move forward with the AB-52 and CEQA compliance process. No response was received.

Having completed the required AB-52 consultation process, on April 9, 2019 NID released the Draft EIR for the Proposed Project for a 30-day public review period. During the review period, UAIC submitted a comment letter (May 14, 2019). Following receipt of comments on the Draft EIR, NID conducted supplemental consultation with UAIC to address comments presented by UAIC. Refer to Section 2.3 of the Final EIR for a copy of UAIC's comment letter on the Draft EIR. Section 3.4.4 has been revised based on comments presented by UAIC. ~~NID will continue to engage both the Nevada City Rancheria and the UAIC during the course of the Project.~~

~~Additionally, the NID had previously conducted traditional cultural properties (TCP) studies in the Project Site as part of the NID Yuba-Bear Hydroelectric Project (between 2006 and 2011) (NID 2011b). Archival research and interviews with tribal informants for the Yuba-Bear Hydroelectric Project did not identify any resources that meet the definition of a TCP or that meet the NRHP criteria for listing on the NRHP.~~

## 3.4.2 Relevant Plans, Policies, and Ordinances

### 3.4.2.1 National Historic Preservation Act

No federal regulations related to cultural resources are applicable to the Project. However, federal regulations, namely Section 106 of the National Historic Preservation Act (NHPA), was the regulatory framework for the cultural resources investigations completed for the FERC project. As such, it is discussed here.

Section 106 of the NHPA (54 U.S.C. 300101 et seq.), as amended, requires that any Federal or Federally assisted project or any project requiring Federal licensing or permitting take into account the effect of the undertaking on historic properties listed in or eligible for the NRHP within the area of potential effects (APE). Section 106's intent is for Federal agencies to consult with the Advisory Council on Historic Preservation (ACHP), SHPO, Federally recognized Indian tribes, other Federal agencies with concurrent undertakings as a result of the project, applicants for Federal assistance, local governments, and any other interested parties regarding the proposed undertaking and its potential effects on historic properties. Engaging in consultation allows Federal

agencies to seek ways to avoid, reduce, or mitigate any effects on NRHP-listed or eligible properties. Effects include, but are not limited to, destruction or alteration of all or part of a property; isolation from or alteration of its surrounding environment; introduction of visual, audible, or atmospheric elements that are out of character with the property or that alter its setting; transfer or sale of a Federally owned property without adequate conditions or restrictions regarding preservation, maintenance, or use; and neglect of a property resulting in its deterioration or destruction.

The SHPO is appointed by each state to protect the interests of its citizens with respect to issues of cultural heritage. The NHPA provides each SHPO a prominent role in advising the responsible Federal agencies and ACHP (54 U.S.C. 3023 et seq.). In addition to the SHPO, the Lead Federal Agency has an obligation to work with state and local governments, private organizations, and individuals during the initial planning and development of the Section 106 process.

On nontribal lands, the Lead Federal Agency, in consultation with the SHPO, and other consulting parties, assesses the need for historic and archaeological resource investigations in the Proposed Project APE, generates and approves methodologies for undertaking such investigations within the state, and evaluates the preliminary NRHP status of any historical or archaeological resources located within the APE. The SHPO also assists the Lead Federal Agency in assessing any potential effects on historic properties. On tribal lands, the SHPO's Section 106 responsibilities can also be assumed by a Tribal Historic Preservation Officer (THPO) (54 U.S.C. § 302702).

### *The National Register of Historic Places*

The NRHP, created under the NHPA, is the Federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. NRHP properties have significance to the history of their community, state, or the Nation and have been deemed worthy of preservation based on value, integrity, and relevance. The National Park Service (NPS) maintains and expands the NRHP on behalf of the Secretary of the Interior.

To guide the determination of eligibility of archaeological resources, historic buildings and structures, or sites of religious and traditional significance as historic properties for inclusion in the NRHP, the NPS has developed the following NRHP Criteria for Evaluation (36 CFR 60.4). The criteria are standards by which every property is evaluated for listing in the NRHP. The criteria (36 CFR 60.4 [a–d]) used to evaluate the significance of a resource are as follows:

- *Criterion A.* Are associated with events that have made a significant contribution to the broad patterns of our history; or
- *Criterion B.* Are associated with the lives of persons significant in our past; or
- *Criterion C.* Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or

that represent a significant and distinguishable entity whose components may lack individual distinction; or

- *Criterion D.* Have yielded, or may be likely to yield, information important in prehistory or history.

Additional "Criteria Considerations" A through G are defined to guide application of the Criteria for Evaluation A through D, listed above. Properties also need to exhibit integrity of location, materials, setting, design, association, workmanship, and feeling and must also be at least 50 years old. Buildings less than 50 years old do not meet the NRHP criteria unless they are of exceptional importance under Criterion Consideration G, as described in NPS Bulletin No. 22, "How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years."

#### 3.4.2.2 California Environmental Quality Act

Before discretionary projects are approved and agency undertakings occur in California, the potential impacts of a project on cultural resources must be considered (Public Resources Code Sections 21083.2 and 21084.1 and the State CEQA Guidelines [California Code of Regulations Title 14, Section 15064.5]).

CEQA uses a broad definition of what constitutes a cultural resource, which is outlined in the California Code of Regulations Title 14, Section 4852. Cultural resources can include traces of prehistoric habitation and activities, historic-era sites and materials, and places used for traditional Native American observances or places with special cultural significance. In general, any trace of human activity over 50 years in age must be treated as a potential cultural resource. However, because projects can extend over a period of years from planning to implementation stages, 45 years is the minimum age generally accepted for resources to be considered historic for the purposes of CEQA.

Generally, a resource shall be considered by the lead agency to be historically significant and constituting a "historical resource" if it meets any of the criteria for listing in the CRHR. A property may be considered a historical resource if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

To be eligible for listing in the CRHR, a property must have both historic significance and integrity. Integrity is judged by considering the property's retention of location, design, setting, workmanship, materials, feeling, or association. Section 15064.5 of the State CEQA Guidelines also defines a historical resource as a location or property that is listed on a local register or as a significant resource in a historical resource survey, or as a site determined to be significant as supported by substantial evidence in the record.

In addition, Section 21083.2 of CEQA defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, a high probability exists that it meets one or more of the following criteria:

- That it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- That it has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- That it is directly associated with a scientifically recognized important prehistoric or historic event or person.

Concerning discoveries of human remains the State CEQA Guidelines (CCR Section 15064.5[e]) require that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the State CEQA Guidelines (CCR Section 15064.5[d]) direct the lead agency to consult with any appropriate Native Americans as identified by the NAHC in a timely manner, and direct the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains. NID has developed a Cultural Resources Policy (No. 6085) that outlines efforts for the District to protect inadvertent discovery of cultural resources or human remains (refer to Appendix C for the NID Policy).

### *Assembly Bill AB-52*

Assembly Bill 52 (AB-52) created a new category of environmental resources that must be considered under CEQA: "tribal cultural resources." Tribal cultural resources are defined as either (1) "sites, features, places cultural landscapes, sacred places and objects with cultural value to a California Native American tribe" that are included in the state register of historical resources or a local register of historical resources, or that are determined to be eligible for inclusion in the state register; or (2) resources determined by the lead agency, in its discretion, to be significant based on the criteria for listing in the state register.

Recognizing that tribes may have expertise with regard to their tribal history and practices, AB-52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project, and if they have requested notice of projects proposed within that area. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe. Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and the alternatives and mitigation measures recommended by the tribe. The parties must consult in good faith, and consultation is deemed concluded when either the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists) or when a party concludes that mutual agreement cannot be reached.

### *California Health and Safety Code and Public Resources Code*

Broad provisions for the protection of Native American cultural resources are contained in the California Health and Safety Code, Division 7, Part 2, Chapter 5 (Sections 8010 through 8030).

Several provisions of the Public Resources Code (PRC) also govern archaeological finds of human remains and associated objects. Procedures are detailed under PRC Section 5097.98 through 5097.996 for actions to be taken whenever Native American remains are discovered. Furthermore, Section 7050.5 of the California Health and Safety Code states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in PRC Section 5097.99. Any person removing human remains without authority of law or written permission of the person or persons having the right to control the remains under PRC Section 7100 has committed a public offense that is punishable by imprisonment.

PRC Chapter 1.7, Section 5097.5/5097.9 (Stats. 1965, c. 1136, p. 2792), entitled Archaeological, Paleontological, and Historical Sites, defines any unauthorized disturbance or removal of a fossil site or remains on public land as a misdemeanor, and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources.

### *Nevada County General Plan*

The Nevada County General Plan includes a chapter on cultural resources which outlines goals and policies designed to protect cultural resources identified in the County. Although the County does not have a specific cultural resources ordinance, the goals and policies from the general plan that are applicable to the Proposed Project are listed below:

**Goal 19.1** Identify and protect and where economically feasible restore significant archaeological and historic resources.

**Objective 19.1** Encourage the inventory, protection and interpretation of the cultural heritage of Nevada County, including historical and archaeological landscapes, sites, buildings, features, artifacts.

**Objective 19.2** Implement development standards, including the preservation of open space, to protect identified significant cultural sites.

**Policy 19.6** Require all applications for discretionary project permits, and all applications for ministerial project permits except single family residences on individual lots shall be accompanied by a Site Sensitivity Literature Review, prepared by a qualified archaeologist or entity such as the North Central Information Center, Department of Anthropology, California State University at Sacramento.

Where review indicates significant archaeological or historical sites or artifacts are, or are likely, present, on-site field review shall be required. If a site or artifacts are discovered, the find shall be evaluated and potential significance determined. If significant cultural resources may be directly or indirectly impacted by proposed development, appropriate mitigation shall be developed and implemented in accordance with California Environmental Quality Act standards, including Appendix K, prior to onset of ground disturbance. Avoidance of significant cultural resources shall be considered the mitigation priority. Excavation of such resources shall be considered only as a last resort when sufficient planning flexibility does not permit avoidance. On-site field review, evaluation of site significance, and development of mitigation measures, as identified above, shall be performed by a qualified professional archaeologist.

**Objective 19.3** Include in the development review process consideration of historic, cultural, and Native American concerns and values.

**Policy 19.7** Cooperate with local historical societies and the Native American community to protect significant historical, cultural and archaeological artifacts, improve access to and interpretation of unrestricted resources and archaeological history by involving them in the development review process (County of Nevada 1996).

### *Nevada Irrigation District*

NID has developed a Cultural Resources Policy (No. 6085) that outlines efforts of the District to protect inadvertent discovery of cultural resources or human remains (refer to Appendix C for the NID Policy). This includes the following implementation of the following:

- 6085.1 Discovery of Cultural Resources, and
- 6085.2 Discovery of Human Remains.

## 3.4.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to cultural and tribal resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to cultural resources would occur if the Project would:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
4. Disturb any human remains, including those interred outside of formal cemeteries.

According to Appendix G of the CEQA Guidelines, a significant impact related to tribal resources would occur if the Project would:

1. Cause a substantial adverse change in the significance of a tribal cultural resource which is listed or eligible for listing in the CRHR or local register of historical resources.

2. Cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant.

## 3.4.4 Impacts Analysis

Potential Project impacts related to cultural and tribal resources were evaluated against the CEQA significance criteria and are discussed below. The impact analysis evaluates potential Project impacts during the annual removal of sediment and associated activities. The Project would cause ground disturbance through sediment removal, establishing and using staging and stockpile areas, installation of the sediment barrier, establishing the access/haul road including the installation of

bridges and/or culverts, channelizing the creek, and installing dewatering pipes or excavation of dewatering channels.

Project impacts on cultural and tribal resources are defined by CEQA as a change in the characteristics of a resource that convey its significance or justify its eligibility for inclusion in the CRHR, or local register. Direct impacts may occur by: (1) physically damaging, destroying, or altering all or part of a resource; (2) altering characteristics of the surrounding environmental setting that contribute to the significance of a resource; (3) allowing a resource to deteriorate through neglect; or (4) incidental discovery of archaeological resources without proper notification. Direct impacts can be assessed by determining the exact location of historical resources and assessing their significance under CEQA criteria, identifying the types and extent of the proposed impacts and their effect on significant resources, and determining appropriate measures to reduce impacts to less-than-significant levels. Indirect impacts may include changes to the viewshed of a significant resource through introduction of a new project element.

CEQA recommends avoidance or preservation in-place as the preferred treatment for eligible properties and unique or significant archaeological or historical resources (PRC 21083.2). If avoidance is not a feasible option, data recovery is a common treatment. For architectural resources, if physical changes to a property—excluding demolition—can be treated following the Secretary of Interior Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, the Project-related impact on the historical resource will generally be considered reduced below a level of significance.

***Impact 3.4-1. The Project could result in damage to or destruction of significant documented cultural resources.***

During intensive cultural resources surveys for the Yuba-Bear Hydroelectric Project relicensing effort in 2011 (NID 2011a), a~~A~~ total of seven prehistoric and historic-era cultural resources were~~have been~~ documented adjacent to the Project Site. Five of these cultural resources were~~have been~~ determined not eligible for listing in the CRHR[2]. The remaining two sites, P-29-3946 and P-29-3971, were unevaluated.

~~, and Cardno archaeologists determined that both sites would not be affected by the Project.~~ P-29-3946 is located approximately 325 feet outside of the Project Work Area where active sediment removal activities would occur. The site is also above the high water line of the reservoir. Implementation of the Project would not result in direct or indirect effects on P-29-3946.

[2] During supplemental tribal consultation for the Proposed Project, an additional resource, P-29-3960, was identified by the UAIC as a Tribal Cultural Resource (May 2019). This resource is located adjacent to the Project Site. During the Yuba-Bear Hydroelectric Project relicensing effort, this isolate was recommended ineligible for inclusion in the NRHP.

P-29-3971 is directly adjacent to the Project Site. ~~In addition, P-29-3971 would not be affected by implementation of the Project.~~ Portions of the site are subject to periodic submergence and/or natural erosion (eastern site boundary) as a result of fluctuating reservoir levels. In addition, there was visible erosion from recent heavy rain events. Both the fluctuating reservoir levels and recent rain events are unrelated to implementation of the Project. Implementation of the Project does have the potential to remove artifacts that have eroded from the ~~cultural~~ site (eastern site boundary) ~~, but is not considered an impact as they lack locational integrity because they have~~and been redeposited within the reservoir. ~~Additionally, t~~The western site boundary, where the prehistoric component is located, would not be affected by sediment removal activities as it is outside of the sediment removal Work Area.

Because P-29-3946 and P-29-3971 are located adjacent to the Project Site and not located within the Work Area, ~~and~~ activities would not result in direct or indirect effects on the sites and~~,~~ the Project would have a **less-than-significant** impact~~no impact~~ on the unevaluated sites that may be eligible for listing in the CRHR. However, NID will implement mitigation measure MM-CUL-1 and MM-CUL-2 to provide further protection of potentially eligible sites.

***Impact 3.4-2. The Project could result in damage to or destruction of significant undocumented cultural resources.***

Although the Project Site has been previously surveyed, encountering undocumented cultural resources may occur. Subsurface disturbances could potentially destroy or damage these cultural resources. If these resources were to represent "unique archaeological resources" or "historic resources" as defined by CEQA, a significant impact would occur. However, NID will implement mitigation measure MM-CUL-1 and MM-CUL-2 reducing impacts to undocumented cultural resources to **less than significant**.

***Impact 3.4-3. The Project could result in damage to or destruction of human remains.***

The Project Site has been previously surveyed and no human remains were identified during the survey. However, human remains were reported at site P-29-3953 by a tribal representative, though no human remains were encountered during testing at the site in September and October 2010 (NID 2011a:128).

The inadvertent discovery of unmarked historic-era or prehistoric burials may occur during subsurface disturbances. Any such disturbance would represent a significant impact.

California law recognizes the need to protect historic-era and Native American human burials, skeletal remains, and items associated with Native American interments from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and Section 7052 and California

Public Resources Code Section 5097. NID will implement mitigation measure MM-CUL-3 reducing impacts to human remains to **less than significant**.

***Impact 3.4-4. The Project could result in damage to or destruction of significant undocumented paleontological resources.***

Due to the geological context (metavolcanic rocks) of the Greenhorn Arm of Rollins Reservoir, it is highly unlikely that any intact paleontological resources would be encountered during the course of Project implementation. However, subsurface disturbances could potentially destroy or damage presently undiscovered paleontological resources. If these resources were determined to be significant per CEQA criteria, a significant impact would occur. NID will implement mitigation measure MM-CUL-4 reducing impacts to undocumented paleontological resources to **less than significant**.

***Impact 3.4-5. The Project would not cause a substantial adverse change in the significance of a tribal cultural resource.***

From 2006 to 2011, NID conducted TCP studies for its Yuba-Bear Hydroelectric Project, which included evaluation of the Greenhorn Arm of Rollins Reservoir and the Project Site. The objective of the study was to identify TCPs that may potentially be affected by Project operation and maintenance, evaluate their eligibility for inclusion in the NRHP, and identify Project-related effects on NRHP-eligible TCPs, other tribal interests, or traditional interests of other groups. The study included archival research, tribal consultation, and site visits. The study did not identify any resources that meet the definition of a TCP or that meet the NRHP criteria for listing on the NRHP.

In addition, NID initiated Project-specific consultation in 2017 by contacting the NAHC to request a list of tribal organizations and individuals with a potential interest in the Project area and to request a search of their Sacred Lands Files. NAHC's Sacred Lands Files search revealed that no properties possessing culturally significant associations for the present-day Native American community were known to exist within or near the Project Site. During consultation with the UAIC, they identified three tribal cultural resources within the Project area: P-29-3946, P-29-3960, and P-29-3971. While the resources are not located within the Work Area and the Project would not result in a substantial adverse change to these resources, NID will implement mitigation measure MM-CUL-1 and MM-CUL-2 to educate workers and ensure protection to these resources. Impacts to tribal cultural resources are considered **less than significant**. ~~with Native American groups with a possible interest in the Proposed Project and requested a Sacred Lands Files search from the NAHC. No properties possessing culturally significant associations for the present-day Native American community were identified as existing within or near the Project Site. Since no TCPs were identified within the Project Site, **no impact** would occur.~~

## 3.4.5 Mitigation Measures

The following mitigation measures will be implemented as part of the Project to reduce potentially significant impacts to a less-than-significant level.

**MM-CUL-1** **Development and Implementation of a Cultural Resource Awareness Training Education ~~Worker Environmental Awareness~~ Program.** NID will ~~design and~~ implement a Cultural Resource Awareness Training Education ~~Worker Education~~ Program, ~~that~~which will be provided to all Project personnel (including construction supervisors and field personnel) who may encounter and/or alter historical resources ~~or~~, unique archaeological properties, or tribal cultural resources. No construction worker will be involved with~~in field~~ excavation activities or will conduct field operations without having participated in the Cultural Resource Awareness Training Education Program~~Worker Education Program~~. The ~~Worker Education~~ Program will include, at a minimum:

- A review of archaeology, history, prehistory and Native American cultures associated with historical resources in the Project vicinity;
- A review of applicable local, state and federal ordinances, laws and regulations pertaining to historic preservation;
- A discussion of avoidance and minimization measures for resources that have the potential to be located on the Project Site and procedures to be followed in the event that unanticipated cultural resources are discovered during implementation of the Project;
- A discussion of disciplinary and other actions that could be taken against persons violating historic preservation laws and NID policies;
- Distribution and review of a tribal cultural resources brochure and training video;
- A discussion of the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values; and
- A statement by the construction company or applicable employer agreeing to abide by the Cultural Resource Awareness ~~Worker Education~~ Training Education Program, NID policies, and other applicable laws and regulations.

The ~~Worker Education~~Cultural Resource Awareness Training Education Program may be conducted in concert with other environmental or safety awareness and education programs for the Project, provided that the program elements pertaining to cultural resources are provided by a qualified ~~instructor~~ cultural resources specialist meeting applicable professional qualifications standards.

**MM-CUL-2** **~~Unanticipated Discovery of Potentially Significant Prehistoric and Historic Resource~~Measures for the Protection of Cultural and Tribal Resources (Known and Inadvertent Discovery).~~s.~~**

**Protection of Known Cultural and Tribal Resources**. Prior to and during Project implementation, NID will implement the following measures to protect known cultural resources adjacent to the Project Site:

- The boundary of sites P-29-3946, P-29-3960, and P-29-3971 will be staked with construction fencing or stakes and flagging prior to Project implementation and will be monitored during Project activities to maintain the protective barrier and to report on any violations of the protected areas.

- NID will notify and invite tribal representatives to participate in pre-construction cultural site demarcation and surveys.

- An NID Qualified Professional Archaeologist will conduct monitoring during active sediment removal activities within 50 feet of P-29-3946, P-29-3960, and P-29-3971. NID Cultural Resources Policy (No. 6085.1 Discovery of Cultural Resources) will be implemented in the event of unanticipated disturbance to these sites.

- NID will notify by email the tribal representatives a minimum one week prior to active sediment removal activities for work within 50 feet of P-29-3946, P-29-3960, and P-29-3971. Tribal representatives will arrange for a tribal monitor(s), and will coordinate with NID as appropriate. If items are uncovered, the tribal monitor(s) is (are) responsible for managing, documenting, recovering, and returning any cultural items to a location acceptable to the tribe.

**Inadvertent Discovery of Previously Unknown Cultural Resources**. If an inadvertent discovery of tribal cultural resources, archaeological resources, or other cultural resources/~~cultural~~ materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, structure/building remains, etc.) is made during Project-related construction activities, the NID Cultural Resources Policy (No. 6085.1 Discovery of Cultural Resources) will be implemented. This policy includes a stop work order~~,~~ or relocation of work by~~communication with~~ the NID project

manager, avoidance of the discovery by 150 feet, and coordination with a qualified archaeologist. Refer to Appendix C for the NID Policy.

As part of this policy, the archaeologist shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation in consultation with the NID, ~~and~~ the SHPO, and Native American Tribal representatives to protect the integrity of the resource and ensure that no additional resources are impacted. Mitigation could include, but not necessarily be limited to preservation in-place, archival research, subsurface testing, or data recovery.

Implementation of the above mitigation measure would reduce potentially significant impacts resulting from inadvertent damage or destruction of known and unknown cultural resources during construction to a **less-than-significant** level.

**MM-CUL-3** **Unanticipated Discovery of Human Remains.** In accordance with the California Health and Safety Code and NID Cultural Resources Policy (No. 6085.2 Discovery of Human Remains), if human remains are uncovered during ground-disturbing activities, all work within 150 feet of the area of the burial shall be halted. The NID project manager will be notified immediately, who in turn will notify the qualified archaeologist. The qualified archaeologist will contact the Nevada County Sheriff/Coroner to determine the nature and extent of the remains.

The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of Native American descent, the coroner must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC shall identify the most likely descendant (MLD). Once given the permission by NID and the land owner (if different from NID), the MLD shall be allowed on-site. The MLD shall complete their inspection and make their recommendation to NID for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. MLD recommendations must be made within 48 hours of the NAHC notification to the MLD.

No additional work shall take place within the immediate vicinity of the find until the qualified archaeologist gives approval to resume work in that area. Refer to Appendix C for the NID Policy.

A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in-place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment, may be discussed. AB 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the landowner shall comply with one or more of the following:

- Record the site with the NAHC or the appropriate Information Center;
- Utilize an open space or conservation zoning designation or easement; and/or
- Record a document with the county in which the property is located.

The landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. Adherence to these procedures and other provisions of the California Health and Safety Code and AB 2641(e) will reduce potential impacts to human remains to a **less-than-significant** level.

**MM-CUL-4** **Unanticipated Discovery of Paleontological Resources.** If an unanticipated discovery of paleontological materials is made during Project-related construction activities, all work within 100 feet (30 meters) of the discovery will be halted and redirected to another location. A qualified paleontologist will be notified regarding the discovery. The paleontologist shall determine whether the resource is potentially significant per the CEQA and develop appropriate mitigation to protect the integrity of the resource and ensure that no additional paleontological resources are impacted. Mitigation could include, but not necessarily be limited to preservation in-place, archival research, and specimen excavation and recovery.

Implementation of the above mitigation measure would reduce potentially significant impacts resulting from inadvertent damage or destruction of paleontological resources during construction to a **less-than-significant** level.

## 3.4.6 Level of Significance After Mitigation

Mitigation measures MM-CUL-1 through MM-CUL-4 describe measures to be implemented to prevent inadvertent damage or destruction of known and unknown cultural resources, paleontological resources, and human remains. Implementation of these measures would reduce impacts to cultural resources to a **less-than-significant** level.

## 3.4.7 References


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# 3.11 RECREATION

This section describes the existing recreation setting of the Project Site and vicinity, evaluates potential impacts, and identifies mitigation measures related to implementation of the Greenhorn Sediment Removal at Rollins Reservoir Project (Proposed Project or Project).

## 3.11.1 Existing Conditions

The Project Site is located on the Greenhorn Arm of Rollins Reservoir, on the west slope of the Sierra Nevada at an elevation of approximately 2,170 feet above mean sea level (msl). The Project Site is situated in a relatively rural area of Nevada County. The closest communities to the Project Site are the small towns of Colfax, Shady Glen, and Chicago Park. The largest city near the Project is Sacramento, with an estimated population of 495,234 (U.S. Census Bureau 2016).

Interstate 80 provides the primary vehicle access in the vicinity of the Project, connecting the Sacramento and surrounding metropolitan area in the Central Valley to the smaller foothill and mountain communities to the east, including Auburn, and the dense forests, reservoirs, and mountainous terrain that characterize the Sierra Nevada (Map 2-1). From Interstate 80, Rollins Reservoir is accessible via Colfax Highway (174) and Rollins Lake Road. The Project Site can be reached by taking Colfax Highway (174) to You Bet Road which provides the primary access to the Greenhorn Arm of Rollins Reservoir. Staging Area 3 (SA-3) can be reached by taking Colfax Highway (174) to the Greenhorn Access Road to the Greenhorn Campground Boat Launch parking area (Map 2-3).

The Project Site is located on private land owned by Nevada Irrigation District (NID) and a small portion of Bureau of Land Management (BLM) land. SA-1 is located on a County-owned and maintained right of way. Nearly all of the area surrounding Rollins Reservoir is privately owned. Individual residences and small groups of houses are scattered throughout the heavily forested areas that encompass the Greenhorn Arm of the reservoir. The area to the west of the reservoir, along Colfax Highway (Road 174) is more densely populated. The reservoir is an important recreation resource for these local communities in particular, and the region in general.

Rollins Reservoir is situated in a region with numerous reservoirs, including the Sugar Pine Reservoir and Scotts Flat Lake, both located within one hour of the Project Site (Map 2-1). Three larger reservoirs, New Bullard's Bar Reservoir, Folsom Lake, and Lake Oroville are located within two hours of the Project Site. All of these reservoirs are situated in settings that are similar to Rollins Reservoir and offer a variety of recreation opportunities, including camping, picnicking, boating, and fishing. Additionally, the Tahoe National Forest (TNF) is located east, southeast, and northeast of the Project Site (Map 2-1). Almost any outdoor recreation activity associated with mountain, river, and/or lake environments is available in the TNF.

#### 3.11.1.1 Recreation Resources at Rollins Reservoir

This section describes the existing recreation facilities at Rollins Reservoir and provides estimates of recreation use and facility utilization. Unless otherwise noted, all information provided in this section is based on data collected during the relicensing of the Yuba-Bear Hydroelectric Project (FERC Project No. 2266) and reported in Technical Memorandum 8-2b, Recreational Use and Visitor Survey (NID 2011). The data documented in this memorandum is based on field studies conducted in 2009.

A wide range of recreation activities are available at Rollins Reservoir including camping, picnicking, beach swimming, motorized and non-motorized boating, and fishing. These activities are supported by various developed facilities located around the perimeter of the reservoir including campgrounds, day-use areas, boat launches, marinas/slips, fueling stations, general stores, restaurants, and parking areas. As shown on Map 2-3, the developed recreation facilities are consolidated into four "recreation areas", each with a campground, a boat ramp, a marina, and other support facilities. Each of these areas is described later in this section.

In 2009 estimated recreation use at Rollins Reservoir during the peak recreation season (Memorial Day through Labor Day), was 115,456 recreation-days. A recreation-day is defined as a visit by a person for recreation purposes during any portion of a 24-hour period. The 2009 data indicated that the majority of visitation at Rollins Reservoir is associated with overnight stays (78%). About 22% of visitation is attributed to day-use. Most day-use visitation is from Placer, Nevada, and Sacramento counties. Approximately 28% of visitation originates from either Placer or Nevada counties. Sacramento county overnight trip-origins account for 34% of visitation.

Camping is only permitted at four developed campground facilities, referred to as Orchard Springs Campground, Greenhorn Campground, Peninsula Campground and Long Ravine Campground. These campgrounds offer a variety of camping opportunities (tents, Recreational Vehicles, trailers). The Orchard Springs, Greenhorn, and Long Ravine campgrounds could be considered "high-density" camping. Space at these facilities is minimal as is screening between campsites, and some sites are grouped together in tight areas. The Peninsula Campground offers a relatively lower density camping experience. The campsites at this campground are situated in a more densely forested setting with screening between sites. With the exception of Peninsula Campground, the campgrounds are open year-round. Combined, the four campgrounds include a total of 348 campsites. In 2009, the combined seasonal occupancy of the four developed campgrounds at Rollins Reservoir was 65% of capacity.

Both motorized and non-motorized boating are popular at Rollins Reservoir. The maximum on-water speed limit is 50 miles per hour (mph) during the daytime and 10 mph at night. At designated launch and mooring areas, and fishing areas, the speed limit is 5 mph. Motorized watercraft are prohibited in designated swimming areas.

The developed recreation facilities at Rollins Reservoir, and associated use, are described in more detail in the following subsections.

### *Orchard Springs Recreation Area*

The facilities that comprise the Orchard Springs Recreation Area are located on the southeast end of the reservoir, immediately northeast of the dam (Map 2-3). This area includes a campground, a resort, a store, a boat launch, boat slips, and two swim beaches.

Shoreline use occurs at the swim beaches and the most common shoreline activities are picnicking/sunbathing. During 2009, the highest level of shoreline use occurred during holiday days, followed by weekend days. The most common types of water craft in this area are ski boats, fishing boats, and jet skis/personal water craft (PWC).

The campground includes a total of 101 camp sites. In 2009, the highest occupancy occurred in July when average facility occupancy was 41% of capacity. As expected, the highest recreation use occurs on holidays and weekends. In 2009, occupancy on holidays averaged 85% of facility capacity. During weekend days, occupancy averaged 62% of facility capacity.

### *Peninsula Recreation Area*

This area is located at the end of the peninsula that separates the Bear River Arm from the main body of Rollins Reservoir (Map 2-3). The Peninsula Recreation Area includes a campground, boat launching facility, three camping cabins, a swimming beach (with volleyball court and horseshoe pit), and toilet buildings with hot showers. In addition, the campground offers a general store and boat rentals.

Parking is available at the boat launch facility for day-use visitation and for overflow campground parking. The boat launch parking area has a 50 vehicles at one time (VAOT) capacity and is paved with designated spaces. The number of vehicles using the parking area is highest during weekends and holidays.

The most common shoreline activities at the Peninsula Recreation Area are picnicking/sunbathing and swimming. The highest level of shoreline use occurs during weekend days, followed by holiday days. The most common types of watercraft observed in this area are ski boats and jet skis/PWCs.

Camping opportunities at the Peninsula Recreation Area include tents and RV sites. The campground includes a total of 83 camp sites, organized in three loops. In 2009, average facility occupancy was 62.7% of capacity. In 2009, the highest recreation use occurred on holidays and weekends. In 2009, occupancy on holidays averaged 100% of facility capacity. During weekend days, occupancy averaged 90% of facility capacity.

### *Long Ravine Recreation Area*

This area is located at the south east end of the reservoir and includes a campground with sites for RV and tent camping, group camp sites, a dump station, a marina with a boat ramp, a floating gas dock/pump, boat slips and boat rentals, a swim platform and slide, and a large beach (Map 2-3). In addition, this area includes a general store and restaurant.

Parking at the Long Ravine Recreation Area is available at the boat launch facility. This parking area includes upper and lower sections, both paved with designated spaces. The total capacity of the parking area is 72 VAOT. Overflow parking is accommodated along the side of the access road and exterior of the parking area. The number of vehicles using the parking area is highest during weekends and holidays.

Visitors may use the shoreline at two locations in the Long Ravine Recreation Area: at the swim beach and near the shoreline campsites adjacent to the boat launch facility. At both of these locations the most common activities are picnicking/sunbathing and swimming and the highest use levels are during weekend days and holiday days. The most common types of water craft observed in this area are ski boats, jet skis/PWCs, and fishing boats.

The campground includes a total of 85 campsites organized in two loops. The campground includes shoreline campsites, adjacent to the boat launch, where visitors have access to the shoreline. As with the other campgrounds, recreation use is the highest on weekends, with an average of 100% facility utilization reported in 2009, followed by weekend days, with a an average facility capacity utilization of 95%.

### *Greenhorn Recreation Area*

This area is located in a cove west of the Greenhorn Arm of Rollins Reservoir. A topographic high separates the cove from the Greenhorn Arm of the reservoir (Map 2-3). This area includes a campground, a general store and arcade, flush toilet buildings, a picnic area with three picnic units, a marina, a swimming beach, and a volleyball court. A boat launch facility with a parking area, paved boat launch, and single dock is located on the east shore of the cove, approximately 700 feet from the resort. A paved access road provides access to the parking area and boat launch. An unpaved parking area is located just beyond the paved parking area and is available for overflow use. Representative photographs of the Greenhorn Recreation Area are provided in Photos 3.11-1 through 3.11-4 at the end of this section.

Three separate parking areas and overflow parking are available at the Greenhorn Recreation Area, as follows:

- **Boat Launch Parking Area.** This parking area is located immediately adjacent to the boat launch. This parking area is paved with designated spaces and has a capacity of 68 VAOT. Under the Proposed Project, this parking area will be used as SA-3 (Map 2-2).

- **Swim Beach and Picnic Area Parking.** The swim beach and picnic area has a gravel parking area with a capacity of about 35 VAOT, although none of the parking spaces are designated. When capacity is reached at this parking area vehicles are allowed to park on the grass beyond the parking area.
- **Overflow Parking Area.** This parking area is located off of the main access road, prior to the boat launch. The overflow parking area is an undeveloped gravel parking area without marked spaces with a capacity of about 40 VAOT. When the capacity of this designated overflow parking area is reached vehicles are allowed to park alongside the main access road.

As expected, use of these parking areas is highest during holidays, followed by weekends.

In 2009, the most commonly observed shoreline activities in the Greenhorn Area were picnicking/sunbathing. Correlating with parking use, shoreline use was highest during holiday days, followed by weekend days. In 2009, the most common types of water craft observed in the Greenhorn Recreation Area were ski boats and jet skis/PWCs.

The campground includes a total of 79 campsites, organized in two loops. In 2009, average facility occupancy was 59.2% of capacity. In 2009, the highest recreation use occurred on holidays and weekends. In 2009, occupancy on holidays averaged 100% of facility capacity. During weekend days, occupancy averaged 90% of facility capacity.

## 3.11.2 Relevant Plans, Policies, and Ordinances

### 3.11.2.1 Federal

The Project Site boundary includes a 3.2-acre parcel within the Work Area that is under the jurisdiction of BLM. This parcel is within the FERC Project boundary for the Yuba-Bear Hydroelectric Project (Map 3.8-1). The BLM manages these lands in accordance with the Sierra Resource Management Plan (SRMP) (BLM 2007) with specific emphasis on establishing a balance between environmental protection with recreation and consumptive uses. The BLM parcel within the Greenhorn Arm is not located within any BLM specially-designated areas.

### 3.11.2.2 State

The California Department of Recreation (CDPR) has developed a statewide master plan for recreation referred to as the Statewide Comprehensive Outdoor Recreation Plan (SCORP). According to the CDPR, "the SCORP serves as a statewide master plan for state and local parks and outdoor recreational open space areas. The SCORP also offers policy guidance to all outdoor recreation providers, including federal, state, local, and special district agencies throughout California" (CDPR 2015). The Project Site lies within CDPR's Sierra Planning Area. The SCORP does not contain objectives or policies specific to Rollins Reservoir.

### 3.11.2.3 Local

The Project Site is located in Nevada County. Therefore, activities associated with the Project must be consistent with the objectives and policies outlined in the Nevada County General Plan and related county ordinances. The General Plan provides the County with a framework to guide and manage growth and future development within the County (Nevada County 2014). Pertinent recreation-related objectives and policies that are outlined in the Recreation Element of the General Plan and outlined below. Note that the Recreation Element of the Nevada County General Plan does not include any objectives or policies specific to Rollins Reservoir.

**Objective 5.7.** Preserve and encourage water based recreational opportunities.

**Policy 5.18.** Cooperate with other public agencies to provide public access to the lakes and impoundments in the County, consistent with their ability to support water based recreation.

**Policy 5.19.** Cooperate with other public and private agencies to provide public access to the rivers in the County, with emphasis at road and highway bridges so as to assure access for police and emergency vehicles.

**Policy 5.20.** Encourage proper operation and environmental standards for private facilities on lakes, impoundments, and rivers.

**Objective 5.9.** Provide for recreational opportunities for visitors while preserving rural character.

**Policy 5.22.** Encourage the development of private recreation facilities within the Recreation land use designation of the General Plan, including food services, motels/hotels, resorts, day camps, and overnight camps.

**Policy 5.23.** Allow the development of limited recreational uses in Rural and Forest land use designations.

## 3.11.3 Thresholds of Significance

The significance criteria used to evaluate potential Project-related impacts to recreation are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.). Appendix G, a significant impact related to recreation would occur if the Project would:

1. 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.
2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

### 3.11.4 Impacts Analysis

As explained in the Project Description (Section 2.0), the Proposed Project involves the removal of sediment from the Greenhorn Arm of Rollins Reservoir primarily to: (1) restore and/or maintain the water storage capacity of Rollins Reservoir; and (2) restore recreational opportunities in the Greenhorn Arm of Rollins Reservoir. Sediment continually migrates into Rollins Reservoir via Greenhorn Creek. Therefore, to maintain water storage capacity, sediment removal activities will occur annually. In general, sediment removal activities will occur from July through November, depending upon reservoir water surface elevation (WSE) and flows in Greenhorn Creek.

The Proposed Project activities will be scheduled to occur when flows in Greenhorn Creek recede to base levels and when the WSE in Rollins Reservoir is low as part of normal reservoir operations. Project operations will not be modified as part of the Proposed Project. Therefore, the WSE in Rollins Reservoir will be similar to historic conditions and the same reservoir-based recreation opportunities that have been available in the past (i.e., motorized and non-motorized boating, fishing, water play) will continue to be available during and after the Project is implemented. Therefore, implementation of the Proposed Project will have a **less-than-significant** impact on the availability and variety of reservoir-based recreation opportunities. Furthermore, implementation of the Proposed Project will benefit reservoir-based recreation opportunities by improving water depth and fish habitat in the Greenhorn Arm of Rollins Reservoir over time.

Project activities will occur in the immediate vicinity of the Greenhorn Recreation Area (Map 2-2). Therefore, as discussed below, the Project could potentially affect recreation visitors using this area. Some of these visitors could be displaced to other facilities on the reservoir. Recognizing this possibility, the Project includes the following public notification requirements that are designed to help minimize potential effects to recreation visitors and minimize displacement.

- NID will keep the Rollins Reservoir campground concessionaire apprised of construction-related activities in the Greenhorn Arm so that information can be disseminated the public via the NID website (www.nidwater.com).
- NID will provide the concessionaries annual notification of the Project schedule and activities in a format that can be posted on site at the reservation window, at information boards within the campgrounds, and at boat docks. Information will also be posted on NID's website to ensure that prospective recreation visitor are informed of Project activities.

These notification requirements will allow recreation visitors to time their visit and plan activities around the construction schedule. Additional measures that NID will implement to help reduce impacts to recreation visitors and minimize displacement are discussed in the following subsections.

***Impact 3.11-1. The project is unlikely to increase the use of existing neighborhood and regional parks but could potentially increase the use of other recreational facilities on the reservoir.***

The following Project activities have the potential to displace recreation visitors to other facilities on the reservoir.

### ***Staging Area 1 (SA-1)***

As part of the Project, NID proposes to use SA-1 to stage a Project office trailer and portable restrooms, and for parking personal vehicles of construction staff (up to six vehicles). In addition, SA-1 may be used as a designated vehicle fueling area (fuel would be stored in a mobile tanker truck). SA-1 is located in a County-owned and maintained right of way, and the site is currently used by the public for parking and access to Greenhorn Creek. Therefore, NID's proposed use of SA-1 may potentially limit public use of the site during Project implementation, and temporarily increase use of other parking areas that provide access to river-based recreation. However, this impact is expected to be less than significant for several reasons.

First, Proposed Project activities will be scheduled to occur from July through November, when flows in Greenhorn Creek recede to base levels. During this period, even without implementation of the Project, river-based recreational pursuits (e.g., boating and fishing) would therefore typically be minimal due to extremely low river flows; and parking demand for river-based recreators would be accordingly lower than during higher-flow periods. Second, NID's use of SA-1 would not preclude use by the public. As described in Section 3.12, Transportation, NID's use of the site will require a County encroachment permit and lease agreement which will include terms for appropriate use of the site. Portions of SA-1 that are not in use during Project implementation would remain available for public use. Considering that the Project will be implemented during low-flow when river-based recreation opportunities are minimal under existing conditions; and that public access to SA-1, while reduced, would still be available; impacts related to NID's use of SA-1 and the potential for displacement of recreation to other areas of the reservoir would be considered **less than significant**.

### *Transport of Equipment and Material to Staging Areas*

Sediment removal activities will involve the use of heavy equipment, vehicles, and machinery. This equipment will be transported to three staging areas, one of which, SA-3, is located at the paved Greenhorn Campground Boat Launch Parking Area (Map 2-2). Equipment and material will be transported to SA-3 via the Greenhorn Access Road over an approximate 2 week period at the beginning of July, and only when the sediment barrier is installed or moved. This road passes the Greenhorn Campground, picnic area, and associated facilities. The access road is paved, so fugitive dust is not expected. However, truck traffic and associated noise could disrupt recreation visitors at the resort, campground, and day-use area. Some of these visitors may be inclined to utilize the facilities located elsewhere on the reservoir.

Accordingly, in addition to ensuring that the concessionaires and public are informed, NID will implement mitigation measure MM-REC-1 to further reduce potential impacts to visitors. This measure requires that NID does not transport equipment and materials to SA-3 on the July 4th holiday, or on the weekend immediately preceding or following the July 4th holiday. This measure will ensure that recreation visitors are not disrupted by construction traffic during the high-use July 4th holiday period. Recreation visitors will be able to utilize the Greenhorn Recreation Area facilities during the July 4th holiday and associated weekends without disruption, thereby minimizing potential displacement. In addition, equipment transport activities will be short-term and temporary, limited to an approximate 2-week period during the few times the sediment barrier is installed or moved. Therefore, potential impacts associated with equipment transport are considered **less than significant**.

### *Staging Area 3 (SA-3)*

A portion of the paved parking area adjacent to the Greenhorn Campground Boat Launch will be used as a staging area for equipment and materials to be used for sediment barrier installation and related activities. SA-3 will only be used in years when the barge is launched for installation or moving of the sediment barrier. During these years, NID will also have a designated fueling station, project office trailer, personnel parking, and a portable restroom stationed at SA-3. About half of the parking area will be used for Project purposes which will reduce the availability of parking for people who launch boats from the Greenhorn Campground Boat Launch. When SA-3 is in use, visitors may be inclined to use other boat launch facilities at Rollins Reservoir, particularly during high-use periods such as holidays and weekends. However, in 2009, on average the Greenhorn Parking Area was only 50% utilized during the peak recreation season, meaning the parking area has the capacity to accommodate both existing parking demand and the staging area, except possibly on holidays and weekends. In addition, two other parking areas (Picnic Area and Overflow) are available in the Greenhorn Recreation Area, and parking is allowed along the access road. Nevertheless, some users may be displaced to other areas on the reservoir. In this case, the other parking areas around the reservoir have the capacity to absorb increased parking demand, if needed. Therefore, visitor displacement that may occur as a result of using the Greenhorn Campground Boat Launch Parking Area as a staging area is considered **less than significant**.

### *Installation of Sediment Barrier*

The Project includes the installation of a sediment barrier to prevent further migration of sediment into the reservoir. Installation of the sediment barrier will require driving interlocking steel sheet piles in the reservoir bottom with a pile driver mounted on a barge. Initially, the sediment barrier will be installed in the main body of Rollins Reservoir. However, the location of the sediment barrier will eventually move into the Greenhorn Arm as sediment removal activities proceed. Upon completion, the top of the barrier will be beneath the surface of the water and 5-mph buoys and/or signage will be installed in the water and on shore, both upstream and downstream of the barrier (Figure 2-2).

Installation or moving of the sediment barrier is expected to occur over a 2-week period in July. Initially the sediment barrier will be installed in the main body of Rollins Reservoir, however the location will eventually move into the Greenhorn Arm as sediment removal activities proceed. It is estimated that the sediment barrier will be moved two times during the term of the Project (Map 3.9-1). When the sediment barrier is installed or being moved, boaters will be required to use one of the three other boat ramps and/or marinas on the reservoir for boating access. Upon completion of installation or moving of the sediment barrier, SA-3 will be demobilized and the entire parking area and boat launch will be available for recreation use. As discussed below, this activity could result in two potential impacts, one relating to reservoir use and one relating to boat launching.

### Reservoir Use

Sediment barrier installation will involve the use of barges and large equipment, including cranes and pile drivers. For public safety reasons, NID will implement mitigation measure MM-REC-2 to prohibit boaters from entering the Work Area while the sediment barrier is installed. This measure requires that NID place buoys and/or signage at a distance of 200 feet around the barge during installation of the sediment barrier. When the installation is complete, the sediment barrier will be under water and boaters will be able to safely pass over the barrier. However, as a precaution, NID will place 5-mph buoys and/or signage in the water and on shore, both upstream and downstream of the barrier (Figure 2-2). This type of low-speed signage is present in other locations on the reservoir.

While the barrier is being installed in the main body of the reservoir, boaters will be able to pass around the Work Area provided they stay outside the area that is delineated by buoys. However, some boaters may be inclined to avoid the Work Area completely due to noise and construction activity. The total area of the reservoir to be affected during sediment barrier installation is approximately 7.25 acres, or 1% of the total reservoir surface area. Given that most of the reservoir will still be available for boating, eliminating 1% of the reservoir for a short-term period is considered a **less-than-significant impact**.

### Boat Launch Availability

When the sediment barrier is initially installed, and when it is moved, a portion of the Greenhorn Campground Boat Launch will be unavailable to the public for a 2-week period in July. While a portion of the Greenhorn Campground Boat Launch is closed to the public, boaters may decide to launch their boats from one of the other three launches on the reservoir. This situation will only occur when the sediment barrier is initially installed, and when it is moved out of the main body of the reservoir. As discussed above, the other boat launches and associated parking areas have the capacity to absorb a limited amount of increased use. Since this situation is short-term and temporary, displacement of boaters to other launches is considered **less than significant**.

### *Sediment Removal, Transport, Processing and Related Activities*

Sediment removal, transport, processing and related activities will not occur in the immediate vicinity of the Greenhorn Recreation Area. Therefore, with the exception of the transport of materials and equipment to and from SA-3, and installation of the sediment barrier, these activities will not directly affect recreation visitors using the boat launch, campground, picnic area, resort, or associated facilities. However, it may be possible to hear the noise associated with these activities, particularly during the beginning of the Project when sediment removal activities are more concentrated near the main body of the reservoir. Noise associated with pile driving, sediment removal, loading, transport and sorting could disrupt visitors and displace them to other campgrounds and day-use areas on the reservoir, or potentially one of the other reservoirs with similar opportunities located within 1 to 2 hours of the Project Site (refer to Section 3.10 Noise).

Combined, the four campgrounds at Rollins Reservoir include a total of 348 campsites. The Greenhorn Campground consists of 79 campsites, or 23% of the total. In 2009, the combined seasonal occupancy of the four developed campgrounds at Rollins Reservoir was 65% of capacity, meaning 35% of the campsites were unused. Therefore, on a seasonal basis there is enough capacity at the other campgrounds on the reservoir to absorb displaced users from Greenhorn Campground, even if 100% of those users are displaced. The exception is weekends and holidays when use at all of the facilities on Rollins Reservoir are at or near capacity. Therefore, in addition to the notification requirements summarized above, the Project includes the following requirements that are designed to reduce potential impacts to recreation visitors and to minimize displacement:

- Project-related work will only be performed between the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday.
- No work will occur on Sunday’s and federal holidays, except during emergencies.

Implementation of the Proposed Project is not expected to increase the use of existing neighborhood or regional parks, or other recreation facilities to the extent that substantial physical deterioration of such facility would occur, or be accelerated. It is unlikely that displaced recreation visitors would utilize existing neighborhood or regional parks because, to a large extent, the recreation uses associated with existing neighborhood or regional parks are not comparable to those supported at Rollins Reservoir. Neighborhood and regional parks typically do not include a large water body with associated recreation uses and support facility development. Any potential impacts to other recreation facilities located at Rollins Reservoir would be minimized by: (1) notifying the public of Project-related activities and potential closures or disruptions via a website, the concessionaire, and signage; and (2) avoiding work during high recreation use periods such as weekends and holidays. Therefore, any impacts related to potential recreation visitor displacement are considered **less than significant**.

***Impact 3.11-2. The Project will not require the construction or expansion of recreational facilities that might have an adverse effect on the environment. Therefore, implementation of the Project will have no impact.***

The Project does not include recreational facilities or require the construction or expansion of recreational facilities. The existing facilities at Rollins Reservoir can accommodate all recreation use that occurs at Rollins Reservoir, including users who may be displaced from the Greenhorn Recreation Area. Therefore NID does not propose to construct or expand any recreation facilities to accommodate use and therefore there is **no impact**.

## 3.11.5 Mitigation Measures

The following mitigation measures will be implemented as part of the Project to reduce potentially significant impacts to a less-than-significant level.

**MM-REC-1** The transport of equipment and materials along the Greenhorn Access Road to SA-3 shall not occur on the July 4th holiday, or during the weekends immediately preceding or following the July 4$^{th}$ holiday, except in emergency situations.

**MM-REC-2** A line of buoys and/or signage shall be placed at a distance of 200 feet around the barge during installation of the sediment barrier to prohibit boaters from entering the barrier installation Work Area. Under no circumstances shall boaters be allowed to enter the Work Area delineated by the buoy line.

## 3.11.6 Level of Significance After Mitigation

As part of the Project, equipment and material will be transported to SA-3 via the Greenhorn Access Road during a 2-week period in July. MM-REC-1 requires NID to avoid equipment and material transport to SA-3 on the July 4th holiday and the weekends surrounding that holiday, all of which traditionally experience heavy recreation use. Implementation of this measure will allow recreation visitors to utilize the Greenhorn Recreation Area without the disturbance of truck traffic and associated noise, thereby minimizing the displacement of visitors to other recreation facilities during high-use periods, thereby reducing the possibility of physical deterioration of those facilities to **less than significant.**

MM-REC-2 requires NID to place a buoy line around the barge during sediment barrier installation. Implementation of this measures allows boaters to continue to access the main body of the reservoir, while keeping a safe distance from the construction zone, thereby reducing the need to utilize other areas of the reservoir or other facilities resulting in impacts that are **less than significant.**

## 3.11.7 References


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**Photo 3.11-1 Greenhorn Campground Boat Launch Parking Area.**

**Photo 3.11-2 Greenhorn Campground Boat Launch.**

**Photo 3.11-3 Greenhorn Campground.**

**Photo 3.11-4 Shoreline Recreation Use at Greenhorn Campground.**

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# 3.12 TRANSPORTATION

This section describes the existing traffic and circulation setting within the Greenhorn Sediment Removal at Rollins Reservoir Project (Proposed Project or Project) vicinity, identifies relevant regulatory requirements, qualitatively evaluates potential impacts, and identifies mitigation measures related to the Project. The Project study area for transportation includes the Interstate 80 (I-80) corridor in Placer County and the State Route 174 (SR-174) corridor in both Placer and Nevada counties, to You Bet Road in Nevada County.

Comments received in response to the Notice of Preparation (NOP) for this Environmental Impact Report (EIR) raised concerns regarding trip generation, impacts to local roads and intersections, impacts to road shoulders, available site distance for Project traffic egressing from the Project Site onto You Bet Road, and use of Staging Area (SA) 1 within the Nevada County right-of-way. As stated in Chapter 2, Project Description, Nevada Irrigation District (NID) will obtain from Nevada County an encroachment permit and a lease agreement for long-term ~~from Nevada County for~~ use of SA-1. All conditions of the encroachment permit and lease agreement will be implemented as part of the Project. All other traffic concerns are addressed in this section. Copies of the NOP and the comment letters received in response to the NOP are included in Appendix A.

## 3.12.1 Existing Conditions

### 3.12.1.1 Study Area Circulation

Access to the Project Site is provided via I-80 and SR-174 in Colfax. From eastbound I-80 access to SR-174 is provided by a one-lane off ramp. From westbound I-80 access to SR-174 is from a one-lane off ramp to Auburn Street.

Access to SA-3, located at the Greenhorn Campground Boat Launch parking area, would be via SR-174 to Greenhorn Access Road. Access to the Work Area would be via SR-174 to You Bet Road through SA-1, located at Greenhorn Creek crossing.

#### *Interstate 80*

I-80 is a primary transcontinental freeway and is the principal east-west route through Northern California. It is the only freeway crossing the Sierra Nevada Range. In the Project vicinity, I-80 is a four-lane freeway. The Colfax overcrossing is a two-lane facility. The off-ramps are controlled by stop signs, as is the overcrossing connection.

#### *State Route 174*

SR-174 is a non-interregional route that extends 13.1 miles northward from I-80 in Colfax to Grass Valley. According to Caltrans, increasing numbers of local and regional commuters are using SR-174 as a direct route between Auburn and Grass Valley or Nevada City to avoid congestion on

SR-49. Large trucks and slow-moving vehicles occasionally affect traffic flow, which may cause sizable lines of traffic along some areas of the route. Despite this, traffic congestion is not a continuous major problem over the entire length of SR-174 (Caltrans 2017). Within the study area SR-174 is a winding, rural 2-lane highway with 0- to 2-foot shoulders and limited recovery space for errant vehicles. Trees and embankments line the roadway along with numerous properties with private driveways that connect to the highway (Caltrans 2016a). Nevada County classifies SR-174 as a minor arterial.

**Caltrans SR-174 Improvement Project**

In 2013 Caltrans District 3 Traffic Safety Branch determined that a 1.9-mile segment of SR-174, from Maple Way (Post Mile 4.6) to You Bet Road (Post Mile 2.7), experienced a high concentration of run-off road collisions. In addition to You Bet Road, this segment includes Greenhorn Access Road, which is also in the study area. During a 3-year period, a total of 30 collisions occurred, including two resulting in fatalities. This concentration of accidents is 1.6 times higher than the statewide average and the fatality rate is 7 times higher than the statewide average for highways of similar configuration (Caltrans 2016a).

Caltrans will address these safety issues with several improvements along the 1.9-mile segment of SR-174. Within the Project Site, Caltrans plans to widen shoulders and clear the recovery zone in the vicinity of You Bet Road, and add a turn lane, widen shoulders, and clear the recovery zone at Greenhorn Access Road. As stated by Caltrans, the increased curve radii will reduce the potential for a vehicle to lose control. The wider shoulders will provide more room for pedestrians and bicycles to travel the corridor, and provide room for an errant vehicle to regain control without leaving the roadway. The removal of fixed objects such as trees and embankments from the clear recovery area will reduce the severity of a run off road collision. Lastly, the improved curve radii, wider shoulders, and removal of fixed objects along the roadway will improve sight distances for roadway users, which will allow more time to identify and react to potential hazards (Caltrans 2016a). This Caltrans project is currently scheduled to ~~begin construction September 2019 and be completed by October 2020~~for construction in 2020 and 2021 (Caltrans 2017).

### *Greenhorn Access Road*

Greenhorn Access Road is a two-lane road maintained by the County in good condition. It serves as the access road from SR-174 to Greenhorn Campground, which is one of four independently operated campgrounds at NID-owned Rollins Reservoir. The Project proposes use of Greenhorn Access Road to access SA-3, located in the Greenhorn Campground Boat Launch parking area. SA-3 would be used during installation or movement of the sediment barrier only. Installation of the barrier would occur during the first year of the Project, and is anticipated to be moved two times during the term of the Project (Figure 3.9-1). Installation or movement of the barrier would occur over a two-week period in July. Haul trucks removing sediment would not use Greenhorn Access Road.

### *You Bet Road*

You Bet Road is a Level of Service (LOS) A County-maintained two-lane minor collector off SR-174. It is in good condition, appearing to have been recently resurfaced and restriped. The Project proposes use of You Bet Road to You Bet Bridge as an access/haul road for removal of sediment.

### *Transit, Bicycle, and Pedestrian Facilities*

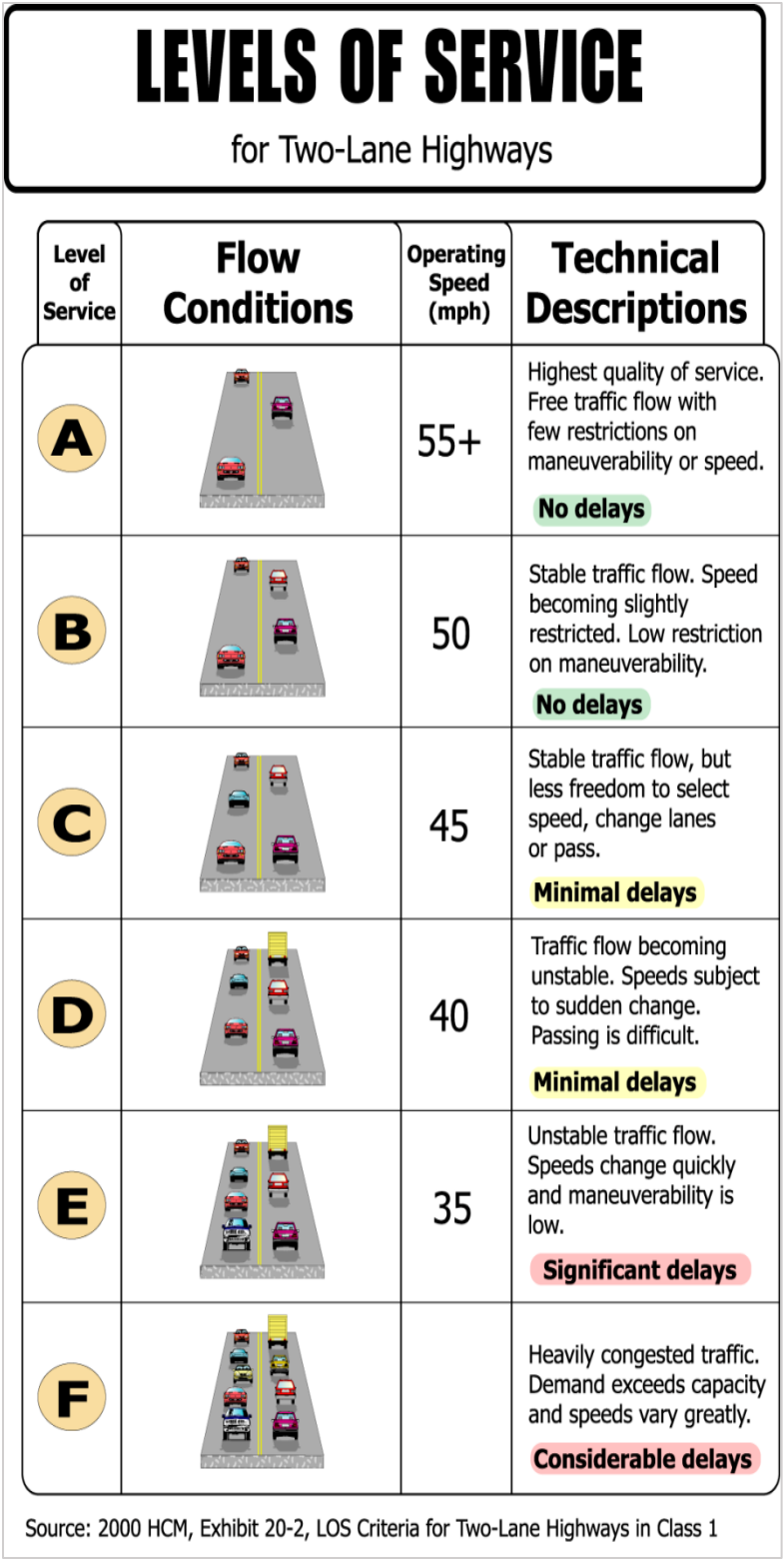
Transit in Nevada County includes the Gold Country Stage, which is a fixed route system operating primarily in and between Nevada City and Grass Valley. There are also three on-demand dial-a-ride or non-fixed route services in the County (Nevada County 2010). There are currently no designated bicycle or pedestrian facilities within the study area. However, according to Caltrans, SR-174 is increasingly being used by recreational cyclists (Caltrans 2017).

## 3.12.1.2 Impacts Evaluation Methodologies

In the past, local agencies, including both Nevada and Placer counties, have adopted minimum LOS standards as a part of general and community plans for roads under their jurisdiction; and LOS has also been the metric used to evaluate transportation impacts under the California Environmental Quality Act (CEQA). As described in Section 3.12.2.2, the recent updates to CEQA Guidelines now identify vehicle miles travelled (VMT), rather than LOS, as the most appropriate metric for evaluating a project's transportation impacts. However, Nevada and Placer county policies have not yet been updated to reflect the changes in state law. Therefore, this section described methodology for both LOS and VMT.

### *Level of Service Methodology*

The LOS is a qualitative measure of traffic operating conditions whereby a letter grade A through F corresponds to progressively worsening traffic operating conditions. In general terms, LOS is calculated for an hour-long traffic condition at a signalized intersection, unsignalized intersection, or roadway segment. Figure 3.12-1, presents typical LOS characteristics for a two-lane highway, such as SR-174.




*Source: TRB 2000*

**Figure 3.12-1 Levels of Service.**

## Nevada County Level of Service Standards

Local agencies currently adopt minimum LOS standards as a part of general and community plans for roads under their jurisdiction. The Project is located in Nevada County. However, roads that could be affected by the Project are located in both Nevada and Placer counties. Each county has its own set of operating standards.

In Placer County these are defined by the Placer County General Plan (Placer County 2013). Policies contained in the Placer County General Plan indicate that the LOS minimum standard for intersections and roadways is generally LOS C. Land development requirements are set to sustain LOS C at all intersection and roadways for as long as possible. The Placer County General Plan also indicates that the LOS standard must be D within 0.5 mile of state highways. Similarly, the California Department of Transportation (Caltrans) identifies LOS D as the acceptable intersection LOS standard. As such, the LOS D standard is applicable to the study area intersections and local roadways.

In Nevada County LOS standards are defined by the 2010 Nevada County General Plan and is be based on the typical highest peak hour of weekday traffic. According to General Plan Policy LU-4.1.1, for Rural Regions of the County, the minimum LOS is C, except where the existing LOS is less than C. In those situations, the LOS is not allowed to drop below the existing LOS. Special events which may temporarily exceed this minimum LOS, may be permitted. Based upon these LOS standards, the existing regional road system serving Nevada County generally provides acceptable service (Nevada County 2010).

## Caltrans Level of Service Standards

**I-80.** Caltrans District 3 has developed a Transportation Corridor Concept Report (TCCR) for I-80 (Caltrans 2010). It is the long-range planning document for the I-80 corridor, the purpose of which is to identify existing route conditions and future needs, including existing and forecast travel data, a concept LOS standard, and the facility needed to maintain the concept LOS and address mobility needs over a 20-year planning horizon (Caltrans 2010). The District 3 TCCR for I-80 is broken into 16 freeway segments. Segment 11 is included in the study area.

Within the TCCR a "Concept LOS" is defined and represents the minimum acceptable service conditions over the next 20 years. Caltrans has established minimum concept LOS standards for the planning horizon at LOS D for rural segments, and LOS E for urban segments. However, the concept LOS for some segments departs from these minimums, and Segment 11 is identified as one of these exceptions. The TCCR indicates that it would not be feasible to maintain or re-attain LOS D on Segments 9 through 14 due to lack of funding under current projections and due to factors such as the cost of adding more lanes to numerous structural elements of I-80. A concept LOS F is identified for these segments. This operating condition also reflects peak day seasonal

directional volumes on the highway, generally representative of afternoon weekend conditions during periods of high recreational traffic (Caltrans 2010).

**SR-174.** The TCCR for SR-174 divides the highway into four segments and has assigned concept LOS for each. All four segments would be used by the Proposed Project. Table 3.12-1 provides a description of each segment, the concept LOS, and planned improvements for SR-174 as provided in the TCCR.

**Table 3.12-1**
**Caltrans Concept LOS and Planned Improvements for SR-174**

| Segment # | Location | Concept LOS | Planned Caltrans Improvements |
|---|---|---|---|
| 1 | Begins at the I-80 and SR-174 interchange on South Auburn Street and ends at Main Street in Colfax | E | • Reconstruct I-80/SR-174 interchange (2036)<br>• Intersection improvements/complete streets (2036) |
| 2 | Main Street to Placer/Nevada County line | D | • None planned. |
| 3 | Placer/Nevada County line to Grass Valley city limit | D | • Widen shoulders and curve improvements on SR-174 from Maple Way to You Bet Road (2020)<br>• Realign to create a 4-way intersection and install traffic signal or roundabout on SR-174 at Brunswick Road/Cedar Ridge intersection (2035) |
| 4 | Grass Valley city limit to northwestern terminus of SR-174 at SR-20 | E | • Improve curve channelization on SR-174 at Race Street (2035)<br>• Construct Americans with Disabilities Act (ADA) curb ramps from Race Street to SR-20/route terminus (2020) |

Source: Caltrans 2017

## Existing Traffic Volumes

### ROADWAYS

According to the latest traffic counts existing traffic levels on You Bet Road are approximately 2,087 annual average daily traffic (AADT, or total volume of vehicle traffic for a year divided by 365 days), which is considered LOS A (Nevada County Planning Department [NCPD] 2017). Counts are not available for Greenhorn Access Road.

### FREEWAYS

**I-80.** Peak hour volume usually occurs between 7:00 and 9:00 am and 5:00 to 7:00 pm. According to 2015 Caltrans traffic volume data, the average daily peak hour volume was 4,550 west of Colfax and 4,250 east of Colfax. The AADT west of Colfax was 32,900 (16% trucks), and the AADT east of Colfax was 27,600 (19% trucks) (Caltrans 2015). In the vicinity of the Project, I-80 operates at LOS E.

The most recent traffic counts for freeway ramps at I-80 and Auburn Street (to SR-174) are from 2007. The westbound direction had an average daily traffic (ADT) rate of 5,000 and the eastbound direction an ADT of 3,900 (Caltrans 2016b).

**SR-174.** The TCCR for SR-174 provides existing condition information for each segment of SR-174 as summarized in Table 3.12-2.

**Table 3.12-2**
**Existing Level of Service and Vehicle Miles Travelled for SR-174**

| Segment | Existing VMT[1] | ADT[2] | AADT Truck Traffic[3] | Total Truck % of AADT |
|---|---|---|---|---|
| 1 | 417 | 14,000 | 230 | 1.57% |
| 2 | 1,308 | 6,500 | 362 | 7.24% |
| 3 | 7,634 | 13,200 | 362 | 7.24% |
| 4 | 1,057 | 13,300 | 507 | 7.24% |

Source: Caltrans 2017 (2013 data)
Notes:
[1] VMT = Estimates the number of vehicle miles that motorists travelled.
[2] ADT = The average daily traffic in both directions.
[3] AADT = The annual average daily truck is the total traffic volume for the year divided by 365 days.

### *Vehicle Miles Travelled Methodology*

VMT data are evaluated as advised in the California Office of Planning and Research (OPR's) *Technical Advisory on Evaluating Impacts in CEQA* (OPR 2018), which states that the VMT metric supports three statutory goals: reduction of greenhouse gas emissions (GHGs), development of multimodal transportation networks, and a diversity of land uses. Because the Project is a sediment removal project, and does not propose to develop transportation networks and will not change existing land uses, the analysis of VMT is focused primarily on impacts associated GHGs. Further, the OPR states that smaller project that "generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact" (OPR 2018). Therefore, this analysis uses 110 trips per day as the threshold for significant impacts.

## 3.12.2 Relevant Plans, Policies, and Ordinances

### 3.12.2.1 Federal

There are no federal transportation plans or policies that would be directly applicable to the Proposed Project.

### 3.12.2.2 State

#### *Transportation Corridor Concept Report*

As described previously, the TCCRs for I-80 and SR-174 serve as the Caltrans District 3 long-range planning documents for the freeway corridors. The purpose of each TCCR is to identify existing route conditions and future needs, including existing and forecast travel data, a concept LOS standard, and the facilities needed to maintain the concept LOS and address mobility needs over a 20-year planning horizon.

#### *California Environmental Quality Act*

In January 2018, the OPR transmitted its proposal for comprehensive updates to the CEQA Guidelines to the California Natural Resources Agency. Among other things, this package included proposed updates related to analyzing transportation impacts pursuant to Senate Bill 743, under which the criteria for determining the significance of transportation impacts must "promote the reduction of GHGs, the development of multimodal transportation networks, and a diversity of land uses." This resulted in changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts, rather than automobile delay, as measured by "level of service" and other similar metrics, which generally no longer constitute a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3)). Accordingly, revisions to Appendix G of the CEQA Guidelines now include evaluation of the transportation impacts as described in CEQA Guidelines Section 15064.3, subdivision b), cited below:

> (b) Criteria for Analyzing Transportation Impacts.
>
> > (1) Land Use Projects. Vehicle miles travelled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles travelled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.

(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles travelled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152 .

(3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles travelled for the particular project being considered, a lead agency may analyze the project's vehicle miles travelled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles travelled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles travelled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles travelled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

#### 3.12.2.3 Local

##### *Nevada County Transportation Commission*

The Nevada County Transportation Commission (NCTC) is a Regional Transportation Planning Agency for Nevada County. The NCTC coordinates transportation planning for Grass Valley, Nevada City, Nevada County, and the Town of Truckee. The NCTC has adopted a Regional Transportation Plan (RTP) to establish transportation policy and document short-term (2015 to 2025) and long-term (2025 to 2035) regional transportation needs and to set forth an action plan to meet these needs. The NCTC is currently in the process of updating the Nevada County RTP.

### *Placer County Transportation Planning Agency*

The Placer County Transportation Planning Agency (PCTPA) is the Regional Transportation Planning Agency for Placer County, excluding the Lake Tahoe Basin. PCTPA is also the County's Congestion Management Agency. PCTPA is part of a larger metropolitan planning jurisdiction (El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba counties), which is coordinated by the Sacramento Area Council of Governments. PCTPA's two most recent regional transportation plans are incorporated into the Sacramento Area Council of Governments' regional planning processes through the Metropolitan Transportation Plan. Regional Transportation Plans document the policy direction, actions, and funding recommendations that are intended to meet the short and long-range transportation needs of Placer County.

## 3.12.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to transportation are based on Appendix G of CEQA Guidelines (14 CCR 15000 et seq.). According to Appendix G, a significant impact related to traffic and circulation (transportation) would occur if the Project would:

1. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
2. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment).
4. Result in inadequate emergency access.

## 3.12.4 Impact Analysis

As described previously, Nevada and Placer county policies currently use LOS as the standard for evaluating transportation conditions rather than VMT, as required under the recent updates to CEQA regulations. This analysis, therefore, evaluates transportation impacts using both metrics. LOS is used to evaluate transportation impacts in the discussion for *Impact 3.12-1*; and VMT is used in the discussion for *Impacts 3.12-2.*

***Impact 3.12-1. The Project would conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.***

The Project would remove 50,000 tons of silt, sand, and aggregate during a typical year. It is assumed the maximum amount of material removed every 6$^{th}$ year would be 200,000 tons. Dry sediment would be excavated in the Work Area using heavy excavating and earthmoving equipment (e.g., scrapers, trackhoes, backhoes, excavators, and/or front-end loaders). Excavation would continue until the level of creek bed surface is lowered to the top of the dewatering pipe/channel. Excavated material would be transported to the SA-2 via the streambed access/haul

road for testing and processing. Materials that meet hazardous waste standards will be distributed for use via You Bet Road and to Hansen Bros., sold locally in Nevada County, for use in reclamation of mining site, or for use outside of Nevada County, as described in more detail below.

In addition, the Project would involve installation of a sediment barrier using a barge within Rollins Reservoir. Stockpiling of equipment, fuel storage and a personnel trailer would be at SA-3 located within Greenhorn Campground Boat Launch parking area. Installation or moving of the sediment barrier would take approximately two weeks in July. It is anticipated that the sediment barrier will be moved two times during the term of the Project. The Project would employ up to six persons.

### *Trip Generation*

The transport of material will be dependent upon material availability as well as customer demand and location. The following assumptions were used in calculating trip generation data for the Project.

- Typically 50,000 tons of material to be removed per year, with a maximum of up to 200,000 tons removed per year. It is assumed that 200,000 tons would be removed every $6^{th}$ year.
- Generally a 4-month period (August through November) for transporting the material, 6 days a week, or approximately 96 days per year.
- 50,000 tons equates to 520 tons of material per day; 200,000 tons equates to 2,083 tons of material per day.
- A standard 10-wheeler dump truck is typically used to haul bulk material by commercial operators and accommodates 15 tons of material (without trailer). This truck capacity equates to 35 truckloads per day (or 70 truck trips, 35 in/35 out) assuming 50,000 tons and 139 truckloads per day (or 278 truck trips, 139 in/139 out) assuming 200,000 tons. It is assumed all trucks depart fully loaded, given the relatively remote location of the Project Site.
- Employees – up to six people, six trips inbound in AM peak hour, six outbound in PM peak hour used as a worst case.

Table 3.12-3 shows the vehicle type and total daily number of truck trips by phase, under the 50,000 tons/year and 200,000 tons/year (every 6th year) scenarios. Phase 1 is mobilization, Phase 2 is sediment removal, and Phase 3 is demobilization. Refer to Section 2.0 for a list of activities to be implemented within each phase. These trip generation characteristics have been used for purposes of analysis and are estimated to represent a reasonable "worst case" condition.

**Table 3.12-3**
**Project Vehicle Type and Total Daily Number of Truck Trips by Phase and Scenario (Annual)**

| Vehicle Type | Total Daily Truck Trips | | | Scenario Total (Phases 1 through 3) |
|---|---|---|---|---|
| | Phase 1 (24 days) | Phase 2 (96 days) | Phase 3 (24 days) | |
| Large Equipment Delivery/Removal Flatbed Trucks[1] | 2 | -- | 2 | |
| Pickup Trucks (supplies, debris, etc.)[2] | 12 | 12 | 12 | |
| Construction Personnel Vehicles[3] | 12 | 12 | 12 | |
| **Subtotal** | **26** | **24** | **26** | |
| Haul/Dump Trucks – 50,000 tons/yr | -- | 70 | -- | |
| **50,000 tons/yr TOTAL** | **26** | **94** | **26** | **146** |
| Haul/Dump Trucks – 200,000 tons/yr | -- | 278 | -- | |
| **200,000 tons/yr TOTAL** | **26** | **302** | **26** | **354** |

Notes:
[1] Twenty flatbed trucks will be used to mobilize equipment, over a 1-month period, or 24 working days. This averages approximately two truck trips day.
[2] Six pickup trucks (12 truck trips) will be used daily to deliver/remove daily supplies and minor debris.
[3] Six employees (12 trips) will commute to the site daily. Three from Auburn area and three from Grass Valley area.

### *Trip Distribution*

The demand and ultimate destination for processed material from the Project Site would vary, depending on various market conditions. For the purposes of the transportation analysis, the following material distribution assumptions were used:

- Analysis assumes that all excavated sediments are larger aggregates that will be distributed as described below (rather than fine sediments to be disposed of at the local transfer station);
  - Distribution of approximately 30% of material to Hansen Bros. Enterprises for processing at the local plant located across You Bet Road approximately 1.25 miles north of the Project;
  - Distribution of approximately 30% of material for local sales in Nevada County via SR-174;
  - Distribution of approximately 10% of material for use in reclamation of one or more mining sites within 10 miles of the Project; and
  - Distribution of approximately 30% of material via I-80 for sales outside of Nevada County. Of the 30%, 75% would be westbound and 25% would be eastbound.

Phase 2 would experience the highest number of daily trips on area roadways. Table 3.12-4 shows the estimated trip distribution to area roadways during Phase 2 based on the distribution assumptions above.

**Table 3.12-4**
**Phase 2 Trip Distribution from SA-2**

| 50,000 tons/year | | 200,000 tons/year | |
|---|---|---|---|
| To Hansen Bros. | 27 | To Hansen Bros. | 90 |
| To Northbound SR-174 | 27 | To Northbound SR-174 | 90 |
| To Southbound SR-174 | 27 | To Southbound SR-174 | 90 |
| To Other Mining Sites | 13 | To Other Mining Sites | 32 |
| **Total** | **94** | **Total** | **302** |

### *I-80*

The Proposed Project would use the I-80 freeway ramps onto Auburn Street. The most current data from Caltrans is dated 2015. The westbound direction had an ADT of 5,000 and the eastbound direction an ADT of 3,900 (Caltrans 2016b). Under the 50,000 tons/year scenario, the Proposed Project would add approximately 21 truck trips per day to the westbound ramp (75% assumed to head westbound), and 7 truck trips per day to the eastbound ramp (25% assumed to head eastbound). Under the 200,000 tons/sixth year scenario, the Proposed Project would add approximately 67 truck trips per day to the westbound ramp, and 25 truck trips per day to the eastbound ramp. The increase would not measurably affect the available capacity of the existing ramps. The impact would be considered **less than significant**.

Segment 11 of I-80 currently operates at LOS E, with and has an average daily peak hour volume of 4,550 west of Colfax and 4,250 east of Colfax. The AADT west of Colfax was 32,900 (16% trucks), and the AADT east of Colfax was 27,600 (19% trucks) (Caltrans 2015). Under the 50,000 tons/year scenario, the Proposed Project would add approximately 27 truck trips per day to I-80, which includes trucks from southbound SR-174. Under the 200,000 tons/sixth year scenario, the Proposed Project would add approximately 90 truck trips per day to I-80. The increase would be considered relatively minor compared to existing volumes on I-80 in the study area, and would not measurably affect the available capacity of the highway. The impact would be considered **less than significant**.

Under future conditions, the TCCR for I-80 indicates that the AADT for Segment 11 would be 58,900 in 2028. Caltrans has determined it would not be feasible to re-attain LOS D on Segment 11 due to lack of funding under current projections and due to factors such as the cost of adding more lanes to numerous structural elements of I-80. A concept LOS F is identified for this segment. This operating condition also reflects peak day seasonal directional volumes on the highway,

generally representative of afternoon weekend conditions during periods of high recreational traffic (Caltrans 2010). Under the 50,000 tons/year scenario, the Proposed Project would add approximately 27 truck trips per day to I-80, which includes trucks from southbound SR-174. Under the 200,000 tons/sixth year scenario, the Proposed Project would add approximately 90 truck trips per day to I-80. The increase would be considered relatively minor compared to existing and future volumes on I-80 in the Project Area, and would not measurably affect the available capacity of the highway. The impact would be considered **less than significant**.

### *SR-174*

As shown on Table 3.12-1, SR-174 currently operates at LOS D/E. Caltrans' concept LOS for SR-174 is to maintain LOS D/E by implementing several improvement projects as listed in Table 3.12-2. As shown on Table 3.12-4, the Proposed Project would add 54 truck trips per day to SR-174 (both north- and southbound) under the 50,000 tons/year scenario and 180 truck trips per day under the 200,000 tons/sixth year scenario. Although the Project would contribute to cumulative traffic conditions along SR-174, the increase would not be considered a substantial contribution. In addition, implementation of planned Caltrans improvements along SR-174 would help minimize the additional traffic of the Proposed Project. The impact would be considered **less than significant**.

### *You Bet Road*

According to the latest traffic counts, existing traffic levels on You Bet Road are approximately 2,087 ADT, which is considered LOS A. Traffic levels would have to reach 8,550 ADT to degrade to LOS D, which is the level considered unacceptable under the Nevada County General Plan LOS standard (NCPD 2017). The Proposed Project would add 66 truck trips per day (70% of trucks leaving the Project Site) under the 50,000 tons/year scenario and 211 truck trips per day (70% of trucks leaving the Project Site) under the 200,000 tons/sixth year scenario. The additional traffic under existing conditions and in the future would be noticeable to area residents using the roadway, but the increase would not measurably affect the available capacity of the existing roadway. The impact would be considered **less than significant**.

### *Truck Loading on Area Roads*

The relative impact of truck traffic on area road conditions associated with the Proposed Project has been considered based on the procedures contained in Chapter 6 of the Caltrans Highway Design Manual (Caltrans 2012). These procedures equate truck loadings over a 20-year period to equivalent single axle loads (ESALs) and identify relative impact in terms of the resulting traffic index (NID 2015).

For the purpose of pavement analysis, it is assumed that 200,000 tons/year of material would be transported every 6$^{th}$ year; however, NID estimates that 50,000 tons of material is the more likely scenario over a long-term planning horizon.

Annualizing the 200,000-ton haul scenario over a 365-day year, for purposes of the ESAL calculation, results in 365 trucks per day in one direction. This load is spread over the pavement's 20-year useful life. The number of ESALs associated with this level of truck activity can be identified based on Table 603.3A of the Highway Design Manual (Caltrans 1995). Each daily truck (3-axle, 10-wheeler dump) creates 3,680 ESALs over a 20-year period. Thus, the Project's contribution to loadings on Auburn Street and Taylor Road to SR-174, and You Bet Road could be up to 132,480 ESALs.

The roadway needed to accommodate this loading over a 20-year period is expressed in terms of the section's traffic index. A traffic index of 7.0 is needed to accommodate 132,480 ESALs. The roadway section required to provide a traffic index of 7.0 is a relatively moderate section typical of many public streets. The extent of the street sections serving the Project are not known. Although area roadways are likely constructed to this standard, the Project could appreciably change the overall conditions of the road over time or result in an accelerated maintenance schedule.

The Proposed Project would not significantly increase traffic volumes on area roadways to unacceptable LOS standards. Although the existing condition of area roadways are in good condition, over time truck loading would significantly contribute to deterioration of road conditions. This impact is considered a **significant impact**. Mitigation measure MM-TRA-1 would be implemented to reduce potential impacts to **less than significant**.

***Impact 3.12-2. The Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).***

CEQA Guidelines Section 15064.3, subdivision (b) describes four criteria for analyzing transportation impacts. The first two criteria pertain specifically to land use and transportation projects and therefore are not applicable to this Project. The third and fourth criteria allow for lead agency discretion in use of qualitative (versus quantitative) analysis and in selection of methodology for evaluating a Project's VMT. Consistent with the lead agency discretion permitted under CEQA Guidelines Section 15064.3, subdivision (b)(3) and (4) in determining the approach for analysis of transportation impacts, this analysis discloses the quantitative impact (i.e., VMT) for the maximum potential daily truck trips generated by the Project (i.e., 370 truck trips/day for 96 days under Phase 2 of the 200,000 tons/year scenario). However, lacking established quantitative thresholds for VMT for non-land-use and non-transportation projects, a qualitative analysis is provided of the effects of transportation as related to GHGs (as required under CEQA).

The following assumptions were used in calculating VMT:

- Truck trips per day are the same as those shown in Table 3.12-3, above.
- All excavated sediments are assumed to be larger aggregates (rather than fine sediments to be disposed of at the local transfer station) that will be distributed as described below. This assumption would maximize VMT:
  - Distribution of approximately 30% of material to Hansen Bros. Enterprises for processing at the local plant located across You Bet Road; one-way mileage from SA-2 is approximately 1.25 miles.
  - Distribution of approximately 30% of material for local sales in Nevada County via SR-174; one-way mileage from SA-2 is estimated at 21 miles, which is the average of one-way mileages to four surrounding cities/population centers (Grass Valley, Nevada City, and Penn Valley ~~and Relief~~).
  - Distribution of approximately 10% of material for use in reclamation of one or more mining sites within 10 miles of the Project; one-way mileage from SA-2 is estimated at 10 miles.
  - Distribution of approximately 30% of material via I-80 for sales outside of Nevada County; one-way mileage from SA-2 is estimated at 36 miles, which is the average of one-way mileages to four cities along I-80 (Colfax, Auburn, Roseville, Sacramento).

As shown in Table 3.12-5, VMT/day under the 50,000 tons/year sediment removal scenario is 2,777. As shown in Table 3.12-6, VMT/day under the 200,000 tons/year sediment removal scenario is estimated at 6,619. In accordance with the updated CEQA Guidelines, because the Project is a sediment removal project, and does not propose to develop transportation networks and will not change existing land uses, this analysis of VMT is focused primarily on impacts associated GHGs. As described in Section 3.6, the Proposed Project would not exceed the GHG threshold of 10,000 metric tons $CO_2E$ per year under either sediment removal scenario, and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. In addition, transportation impacts associated with the Project would be limited to between July and December; and the sharp rise in VMT associated with Phase 2 sediment distribution under the 200,000 tons/year scenario would only occur infrequently (i.e., every $6^{th}$ year). Considering the fact that transportation levels under the Project would not result in impacts related to GHGs, this impact would be **less than significant.**

## Table 3.12-5
## VMT/Day Under 50,000 Tons/Year Sediment Removal Scenario (Phases 1, 2 and 3)

| | Estimated Vehicle Miles (one-way) | Distribution Percentage | Truck Trips/Day[1] | VMT/Day |
|---|---|---|---|---|
| **Phase 1** | **20** | **100%** | **26** | **520** |
| **Phase 2** | | | | |
| Hanson Bros. Enterprises | 1.25 | 30% | 28 | 26 |
| Nevada County | 21 | 30% | 28 | 441 |
| Mining Reclamation Sites | 10 | 10% | 9 | 70 |
| Placer County | 36 | 30% | 28 | 756 |
| **Phase 2 Subtotal** | **68.25** | **100%** | **94** | **1,737** |
| **Phase 3** | **20** | **100%** | **26** | **520** |
| **Scenario Total** | **108.25** | | **146** | **2,777** |

## Table 3.12-6
## VMT/Day Under 200,000 Tons/Year Sediment Removal Scenario (Phases 1, 2, and 3)

| | Estimated Vehicle Miles (one-way) | Distribution Percentage | Truck Trips/Day[1] | VMT/Day |
|---|---|---|---|---|
| **Phase 1** | **20** | **100%** | **26** | **520** |
| **Phase 2** | | | | |
| Hanson Bros. Enterprises | 1.25 | 30% | 91 | 113 |
| Nevada County | 21 | 30% | 91 | 1,903 |
| Mining Reclamation Sites | 10 | 10% | 30 | 302 |
| Placer County | 36 | 30% | 91 | 3,262 |
| **Phase 2 Subtotal** | **68.25** | **100%** | **302** | **5,579** |
| **Phase 3** | **20** | **100%** | **26** | **520** |
| **Scenario Total** | **108.25** | | **354** | **6,619** |

***Impact 3.12-3. The Project would potentially increase hazards due to a geometric design feature or incompatible use.***

State Route 174 and You Bet Road would be the primary roadways used for hauling sediment from SA-2. Greenhorn Access Road would be used to access SA-3 for a two-week period in July when the sediment barrier is installed or moved.

### *SR-174*

During Phase 2, haul truck traffic would peak on SR-174. The Proposed Project would add approximately 66 daily trips under typical haul conditions (50,000 tons/year) and up to 207 daily trips every 6th year (200,000 tons/year).

Caltrans has identified hazardous roadway conditions along SR-174 and has plans to widen shoulders and clear the recovery zone in the vicinity of You Bet Road. In addition, the Caltrans project would make improvements, including adding a turn lane, widening shoulders, and clearing the recovery zone at Greenhorn Access Road. The Caltrans project is ~~expected to be completed in~~currently scheduled for construction in 2020 and 2021 (Caltrans 2017).

In addition, ingress and egress of haul trucks from You Bet Road and Greenhorn Access Road could create hazards related to stopping sight distance for non-Project vehicles using these roads. The Caltrans improvement projects would contribute to minimization of ~~and would minimize~~the potential increased hazards associated with truck traffic entering and exiting SR-174. In addition, as described in mitigation measure MM-TRA-2, NID will develop and implement a Traffic Management Plan which includes site-specific measures for addressing stopping sight distance deficiencies at the ingress/egress from You Bet Road and Greenhorn Access Road to SR 174. With implementation of mitigation measure MM-TRA-2, ~~T~~this impact would be considered a **less than significant** impact.

### *Greenhorn Access Road*

Greenhorn Access Road is a 1.1-mile two-lane roadway that terminates at the Greenhorn Campground entry gate. The roadway is approximately 20 feet wide, with little to no shoulders. The majority of the roadway is generally flat, but has a slight drop down into the campground. No significant curves or advisory signs are present. Adequate sight distance exists along Greenhorn Access Road. The roadway within the campground is not striped and has limited two-way capacity in some areas.

The Proposed Project would add up to 26 truck trips per day to Greenhorn Access Road during installation or moving of the sediment barrier, which would occur for a two-week period during the recreation season. This roadway does not have curves that would create significant hazardous conditions. However, hazardous conditions could occur due to potential conflicts between boat launch traffic and truck traffic since the campground roadway has limited two-way capacity. This would be considered a **significant impact**.

To minimize potential hazards from truck traffic, NID will implement mitigation measure MM-TRA-2 which requires NID to ~~development~~ develop and implement a Traffic Management Plan to minimize construction-related traffic safety hazards on the affected roadways, including site-specific measures to address hazards associated with stopping sight distance at the ingress/egress from Greenhorn Access Road to SR 174. With implementation of MM-TRA-2, impacts would be considered **less than significant**.

### *You Bet Road*

Proposed Project haul trucks would use approximately 2.5 miles of You Bet Road to reach SR-174 from SA-1 located at Greenhorn Creek crossing. From SR-174, You Bet Road is a two-lane winding uphill roadway for approximately 0.8 mile where it peaks and then travels downhill for 1.7 miles to SA-1. You Bet Road provides access to numerous residences and is also used by Hansen Bros. to haul aggregate materials from their processing plant. The roadway is approximately 20 feet in width, with little to no shoulders. Several curves are signed with warnings to indicate road curvature and advisory speed (e.g., "curves ahead" with 20 miles per hour advisory speed). The Proposed Project would add approximately 66 daily trips under typical haul conditions (50,000 tons/year) and up to 207 daily trips every six years (200,000 tons/year).

~~You Bet Road provides adequate signage indicating road curvature and providing an advisory speed limit. Adherence to the advisory aids in identifying the presence of an oncoming vehicle in the vicinity of the curve, as s~~Sight distance is limited along You Bet Road, and therefore ingress and egress of haul trucks on to You Bet Road and SR 174 could create a stopping distance hazard for non-Project vehicles using these roads. ~~In addition, the~~The Caltrans project ~~is expected to be completed in 2020 (Caltrans 2017)~~described above may ~~and would~~ help minimize potential increased hazards associated with truck traffic entering and exiting You Bet Road. However, the Proposed Project would increase hazards through increased two-way truck traffic on a roadway that has limited width and sight distance in some areas. The impact is considered **significant.**

To minimize potential hazards from truck traffic, NID will implement mitigation measure MM-TRA-2 which requires NID to ~~development~~ develop and implement a Traffic Management Plan to minimize construction-related traffic safety hazards on the affected roadways. The Traffic Management Plan will include site-specific measures to address hazards associated with stopping sight distance deficiencies at the ingress/egress of the haul road on to You Bet Road; and You Bet

Road to SR 174. With implementation of MM-TRA-2, impacts would be considered **less than significant**.

### ***SA-1***

As part of the Project, NID proposes to use SA-1 to stage a Project office trailer and portable restrooms, and for parking personal vehicles of construction staff (up to 6 vehicles). In addition, SA-1 may be used as a designated vehicle fueling area (fuel would be stored in a mobile tanker truck). SA-1 is located in a County-owned and maintained right of way, and the site is currently used to access a residence, and as a solid-waste pickup area by local residents. (Note that the site is also used by the public for parking and access to Greenhorn Creek. Refer to Section 3.11 for a discussion of impacts to recreational use of SA-1). NID's proposed use of SA-1 is therefore potentially incompatible with existing uses. In order to minimize the potential to affect the resident access and solid waste pickup at the site, NID will implement mitigation measure MM-TRA-1, which commits NID to obtain from Nevada County an encroachment permit and a lease agreement for long-term (half-year) use of SA-1. The lease agreement will specify maintenance, repair, and fee payment. The agreement will also include NID's obligation to maintain access through the site for local residents and to maintain an area for continued solid waste pickup. If NID and Nevada County opt not to pursue the lease agreement for SA-1, NID will instead use SA-2 and/or portions of the existing access road. With implementation of mitigation measure MM-TRA-2, impacts would be considered **less than significant**.

***Impact 3.12-4. The Project would result in inadequate emergency access.***

In the Project area, SR-174 is considered a primary access route by the Nevada County Office of Emergency Services (OES). All other roadways are considered secondary (J. Gulserian, pers. comm.). The Proposed Project would result in an increase in haul truck traffic on area roadways. The Project would add approximately 66 daily trips to You Bet Road from August through November during a typical year, and up to 207 daily trips infrequently (i.e., under the 200,000 tons/year sediment removal scenario). Although the increase in trucks would not result in significant traffic levels compared to current local roadway volumes the increase would occur during a portion of peak fire season. In addition, You Bet Road has narrow shoulders and does not provide adequate graveled or paved areas/turnouts to allow haul trucks to pull over and yield to oncoming emergency vehicles. As a result, the Proposed Project would result in a significant impact related to emergency access. Mitigation measures MM-TRA-3 will be implemented to reduce potential impacts to **less than significant**.

## 3.12.5 Mitigation Measures

The following mitigation measures will be implemented as part of the Project to reduce potentially significant impacts to a less than significant level.

**MM-TRA-1 County Road Maintenance.**

- NID shall obtain from Nevada County an encroachment permit for use of SA-1.
- NID shall obtain from Nevada County a lease agreement for long-term (half-year) use of SA-1. The lease agreement will specify maintenance, repair, payment, and other applicable terms including NID's obligation to maintain access through the site for local residents and to maintain the existing solid waste pickup area of the site.
    - If NID and Nevada County do not pursue the lease agreement for SA-1, NID will instead use SA-2 or portions of the existing access road.
- NID shall pay to Nevada County all Traffic Impact Mitigation Fees required per Board Resolutions 18-206. Payment of these fees by the project applicant would ensure that the Project contributes its fair share of the cost of necessary for future improvements to the regional roadway network.
- ~~NID shall document road and shoulder conditions along You Bet Road prior to Project implementation to provide a baseline against future evaluations of road and shoulder conditions. Every 5 years, or a timeframe deemed appropriate by Nevada County Public Works, road and shoulder conditions will be evaluated. Based on the results of evaluation and in consultation with Nevada County Public Works, NID may be required to repair roads and/or shoulders that have been affected by increased truck traffic associated with the Project.~~NID shall pay to Nevada County a reasonable tonnage fee commensurate to the Project's impacts and to other similar projects in Nevada County. The fee will be used by the County, at its discretion, to repair the roads as needed.
- Each year, prior to initiation of Phase 2 of the Project (i.e., excavation and hauling of sediments), NID shall provide to Nevada County a list of roads that will be used for the distribution of excavated materials for local sales within County.
- Gravel, sand, soil, and other debris from the Project Site and affected roadways is promptly removed from roads and shoulders.

**MM-TRA-2** **Hazards Due to Truck Traffic**. NID shall develop and implement a Traffic Management Plan to minimize construction-related traffic safety hazards on the affected roadways. To the extent practicable, the Traffic Management Plan will conform to the latest edition of the California Manual on Uniform Traffic Control Devices for Temporary Traffic Control. NID shall coordinate development and implementation of this plan with the Nevada County Office of Emergency Services (OES), Caltrans and the Placer and Nevada County Public Works Departments, as appropriate. The Traffic Management Plan will include, but would not be limited to, the following elements:

- Movement of large oversized equipment and hauling of materials of oversized vehicles related to sediment barrier installation and removal shall be done by convoy using applicable roadway standards.

- Develop and implement a plan for notifications and a process for communication with affected Greenhorn Campground users and residents along affected roadways before the start of construction. Public notification will include posting of notices at NID website, Greenhorn Campground website, Placer and Nevada County Public Works Departments websites, Nevada County OES, notices at the Project Site, and appropriate signage of construction activities. The notifications will include the construction schedule, the location and duration of activities on each roadway (e.g., which roads/lanes, access points/driveways would be blocked on which days and for how long, and alternative vehicle routes), and contact information for questions and complaints.

- Maintenance of access for vehicles in and/or adjacent to roadways affected by construction activities at all times. The contractor is, for the life of the Project, responsible for ensuring that gravel, sand, soil, and other debris from the Project Site is removed promptly from the surface and shoulders of all County roads.

- ~~Evaluate~~ Evaluation ~~sighting distances along You Bet Road annually to determine if they meet the current County Policy; and, where deficiencies occur, install warning signs, convex high visibility mirrors, or other similar measures to improve sighting distances, as~~ of sight distances at three locations (intersection of the Project haul road/You Bet Road; SR 174/You Bet Road, and SR 174/Greenhorn Access Road) using design criteria from the Highway Design Manual (Caltrans 2018) and Nevada County Improvement Standards. ~~where~~ Where deficiencies occur, NID will develop site-specific measures including, but not limited to, installing ~~install~~ warning signs~~, convex high visibility mirrors~~ conducting vegetation removal, cutting back slopes, or other

similar measures. ~~to improve sighting distances, as~~ Measures to address sight distance deficiencies will be included in the Transportation Management Plan and provided to Nevada County for review and approval prior to implementation.

**MM-TRA-3** NID shall notify the Nevada OES annually at least 30 days prior to commencing work. The Nevada County OES is responsible for coordinating with local fire, police, and the Nevada County Public Works Department regarding maintaining safe conditions during project implementation.

## 3.12.6 Level of Significance After Mitigation

- With implementation MM-TRA-1 potential impacts related to road degradation from haul trucks would be reduced to less than significant.
- With implementation of MM-TRA-2 hazards resulting from increased truck traffic would be reduced to less than significant.
- With implementation of MM-TRA-3 impacts related to inadequate emergency access would be reduced to less than significant.

## 3.12.7 References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# CHAPTER 4
# MITIGATION, MONITORING, AND REPORTING PLAN

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
|---|---|---|---|
| **MM-AES-1**: At the end of each workday crews will conduct Project Site housekeeping, including moving equipment and work vehicles to one of the three staging areas and will maintain work and staging areas to ensure they are orderly and free of trash and debris. | During annual Project implementation | NID | NID |
| **MM-AES-2**: Following completion of annual sediment removal activities, the following will be removed from the Work Area: dewatering pipes/channels; valve box/pond; aeration system; construction equipment and mats; bridges and culverts; Work Area closure buoy line (depending on extent of sediment removal completed); and processing plant (grizzly). During annual demobilization, construction crews will restore staging areas disturbed by Project activities to pre-mobilization condition with the exception of the haul road and creek channelization berm which will remain in place until high spring flows redistribute the material. | Following completion of annual Project implementation | NID | NID |
| **MM-AES-3**: Lighting fixtures shall be full or semi cutoff. Overall lighting levels shall be limited to that necessary to illuminate the Work Area during the later months of the year. Incandescent and mercury vapor light sources will not be used. | During annual Project implementation | NID | NID |
| **MM-AQ-1**: Per the requirements of the Northern Sierra Air Quality Management District (NASQMD) Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects the following mitigation will be required during project operations.<br>• Temporary traffic control shall be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans.<br>• Construction activities shall be scheduled to direct traffic flow to off-peak hours as much as practicable.<br>• 200,000During initial grading, earth moving, or site preparation, larger projects may be required to construct a paved, coarse gravel or dust palliative treated apron, at least 100 feet in length, leading onto the paved road(s).<br>• Wheels will be washed when project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment will be washed prior to each trip, if necessary.<br>• During years when approximately 200,000 tons of sediment is removed, all self-propelled off-road diesel-powered equipment and vehicles greater than 25 horsepower shall be equipped with an | During annual Project implementation | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
|---|---|---|---|
| engine meeting at least Tier 1 emission standards, and the overall fleet average shall meet Tier 2 emission standards. | | | |
| **MM-AQ-2:** As required by NSAQMD Rule 226, a Fugitive Dust Plan will be prepared for the Project that, in addition to the Standard Dust Control Plan conditions, includes site watering at least twice daily during sediment removal, sorting, and hauling activities. | Prior to initial implementation of the Project | NID | NID |
| **MM-AQ-3** Owners or operators of portable equipment rated 50 bhp or greater will register the applicable equipment through the Statewide Portable Equipment Registration Program or at the local air district level, in compliance with NSAQMD, Rule 523. Proof of registration will be provided to NID prior to Project implementation. | Prior to initial implementation of the Project | NID | NID |
| **MM-BIO-1:** *Work Period and Timing.* The following restrictions for work period and timing will be observed:<br>• Ground-disturbing activities in the Work Area (including, but not limited to, construction of stream road crossings, modification/relocation of the stream channel, or sediment removal) will be restricted to the period between July and November, when stream flows are low and weather conditions are dry.<br>• Work activities in the Project Site will be timed with awareness of precipitation forecasts and likely increases in streamflow. If the National Oceanic and Atmospheric Administration (NOAA) National Weather Service forecasts a storm event that will result in more than 1 inch of rain in a 24-hour period, sediment removal activities will cease until all reasonable erosion and stormwater pollution prevention measures (including, but not limited to, measures required in the Project SWPPP) have been implemented.<br>All work activities will be restricted to the hours between 7:00 am to 7:00 pm. | During annual Project implementation | NID | NID |
| **MM-BIO-2:** *Biological Monitor.* NID will submit to the California Department of Fish and Wildlife (CDFW) for approval the resumes of a qualified biologist (or biologists) who will lead implementation of aquatic and/or terrestrial surveys and monitoring required for the Project. The biological monitor(s) must have the following qualifications:<br>• Academic and professional experience in biological sciences or related resource management activities;<br>• Experience with construction-level biological monitoring;<br>• For biologists conducting aquatic surveys and monitoring, the ability to recognize resident and native aquatic species and familiarity with their behaviors and habitats (species include, but are not limited to foothill yellow-legged frog (FYLF), western pond turtle (WPT), and resident fish species); | Prior to annual Project implementation | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
|---|---|---|---|
| • For biologists conducting terrestrial surveys and monitoring:<br>• The ability to recognize bald eagle, osprey, and other migratory birds and their nests, and familiarity with their behaviors and habitats; and<br>• Familiarity with special-status species that may inhabit burrows in the Project Site.<br>All biological monitors will obtain any necessary authorizations prior to handling or relocating special-status species. | | | |
| **MM-BIO-3:** *Foothill Yellow-Legged Frog Breeding Surveys and Breeding Area Avoidance.* A survey for FYLF (including egg masses, tadpoles, sub-adult, and adults) will be conducted by an approved biologist during the spring breeding season (e.g., April/May) prior to initiation of the Project each year. The purpose of the survey will be to determine whether and where FYLF are breeding in the Work Area. If FYLF egg masses and/or amplexing adults are found during the breeding surveys, a Breeding Area Avoidance Plan (BAAP) will be developed prior to initiation of sediment removal in the vicinity of the breeding area. The BAAP will include a description and maps/diagrams showing how the Work Area will be modified to avoid negative impacts to the breeding area(s). Modifications may include, but are not limited to, the installation of exclusionary or high visibility fencing. The BAAP will be submitted to CDFW 30 days prior to initiation of sediment removal and implemented as part of the Project**.** | Prior to annual Project implementation | NID | NID |
| **MM-BIO-4:** *Worker Environmental Awareness Program.* Construction personnel will participate in worker environmental awareness program (WEAP) designed to minimize the potential for impacts to sensitive biological resources. Under this program, workers will be informed by a qualified biologist about the potential presence of sensitive biological resources, including special-status species and habitat, and applicable measures incorporated into the Project to avoid and protect these species and their habitats. | Prior to annual Project implementation | NID | NID |
| **MM-BIO-5:** *Delineation of Project and Environmentally Sensitive Areas.* Before starting work each season, NID will clearly fence, stake, and/or flag the boundaries of the existing and new haul road, staging areas, and the Work Area within which sediment removal activities will occur. Delineation of work areas will consider avoidance and protection measures established for aquatic and terrestrial resources, including, but not limited to, breeding areas for FYLF (MM-BIO-3); special-status plants (MM-BIO-8); active bird nests and animal burrows (MM-BIO-9); and riparian vegetation (MM-BIO-10). Vehicular traffic and use of ground-based construction equipment will be confined to fenced, staked, or flagged areas. All fencing, stakes, or flags will be maintained in good condition throughout sediment removal. | Prior to annual Project implementation | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
|---|---|---|---|
| **MM-BIO-6:** *Aquatic Species Pre-Construction Survey and Species Relocation.* Immediately prior to initiation of ground-disturbing activities in the Work Area (including, but not limited to, construction of stream road crossings, modification/relocation of the stream channel, or sediment removal), a pre-construction survey will be conducted by an approved biologist. Native and resident aquatic species including resident fish, FYLF (all life stages) and WPT, will be captured and immediately relocated from within the Work Area to the closest suitable aquatic habitat. Capture methods may include fish landing nets, dip nets, buckets, and by hand.<br>A record will be maintained that will include the following data for each individual rescued and relocated (or as specified in CDFW permit conditions):<br>• Date of Capture and Relocation<br>• Method of Capture<br>• Life Stage (for FYLF and WPT)<br>• Life Stage, Fork Length, and Weight (for Fish)<br>• Location of Relocation in Relation to the Project Site<br>A letter report of the results of the survey and capture/relocation data will be provided to CDFW for review within 14 days of completion of the survey. | Prior to initiation of annual ground-disturbing activities | NID | NID |
| **MM-BIO-7:** *Biological Monitor On-site with Stop Work Authorization.* An approved aquatic biologist will be responsible for monitoring activities that may result in impacts to native and resident aquatic species (i.e., relocating the stream and constructing road crossings of the stream). The biological monitor will have the authority to immediately stop any activity that may harm native or resident aquatic resources and to authorize the resumption of work once individuals have moved and/or are relocated out of harm's way. All reasonable efforts will be made to capture and move all stranded species or species otherwise in the way of harm. Capture will only be conducted by the biological monitor and may include fish landing nets, dip nets, buckets and by hand. Captured aquatic life will be released within the closest suitable habitat outside of the work site.<br>Relocations of fish and aquatic species will be recorded as described under MM-BIO-6, and submitted in a letter report to CDFW at the conclusion of each work season**.** | During annual Project implementation | NID | NID |
| **MM-BIO-8** *Special-status Plant Surveys.* Protocol-level surveys for special-status plants will be completed prior to initiation of the Project and during the appropriate blooming period for the 13 plants occurring or potentially occurring at the Project Site (refer to Table 3.3-1). This will include an early-season survey in April/May and a late-season survey in July/August. Surveys will be conducted consistent with the Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). If special-status plant species are found in the Project Site and could be affected by Project implementation, a protective buffer of a | Prior to initial implementation of the Project | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
|---|---|---|---|
| minimum of 25 feet (or smaller, if approved by CDFW) will be designated around the population with stakes, fence or flagging prior to the start of each construction season. No vehicular traffic or use of ground-based equipment will be permitted within the buffer. A letter report providing the results of the special-status plant surveys will be provided to CDFW prior to initiation of construction. | | | |
| **MM-BIO-9:** *Terrestrial Species Pre-Construction Surveys.* A pre-construction survey will be conducted by a qualified biologist to determine if there are active bird nests or burrows of special-status species including Blainville's horned lizard, Sierra Nevada mountain beaver, and American badger present in the Project Site which could be affected by the Project. The survey will be conducted no more than 30 days prior to initiation of any Project activities. The survey would include an inspection of the following:<br>• Trees and other suitable nesting structures within 660-feet around the Project Site for bald eagles and within 500 feet of the Project Site for other raptors;<br>• Suitable nesting habitat within 100 feet around the Project Site for other migratory and non-raptorial birds; and<br>• Suitable habitat within Project Site boundaries for burrows that may potentially be used by Blainville's horned lizard, Sierra Nevada mountain beaver, and American badger.<br>• The location of active nests will be recorded and an appropriate protective buffer delineated around the nest of 660 feet for bald eagle nests; 500 feet for other raptor nests; and between 25 and 100 feet for other migratory and non-raptorial birds, as appropriate based on the species, site-specific features, and the nature and extent of construction activities proposed in the vicinity of the nest. No use of ground-disturbing equipment will be permitted within the protective buffer. If NID cannot comply with these recommended buffers, reduced buffers or other site-specific avoidance and protection measures will be developed in consultation with the appropriate resource agencies. This protective buffer does not apply to the existing osprey nest on the Drum-Bell transmission line tower (refer to Section 3.3.2.4) of the EIR.<br>• Animal burrows will be flagged and avoided to the degree possible. Any burrows that cannot be avoided will be inspected to determine whether they are actively inhabited. Uninhabited burrows that cannot be avoided will be collapsed by or in the presence of the biologist to avoid future occupation. If a burrow is inhabited and cannot be avoided, NID will consult with CDFW to determine alternative avoidance, protection, and/or exclusion measures. Such measures would depend on the species involved, site-specific conditions and nature and extent of work activities to be implemented near the burrow. Measures could include, but are not limited to, implementation of a protective buffer around the burrow or exclusion/evacuation and collapse of the burrow by a CDFW-approved biologist. | Prior to annual Project implementation | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
|---|---|---|---|
| A letter report providing the results of the terrestrial pre-construction survey will be provided to CDFW prior to initiation of construction. The report will include (1) a map of the location of any active nests and all burrows identified, and (2) a description of buffers or other proposed avoidance and protection measures to be implemented to protect any nests or inhabited burrows that may be affected by the Project. Agreed upon buffers and/or avoidance and protection measures will be implemented as part of the Project. | | | |
| **MM-BIO-10:** *Protection of Riparian Vegetation.* No riparian vegetation will be removed as part of the Project. If riparian vegetation becomes established within the Project Site and may potentially be affected by Project activities, NID will establish a 25-foot-buffer around the riparian vegetation. The buffer will be flagged or fenced prior to implementation of the Project. | Prior to/during annual Project implementation | NID | NID |
| **MM-BIO-11:** *Clean Water Act Permitting.* Prior to implementation of the Project, NID will obtain the appropriate permits to authorize Project activities within waters of the U.S. and state. This includes the following:<br>• All proposed discharges of dredge or fill material into waters of the U.S. will first be authorized by the U.S. Army Corps of Engineers (USACE), pursuant to Section 404 of the Clean Water Act (CWA), and all avoidance, protection, and mitigation measures associated with Corps permits will be implemented.<br>• Pursuant to Section 401 of the CWA, NID will obtain Water Quality Certification from the Regional Water Quality Control Board for the Proposed Project. Avoidance, protection, and mitigation measures identified in this certification will be implemented.<br>Pursuant to Section 1600 of the Fish and Game Code, NID will obtain a Streambed Alteration Agreement (SAA) for the Proposed Project. Avoidance, protection, and mitigation measures identified in this SAA will be implemented. | Prior to initial implementation of the Project | NID | NID |
| **MM-CUL-1:** *Development and Implementation of a Cultural Resource Awareness Training Education Program.* NID will implement a Cultural Resource Awareness Training Education Program, which will be provided to all Project personnel , including construction supervisors and field personnel, who may encounter and/or alter historical resources, unique archaeological properties, or tribal cultural resources. No construction worker will be involved with excavation activities or field operations without having participated in the Cultural Resource Awareness Training Education Program. The Program will include, at a minimum:<br>• A review of archaeology, history, prehistory and Native American cultures associated with historical resources in the Project vicinity;<br>• A review of applicable local, state and federal ordinances, laws and regulations pertaining to historic preservation; | Prior to initial/during annual Project implementation | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
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| • A discussion of avoidance and minimization measures for resources that have the potential to be located on the Project Site and procedures to be followed in the event that unanticipated cultural resources are discovered during implementation of the Project;<br>• A discussion of disciplinary and other actions that could be taken against persons violating historic preservation laws and NID policies;<br>• Distribution and review of a tribal cultural resources brochure and training video;<br>• A discussion of the requirement for confidentiality and culturally-appropriate treatment of a find of significance to Native Americans and behaviors, consistent with Native American Tribal values; and<br>• A statement by the construction company or applicable employer agreeing to abide by the Cultural Resources Awareness Training Education Program, NID policies and other applicable laws and regulations.<br>The Cultural Resource Awareness Training Education Program may be conducted in concert with other environmental or safety awareness and education programs for the Project, provided that the program elements pertaining to cultural resources are provided by a qualified cultural resources specialist meeting applicable professional qualifications standards. | | | |
| **MM-CUL-2:** *Measures for the Protection of Cultural and Tribal Resources (Known and Inadvertent Discovery).*<br>Protection of Known Cultural and Tribal Resources. Prior to and during Project implementation, NID will implement the following measures to protect known cultural resources adjacent to the Project Site:<br>• The boundary of sites P-29-3946, P-29-3960, and P-29-3971 will be staked with construction fencing or stakes and flagging prior to Project implementation and will be monitored during Project activities to maintain the protective barrier and to report on any violations of the protected areas.<br>• NID will notify and invite tribal representatives to participate in pre-construction cultural site demarcation and surveys.<br>• An NID Qualified Professional Archaeologist will conduct monitoring during active sediment removal activities within 50 feet of P-29-3946, P-29-3960, and P-29-3971. NID Cultural Resources Policy (No. 6085.1 Discovery of Cultural Resources) will be implemented in the event of unanticipated disturbance to these sites.<br>• NID will notify by email the tribal representatives a minimum one week prior to active sediment removal activities for work within 50 feet of P-29-3946, P-29-3960, and P-29-3971. Tribal representatives will arrange for a tribal monitor(s), and will coordinate with NID as appropriate. If items are uncovered, the tribal monitor(s) is (are) responsible for managing, documenting, recovering, and returning any cultural items to a location acceptable to the tribe. | Prior to/during annual Project implementation | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
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| Inadvertent Discovery of Previously Unknown Cultural Resources. If an inadvertent discovery of tribal cultural resources, archeological resources, or other cultural resources (e.g., unusual amounts of shell, animal bone, glass, ceramics, structure/building remains, etc.) is made during Project-related construction activities, the NID Cultural Resources Policy (No. 6085.1 Discovery of Cultural Resources) will be implemented. This policy includes a stop work order, or relocation of work by the NID project manager, avoidance of the discovery by 150 feet, and coordination with a qualified archaeologist. Refer to Appendix C of the EIR for the NID policy.<br>As part of this policy, the archaeologist shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation in consultation with the NID, the State Historic Preservation Officer (SHPO), and Native American Tribal representatives to protect the integrity of the resource and ensure that no additional resources are impacted. Mitigation could include, but not necessarily be limited to preservation in-place, archival research, subsurface testing, or data recovery.<br>Implementation of the above mitigation measure would reduce potentially significant impacts resulting from inadvertent damage or destruction of known and unknown cultural resources during construction to a less-than-significant level. | | | |
| **MM-CUL-3:** *Unanticipated Discovery of Human Remains.* In accordance with the California Health and Safety Code and NID Cultural Resources Policy (No. 6085.2 Discovery of Human Remains), if human remains are uncovered during ground-disturbing activities, all work within 150 feet of the area of the burial shall be halted. The NID project manager will be notified immediately, who in turn will notify the qualified archaeologist. The qualified archaeologist will contact the Nevada County Sheriff/Coroner to determine the nature and extent of the remains.<br>The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of Native American descent, the coroner must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC shall identify the most likely descendant (MLD). Once given the permission by NID and the land owner (if different from NID), the MLD shall be allowed on-site. The MLD shall complete their inspection and make their recommendation to NID for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code (PRC) Section 5097.98. MLD recommendations must be made within 48 hours of the NAHC notification to the MLD.<br>No additional work shall take place within the immediate vicinity of the find until the qualified archaeologist gives approval to resume work in that area. Refer to Appendix C of the EIR for the NID policy. | During annual Project implementation | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
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| A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in-place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment, may be discussed. AB 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the landowner shall comply with one or more of the following:<br>• Record the site with the NAHC or the appropriate Information Center;<br>• Utilize an open-space or conservation zoning designation or easement; and/or<br>• Record a document with the county in which the property is located.<br>The landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. Adherence to these procedures and other provisions of the California Health and Safety Code and AB 2641(e) will reduce potential impacts to human remains to a less-than-significant level. | | | |
| **MM-CUL-4:** *Unanticipated Discovery of Paleontological Resources.* If an unanticipated discovery of paleontological materials is made during Project-related construction activities, all work within 100 feet (30 meters) of the discovery will be halted and redirected to another location. A qualified paleontologist will be notified regarding the discovery. The paleontologist shall determine whether the resource is potentially significant per the CEQA and develop appropriate mitigation to protect the integrity of the resource and ensure that no additional paleontological resources are impacted. Mitigation could include, but not necessarily be limited to preservation in-place, archival research, and specimen excavation and recovery.<br>Implementation of the above mitigation measure would reduce potentially significant impacts resulting from inadvertent damage or destruction of paleontological resources during construction to a less-than-significant level. | During annual Project implementation | NID | NID |
| **MM-HAZ-1:** Annually, prior to Project implementation, all contractor and subcontractor personnel shall receive training regarding the appropriate work practices necessary to effectively comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. | Prior to annual Project implementation | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
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| **MM-HAZ-2:** A Hazardous Materials Business Plan (HMBP) will be prepared and implemented. The HMBP will be consistent with Nevada County requirements and will incorporate industry standard best management practices (e.g., Department of Water Resources' best management practices). The plan will:<br>• Identify all hazardous materials.<br>• Identify spill response materials.<br>• Specify procedures for notification and reporting, including internal management and local agencies (e.g., fire department, Department of Environmental Health), as needed.<br>• Specify measures to protect worker and public health and safety.<br>Specify measures to manage and remediate waste, as needed. | Prior to initial implementation of the Project | NID | NID |
| **MM-HAZ-3:** A Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared and implemented. The SPCCP will be consistent with Nevada County requirements and will incorporate industry standard best management practices (e.g., Department of Water Resources' best management practices). The plan will:<br>• Detail fuel storage areas.<br>• Identify measures to limit and control fuel spills, including use of bermed storage areas, equipment inspections, fueling and refueling procedures.<br>• Describe the use and placement of spill kits.<br>Specify reporting requirements in the event of a spill. | Prior to initial implementation of the Project | NID | NID |
| **MM-HYD-1:** *Stormwater Pollution Prevention Plan.* Operator shall develop and implement a stormwater pollution prevention plan (SWPPP) in accordance with State Water Resources Control Board (SWRCB) and Central Valley RWQCB (RWQCB) requirements. The SWPPP shall specify the location, type, and maintenance requirements for best management practices (BMPs) necessary to prevent stormwater runoff from carrying construction-related pollutants. BMPs shall be implemented to address potential release of fuels, oil, and/or lubricants from operational vehicles and equipment (e.g., drip pans, secondary containment, washing stations), as well as release of fine sediment from material stockpiles (e.g., sediment barriers, soil binders). The SWPPP shall be developed and implemented by a Construction General Permit Qualified SWPPP Practitioner (QSP) / Qualified SWPPP Developer (QSD) and submitted to the RWQCB as part of obtaining regulatory approval for the proposed activities (i.e., the Industrial General Permit). | Prior to initial implementation of the Project | | |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
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| **MM-HYD-2:** *Water Quality Monitoring Plan*. NID will prepare and implement a Water Quality Monitoring Plan (WQMP) for the Project. The WQMP will include monitoring water quality (baseline and Project conditions) in the vicinity of the Project during implementation (setup through demobilization). The WQMP will include compliance thresholds and adaptive management to address potential water quality issues should any arise. The WQMP would be implemented in any year, which sediment removal activities occur. The WQMP will include water quality monitoring for the following constituents:<br>• Water Temperature<br>• Dissolved Oxygen (DO)<br>• Turbidity<br>• Total Dissolved Solids (TDS)<br>• Total Suspended Solids (TSS)<br>• Total Mercury<br>• Methylmercury<br>To fully document baseline and Project conditions, NID will monitor water quality in Greenhorn Creek, Greenhorn Arm of Rollins Reservoir, and the main body of Rollins Reservoir. Baseline condition monitoring will be conducted prior to the initial sediment removal. Water quality monitoring compliance thresholds will be established based on consultation with the Regional Water Quality Control Board and California Department of Fish and Wildlife. Monitoring reports will be developed and provided to agencies during Project implementation. Sediment removal will be suspended, and agencies will be immediately notified (within 24 hours) if any constituents exceed thresholds developed through agency consultation with consideration of pre-project background levels. | Prior to initial implementation of the Project | NID | NID |
| **MM-HYD-3:** *Hydrologic Management Plan.* NID will prepare and implement a Hydrologic Management Plan (HMP) for the Project. The HMP will include the following elements:<br>• Seasonal demobilization procedures shall include, at a minimum, removal of all operational equipment located within the limits of the 100-year flood, including temporary road crossings (bridges and culverts) and dewatering pipes.<br>• Annual visual incision monitoring and photo documentation shall be conducted upstream of the Work Area to ensure excessive project-induced channel incision (deepening of the channel from erosion) and avulsion (abandonment of the channel and formation of a new channel) is not occurring. This monitoring will be done in context of non-Project gravel extraction activities within the Hansen Bros. Enterprises Lease. If excessive channel incision or avulsion is occurring as a | Prior to initial implementation of the Project | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
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| result of Project activities, then grade control measures or modification of the sediment extraction in the Work Area will be implemented. | | | |
| **MM-NOI-1:** When purchasing or replacing equipment, NID will use backup warning devices available per current standards. To the extent feasible, the Project Site will be designed to minimize the need to operate mobile machinery in reverse causing backup warning alarms to activate. In addition, diesel generators would be equipped with silencers. | During annual Project implementation | NID | NID |
| **MM-NOI-2:** The stockpile shall be designed to minimize the need for haul trucks to back up for loading and exiting. | During annual Project implementation | NID | NID |
| **MM-NOI-3:** Signs shall be posted to limit horn use unless required for employee and public safety. | During annual Project implementation | NID | NID |
| **MM-NOI-4:** Noise minimization shall be a standard topic at operations meetings. | During annual Project implementation | NID | NID |
| **MM-NOI-5:** Construction activities shall be limited to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. On Sundays and Federal holidays, no noise-generating construction activities shall be permitted. | During annual Project implementation | NID | NID |
| **MM-REC-1:** The transport of equipment and materials along the Greenhorn Access Road to SA-3 shall not occur on the July 4th holiday, or during the weekends immediately preceding or following the July 4th holiday, except in emergency situations. | During annual Project implementation | NID | NID |
| **MM-REC-2:** A line of buoys and/or signage shall be placed at a distance of 200 feet around the barge during installation of the sediment barrier to prohibit boaters from entering the barrier installation work area. Under no circumstances shall boaters be allowed to enter the work area delineated by the buoy line. | During annual Project implementation | NID | NID |
| **MM-TRA-1:** *County Road Maintenance.*<br>• NID shall obtain from Nevada County an encroachment permit for use of SA-1.<br>• NID shall obtain from Nevada County a lease agreement for long-term (half-year) use of SA-1. The lease agreement will specify maintenance, repair, and fee payment. The agreement will also include NID's obligation to maintain access through the site for local residents and to maintain an area for solid waste pickup.<br>o If NID and Nevada County do not pursue the lease agreement for SA-1, NID will instead use SA-2 and/or portions of the existing access road.<br>• NID shall pay to Nevada County all Traffic Impact Mitigation Fees required per Board Resolution 18-206. Payment of these fees would ensure that the Project contributes its fair share of the cost of necessary future improvements to the regional roadway network. | • Prior to initial Project implementation (permits and leases);<br>• Prior to annual Project implementation (provision of lists of roads)<br>• During annual Project | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
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| • NID shall pay to Nevada County a reasonable tonnage fee commensurate to the Project's impacts and to other similar projects in Nevada County. The fee will be used by the County, at its discretion, to repair the roads as needed.<br>• Each year, prior to initiation of Phase 2 of the Project (i.e., excavation and hauling of sediments), NID shall provide to Nevada County a list of roads that will be used for the distribution of excavated materials for local sales within the County.<br>• Gravel, sand, soil, and other debris from the Project Site and affected roadways is promptly removed from roads and shoulders. | implementation (removal of material from roadsides) | | |
| **MM-TRA-2**: *Hazards Due to Truck Traffic.* NID shall develop and implement a Traffic Management Plan to minimize construction-related traffic safety hazards on the affected roadways. To the extent practicable, the Traffic Management Plan will conform to the latest edition of the California Manual on Uniform Traffic Control Devices for Temporary Traffic Control. NID shall coordinate development and implementation of this plan with the Nevada County Office of Emergency Services (OES), Caltrans and the Placer and Nevada County Public Works Departments, as appropriate. The Traffic Management Plan will include, but would not be limited to, the following elements:<br>• Movement of large oversized equipment and hauling of materials of oversized vehicles related to sediment barrier installation and removal shall be done by convoy using applicable roadway standards.<br>• Develop and implement a plan for notifications and a process for communication with affected Greenhorn Campground users and residents along affected roadways before the start of construction. Public notification will include posting of notices at NID website, Greenhorn Campground website, Placer and Nevada County Public Works Departments' websites, Nevada County OES, notices at the Project Site, and approved private signage of construction activities. The notifications will include the construction schedule, the location and duration of activities on each roadway (e.g., which roads/lanes, access points/driveways would be blocked on which days and for how long, and alternative vehicle routes), and contact information for questions and complaints.<br>• Maintain access for vehicles in and/or adjacent to roadways affected by construction activities at all times. The contractor is, for the life of the Project, responsible for ensuring that gravel, sand, soil, and other debris from the Project Site is removed promptly from the surface and shoulders of all County roads.<br>• Evaluation of sight distances at three locations (intersection of the Project haul road/You Bet Road; SR 174/You Bet Road, and SR 174/Greenhorn Access Road) using design criteria from the Highway Design Manual (Caltrans 2018) and Nevada County Improvement Standards Where deficiencies occur, NID will develop site-specific measures including, but not limited to, installing | Prior to initial implementation of the Project | NID | NID |

| Mitigation Measure | Timing | Implementation Responsibility | Monitoring / Enforcement Responsibility |
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| warning signs, conducting vegetation removal, cutting back slopes, or other similar measures. Measures to address sight distance deficiencies will be included in the Transportation Management Plan and provided to Nevada County for review and approval prior to implementation. | | | |
| **MM-TRA-3:** NID shall notify the Nevada OES annually at least 30 days prior to commencing work. The Nevada County OES is responsible for coordinating with local fire, police, and the Nevada County Public Works Department regarding maintaining safe conditions during project implementation. | • Prior to initial Project implementation (consultation with public agencies)<br>• Prior to annual Project implementation (notification) | NID | NID |
| **MM-WF-1:** In the event that the County, state, or other authorities declare a state of emergency that involves evacuation on I-80 or other routes that may be used during implementation of the Project, all non-essential operation of Project vehicles that could affect evacuation routes would cease until the evacuation is no longer in effect. | During annual Project implementation | NID | NID |

# CHAPTER 5
# ORGANIZATIONS/INDIVIDUALS CONSULTED

## 5.1.2 Consultant Team

### *Cultural and Tribal Resources*

- Melodi McAdams (UAIC)

### *Transportation*

- Adrian Engels (Fehr & Peers)

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