

Markleeville Sewer Pump Station Relocation and Improvements Project

Addendum to the
Markleeville Creek Floodplain Restoration Project, Alpine County
Initial Study/Mitigated Negative Declaration
State Clearinghouse No. 2015032034

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LIST OF ABBREVIATIONS

APE	area of potential effects
APN	Assessor's Parcel Numbers
AWG	Alpine Watershed Group
bgs	below ground surface
CAAQS	California ambient air quality standards
Cal EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CDF	California Department of Forestry
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRHR	California Register of Historical Resources
EAP	Energy Action Plan
EPA	U.S. Environmental Protection Agency
GBUAPCD	Great Basin Unified Air Pollution Control District
GBVAB	Great Basin Valleys Air Basin
GHG	greenhouse gas
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
MND	Mitigated Negative Declaration
MPUD	Markleeville Public Utility District
NAAQS	national ambient air quality standards
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PM ₁₀	respirable particulate matter with an aerodynamic diameter less than or equal to 10 microns
PM _{2.5}	fine particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in diameter
PRC	Public Resources Code
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SR	State Route
SRF	State Revolving Fund
SWPPP	stormwater pollution prevention plan

SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1 PROJECT INFORMATION

Project title: Markleeville Sewer Pump Station Relocation and Improvements Project

Project location: Project is located in Alpine County, California in the town of Markleeville on the north side of State Route (SR) 89. The site is included on the Markleeville U.S. Geological Survey (USGS) Quadrangle map, NE ¼ of the SE ¼ of Section 21, T10N, R20E MDBM

Lead agency's name and address: Markleeville Public Utility District
PO Box 222 Markleeville, CA 96120

Contact person: Dave Harden, PE, District Engineer, 916-771-6144

Project sponsor's name and address: Same as Lead Agency, above.

Location of administrative record: Same as Lead Agency, above.

Previously Adopted Initial Study and Mitigated Negative Declaration:

This addendum documents that none of the conditions described in Section 15162 of the State California Environmental Quality Act (CEQA) Guidelines calling for preparation of a subsequent negative declaration have occurred and the project will not have any significant effects that were not previously discussed in the Markleeville Creek Floodplain Restoration Project Alpine County, California Initial Study/Mitigated Negative Declaration (IS/MND) (February 2014). A Notice of Determination documenting adoption of an MND and approval of the project was filed on June 29, 2015 (State Clearinghouse No. 2015032034) (referred to as "2015 IS/MND" throughout this addendum). The Markleeville Creek Floodplain Restoration Project includes sewer system modifications, as well as channel and floodplain restoration and improved public access facilities. Alpine County's 2015 IS/MND is available for review online at: <https://www.alpinecountyca.gov/407/Current-Projects>.

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2 INTRODUCTION

2.1 PURPOSE OF THIS ADDENDUM

Alpine County, in coordination with the Markleeville Public Utility District (MPUD) and the Alpine Watershed Group (AWG), approved the *Markleeville Creek Floodplain Restoration Project* in 2015, which is a priority floodplain restoration project for the Upper Carson River Watershed (2015 Project). The goal of the 2015 Project is to restore the natural form and function of Markleeville Creek at the site of the former U.S. Forest Service (USFS) Markleeville Guard Station. The 2015 Project has three major elements: sewer system modifications, floodplain restoration, and public access improvements, all of which are important in achieving the project objectives. The sequence of these elements is vital to ensure that the floodplain restoration can utilize the entire footprint of disturbed ground. Thus, the sewer system modifications must occur first, followed concurrently by public access facilities and floodplain restoration. The approved 2015 Project will remove the floodwalls and artificial fill material, re-vegetate all disturbed areas, and will provide community benefits including sewer infrastructure modifications and public access for recreation such as walking paths, interpretive signage, picnicking and parking. Alpine County, as lead agency under CEQA, prepared an Initial Study (IS) for the project in 2014, adopted a Mitigated Negative Declaration (MND), and filed a Notice of Determination in 2015 (State Clearinghouse No. 2015032034) (referred to as "2015 IS/MND" throughout this addendum).

Since 2015, the Markleeville Creek Floodplain Restoration Project has been split into two separate and distinct projects, with separate funding sources:

- ▶ *Markleeville Sewer Pump Station Relocation and Improvements Project*, led by MPUD, to be funded by Clean Water State Revolving Fund (SRF) financing; and
- ▶ *Markleeville Creek Floodplain Restoration Project*, which includes the floodplain restoration and the public access facilities, led by AWG.

The *Markleeville Sewer Pump Station Relocation and Improvements Project* ("Sewer Improvement Project" or "project") is the focus of this addendum. As stated above, the sewer system improvements need to be completed first to allow for the subsequent floodplain restoration and public access improvements. MPUD is responsible for the sewer system modifications, which consistent with the 2015 Project evaluated in the 2015 IS/MND, includes the demolition and removal or abandonment of on-site sewer facilities in the floodplain and construction of replacement facilities including an access road, sewer manholes, sewer piping, and a pump station that is accessible to maintenance vehicles at all times regardless of weather conditions. The current project site plan for the sewer system improvements has simply been refined based on detailed engineering of the sewer facilities and avoidance of potential environmental impacts. The Sewer Improvement Project has independent utility, extending the lifespan of MPUD facilities, improving reliability and accessibility, and protecting water quality by moving sewer facilities out of the floodplain.

The purpose of this addendum is to describe MPUD's current design for the *Markleeville Sewer Pump Station Relocation and Improvements Project*, which has been revised to avoid trenching across Markleeville Creek and to avoid work near the Markleeville Courthouse, and to update the CEQA document, which is over five years old, to address current CEQA Guidelines. The evaluation in this addendum addresses whether changes to the project, changes to the project site or vicinity, or new information are so substantial that they would require major revisions to the previous CEQA document. As documented in this addendum, no subsequent CEQA document is necessary for the project.

2.1.1 State CEQA Guidelines Regarding an Addendum

If, after certification of an EIR or adoption of a MND, minor technical changes or additions are necessary or none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR or MND have occurred, an addendum to the EIR or MND may be prepared.

Public Resources Code (PRC) Section 21166 and Sections 15162 through 15163 of the State CEQA Guidelines describe the conditions under which subsequent document would be prepared. In summary, when an EIR has been certified or a MND adopted for a project, no subsequent document shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

- ▶ substantial changes are proposed in the project that will require major revisions of the previous EIR or MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- ▶ substantial changes occur with respect to the circumstances under which the project is undertaken that will require major revisions of the previous EIR or MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- ▶ new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR or MND was certified as complete was adopted, shows any of the following:
 - the project will have one or more significant effects not discussed in the previous EIR or MND;
 - significant effects previously examined will be substantially more severe than shown in the previous EIR or MND;
 - mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR or MND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Section 15164 of the CEQA Guidelines provides that a lead agency may prepare an addendum to a previously certified EIR or adopted MND if some changes or additions are necessary, but none of the conditions described above for Section 15162 calling for preparation of a subsequent document have occurred. CEQA allows lead agencies to restrict review of modifications to a previously approved project to the incremental effects associated with the proposed modifications, compared against the anticipated effects of the previously approved project at build-out.

As described in Chapter 3, "Project Description," and Chapter 4, "Coverage Under the 2015 IS/MND," none of the conditions described above from Section 15162 calling for preparation of a subsequent document have occurred. Therefore, the differences between the approved 2015 Project, as evaluated in Alpine County's 2015 IS/MND, and the Sewer Improvement Project now being considered by MPUD constitute changes consistent with CEQA Guidelines Section 15164 that may be addressed in an addendum to the 2015 IS/MND.

2.2 CLEAN WATER STATE REVOLVING FUND

The Clean Water SRF program offers low cost financing for a wide variety of water quality projects. In California, administration of the SRF program has been delegated by the United States Environmental Protection Agency (EPA) to the State Water Resources Control Board (SWRCB). In turn, the SWRCB requires all projects being considered under the SRF program to comply with CEQA and certain federal environmental protection laws and regulations (federal cross-cutter regulations), including the Federal Endangered Species Act (Section 7), the National Historic Preservation Act (Section 106), Environmental Justice (Executive Order 12898), and the General Conformity Rule for

the Clean Air Act, among others. Collectively, the SWRCB refers to these requirements as “CEQA-Plus.” This addendum will support MPUD’s SRF Financial Assistance Application Environmental Package (as revised 12/2019) and compliance with SWRCB CEQA-Plus requirements, per the Clean Water State Revolving Fund Program State Environmental Review Process (SWRCB 2017). In addition, the SRF Financial Assistance Application Environmental Package requires that the project’s CEQA document is less than five years old at the time a financing agreement is executed for the project. Because the Alpine County MND was adopted in 2015, although it evaluated the Sewer Improvement Project now being considered, it would be over five years old at the time of funding. Therefore, the evaluation of current site conditions, regulations, and project elements in this addendum will also serve to update the 2015 IS/MND, ensuring the CEQA review for the Markleeville Sewer Pump Station Relocation and Improvements Project is less than five years old.

2.3 ANTICIPATED PERMITS AND APPROVALS

Table 2.1 lists the anticipated agency reviews, permits, and approvals that would be necessary to implement the project.

Table 2-1 Anticipated Permits and Approvals

Agency	Regulation	Permit/Action
Markleeville Public Utility District	California Environmental Quality Act, Section 15000 et seq. MPUD Ordinances	Addendum to the Alpine County 2015 MND Inspection Agreement
California Department of Transportation		ROW Encroachment Permit
State Water Resources Control Board	State Revolving Fund Environmental Compliance Federal Cross-Cutter Regulations	SRF Environmental Form
California Regional Water Quality Control Board (Lahontan Water Board)	Clean Water Act, Section 401	NPDES Construction
California State Office of Historic Preservation	National Historic Preservation Act, Section 106	Compliance with Section 106
Great Basin Unified Air Pollution Control District		Construction Permit
Private Landowner - MPUD Easement Holder		Possible modification to easement
California Department of Fish and Wildlife	California Fish and Game Code	Streambed Alteration Agreement for impacts on fish and wildlife resources due to riparian habitat removal
US Army Corps of Engineers	Section 404 of Clean Water Act	Section 404 permit for fill of federally protected wetlands
Lahontan Regional Water Quality Control Board	Section 401 of Clean Water Act	Section 401 Water Quality Certification for fill or waters of the state (including wetlands)

2.4 ORGANIZATION OF THE ADDENDUM

This addendum uses a modified checklist format to document that the site-specific activities for the Markleeville Sewer Pump Station Relocation and Improvements Project are adequately addressed by the 2015 IS/MND pursuant to Section 15164(b) of the State CEQA Guidelines, which states that “an addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.” The

checklist is set up to document that none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent MND have occurred and an addendum to the 2015 IS/MND may be prepared (per CEQA Guidelines Section 15164).

The organization of project-specific environmental analysis in this addendum follows the organization of Alpine County's 2015 IS/MND (specifically the IS/MND Volume I, dated February 2014); however, it avoids excessive repetition of information and issues that were disclosed in the 2015 IS/MND and that require no further analysis. Instead, this addendum evaluates the more detailed project-level information specific to the Markleeville Sewer Pump Station Relocation and Improvements Project to document that the project activities are covered by the Alpine County 2015 IS/MND and that no subsequent MND is required.

This addendum is organized into the following chapters:

Chapter 1 – Project Information: provides a summary of information about the Sewer Improvement Project, including project location, lead agency, and contact information.

Chapter 2 – Introduction: summarizes the purpose of the addendum, the 2015 IS/MND, and this document's organization.

Chapter 3 – Project Description: includes a description of all elements of the Markleeville Sewer Pump Station Relocation and Improvements Project, focusing on those elements that differ from the 2015 Project.

Chapter 4 – Coverage under the 2015 IS/MND: describes the consistency of the Sewer Improvement Project with the 2015 IS/MND and includes an environmental checklist for each resource topic. This section of the addendum analyzes the potential effects on the existing physical environment from implementation of the proposed modifications, as compared to the approved 2015 Project. This analysis has been prepared to determine whether any of the conditions described above that would require preparation of a subsequent or supplemental MND would occur as a result of the project modification.

Chapter 5 – Applicable 2015 IS/MND Mitigation Measures: lists adopted mitigation measures from the 2015 IS/MND that are applicable to, and would be required for, the Sewer Improvement Project.

Chapter 6 - References: lists references used in the preparation of this document.

3 PROJECT DESCRIPTION

3.1 LOCATION

The Markleeville Sewer Pump Station Relocation and Improvements Project site is located in the town of Markleeville, Alpine County, California (Figure 3-1). Markleeville is approximately 8 miles southwest of the Nevada border and 20 miles south of Lake Tahoe. The project site is located on the north side of State Route (SR) 89, and found on the Markleeville USGS Quadrangle map, NE ¼ of the SE ¼ of Section 21, T10N, R20E MDBM.

The project site is located immediately east of the Alpine County Administration Center along Markleeville Creek near its confluence with Millberry Creek. Land uses to the west are commercial and public institutional in downtown Markleeville, while those to the south are residential. Land uses to the north and east are a mix of rural agricultural, public institutional (the wastewater treatment plant), and open space/recreation.

3.2 PROJECT SITE

The project site covers approximately 4.5 acres (see Figure 3-2), that formerly housed the USFS Markleeville Guard Station. The site includes Markleeville Creek and immediate adjacent areas downstream of the SR 89 bridge and Millberry Creek downstream of the MPUD access road to its confluence with Markleeville Creek. The parcels within the project boundary are primarily owned by the County (Assessor's Parcel Numbers [APNs] 002-280-002-0, 002-280-003-0, 002-280-005-0, 002-280-006-0, and include a portion of a private parcel along the MPUD access road (002-260-002-0). The MPUD holds access easements along all pipelines and a blanket access easement that includes the access road. The southern portion of the project site is at and may include portions of the Caltrans right-of-way (ROW) along SR 89.

3.3 PROJECT BACKGROUND

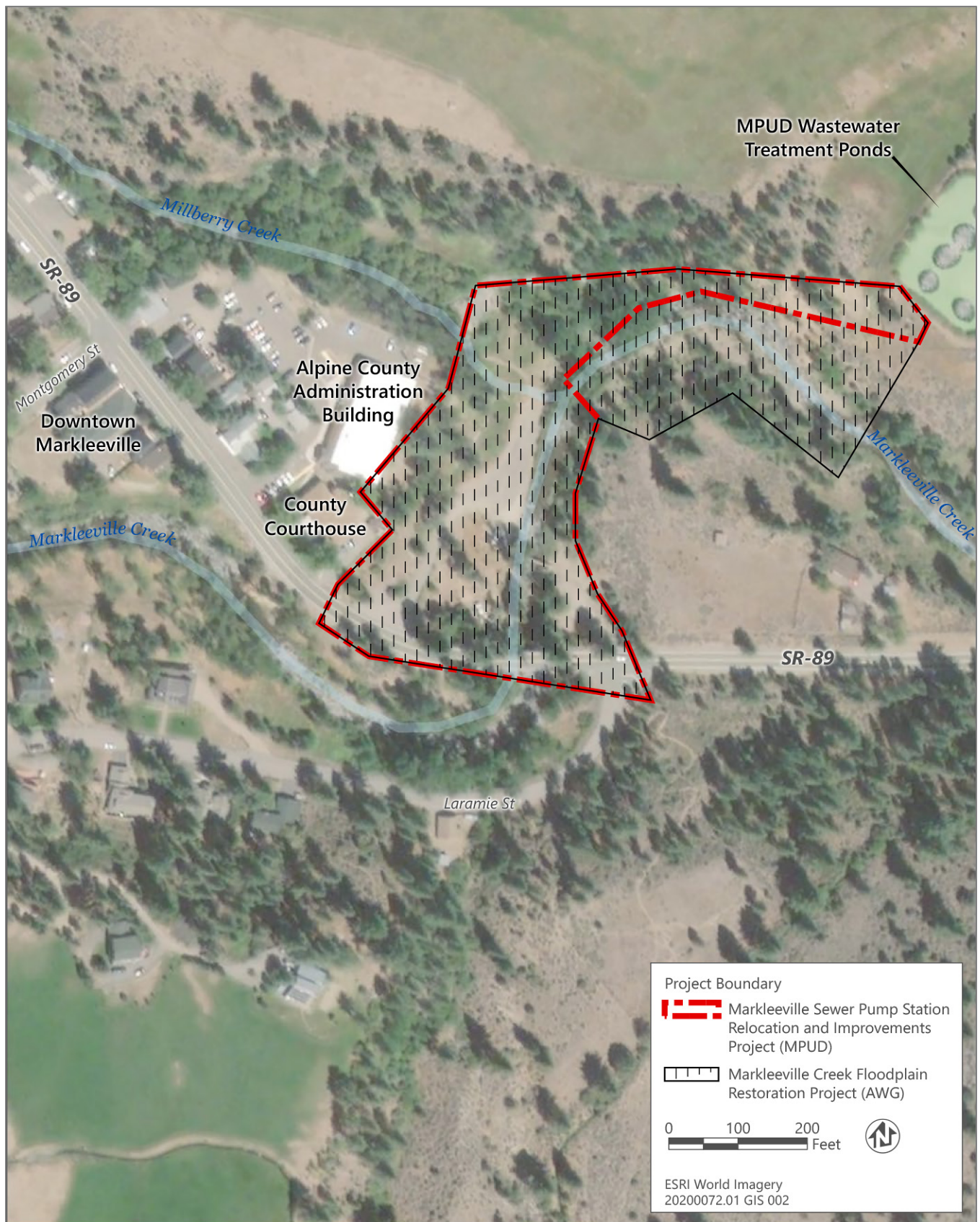
The project site is prone to seasonal flooding and has been highly altered since the 1930s to reduce flooding risk and allow for development on the site. Alterations have included rock floodwalls installed to isolate the floodplain and clearing and grading of the area. Despite these alterations, the site remains subject to significant and repeated flooding during major storm events, having been inundated at least five times from 1937 to 2005. Following a flood in 1997, additional rock gabion slope stabilization measures were completed along the left bank of Markleeville Creek to protect the road, sewer force main, and the USFS campground waterline. However, while the site is protected during 2- and 5-year events, it remains vulnerable to inundation during 10-year or greater events. During flooding conditions, the MPUD access road provides limited access to large vehicles. Some sewage infrastructure is completely inaccessible during flooding events, including several of the existing sewer manholes and the MPUD sewer pump station. Equipment failure or other maintenance issues that could not be resolved during an impassable flood could result in creek contamination.

The sewer infrastructure modifications are needed to extend the lifespan of MPUD sewer facilities; improve reliability; provide safer year-round accessibility; and reduce the probability of water quality risks posed by continued exposure of the aging pipes, manholes, and pump station to flooding. Changes to the sewer system infrastructure on the project site are a necessary prerequisite for implementation of the remainder of the previously-approved 2015 project: AWG's Markleeville Creek Floodplain Restoration Project, which includes the floodplain restoration and the public access facilities.



Source: adapted by Ascent Environmental in 2020

Figure 3-1 Project Location



Source: Data received from Bennett Engineering in 2020

Figure 3-2 Project Area

3.4 PROJECT OBJECTIVES

Consistent with the project objectives stated in the 2015 IS/MND, the objectives of the Markleeville Sewer Pump Station Relocation and Improvements Project are to:

- ▶ relocate key sewer system infrastructure out of the floodplain;
- ▶ reduce the potential for sewer system overflows;
- ▶ replace aging pipes, manholes and pump stations to extend their lifespan;
- ▶ reduce the threat of water quality impairments from flooding, leaks or spills; and
- ▶ provide safe access to sewer system infrastructure during all weather conditions.

3.5 PROJECT ELEMENTS

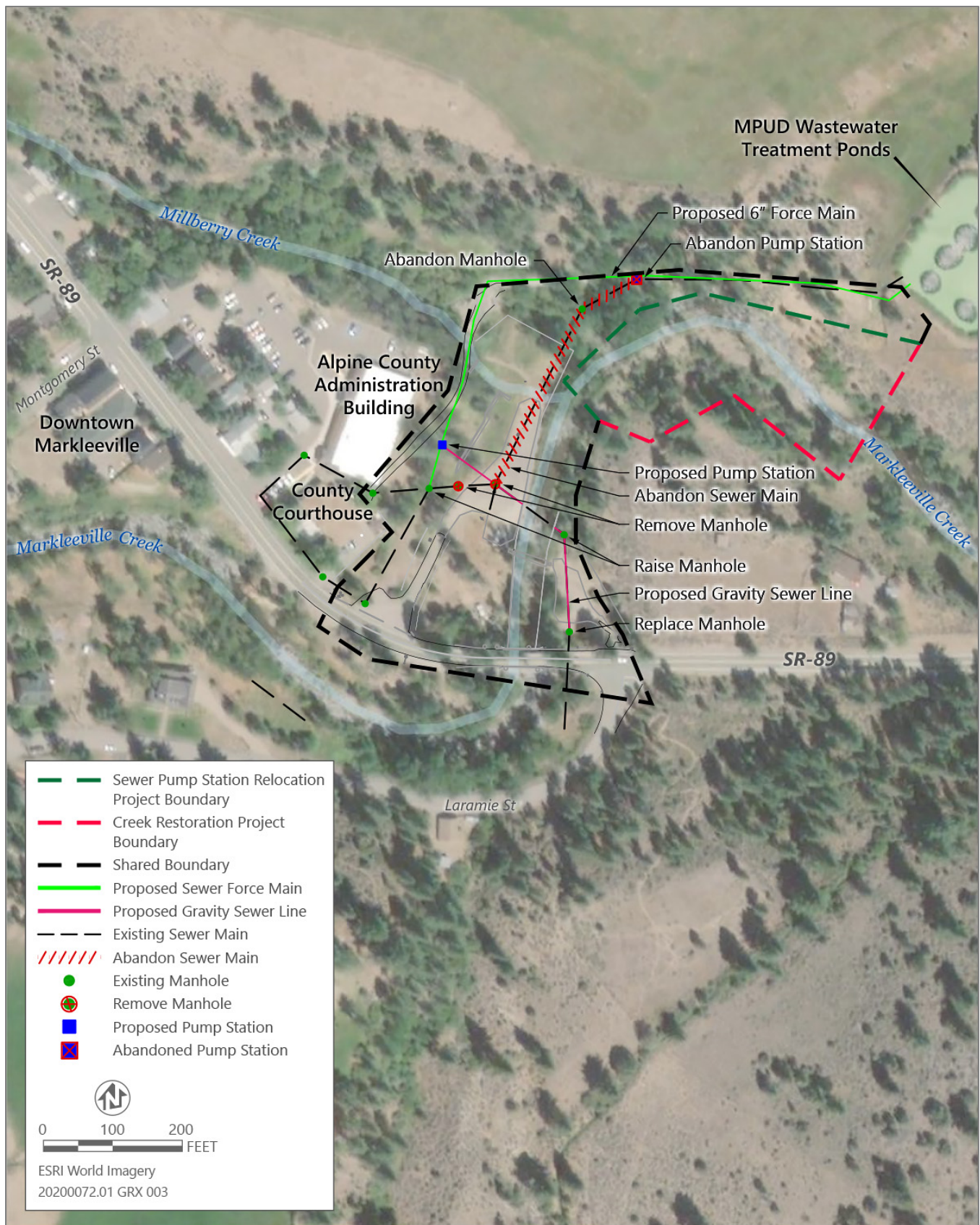
Consistent with the MPUD sewer system modifications evaluated in the 2015 IS/MND, the project includes replacement and relocation of sewer pipelines; construction of a new pump station along the new pipeline alignment; and modification of the access road location, profile, and drainage facilities. All new surface sewer facilities would be constructed 1 to 2 feet above the projected 100-year flood level to prevent future inundation. Figure 3-3 shows the current site plan of the proposed sewer system modifications, which is consistent with the plan evaluated in the 2015 IS/MND, but refined based on additional engineering, avoidance of a historic wall near the Markleeville Courthouse, and avoidance of trenching across Markleeville Creek.

3.5.1 Replacement and Relocation of Sewer Infrastructure

The project would involve the abandonment, removal, and replacement of various sewer pipelines and manholes. Abandonment of selected infrastructure would be consistent with federal and state regulations. With the exception of the 8-inch concrete-encased steel gravity pipe that crosses Markleeville Creek, which would remain in use, no infrastructure located within 2 feet of the finished grade would be abandoned in place. Selected infrastructure would be removed and properly disposed offsite, including any special disposal measures for asbestos-lined concrete pipes. Based on the site history, it is possible that some remnant infrastructure or materials could be present within the site. Any remnant infrastructure or materials would be inspected, removed, and disposed of safely.

The specific abandonment, removal, and replacement of sewer infrastructure includes the following elements.

- ▶ Decommission, abandon, and remove the existing sewer pump station, including the removal of all equipment and backfilling the pump station and screening manhole per industry standards.
- ▶ Abandon in place approximately 380 feet of existing 8-inch gravity sewer pipe that connects to the existing sewer pump station to the west of Markleeville Creek. The abandonment would be done by cutting the pipe ends, filling the pipe with concrete, and capping both ends of the pipe. The pipe is at a depth of approximately 7.5 feet below ground surface (bgs).
- ▶ Remove and replace two manholes west of Markleeville Creek.
- ▶ Remove approximately 150 feet of gravity sewer pipe and replace with new 8-inch PVC gravity sewer pipe west of Markleeville Creek at a depth of 5 to 15 feet below finished grade.
- ▶ Remove approximately 160 feet of gravity sewer pipe and replace with new 8-inch PVC gravity sewer pipe east of Markleeville Creek at a depth of 5 to 10 feet below finished grade.
- ▶ Replace one standard sewer manhole and one sewer drop manhole east of Markleeville Creek.



Source: Image produced in 2014 by Cardno Entrix; line work provided by BEN|EN in 2020

Figure 3-3 Sewer System Modifications

- ▶ Remove approximately 390 feet of existing force main along the MPUD access road and install approximately 865 feet of new force main pipe using open trench methods. The new force main from the pump station to the wastewater treatment facility would be upsized from 6-inch pipe to 8-inch pipe to account for additional head loss and future development.
- ▶ The single manhole located within the 100-year floodplain (east of Markleeville Creek) would be raised a minimum of 12 inches above the 100-year floodplain elevation and fitted with a watertight lid.

3.5.2 New Pump Station

Construction of the new pump station would occur along the MPUD access road and new force main alignment. The new pump station would:

- ▶ Be located outside the 100-year floodplain boundary and at a finished elevation above the maximum projected 100-year flood level. The wet well structure would have a depth of approximately 30 feet below grade.
- ▶ Be located in an area that provides the necessary hydraulic grade for conveyance from gravity sewers to the pump station.
- ▶ Meet Hydraulic Design Institute specifications with pumping capacity greater than or equal to that of the existing pump station to account for additional head loss and planned future development. Pump station design would include provisions for maintaining the storage time-to-overflow in the event of a pump station failure or malfunction. Currently, time-to-overflow is a minimum of six hours during peak flow conditions, which is provided by a combination of wet well volume and lower collection piping and manholes. To maintain this time buffer, the new pump station wet well diameter or depth would be increased for storage. This improvement would provide additional safeguards and reliability for sewer function and maintain the response time necessary to procure emergency equipment and contractors in the event of a major failure or blockage.
- ▶ Provide sufficient space for MPUD operations staff and/or emergency vehicles to access and maintain the system during all weather conditions. The new pump station may have down-cast security lighting and security fencing.
- ▶ Back up generator may be installed at the new pump station location (budget permitting).

As stated above, the existing pump station would be decommissioned, abandoned, and removed, including the removal of all equipment and backfilling the pump station and screening manhole per industry standards. This would occur after the new pump station and force main are installed and operational.

3.5.3 Access Road Modifications

The MPUD access road modifications would focus on improving year-round accessibility during all weather conditions. The road modifications would:

- ▶ Relocate the MPUD access road entry point to be co-located with the proposed parking lot at the southwest corner of the site to allow for a lower gradient profile and to eliminate the need for maintenance vehicles to travel between the neighboring Alpine County courthouse and administration buildings.
- ▶ Modify the road profile and cross section to reduce the maximum road profile slope and to create a more uniform standard cross section that is approximately 12 feet wide with two percent crown and minimum cover of three feet over the new sewer.

3.5.4 Construction

Construction is anticipated to begin in summer of 2022 or 2023 depending on funding and occur over the span of approximately 20 weeks. Initial site preparation would consist of vegetation removal and clearing around work areas. Construction crews would consist of approximately ten personnel (i.e., 3 to 6 construction personnel, 1 construction

supervisor, 2 electrical/mechanical personnel, and 1 inspector) at peak construction. Construction personnel would access the site via SR 89. No closure of SR 89 nor other local streets would be required. Construction equipment, materials, and vehicle staging would occur on the project site.

Construction activities would be limited to 8:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 3:00 p.m. on weekends to comply with the Alpine County Code construction noise exemption and minimize disruption to the community.

Construction equipment would include:

- ▶ One (1) excavator for the entire duration of the project;
- ▶ One (1) large bore drill rig for one week during construction of the new pump station;
- ▶ Twenty (20) dump truck trips for select backfill material and off-haul/disposal of materials;
- ▶ One (1) watering truck; and
- ▶ Four (4) materials-delivery trucks.

All construction equipment would be properly maintained and fitted with operational noise control devices, per manufacturer specifications. Equipment idling would be prohibited when equipment is not in use.

Construction would be performed in conformance with an approved stormwater pollution prevention plan (SWPPP), which shall include but not be limited to a description of best management practices to be implemented, dewatering and diversion requirements, site-specific erosion control devices.

While construction would be scheduled during a low flow time of year to minimize the potential for saturated soils and shallow groundwater, it is possible that subsurface flow would be intercepted. This would require implementation of an approved dewatering plan including proper pre-treatment of any pumped water prior to discharge.

The project would include temporary re-vegetation measures to ensure that any ground disturbance would be stabilized during the interim period before the separate floodplain restoration project begins. If floodplain restoration is not planned to occur within two growing seasons, the project would implement permanent re-vegetation in all areas where direct ground disturbance occurred.

3.5.5 Sewer System Monitoring and Maintenance

The MPUD would perform routine and any emergency inspections and repairs of the sewer system infrastructure, consistent with their current operating procedures and governing regulations. The project would not require additional staff.

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4 COVERAGE UNDER THE 2015 IS/MND

The MPUD has determined that, in accordance with PRC Section 21166 and Section 15164 of the State CEQA Guidelines, minor technical changes or additions to Alpine County's 2014 IS/MND and adopted 2015 MND (2015 IS/MND) are necessary to address the refined site plan for the *Markleeville Sewer Pump Station Relocation and Improvements Project*, which was approved as part of the *Markleeville Creek Floodplain Restoration Project*. An addendum to an adopted MND is prepared when changes to a project are required, and the changes:

- ▶ will not result in any new significant environmental effects, and/or
- ▶ will not substantially increase the severity of previously identified effects.

The environmental analysis evaluates whether, for each environmental resource topic (e.g., land use, traffic, air quality), there are any changes in the project or the circumstances under which it would be undertaken that would result in new or substantially more severe environmental impacts than considered in the 2015 IS/MND. The column headings in the environmental checklist are defined as follows:

- ▶ Impact Examined in the 2015 MND?: "Yes" is stated where the potential impacts of the project were examined in the 2015 IS/MND. This document summarizes and cross references the relevant analysis in the 2015 IS/MND.
- ▶ Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?: This question is answered with a "yes" or "no," as substantiated by the discussion provided below the table. If the response is "yes," additional CEQA analysis is required.
- ▶ Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?: This question is answered with a "yes" or "no," as substantiated by the discussion provided below the table. If the response is "yes," additional CEQA analysis is required.
- ▶ Do Mitigation Measures in the 2015 IS/MND Address and Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?: This question is answered with a "yes," "no," or "N/A," as substantiated by the discussion provided below the table. The answer N/A indicates there was no potential impact under the 2015 IS/MND and the project does not change the impact conclusion as adopted in 2015. The 2015 IS/MND mitigation measures are summarized and cross referenced, as necessary. To ensure proper implementation of the 2015 IS/MND mitigation measures, clarification and prescriptive directions have been provided herein. The mitigation measures applicable to the project are also summarized in Chapter 5 of this addendum.

The "Discussion" section in each resource topic provides substantiation of each impact conclusion. The bold impact conclusions for each checklist question are consistent with the conclusions of the 2015 IS/MND.

4.1 AESTHETICS

Section 3.1 of the 2015 IS/MND evaluates the impacts of the project on aesthetics.

4.1.1 Environmental Checklist and Discussion

Aesthetics	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Have a substantial adverse effect on a scenic vista?	Yes	No	No	N/A
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Yes	No	No	N/A
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Yes	No	No	N/A
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Yes	No	No	N/A

- a) **No Impact.** The project site is located in downtown Markleeville, adjacent to commercial and institutional buildings, SR 89, and Markleeville and Miller Creeks. The project site has been previously disturbed and does not provide views of a scenic vista. Project construction would temporarily alter the visual character of the project site; however, the infrastructure would primarily be underground and the aboveground pump station would be similar to current conditions and located near the Alpine County Administration building to the west. Therefore, the project would not adversely affect the visual character of the site and the project would have no impact on a scenic vista. Therefore, the project would not result in a new or substantially more severe impact on a scenic vista, and no mitigation would be required.
- b) **Less than Significant.** As discussed in the 2015 IS/MND, SR 89 located within Alpine County is a designated state scenic highway. The project would temporarily disrupt views from SR 89 in Markleeville due to construction equipment and site disturbance. However, the project would result in underground sewer infrastructure and the above-ground pump station would be similar to current conditions and located near the Alpine County Administration building to the west. Thus, the project elements would not alter the views of drivers on SR 89, nor would the project degrade or damage existing scenic resources along SR 89. The project would not result in a new or substantially more severe impact, this impact would remain less than significant, and no mitigation would be required.
- c) **Less than Significant.** Consistent with the 2015 IS/MND, although the project would temporarily disrupt the existing visual character of the project site due to construction equipment and site disturbance, the project would not permanently degrade the visual character of the project site. The project would result in underground sewer infrastructure and the new pump station would be similar to current conditions and located near the Alpine County

Administration building to the west. Therefore, the project would not result in a new or substantially more severe impact, this impact would remain less than significant, and no mitigation would be required.

- d) **No Impact.** As discussed in the 2015 IS/MND, there would be no impact with respect to light or glare. Construction activities would occur during daylight hours and would not require nighttime lighting. Construction equipment is unlikely to have reflective surfaces and would not be a substantial source of glare in the area. The new pipelines would be underground, and consistent with current conditions of the sewer pump station, the new pump station building would not be constructed with glare-inducing materials. The new facilities would have limited exterior security lighting, which would be shielded and downcast to prevent light pollution on surrounding residences and the night sky. The project would not result in a new or substantially more severe impact and no mitigation would be required.

4.2 AGRICULTURAL AND FORESTRY RESOURCES

Section 3.2 of the 2015 IS/MND evaluates the impacts of the project on agricultural and forestry resources.

4.2.1 Environmental Checklist and Discussion

Agricultural & Forestry Resources	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Yes	No	No	N/A
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Yes	No	No	N/A
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Yes	No	No	N/A
d) Result in the loss of forest or agricultural land or conversion of forest land to non-forest use?	Yes	No	No	N/A
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	Yes	No	No	N/A

- a) **No Impact.** Alpine County is not included in the area mapped pursuant to the California Department of Conservation’s Farmland Mapping and Monitoring Program (DOC 2016). As such, no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is designated along the project alignment or within the project area. In addition, the project site is an existing disturbed site in Markleeville that is not in agricultural use. Consistent with the 2015 IS/MND, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation, to non-agricultural use. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.
- b) **No Impact.** Consistent with the 2015 IS/MND, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract and there is no land under Williamson Act contract within the project site. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.

- c,d) **No Impact.** Consistent with the 2015 IS/MND, the project would not occur on designated forest land and would not convert forest land to a non-forest land use. Consistent with the 2015 IS/MND, the project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned for Timberland Production (as defined by Government Code section 51104(g)). Additionally, as discussed above under criteria a) and b), the project site is not located on agricultural land and would not result in the conversion of agricultural land to a non-agricultural land use. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.
- e) **No Impact.** Consistent with the 2015 IS/MND, because the project involves relocating and improving existing sewer infrastructure and facilities on the project site, the project would not involve any changes that could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.

4.3 AIR QUALITY

Section 3.3 of the 2015 IS/MND evaluates the impacts of the project on air quality.

4.3.1 Environmental Checklist and Discussion

Air Quality	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Conflict with or obstruct implementation of the applicable air quality plan?	Yes	No	No	N/A
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Yes	No	No	Yes
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Yes	No	No	N/A
d) Expose sensitive receptors to substantial pollutant concentrations?	Yes	No	No	N/A
e) Create objectionable odors affecting a substantial number of people?	Yes	No	No	N/A

The Project is located in Alpine County, which is in the northernmost section of the Great Basin Valleys Air Basin (GBVAB). The Great Basin Unified Air Pollution Control District (GBUAPCD) is the regional agency responsible for air quality planning within the GBVAB, which includes ensuring that the GBVAB is in compliance or moving towards compliance with the national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS). The U.S. Environmental Protection Agency established NAAQS for six criteria air pollutants, which are known to be harmful to human health and the environment: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter (which is categorized into respirable particulate matter with an aerodynamic diameter less than or equal to 10 microns [PM₁₀] and fine particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in diameter [PM_{2.5}]), nitrogen dioxide, and sulfur dioxide. The State of California has established the CAAQS for these six pollutants, as well as for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Alpine County's designation with respect to the CAAQS and NAAQS has not changed since adoption of the 2015 MND. Alpine County is currently designated as nonattainment with respect to the CAAQS for PM₁₀. The prominent sources of PM₁₀ in Alpine County are controlled burns and wildfires. The region is designated as in attainment unclassifiable with respect to the NAAQS and CAAQS for all other pollutants (CARB 2019).

GBUAPCD has not established significance criteria for the evaluation of air quality impacts under CEQA. However, GBUAPCD implements rules and regulations within their jurisdiction, including Rule 401, which regulates fugitive dust emissions generated by construction activities.

The 2015 IS/MND determined that operational emissions associated would be indirect and associated with the replacement of the pump station, which would have all new electrically powered equipment tied into the local utilities power supply. After project construction is completed, operational emissions from the project would be similar, if not

less than, existing conditions. Therefore, the analysis below, consistent with the analysis in the 2015 IS/MND, focuses on emissions generated by project-related construction activity.

- a) **No Impact.** No new air quality plans have been developed or implemented since adoption of the 2015 MND. As discussed in the 2015 IS/MND, GBUAPCD has developed four distinct air quality plans that are being implemented in specific locations within the GBVAB. None of these plans apply to locations in Alpine County, where the project is located. For this reason, the 2015 IS/MND concluded that there would be no impact regarding compliance with applicable air quality plans. The project would not result in a new or substantially more severe impact, and no mitigation would be required.
- b) **Less than Significant with Mitigation.** As discussed above and in the 2015 IS/MND, Alpine County is designated as nonattainment with respect to the CAAQS for PM₁₀. The 2015 IS/MND determined that project construction would generate short-term, intermittent PM₁₀ emissions, which could result in a potentially significant impact.

Mitigation Measure AQ-1 (per page 3-30 of the 2015 IS/MND)

Implementation of the air quality protection measures described in Section 2.5.17, "Air Quality Protection," of the 2015 IS/MND are required to ensure that the project does not violate any standard or contribute substantially to an existing or projected air quality violation. Air quality protection during project construction would be required to ensure particulate matter (i.e., fugitive dust) emissions would be limited. The following fugitive dust control measures, as outlined in the GBUAPCD's Rule 401, shall be implemented during construction. MPUD shall take reasonable precautions to prevent visible particulate matter from being airborne, under normal wind conditions, beyond the property from which the emission originates. Reasonable precautions include, but are not limited to:

- ▶ Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
- ▶ Application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dusts;
- ▶ Installation and use of hoods, fans, and fabric filters, to enclose and vent the handling of dusty materials. Adequate contaminant methods shall be employed during such handling operations;
- ▶ Use of water, chemicals, chuting, venting, or other precautions to prevent particulate matter from becoming airborne in handling dusty materials to open stockpiles and mobile equipment; and
- ▶ Maintenance of roadways in a clean condition.

With implementation of the required GBUAPCD's Rule 401 air quality protection measures, the project would result in less than significant short-term, intermittent PM₁₀ emissions. Therefore, the project would not violate any standard or contribute substantially to an existing or projected air quality violation, would not result in a new or substantially more severe impact with implementation of the mitigation required in the 2015 IS/MND, and no additional mitigation is required.

- c) **No Impact.** As discussed under criterion b), project construction would generate short-term, intermittent emissions of PM₁₀, which is currently designated nonattainment in Alpine County with respect to the CAAQS. However, implementation of the required air quality protection measures (per Section 2.5.17, "Air Quality Protection," of the 2015 IS/MND) during construction would minimize particulate matter and fugitive dust emissions, and construction emissions would be short-term and intermittent. For these same reasons, the 2015 IS/MND concluded that the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- d) **No Impact.** Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to

pollutants, such as children and the elderly, and the potential for these individuals to experience increased and prolonged exposure to pollutants. The closest sensitive receptors to the project site are single-family residences located south of the project site on the opposite side of SR 89. These residences are located 230 feet or further from where project construction activity would occur, which provides a buffer distance for any pollutants emitted during construction to dissipate. Additionally, as discussed in the 2015 IS/MND, the project would not generate any permanent, long-term substantial pollutant concentrations because project operation would result in very limited emissions. The project would not result in a new or substantially more severe impact, and no mitigation would be required.

- e) **Less than Significant.** As discussed in the 2015 IS/MND, the project involves modifications to existing sewer infrastructure, resulting in improvements to the sewer system that would reduce the potential for future sewer system overflows that could create objectionable odors. Thus, the project would provide a long-term net benefit. Any odors generated by construction equipment or activities would be temporary and localized, and thus, would not affect nearby land uses for an extended period of time or affect a substantial number of people. The project would not result in a new or substantially more severe impact, and no mitigation would be required.

4.4 BIOLOGICAL RESOURCES

Section 3.4 of the 2015 IS/MND evaluates the impacts of the project on biological resources.

4.4.1 Environmental Checklist and Discussion

Biological Resources	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Yes	No	No	Yes
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	Yes	No	No	Yes
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Yes	No	No	Yes
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Yes	No	No	Yes
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Yes	No	No	N/A
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Yes	No	No	N/A

- a) **Less than Significant with Mitigation.** The 2015 IS/MND evaluated impacts on special-status species and concluded that there was a potentially significant impact related to special-status plants, special-status wildlife, as well as raptors and migratory birds protected by California Fish and Game Code and the Migratory Bird Treaty Act.

New biological database searches were conducted for the Markleeville Sewer Pump Station Relocation Project. The California Natural Diversity Database (CNDDDB), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants, and U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) records were reviewed for special-status wildlife and plants in September and November of 2020 (CNDDDB 2020,

CNPS 2020, USFWS 2020). No additional special-status species or other changes were identified in the USFWS search results (USFWS 2020). The CNDDDB and CNPS inventory searches were increased from a search of the Markleeville USGS quadrangle to a search of the nine USGS quadrangles surrounding the project site (i.e., Freel Peak, Woodfords, Carters Station, Carson Pass, Markleeville, Heenan Lake, Wolf Creek, Ebbetts Pass, Pacific Valley; CNDDDB 2020, CNPS 2020). The updated records search results are included in Appendix A. Based on a review of database search results, documented species ranges, and habitat within the project site as confirmed during a site visit by an Ascent Environmental biologist on October 2, 2020, nine special-status plant species and 10 special-status wildlife species may occur on the project site (CNDDDB 2020, CNPS 2020).

Special-Status Plants

The nine special-status plant species that may occur on the project site are: mountain bent grass, upswept moonwort, Davy’s sedge, porcupine sedge, Liddon’s sedge, western valley sedge, marsh willowherb, Blandow’s bog moss, and alder buckthorn (Table 4-1, CNDDDB 2020, CNPS 2020). Habitat suitable for these species (i.e. creeks, seeps, scrub, forest) is present near Markleeville Creek and in undeveloped areas of the project site. Consistent with the 2015 IS/MND, no special-status plants were observed during biological reconnaissance survey of the project site.

Table 4-1 Special-Status Plant Species Known to Occur in the Vicinity of the Project Site and Potential for Occurrence in the Project Site

Species	Listing Status ¹ Federal	Listing Status ¹ State	CRPR	Habitat	Potential for Occurrence
Mountain bent grass <i>Agrostis humilis</i>	—	—	2B.3	Alpine boulder and rock field, meadows and seeps, subalpine coniferous forest. Sometimes on calcareous substrates. 5,003–11,155 feet in elevation. Blooms July–September.	May occur. The project site contains seep habitat potentially suitable for this species.
Upswept moonwort <i>Botrychium ascendens</i>	—	—	2B.3	Grassy fields or conifer forests near springs and creeks, meadows and seeps. 4,920–10,712 feet in elevation. Blooms July–August.	May occur. The project site contains conifer forest habitat near creeks (i.e., Markleeville Creek) that may be suitable for this species.
Davy's sedge <i>Carex davyi</i>	—	—	1B.3	Subalpine coniferous forest, upper montane coniferous forest, typically in dry, sparse meadows. 4,790–10,597 feet in elevation. Blooms May–August.	May occur. The project site contains forest habitat potentially suitable for this species.
Porcupine sedge <i>Carex hystericina</i>	—	—	2B.1	Wet places, such as stream edges. 1,985–3,150 feet in elevation. Blooms May–June.	May occur. The project site contains creek habitat (i.e., Markleeville Creek) and associated wet areas potentially suitable for this species.
Mud sedge <i>Carex limosa</i>	—	—	2B.2	In floating bogs and soggy meadows and edges of lakes. 4,495–9,154 feet in elevation. Blooms June–August.	Not expected to occur. The project site does not contain bog, meadow, or lake habitat.
Liddon's sedge <i>Carex petasata</i>	—	—	2B.3	Broadleaved upland forest, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland. 2,740–9,941 feet in elevation. Blooms May–July.	May occur. The project site contains forest and seep habitat potentially suitable for this species.
Western valley sedge <i>Carex vallicola</i>	—	—	2B.3	Great Basin scrub, meadows, and seeps. Mesic sites. 5,003–9,203 feet in elevation. Blooms July–August.	May occur. The project site contains scrub and seep habitat potentially suitable for this species.

Species	Listing Status ¹ Federal	Listing Status ¹ State	CRPR	Habitat	Potential for Occurrence
Alpine dusty maidens <i>Chaenactis douglasii</i> var. <i>alpina</i>	—	—	2B.3	Open, subalpine to alpine gravel and crevices; granitic substrate. 7,749–11,007 feet in elevation. Blooms July–September.	Not expected to occur. The project site does not contain gravel or rocky crevice habitat suitable for this species.
Fell-fields claytonia <i>Claytonia megarhiza</i>	—	—	2B.3	In the crevices between rocks, rocky or gravelly soil. 8,530–10,942 feet in elevation. Blooms July–September.	Not expected to occur. The project site is outside of the elevation range of this species.
Great Basin claytonia <i>Claytonia umbellata</i>	—	—	2B.3	Subalpine coniferous forest. Talus slopes, stony flats, crevices. 5,594–11,483 feet in elevation. Blooms May–August.	Not expected to occur. The project site does not contain talus slope habitat.
Fiddleleaf hawksbeard <i>Crepis runcinata</i>	—	—	2B.2	Moist, alkaline valley bottoms. 1,247–10,203 feet in elevation. Blooms May–August.	Not expected to occur. The project site does not contain alkaline valley bottom habitat suitable for this species.
Subalpine cryptantha <i>Cryptantha crymophila</i>	—	—	1B.3	Subalpine coniferous forest. On dry talus of volcanic formation. 8,793–10,810 feet in elevation. Blooms July–August.	Not expected to occur. The project site does not contain talus slope habitat and is outside of the elevation range of this species.
Tahoe draba <i>Draba asterophora</i> var. <i>asterophora</i>	—	—	1B.2	On open talus slopes, rock outcrops, and crevices. On decomposed granite. 9,088–11,499 feet in elevation. Blooms July–August.	Not expected to occur. The project site does not contain talus slope or rock outcrop habitat and is outside of the elevation range of this species.
Tall draba <i>Draba praealta</i>	—	—	2B.3	Mesic sites. 8,202–11,204 feet in elevation. Blooms July–August.	Not expected to occur. The project site is outside of the elevation range of this species.
Scribner's wheat grass <i>Elymus scribneri</i>	—	—	2B.3	On rocky slopes. 9,514–13,780 feet in elevation. Blooms July–August.	Not expected to occur. The project site is outside of the elevation range of this species.
Marsh willowherb <i>Epilobium palustre</i>	—	—	2B.3	Mesic sites. 5,430–7,710 feet in elevation. Blooms July–August.	May occur. The project site contains mesic habitat associated with Markleeville Creek potentially suitable for this species.
Jack's wild buckwheat <i>Eriogonum luteolum</i> var. <i>saltuarium</i>	—	—	1B.2	Sandy, granitic substrates. 5,577–7,874 feet in elevation. Blooms July–September.	Not expected to occur. The project site does not contain sandy, rocky habitat and is outside of the known range of this species.
Carson Valley monkeyflower <i>Erythranthe carsonensis</i>	—	—	1B.1	Granitic openings. 4,856–4,856 feet in elevation. Blooms April–June.	Not expected to occur. The project site is outside of the known range of this species.
Blandow's bog moss <i>Helodium blandowii</i>	—	—	2B.3	Moss growing on damp soil, especially under willows among leaf litter. 6,109–8,858 feet in elevation.	May occur. The project site contains damp soil habitat and willows.
Robbins' pondweed <i>Potamogeton robbinsii</i>	—	—	2B.3	Deep water, lakes. 5,020–10,827 feet in elevation. Blooms July–August.	Not expected to occur. The project site does not contain lake habitat.

Species	Listing Status ¹ Federal	Listing Status ¹ State	CRPR	Habitat	Potential for Occurrence
Alder buckthorn <i>Rhamnus alnifolia</i>	—	—	2B.2	Mesic sites. 4,692–7,005 feet in elevation. Blooms May–July.	May occur. The project site contains mesic habitat associated with Markleeville Creek potentially suitable for this species.
Water bulrush <i>Schoenoplectus subterminalis</i>	—	—	2B.3	Montane lake margins, in shallow water. 2,461–7,382 feet in elevation. Blooms June–August.	Not expected to occur. The project site does not contain montane lake habitat.
Cream-flowered bladderwort <i>Utricularia ochroleuca</i>	—	—	2B.2	Mesic sites, including lake margins. 4,298–7,710 feet in elevation. Blooms June–July.	Not expected to occur. The project site is outside of the known range of this species.
Golden violet <i>Viola purpurea</i> ssp. <i>aurea</i>	—	—	2B.2	Great Basin scrub, pinyon-juniper woodland. Dry, sandy slopes. 3,281–8,202 feet in elevation. Blooms April–June.	Not expected to occur. The project site is outside of the known range of this species.

Notes: CRPR = California Rare Plant Rank; CESA = California Endangered Species Act; CEQA = California Environmental Quality Act; ESA = Endangered Species Act; NPPA = Native Plant Protection Act

¹ Legal Status Definitions

California Rare Plant Ranks:

- 1A Plant species that are presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. A plant is extinct if it no longer occurs anywhere. A plant that is extirpated from California has been eliminated from California but may still occur elsewhere in its range.
- 1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
- 2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

Threat Ranks:

- 0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
- 0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
- 0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Sources: CNDDDB 2020; CNPS 2020

Due to the potential for special-status plant species to occur on the project site, project construction disturbance has the potential to result in a potentially significant impact on special-status plants.

Mitigation Measure BIO-1 - Pre-construction plant survey within the project disturbance footprint shall be conducted a qualified biologist to identify any special status plants and create construction exclusion areas.

Mitigation Measure BIO-1a – Conduct Special-Status Plant Surveys and Implement Avoidance Measures and Mitigation

- ▶ Prior to implementation of project activities and during the period when special-status plant species with potential to occur in the project site (Table 4-2) are most identifiable (generally, the blooming period of flowering plants or sporophyte period of bryophytes), a qualified botanist will conduct protocol-level surveys for special-status plants within the project site following survey methods from the CDFW Protocols for Surveying and Evaluating Impacts on Special Status Native Plant Populations and Natural Communities (CDFW 2018). The qualified botanist will 1) be knowledgeable about plant taxonomy, 2) be familiar with plants of the Sierra Nevada region, including special-status plants and sensitive natural communities, 3) have experience conducting floristic botanical field surveys as described in CDFW 2018, 4) be familiar with the *California Manual of Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at <http://vegetation.cnps.org/>), and 5) be familiar with federal and state statutes and regulations related to plants and plant collecting.

- ▶ If special-status plants are not found, the botanist will document the findings in a letter report to MPUD and no further mitigation will be required.
- ▶ If special-status plant species are found, the occupied habitat will be avoided completely, if feasible (i.e., project objectives can still be met). This may include establishing a no-disturbance buffer around the plant population and demarcation of this buffer by a qualified botanist using flagging or high-visibility construction fencing. The size of the buffer will be determined by the qualified botanist and will be large enough to avoid direct or indirect impacts on the plant.

Table 4-2 Typical Blooming Period for Special-Status Plants that May Occur within the Project Site¹

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mountain bent grass							X	X	X			
Upswept moonwort							X	X				
Davy's sedge					X	X	X	X				
Porcupine sedge					X	X						
Liddon's sedge					X	X	X					
Western valley sedge							X	X				
Marsh willowherb							X	X				
Blandow's bog moss ²	—	—	—	—	—	—	—	—	—	—	—	—
Alder buckthorn					X	X	X					

¹ Blooming periods vary annually based on annual climatic variation and across species range. It is essential to base survey timing on current conditions in the survey year and it is recommended that reference populations are visited to verify species are identifiable during the survey period.

² Non-blooming bryophyte species

Source: Data compiled by Ascent Environmental in 2021; CNPS 2020

- ▶ If special-status plants are found during rare plant surveys and cannot be avoided, MPUD will consult with CDFW or U.S. Fish and Wildlife Service (USFWS), as appropriate depending on species status, to determine the compensation necessary to achieve no net loss of occupied habitat or individuals. Mitigation measures may include, but are not limited to, preserving and enhancing existing populations, creating off-site populations on mitigation sites through seed collection or transplantation at a 1:1 ratio, and restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. Potential mitigation sites could include suitable locations within or outside of the project site. MPUD will develop and implement a site-specific mitigation strategy describing how unavoidable losses of special-status plants will be compensated. Success criteria for preserved and compensatory populations will include:
 - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
 - Compensatory and preserved populations will be self-producing. Populations will be considered self-producing when:
 - plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.
 - If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.

Implementation of 2015 IS/MND Mitigation Measures BIO-1 and BIO-1a, which would require protocol-level special-status plant surveys and protection measures if special-status plants are identified prior to implementation of project activities would reduce impacts on special-status plant species to less than significant. The findings of the 2015 IS/MND remain valid and no additional mitigation is required.

Special-Status Wildlife

Special-status wildlife that may occur or are known to occur on the project site are Lahontan cutthroat trout, mountain sucker, mountain whitefish, pallid bat, ringtail, Sierra Nevada mountain beaver, Sierra Nevada snowshoe hare, Townsend’s big-eared bat, western red bat, and western white-tailed jackrabbit (Table 4-3, CNDDDB 2020, USFWS 2020). Additionally, as identified in the 2015 IS/MND, nesting birds protected by California Fish and Game Code and the federal Migratory Bird Treaty Act may also occur on the project site.

Three special-status fish have potential to occur or are known to occur in the portion of Markleeville Creek within the project site: Lahontan cutthroat trout, mountain sucker, and mountain whitefish (Table 4-3). Experts, including the UC Davis Center for Watershed Sciences, U.S. Forest Service, CDFW, and the National Oceanic and Atmospheric Administration, have established the range for Lahontan cutthroat trout, which currently includes Markleeville, and the portion of Markleeville Creek within the project site (BIOS 2014). Lahontan cutthroat trout are known to occur in the East Fork Carson River and there are no significant barriers to aquatic movement between the East Fork Carson River and Markleeville Creek, which feeds into the East Fork Carson River approximately 1.6 miles northeast of the project site. No in-water work is proposed in Markleeville Creek; however, project activities in the vicinity of the creek could result in inadvertent introduction of silt or other materials into the creek, potentially affecting water quality, which could result in adverse effects on special-status fish. The 2015 IS/MND Hydrology and Water Quality section identified temporary erosion/runoff best management control measures (e.g., straw wattles, straw bales, secondary containment for storage of fuel and oil), which would reduce potential impacts on special-status fish to less than significant.

Table 4-3 Special-Status Wildlife Species Known to Occur in the Vicinity of the Project Site and Potential for Occurrence in the Project Site

Species	Listing Status ¹ Federal	Listing Status ¹ State	Habitat	Potential for Occurrence
Amphibians and Reptiles				
Northern leopard frog <i>Lithobates pipiens</i>	–	SSC	Native range is east of Sierra Nevada-Cascade Crest. Near permanent or semi-permanent water in a variety of habitats. Highly aquatic species. Shoreline cover, submerged and emergent aquatic vegetation are important habitat characteristics.	Not expected to occur. The project site is outside of the known range of this species.
Sierra Nevada yellow-legged frog <i>Rana sierrae</i>	FE	ST	Always encountered within a few feet of water. Tadpoles may require 2 to 4 years to complete their aquatic development.	Not expected to occur. The project site is outside of the known range of this species.
Southern long-toed salamander <i>Ambystoma macrodactylum sigillatum</i>	–	SSC	High elevation wet meadows and lakes in the Sierra Nevada, Cascade, and Klamath mountains. Aquatic larvae occur in ponds and lakes. Outside of breeding season adults are terrestrial and associated with underground burrows of mammals and moist areas under logs and rocks.	Not expected to occur. The project site does not contain wet meadow, lake, or pond habitat suitable for this species.

Species	Listing Status ¹ Federal	Listing Status ¹ State	Habitat	Potential for Occurrence
Southern mountain yellow-legged frog <i>Rana muscosa</i>	FE	SE	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino Mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, April 2014, effective June 30, 2014. Always encountered within a few feet of water. Tadpoles may require 2 - 4 years to complete their aquatic development.	Not expected to occur. The project site is outside of the known range of this species.
Yosemite toad <i>Anaxyrus canorus</i>	FT	SSC	Vicinity of wet meadows in central High Sierra, 6,400 to 11,300 feet in elevation. Primarily montane wet meadows; also in seasonal ponds associated with lodgepole pine and subalpine conifer forest.	Not expected to occur. The project site does not contain wet meadow or seasonal pond habitat suitable for this species.
Birds				
Bald eagle <i>Haliaeetus leucocephalus</i>	FD	SE FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Not expected to occur. The project site does not contain large, old growth trees or snags suitable for this species.
Black swift <i>Cypseloides niger</i>	-	SSC	Coastal belt of Santa Cruz and Monterey County; central and southern Sierra Nevada; San Bernardino and San Jacinto Mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely	Not expected to occur. The project site does not contain cliff or canyon habitat suitable for this species.
California spotted owl <i>Strix occidentalis</i>	-	SSC	Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure greater than 40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	Not expected to occur. The forest habitat within the project is generally not characterized by high canopy closure or late seral forest features (e.g., old growth trees and snags, coarse woody debris).
Golden eagle <i>Aquila chrysaetos</i>	-	FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not expected to occur. The project site does not contain large trees or snags suitable for this species.
Great gray owl <i>Strix nebulosa</i>	-	SE	Resident of mixed conifer or red fir forest habitat, in or on edge of meadows. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	Not expected to occur. The project site does not contain large trees or snags suitable for this species.
Northern goshawk <i>Accipiter gentilis</i>	-	SSC	Within, and in vicinity of, coniferous forest. Uses old nests and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	Not expected to occur. The project site does not contain large trees or snags suitable for this species.

Species	Listing Status ¹ Federal	Listing Status ¹ State	Habitat	Potential for Occurrence
Purple martin <i>Progne subis</i>	–	SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree/snag.	Not expected to occur. The project site is outside of the known range of this species.
Willow flycatcher <i>Empidonax traillii</i>	–	SE	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 2,000-8,000 feet elevation. Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	Not expected to occur. Riparian habitat associated with Markleeville Creek does not provide sufficient cover or the habitat components (e.g., meadow, marsh) preferred by this species.
Fish				
California golden trout <i>Oncorhynchus mykiss aguabonita</i>	–	SSC	Native to Kern Plateau in wide, shallow, and exposed streams with little riparian vegetation. Transplanted within and outside of California beyond native range. Stream bottoms of sand, gravel, and some cobble. Water is clear and usually cold, but summer temperatures can vary from 3 to 22 Celsius.	Not expected to occur. The project site is outside of the known range of this species.
Lahontan cutthroat trout <i>Oncorhynchus clarkii henshawi</i>	FT	–	Historically in all accessible cold waters of the Lahontan Basin in a wide variety of water temperatures and conditions. Cannot tolerate presence of other salmonids. Requires gravel riffles in streams for spawning.	May occur. The project site is within the current range of Lahontan cutthroat trout and the portion of Markleeville Creek in the project site provides habitat potentially suitable for this species (BIOS 2014).
Mountain sucker <i>Catostomus platyrhynchus</i>	–	SSC	Restricted to the Lahontan drainage system and the north fork of the Feather River. Generally occupy pool-like habitats. Abundance greatest in areas with dense cover.	Known to occur. Mountain sucker has been documented within Markleeville Creek (CNDDDB 2020).
Mountain whitefish <i>Prosopium williamsoni</i>	–	SSC	Mountain whitefish in California inhabit clear, cold streams and rivers at elevations of 4,500–7,600 feet. While they are known to occur in a few natural lakes (e.g., Lake Tahoe), there are few records from reservoirs. In streams, they are generally associated with large pools (i.e., less than 3 feet deep) or deep runs.	Known to occur. Mountain whitefish has been documented within Markleeville Creek (CNDDDB 2020).

Species	Listing Status ¹ Federal	Listing Status ¹ State	Habitat	Potential for Occurrence
Invertebrates				
Western bumble bee <i>Bombus occidentalis</i>	–	SC	Bumble bees have three basic habitat requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens.	Not expected to occur. The project site is within the historic range of this species and there is one historic (1948) occurrence of the species within approximately 8 miles north of the project site (CNDDDB 2020). However, western bumble bee has recently undergone a decline in abundance and distribution and is no longer present across much of its historic range. In California, western bumble bee populations are currently largely restricted to high elevation sites in the northern Sierra Nevada and a few locations on the northern California coast (Xerces Society 2018).
Mammals				
American badger <i>Taxidea taxus</i>	–	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not expected to occur. While the project site has some areas containing scrub or forest habitat, these areas are surrounded by development (e.g., buildings, roads), and unlikely to provide contiguous habitat suitable for American badger.
California wolverine <i>Gulo</i>	–	ST FP	Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats. Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas. Can travel long distances.	Not expected to occur. While the project site is located within the historic range of this species, the only known wolverine in California was last detected in Tahoe National Forest near Truckee. This detection is a significant distance from the project site (i.e., greater than 50 miles) and the likelihood of this individual dispersing to the project site is extremely low.
Fisher - West Coast DPS <i>Pekania pennanti</i>	FE	SSC	Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest. Endangered status applies to Southern Sierra DPS.	Not expected to occur. Fisher is considered to be extirpated from most of the northern and central Sierra Nevada (Zielinski et al. 1995; Sweitzer et al. 2015) and has not been detected within or in the vicinity of the project site since the late 1970s (CNDDDB 2020).
Pallid bat <i>Antrozous pallidus</i>	–	SSC	Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	May occur. The project site contains trees that may provide roost habitat potentially suitable for this species.
Ringtail <i>Bassariscus astutus</i>	–	FP	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations. Hollow trees, logs, snags, cavities in talus and other rocky areas, and other recesses are used for cover. Usually found within 0.6 mile of a permanent water source.	May occur. The riparian habitat associated with Markleeville Creek and forest habitat within the project site may provide habitat potentially suitable for ringtail.
Sierra Nevada mountain beaver <i>Aplodontia rufa californica</i>	–	SSC	Dense growth of small deciduous trees and shrubs, wet soil, and abundance of forbs in the Sierra Nevada and east slope. Needs dense understory for food and cover. Burrows into soft soil. Needs abundant supply of water.	May occur. Riparian habitat potentially suitable for Sierra Nevada mountain beaver is present along Markleeville Creek.

Species	Listing Status ¹ Federal	Listing Status ¹ State	Habitat	Potential for Occurrence
Sierra Nevada red fox <i>Vulpes necator</i>	FC	ST	Historically found from the Cascades down to the Sierra Nevada. Found in a variety of habitats from wet meadows to forested areas. Use dense vegetation and rocky areas for cover and den sites. Prefer forests interspersed with meadows or alpine fell-fields.	Not expected to occur. The project site may be within the historic range of Sierra Nevada red fox; however, only two small populations of the species are currently known: one near Lassen Peak and one near Sonora Pass. This species is currently unlikely to occur in the vicinity of the project site.
Sierra Nevada snowshoe hare <i>Lepus americanus tahoensis</i>	–	SSC	Boreal riparian areas in the Sierra Nevada. Thickets of deciduous trees in riparian areas and thickets of young conifers.	May occur. The project site contains deciduous tree thicket habitat and nearby riparian habitat potentially suitable for this species.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	–	SCC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	May occur. The project site contains bridges and buildings that may provide roost habitat potentially suitable for this species.
Western red bat <i>Lasiurus blossevillii</i>	–	SSC	Roosts primarily in foliage of trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	May occur. The project site contains trees that may provide roost habitat potentially suitable for this species.
Western white-tailed jackrabbit <i>Lepus townsendii</i>	–	SSC	Open areas with scattered shrubs and exposed flat-topped hills with open stands of trees, brush, and herbaceous understory.	May occur. The project site contains brush and forest habitat potentially suitable for this species.

Notes: CNDDB = California Natural Diversity Database; CEQA = California Environmental Quality Act

¹ Legal Status Definitions

Federal:

- FE Federally Listed as Endangered (legally protected)
- FT Federally Listed as Threatened (legally protected)
- FC Federal Candidate for listing (legally protected)
- FD Federally Delisted

State:

- FP Fully protected (legally protected)
- SSC Species of special concern (no formal protection other than CEQA consideration)
- SE State Listed as Endangered (legally protected)
- ST State Listed as Threatened (legally protected)
- SC State Candidate for listing (legally protected)

Sources: CNDDB 2020; Sweitzer et al. 2015; USFWS 2020; Xerces 2018; Zielinski et al. 1995

Due to the potential for special-status wildlife species to occur on the project site, project construction disturbance has the potential to result in a potentially significant impact on special-status plants.

Mitigation Measure BIO-2 - Pre-construction wildlife and amphibian surveys of the disturbance footprint would be conducted by qualified biologists to identify any special status wildlife and amphibian species present, designate exclusion zones, and/or perform removals.

Mitigation Measure BIO-2a: Implement Limited Operating Period or Conduct Focused Surveys for Ringtail

- ▶ To minimize the potential for loss of ringtail and active ringtail dens, project activities (e.g., tree removal, other vegetation removal, ground disturbance, staging) within habitat potentially suitable for ringtail (i.e., forest habitat, scrub habitat, riparian habitat) will be conducted outside of the ringtail maternity season (not well defined, but approximately April 15–July 31), if feasible.
- ▶ If the limited operating period is not feasible, and construction activities would occur from April 15–July 31, additional preconstruction surveys would be required. No more than 30 days before initiation of project activities, within potentially suitable ringtail habitat, a qualified biologist with experience conducting ringtail surveys will conduct a focused survey for potential ringtail dens (e.g., hollow trees, snags, rock crevices) within the project site. The qualified biologist will document sightings of individual ringtails, as well as potential dens.
- ▶ If individuals or potential or occupied dens are not found, the qualified biologist will submit a letter report summarizing the results of the survey to MPUD, and further mitigation will not be required.
- ▶ If ringtails are identified or if potential dens are located, an appropriate method will be used by the qualified wildlife biologist to confirm whether a ringtail is occupying the den. This may include use of remote field cameras, track plates, or hair snares. Other devices, such as a fiber optic scope, may be utilized to determine occupancy.
 - If potential dens are not occupied, the entrances will be temporarily blocked so that no other animals occupy the project site during project activities, but only after it has been fully inspected. The blockage will be removed once the project activities are completed.
 - If a den is found to be occupied by a ringtail, a no-disturbance buffer will be established around the occupied den. The no-disturbance buffer will include the den tree (or other structure) plus a suitable buffer as determined by the biologist in coordination with CDFW. Project activities in the no-disturbance buffer will be avoided until the den is unoccupied as determined by the qualified wildlife biologist in coordination with CDFW.

Mitigation Measure BIO-2b: Conduct Preconstruction Surveys for Sierra Nevada Mountain Beaver and Implement Protective Buffers

- ▶ No more than 30 days prior to any ground disturbance or vegetation removal activities within 200 feet of Markleeville Creek, a preconstruction survey for Sierra Nevada mountain beaver will be conducted by a qualified biologist familiar with the species. Surveys would consist of burrow searches within habitat suitable for the species.
- ▶ If individuals or occupied burrows are not found, the qualified biologist will submit a letter report summarizing the results of the survey to MPUD, and further mitigation will not be required.
- ▶ If active breeding/burrow sites are identified within 250 feet of project activities, MPUD will implement a limited operating period during the Sierra Nevada mountain beaver breeding season (February 1–July 31) during which no ground disturbance, vegetation or tree removal, or staging activities will occur within 250 feet of the identified burrow. The limited operating period, area within which it is implemented (e.g., 250-foot buffer), and activities allowed or prohibited within the limited operating period may be adjusted through consultation with CDFW.

Mitigation Measure BIO-2c: Conduct Preconstruction Surveys for Sierra Nevada Snowshoe Hare and Western White-Tailed Jackrabbit and Implement Protective Buffers

- ▶ No more than 30 days prior to any ground disturbance or vegetation removal activities during the Sierra Nevada snowshoe hare and western white-tailed jackrabbit breeding season (February 1–July 31), a preconstruction survey for nests of both species will be conducted by a qualified biologist familiar with the species. Surveys would consist of walking transects to determine whether active nests of either species are present within suitable habitat areas of the project site (e.g., scrub, forest).
- ▶ If individuals or active nests are not found, the qualified biologist will submit a letter report summarizing the results of the survey to MPUD, and further mitigation will not be required.
- ▶ If active nests are identified, MPUD will implement a limited operating period during the Sierra Nevada snowshoe hare and western white-tailed jackrabbit breeding season (February 1–July 31) during which no ground disturbance, vegetation or tree removal, or staging activities will occur within 250 feet of the identified nest. The limited operating period, area within which it is implemented (e.g., 250-foot buffer), and activities allowed or prohibited within the limited operating period may be adjusted through consultation with CDFW.

Mitigation Measure BIO-2d: Conduct Focused Special-Status Bat Surveys and Implement Avoidance Measures

- ▶ In the early planning stages of the project, a qualified biologist familiar with bats and bat ecology and experienced in conducting bat surveys will conduct surveys for bat roosts in suitable habitat (e.g., large trees, crevices, cavities, exfoliating bark, bridges, unoccupied buildings) within and adjacent to the project site.
- ▶ If no evidence of bat roosts is found, the qualified biologist will submit a letter report summarizing the results of the survey to MPUD, and no further study will be required.
- ▶ If evidence of bat roosts is observed, the species and number of bats using the roost will be determined. Bat detectors shall be used if deemed necessary to supplement survey efforts by the qualified biologist.
- ▶ A no-disturbance buffer of 250 feet will be established around active pallid bat, Townsend's big-eared bat, or western red bat roosts, and project activities will not occur within this buffer until after the roosts are unoccupied.
- ▶ If roosts of pallid bat, Townsend's big-eared bat, or western red bat are determined to be present and must be removed, the bats will be excluded from the roosting site before the tree, building, or other structure is removed. A program addressing compensation, exclusion methods, and roost removal procedures will be developed in consultation with CDFW before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter) or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion from active maternity roosts will not occur while females in maternity colonies are nursing young. Exclusion efforts may be restricted during other periods of sensitive activity (e.g., during hibernation). The loss of each roost (if any) will be replaced in consultation with CDFW and may require construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. If determined necessary during consultation with CDFW, replacement roosts will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and a qualified biologist confirms that bats are not present in the original roost site, the roost tree, building, or other structure may be removed or sealed to prevent bats from reentering.

Mitigation Measure BIO-3 - Impacts to active nests will be avoided by the establishment and maintenance of buffers around the nests. The appropriate size and shape of the buffers will be determined by a qualified biologist in consultation with the CDFW, and may vary depending on the nest location, nest stage, and construction activity. No project activity will occur within the buffer area until the biologist confirms that the nest is no longer active. Monitoring will be conducted to confirm that the Project activities are not resulting in detectable adverse effects to the active nests.

Mitigation Measure BIO-3a: Conduct Focused Surveys for Special-Status Birds and Other Native Nesting Birds and Implement Protective Buffers

- ▶ To minimize the potential for loss of special-status bird species, raptors, and other native birds, project activities (e.g., tree removal, other vegetation removal, ground disturbance, staging) will be conducted during the nonbreeding season (approximately September 1-January 31, as determined by a qualified biologist), if feasible. If project activities are conducted during the nonbreeding season, no further mitigation will be required.
- ▶ Within 14 days before the onset of project activities during the breeding season (approximately February 1 through August 31, as determined by a qualified biologist), a qualified biologist familiar with birds of California and with experience conducting nesting bird surveys will conduct focused surveys for special-status birds, other nesting raptors, and other native birds and will identify active nests within 500 feet of the project site (where accessible).
- ▶ Impacts on nesting birds will be avoided by establishing appropriate buffers around active nest sites identified during focused surveys to prevent disturbance to the nest. Project activity will not commence within the buffer areas until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer will not likely result in nest abandonment. A qualified biologist will determine the appropriate buffer size for non-raptor nests after a site- and nest-specific analysis. Buffers typically will be 500 feet for raptors and 100 feet for non-raptor species. Factors to be considered for determining buffer size will include presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and proposed project activities. The size of the buffer may be adjusted if a qualified biologist determines that such an adjustment would not be likely to adversely affect the nest. Any buffer reduction for a special-status species will require consultation with CDFW. Periodic monitoring of the nest by a qualified biologist during project activities will be required if the activity has potential to adversely affect the nest, the buffer has been reduced, or if birds within active nests are showing behavioral signs of agitation (e.g., standing up from a brooding position, flying off the nest) during project activities, as determined by the qualified biologist.

Mitigation Measures BIO-2 and BIO-3 from the 2015 IS/MND require preconstruction surveys for special-status species and protection of active nests. These mitigation measures are further defined by Mitigation Measures BIO-2a through BIO-2d and BIO-3a. Mitigation Measure BIO-3a requires preconstruction surveys for special-status birds and other birds protected by California Fish and Game Code and the Migratory Bird Treaty Act and protective measures if active nests are identified in the project site. Mitigation Measure BIO-2a requires a limited operating period for ringtail and preconstruction surveys and avoidance measures if the limited operating period is not feasible. Mitigation Measure BIO-2b requires preconstruction surveys for Sierra Nevada mountain beaver and avoidance of active burrows, if detected. Mitigation Measure BIO-2c requires preconstruction surveys for Sierra Nevada snowshoe hare and western white-tailed jackrabbit and avoidance of active nests, if detected. Mitigation Measure BIO-2d requires preconstruction surveys for special-status bat roosts and avoidance of active roosts, if detected. With implementation of these mitigation measures, the project would result in a less-than-significant impact on special-status wildlife species. The findings of the 2015 IS/MND remain valid and no additional mitigation is required.

- b) **Less than Significant with Mitigation.** As discussed in the 2015 IS/MND, riparian habitats have high value for many riparian and aquatic species; providing water, thermal cover, migration corridors, and diverse nesting and feeding opportunities for numerous species. Riparian habitat occurs along the Markleeville Creek stream margins and dense mature willow scrub is found along Millberry Creek. Some project elements, including access road modifications and replacement and relocation of sewer infrastructure could result in removal or disturbance of riparian habitat.

Mitigation Measure BIO-4: Implement Avoidance Measures and Compensate for Unavoidable Impacts on Riparian Habitat

- ▶ Before implementation of project activities, riparian habitats previously mapped during preparation of the 2015 IS/MND will be flagged or fenced with brightly visible construction flagging and/or fencing under the direction of a qualified biologist and no project activities (e.g., vegetation removal, ground disturbance, staging) will

occur within these areas. Foot traffic by personnel will also be limited in these areas to prevent the introduction of invasive or weedy species or inadvertent crushing of plants. Periodic inspections during construction will be conducted by the monitoring biologist to maintain the integrity of exclusion fencing/flagging throughout the period of construction involving ground disturbance.

If riparian habitat in the project site cannot be avoided, the following measures will be implemented:

- ▶ A Streambed Alteration Notification will be submitted to CDFW, pursuant to Section 1602 of the California Fish and Game Code. If proposed project activities are determined to be subject to CDFW jurisdiction, MPUD will abide by the measures to protect fish and wildlife resources, required by any executed agreement, prior to any vegetation removal or activity that may affect the resource. Measures to protect fish and wildlife resources shall include, at a minimum, a combination of the following mitigation.
- ▶ MPUD will compensate for the loss of riparian habitat such that no net loss of habitat function and values occurs by:
 - restoring riparian habitat function and value within the project site;
 - restoring degraded riparian habitat outside of the project site;
 - purchasing riparian habitat credits at a CDFW-approved mitigation bank; or
 - preserving existing riparian habitat of equal or better value to the affected riparian habitat through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function (at least 1:1).
- ▶ MPUD will prepare and implement a Compensatory Mitigation Plan that will include the following:
 - For preserving existing riparian habitat outside of the project site in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title).
 - For restoring or enhancing riparian habitat within the project site or outside of the project site, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.
 - Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by MPUD (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.

Compliance with state law (e.g., Section 1602 of California Fish and Game Code), as identified in the 2015 IS/MND, as well as implementation of Mitigation Measure BIO-4, which requires avoidance of riparian habitat or permitting and compensation for unavoidable, permanent loss of riparian habitat, would reduce impacts on riparian habitat to less than significant. The findings of the 2015 IS/MND remain valid and no additional mitigation is required.

- c) **Less than Significant with Mitigation.** The 2015 IS/MND evaluated impacts on federally protected wetlands and waters, including a delineation of aquatic resources within the project site during which two wetland features were identified in addition to Markleeville Creek and Millberry Creek. Implementation of the project, including access road modifications and replacement and relocation of sewer infrastructure may result in impacts on the two wetland features identified in the 2015 IS/MND.

Mitigation Measure BIO-5: Implement Avoidance Measures and Compensate for Unavoidable Impacts on Wetlands

- ▶ Before implementation of project activities, a qualified biologist will mark the jurisdictional boundaries of the onsite wetlands with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway).
- ▶ Project activities (e.g., ground disturbance, vegetation removal, staging) will be prohibited within the wetland boundaries. The qualified biologist will periodically inspect the materials demarcating the wetland boundaries to confirm that they are intact and visible, and wetland impacts are being avoided.
- ▶ If it is determined that fill of waters of the United States would result from project implementation, authorization for such fill will be secured from U.S. Army Corps of Engineers (USACE) through the Section 404 permitting process. Any waters of the United States that would be affected by the project will be replaced or restored on a no-net-loss basis in accordance with the applicable USACE mitigation guidelines in place at the time of construction. In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, Section 401 Water Quality Certification from the Lahontan Regional Water Quality Control Board (RWQCB) will be obtained.
- ▶ If it is determined that fill of waters of the state, including state-protected wetlands, cannot be avoided, MPUD will submit an application for discharges of dredged or fill material to the Lahontan RWQCB before commencing activity that may result in discharge of dredged or fill material to waters of the state. MPUD will not commence any activity in waters of the state until permitted by the Lahontan RWQCB and MPUD will implement all protection measures and comply with all conditions of the permit.
- ▶ MPUD will restore all waters of the state following completion of project construction. A draft restoration plan outlining design, implementation, assessment, and maintenance for restoring temporary disturbance areas will be submitted to the Lahontan RWQCB with the application for discharge of dredged or fill material to waters of the state and will be implemented as approved by the Lahontan RWQCB.
- ▶ If any waters of the state cannot be restored on site, MPUD will implement a compensatory mitigation plan resulting in no net loss of the overall abundance, diversity, and condition of aquatic resources based on an assessment of the affected watershed. MPUD may compensate for loss of waters of the state by purchasing credits from a RWQCB-approved mitigation bank or in-lieu fee program, or through restoration or establishment of wetlands or non-wetland waters comparable to those affected by the project.

Compliance with state and federal law, as identified in the 2015 IS/MND, as well as implementation of Mitigation Measure BIO-5 which requires wetland avoidance or permitting and compensation for unavoidable loss of wetlands would reduce impacts on state or federally protected wetlands to less than significant. The findings of the 2015 IS/MND remain valid and no additional mitigation is required.

- d) **Less than Significant.** The 2015 IS/MND evaluated impacts on wildlife corridors and concluded that the project would have a less-than-significant impact because project implementation would not result in any physical obstructions that would inhibit wildlife movement, and would not remove, degrade, or otherwise interfere with the stream-associated wildlife corridor along Markleeville Creek. Potential impacts on wildlife movement resulting from project construction activities would be temporary. Additionally, there are no known native wildlife nursery sites within the project site. The project would not result in any new or substantially more severe impacts than those identified in the previously adopted 2015 IS/MND. The findings of the 2015 IS/MND remain valid and no mitigation is required.

- e) **Less than Significant with Mitigation.** The Alpine County General Plan Conservation Element contains goals and policies related to protection and conservation of wetlands; threatened, rare, or endangered plant species; sensitive, threatened, rare, or endangered wildlife species; and important deer migration routes (Alpine County 2003). Consistent with the 2015 IS/MND, the project would result in temporary construction disturbance and then would result in sewer facilities relocated outside of the floodplain. The project would not conflict with local policies or ordinances protecting biological resources and the project would have a less-than-significant impact. Further, implementation of 2015 IS/MND Mitigation Measures BIO-1, BIO-2, BIO-2a-BIO-2d, BIO-3, BIO-3a, BIO-4, and BIO-5 would result in compliance with all of the general plan policies pertaining to biological resources. Thus, the findings of the 2015 IS/MND remain valid and no additional mitigation is required.
- f) **No Impact.** As discussed in the 2015 IS/MND, the project would not have an effect on an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or adopted biological resources recovery or conservation plans of any federal or state agency because the project site is not within the coverage area of any such plan. Therefore, there are no new significant impacts or substantially more severe impacts that would occur pertaining to conflicts with adopted conservation plants. The findings of the 2015 IS/MND remain valid and no mitigation is required.

CONCLUSION

Since approval of the 2015 IS/MND, the project has been focused on the sewer pump station relocation project and new biological database searches were conducted, resulting in identification of several additional special-status species with potential to occur on the project site. Additional mitigation measures have been identified to further define the 2015 IS/MND mitigation measures and because of updated records searches and recent surveys of the project site. Implementation of the mitigation measures would reduce potential project impacts to less-than-significant levels. Therefore, the conclusions of the 2015 IS/MND remain valid and approval of the project would not result in new significant or substantially more severe significant impacts on biological resources.

4.5 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Section 3.5, "Cultural Resources," of the 2015 IS/MND evaluates the impacts of the project on archaeological, historical, and tribal cultural resources.

4.5.1 Environmental Checklist and Discussion

Archaeological, Historical, & Tribal Cultural Resources	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	Yes	No	No	Yes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Yes	No	No	Yes
c) Disturb any human remains, including those interred outside of formal cemeteries?	Yes	No	No	Yes
d) Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	No	No	No	Yes
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

The 2015 IS/MND was based on a cultural resources investigation (Cardno ENTRIX 2014). Although site conditions have not changed since 2015, due to the passage of time, an updated cultural resources inventory was conducted in 2020 by Natural Investigations Company (NIC) in compliance with Section 21083.2 of the CEQA statutes, Section 15064.5 of the CEQA Guidelines, and Section 106 of the federal National Historic Preservation Act (NHPA) (NIC 2020). The 2020 Cultural Resources Inventory Report includes a cultural resources literature search, Sacred Lands File search, paleontological sensitivity analysis, intensive pedestrian survey of the area of potential effects (APE), and an inventory report (NIC 2020).

- a) **Less than Significant with Mitigation.** Consistent with the 2015 IS/MND, the project would result in a less-than-significant impact to historical resources as defined in CEQA Section 15064.5. Two cultural resources have been previously recorded within the APE, the Markleeville Creek Bridge (P-02-000473) and the former Markleeville Guard House (P-02-000488). Both have been previously evaluated and recommended as ineligible for listing in the National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR). The bridge remains in place and is in active use. The project would result in no impact to the bridge. The former Markleeville Guard House has been almost completely destroyed. All associated standing structures have been demolished and removed. Among the few related features that remains in place are five rock walls (Walls #2-6), a pedestrian bridge over Markleeville Creek, and a cement sidewalk and drainage. Neither of these resources constitutes an historic property as defined under NHPA Section 300308, an historical resource as defined under CEQA Section 15064.5, unique archaeological resource as defined under CEQA Section 21083.2(g), or Native American cultural resource (NIC 2020).

As required by **Mitigation Measure CR-1, "Prepare a Section 106 Cultural Resources Inventory and Evaluation Report and/or Historic Properties Survey Report, Historic Properties Evaluation Report, and Archaeological Survey Report,"** of the 2015 IS/MND, the 2020 cultural resources inventory was prepared in compliance with Section 106 of the federal NHPA and evaluated potential project effects on the Markleeville Guard House and the Markleeville Creek Bridge. Neither of these resources constitutes an historic property as defined under NHPA Section 300308 or an historical resource as defined under CEQA Section 15064.5. Furthermore, consistent with **Mitigation Measure CR-2, "Avoidance and Protection Measures for Rock Wall #1 of the National Register Listed Alpine County Courthouse,"** of the 2015 IS/MND, the project site boundary does not include, and the project would avoid, Wall #1 associated with the National-Register-listed Alpine County Courthouse.

With implementation of Mitigation Measures CR-1 and CR-2, the project would result in a less-than-significant impact to historical resources, including the Markleeville Guard Station, the Markleeville Creek Bridge, and Wall #1 through avoidance of the bridge and Wall #1, and because the project would not impact the remnant features of the Guard Station. Therefore, no new or substantially more severe impacts would occur and no additional mitigation would be required.

- b) **Less than Significant with Mitigation.** Consistent with the 2015 IS/MND, no archaeological artifacts, objects, or sites, have been identified within the project area. Given the relatively late historical development of the Project vicinity beginning with the construction of the Markleeville Guard House in the 1930s, long after organized municipal trash collection was established, the sensitivity for subsurface archaeological remains from the historic period is estimated to be low.

Similarly, the negative results of the California Historical Resources Information System (CHRIS) and Sacred Lands File (SLF) searches for prehistoric cultural resources within the APE, along with the negative results of Native American outreach efforts, suggest that the potential for subsurface indigenous resources is also low. This potential is reduced further by the extent of past ground disturbance from construction, not only of the Guard Station, but also of utility and flood-management related infrastructure, as well as by the deposition of up to three feet of nonnative fill at the location. Taken together, these factors suggest that the overall sensitivity of the project site for intact subsurface archaeological is low (NIC 2020).

While it is unlikely that previously unrecorded archaeological deposits would be discovered during construction for the proposed project, the possibility exists that project construction could result in exposure and impacts to unknown significant unique resources. This would be a potentially significant impact.

Mitigation Measure CR-3—Construction Crew Education/Tailboard Meeting and Accidental Discovery of Archaeological Resources Procedures

Prior to the start of construction, MPUD will ensure that all construction personnel, including construction forepersons and field supervisors receive training by a qualified professional archaeologist, as defined by the Secretary of the Interior, and who is experienced in teaching non-specialists, to ensure they can recognize cultural resources materials in the event any are discovered during construction.

Furthermore, to avoid any potential adverse effect from the proposed project on accidentally discovered buried historical resources as defined in CEQA Guidelines Section 15064.5(a)(c), MPUD will distribute a cultural resources "ALERT" sheet to the project's prime contractor; to any project subcontractor (including firms providing services such as demolition, excavation, grading, etc.), or utilities firms involved in soils disturbing activities within the project site. The ALERT sheet provides workers notice that cultural resources may be encountered during excavation and instructions on what to do if evidence of an archaeological site is encountered. Prior to any soils disturbing activities being undertaken, each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel, including: machine operators, field crew, supervisory personnel, etc. The prime contractor will provide MPUD with a signed affidavit from the responsible parties (prime contractor, subcontractor[s], and utilities firms) confirming that all field personnel have received copies of the ALERT Sheet.

Should any indication of an archaeological resource be encountered during any soils disturbing activity of the project, the contractor will immediately notify MPUD and suspend any soils disturbing activities within 150 feet of the discovery until the find can be assessed by a qualified professional archaeologist, the qualified professional will determine what additional measures should be undertaken.

The qualified professional archaeologist will advise MPUD as to whether the discovery is an archaeological resource, retains sufficient integrity, and it of potential scientific, historical, and/or cultural significance. If an archaeological resource is present, the archaeological consultant will identify and evaluate the archaeological resource. The archaeological consultant will make a recommendation as to what action, if any, is warranted. Based on this information, if warranted, specific additional measures may be implemented.

Measures might include: preservation in situ of the archaeological resource; an archaeological monitoring program; and/or an archaeological testing program. MPUD may also require that a site security program be implemented if the resource is at risk from vandalism, looting, or other damaging actions.

The archaeological consultant will submit a final report that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archaeological resource will be provided in a separate removable insert within the final report.

Copies of the final report will be sent to Alpine County and the Central California Information Center, along with copies of any formal recordation forms (CA DPR 523 series) and/or documentation for nomination to the NRHP/CRHR. In instances of high public interest or interpretive value, Alpine County may require a different final report content, format and distribution from that presented above.

Implementation of Mitigation Measure CR-3 would reduce the impact of inadvertent discovery of archaeological resources to a less-than-significant level through evaluation, preservation in place, archaeological test excavation, and/or archaeological data recovery. Therefore, no new or substantially more severe impacts would occur and no additional mitigation would be required.

- c) **Less than Significant with Mitigation.** Consistent with the 2015 IS/MND, no human remains have been identified within the project area as result of the records search, archaeological fieldwork, or through consultation with the NAHC and interested Native American tribes. However, construction of the project could result in the inadvertent discovery of human remains associated with unrecorded archaeological deposits. Disturbance of human remains would be a significant impact.

Mitigation Measure CR-4—Preserve Human Remains if Encountered

If human remains are encountered during construction, MPUD will notify the Alpine County Coroner immediately, as required by California PRC Code §5097.98. A qualified professional archaeologist will also be contacted immediately. If the County Coroner determines that the remains are Native American, the Coroner will then contact the NAHC, pursuant to Section 7050.5[c] of the California Health and Safety Code.

There will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie human remains until the County Coroner has determined that no investigation of the cause of death is required or if remains are Native American. If the remains are of Native American in origin:

- ▶ Within 24 hours of notification, the NAHC will identify a Native American “most likely descendant” (MLD) to make a recommendation regarding appropriate treatment of the human remains.
- ▶ If the identified MLD fails to make a recommendation within 48 hours of being notified, Alpine County will work with the NAHC to determine appropriate means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in PRC Section 5097.98.

Compliance with California Health and Safety Code Sections 7050.5 and PRC Section 5097, as required by Mitigation Measure CR-4, would provide an opportunity to avoid or minimize the disturbance of human remains, and to treat with appropriate dignity, any discovery of human remains and any associated grave goods, as provided in PRC Section 5097.98. Therefore, this impact would be less than significant. No new or substantially more severe impacts would occur and no additional mitigation would be required.

- d) **Less than Significant with Mitigation.** The project area is located within the lands historically occupied by the Washoe; however, there are no known tribal cultural resources within the project area. The NAHC was contacted to request a search of their Sacred Lands File for traditional cultural resources within or near the project site. The reply from the NAHC, dated September 25, 2020, identified that the search failed to indicate the presence of Native American cultural resources in the project area (NIC 2020). The Washoe tribe indicated no knowledge of cultural resources that may be affected by the project, nor any concerns about the project at this time (NIC 2020). In addition, see discussion of historical resources, archaeological resources, and human remains in a) through c), above, which would be less-than-significant impacts with implementation of Mitigation Measures CR-1 through CR-4. The project-related potential to impact tribal cultural resources would be less than significant and no additional mitigation is required.

4.6 ENERGY

Energy was not evaluated in the 2015 IS/MND because this environmental resource topic was not required by CEQA until 2019. To address the current CEQA Guidelines, this addendum includes analysis of the project's energy impacts.

4.6.1 Environmental Checklist and Discussion

Energy	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Result in unnecessary, inefficient, and wasteful use of energy?	No	No	No	N/A
b) Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to energy use?	No	No	No	N/A

The primary forms of energy consumed in Alpine County are electricity and propane, as well as automotive fuels for transportation (gasoline and diesel). In Markleeville, electricity is supplied by the Pacific Gas and Electric Company (PG&E) and propane is supplied by several regional providers operating from nearby areas such as Gardnerville and South Lake Tahoe (Alpine County 2016).

In 2016, Alpine County adopted an Energy Action Plan (EAP), which set a goal to reduce electricity use in 2025 by 17 percent and propane use by 9 percent compared to the business-as-usual forecast. The EAP focuses on three energy use sectors: residential, non-residential, and municipal (Alpine County 2016). Because the project consists of improvements to sewer infrastructure, the following EAP goals and strategies relating to municipal energy use would apply to the project:

- ▶ **GOAL 4.** Increase energy efficiency in municipal structures and operations.
 - **Strategy 4.1.** Increase the energy efficiency of existing municipal structures.

The Alpine County General Plan and Alpine County Code also contain goals, policies, and codes related to energy use and efficiency. However, none are applicable to the project, as they predominantly focus on the energy consumption and the efficiency of residential land uses and new land use development projects.

- a) **Less than Significant.** Energy, primarily diesel and gasoline, would be consumed during project construction to operate construction equipment and transport construction materials. Gasoline would also be consumed for worker commutes. Levels of construction-related fuel consumption were estimated based on equipment assumptions consistent with the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 computer program (CalEEMod) (CAPCOA 2016) and fuel consumption factors derived from the California Air Resources Board's Emission Factor (CARB 2017). See Appendix B for detailed calculations. An estimated 608 gallons of gasoline and 14,853 gallons of diesel would be consumed during project construction, accounting for both on-site equipment use and off-site vehicle travel for worker commutes and haul trips. This one-time energy expenditure required to construct the project would be nonrecoverable. However, energy needs for project construction would be temporary and would not require additional capacity or increase peak or base period demands for electricity or other forms of energy.

Project operation would require electricity to power various components of the sewer system, including water pumps and security lighting. However, the new facilities would replace existing aging facilities, and thus, would likely be more energy efficient. Additionally, the project would not generate an increase in vehicle trips during operation because the project would not involve any land use development or require an increase in employees. Thus, the project would not appreciably increase the amount of gasoline and diesel consumption associated with employee trips or maintenance activities during operation.

The project would be beneficial for the community of Markleeville because these sewer system modifications would improve and relocate Markleeville's aging sewer system outside of the floodplain, thus avoiding future inundation by flooding and making sewer infrastructure safer and more accessible for maintenance. For these reasons, the project would not result in the inefficient, wasteful, or unnecessary consumption of energy resources during project construction or operation. This impact would be less than significant.

- b) **Less than Significant.** As discussed above, the Alpine County EAP is the local plan that provides a roadmap for expanding energy efficiency, water efficiency, and renewable energy efforts already underway in the County. The project would be consistent with all applicable EAP goals and strategies, particularly Goal 4 and Strategy 4.1, because the project would increase energy efficiency in existing municipal structures (i.e., sewer system facilities). Thus, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.

4.7 GEOLOGY, SOILS, AND SEISMICITY

Section 3.6 of the 2015 IS/MND evaluates the impacts of the project on geology, soils, and seismicity.

4.7.1 Environmental Checklist and Discussion

Geology, Soils, & Seismicity	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Yes	No	No	N/A
ii) Strong seismic ground shaking?	Yes	No	No	N/A
iii) Seismic-related ground failure, including liquefaction?	Yes	No	No	N/A
iv) Landslides?	Yes	No	No	N/A
b) Result in substantial soil erosion or the loss of topsoil?	Yes	No	No	N/A
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Yes	No	No	N/A
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	Yes	No	No	N/A
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Yes	No	No	N/A
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Yes	No	No	N/A
a) Less than Significant. As discussed in the 2015 IS/MND, the new sewer infrastructure would be built to meet all applicable regulations for minimizing risks related to earthquakes and ground shaking, including building codes for the maximum expected earthquake intensity (Zone 4). Additionally, the risks of liquefaction and landslide in the project area are considered low, and the project would not modify the project site or surrounding area in a way that would increase risks. The project would not result in a new or substantially more severe impact, and no mitigation would be required.				

- b) **Less than Significant.** Project construction would result in ground disturbance to remove and install new sewer infrastructure and improve site access. However, ground disturbance would be limited, and no substantial loss of topsoil would be required to implement the project. Additionally, the project would result in decreased erosion because MPUD access road modifications would result in improved drainage and sewer facilities would be moved out of the floodplain. The project would not result in a new or substantially more severe impact, and no mitigation would be required.
- c) **No Impact.** Consistent with the 2015 IS/MND, the project would not create cuts or place fill in areas of landslide, lateral spreading, subsidence, or liquefaction. The project would not result in a new or substantially more severe impact, and no mitigation would be required.
- d) **No Impact.** Consistent with the 2015 IS/MND, the project would not locate paved parking or sewer infrastructure facilities on expansive soils. The project would not result in a new or substantially more severe impact, and no mitigation would be required.
- e) **No Impact.** Consistent with the 2015 IS/MND, the project would not install septic or other alternative waste water systems for the disposal of wastewater. The project would not result in a new or substantially more severe impact, and no mitigation would be required.
- e) **No Impact.** No paleontological resources or unique geological features have been previously documented within or near the project site and the underlying Quaternary (2.5 million years ago to present) alluvium has not yielded significant paleontological remains. Additionally, these alluvial sediments have been extensively disturbed during past construction-related activities. Taken together these factors suggest that the project site has low paleontological resource sensitivity based on SVP criteria (NIC 2020). Consistent with the 2015 IS/MND (Section 3.5, page 3-61), no geologic strata that would contain paleontological resources exist at the site; therefore, the project would not directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature and there would be no impact. The project would not result in a new or substantially more severe impact, and no mitigation would be required.

4.8 GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Section 3.7 of the 2015 IS/MND evaluates the impacts of the project on greenhouse gas emissions and climate change.

4.8.1 Environmental Checklist and Discussion

Greenhouse Gas Emissions	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Yes	No	No	N/A
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose or reducing the emissions of greenhouse gases?	Yes	No	No	N/A

- a) **Less than Significant.** Consistent with the 2015 IS/MND, the project would generate greenhouse gases (GHGs) from equipment and vehicles during construction. However, these emissions would be temporary and the project would not create any long-term sources of GHG emissions. The operation of the relocated sewer pump station would be more efficient than existing facilities. Thus, the project would not result in a new or substantially more severe impact, and no mitigation would be required.
- b) **No Impact.** Alpine County has not developed or adopted a climate action plan or other plan for reducing local GHG emissions. Thus, consistent with the 2015 IS/MND, the project would not conflict with any GHG reduction plans, policies, or regulations. The project would not result in a new or substantially more severe impact, and no mitigation would be required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Section 3.8 of the 2015 IS/MND evaluates the impacts of the project related to hazards and hazardous materials.

4.9.1 Environmental Checklist and Discussion

Hazards & Hazardous Materials Would the Project...	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Yes	No	No	N/A
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Yes	No	No	N/A
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Yes	No	No	N/A
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Yes	No	No	N/A
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	Yes	No	No	N/A
f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	Yes	No	No	N/A
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Yes	No	No	N/A
h) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Yes	No	No	N/A
a) Less than Significant. Construction activities would involve the use of hazardous materials, such as fuels, solvents, gasoline, asphalt, and oil, and operation of the water treatment plant would continue to involve hazardous materials. The transport, storage, and use of hazardous materials could potentially expose and adversely affect workers, the public, or the environment as a result of improper handling or use, accident, environmentally unsound disposal methods, fire, explosion, or other emergencies, resulting in adverse health or environmental effects.				

The California Highway Patrol and Caltrans are responsible for enforcing regulations related to the transportation of hazardous materials on local roadways, and the use of these materials is regulated by the California Department of Toxic Substances Control, as outlined in CCR Title 22. MWC and its construction contractors would be required to comply with the California Environmental Protection Agency's (Cal EPA's) Unified Program, which protects Californians from hazardous waste and hazardous materials by ensuring consistency throughout the state regarding the implementation of administrative requirements, permits, inspections, and enforcement at the local regulatory level. Regulated activities would be managed by the Alpine County Health Department, which is the Cal EPA-designated Certified Unified Program Agency, and in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous material management plans and inventories). Such compliance would reduce the potential for accidental release of hazardous materials during project construction.

MPUD is required to comply with existing laws and regulations regarding the transportation, storage, use, and disposal of hazardous materials in relation to the sewer system. These regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Compliance with applicable regulations would ensure that this impact would be less than significant. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.

- b) **Less than Significant.** As discussed in the 2015 IS/MND, in a) above, and c) below, there are no existing hazardous materials sites within the project site; however, project construction and operation would involve the transport, storage, use, and disposal of hazardous materials. MPUD is required to comply with existing laws and regulations regarding the transportation, use, and disposal of hazardous materials in relation to construction and operation of the sewer system. These regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Furthermore, the 2015 IS/MND project specifications also included methods and measures to properly remove and dispose of any asbestos concrete pipe segments. Compliance with applicable regulations would ensure that this impact would be less than significant. The project would not result in a new or substantially more severe impact, and no mitigation would be required.
- c) **No Impact.** Consistent with the 2015 IS/MND, hazardous materials and waste would not be handled within 0.25 mile of an existing or proposed school as a result of the project. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.
- d) **No Impact.** Consistent with the 2015 IS/MND, no portion of the project site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (CalEPA 2021). Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.
- e) **No Impact.** Consistent with the 2015 IS/MND, the project site is not located in an airport land use plan or within two miles of a public or public use airport. Alpine County Airport is the closest airport and is located approximately 2.5 miles north of the project site. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.
- f) **No Impact.** Consistent with the 2015 IS/MND, the project would not be located in the vicinity of a private airstrip. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.
- g) **Less than Significant.** As discussed in the 2015 IS/MND, the project would improve the accessibility, reliability, and safety of sewer infrastructure in Markleeville, which would not interfere with emergency response or evacuation in Markleeville. The project would not result in additional vehicle trips that could affect emergency response times. Additionally, the only road that would be modified for the project would be the on-site unpaved MPUD access road, and access road modifications would improve year-round access for MPUD vehicles, resulting in improved emergency access. Therefore, the project would not result in a new or substantially more severe impact, and no mitigation would be required.
- h) **Less than Significant.** As discussed in the 2015 IS/MND, the project would not involve the construction of new structures (i.e., residences, schools) that would result in a substantial in human exposure to wildland fire hazards.

Since adoption of the 2015 MND, the CEQA Guidelines have added wildfire as a separate environmental resource topic with several new Appendix G criteria. This section is addressed in Section 1.1.19, "Wildfire," of this Addendum.

4.10 HYDROLOGY AND WATER QUALITY

Section 3.9 of the 2015 IS/MND evaluates the impacts of the project on hydrology and water quality.

4.10.1 Environmental Checklist and Discussion

Hydrology & Water Quality	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Violate any water quality standards or waste discharge requirements?	Yes	No	No	Yes
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?	Yes	No	No	N/A
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	Yes	No	No	N/A
d) Substantially alter the exiting drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Yes	No	No	N/A
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Yes	No	No	N/A
f) Otherwise substantially degrade water quality?	Yes	No	No	N/A
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Yes	No	No	N/A
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	Yes	No	No	N/A
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	Yes	No	No	N/A
j) Inundation by seiche, tsunami, or mudflow?	Yes	No	No	N/A
k) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No	No	No	N/A

- a) **Less than Significant with Mitigation.** Construction. Consistent with the 2015 IS/MND, project construction would result in short-term risks to water quality from ground disturbance and the use of heavy equipment, resulting in a potentially significant impact.

Mitigation Measure HYRO-1 (page 3-77 of the 2015 IS/MND)

Temporary erosion/runoff best management control measures would be implemented during construction to minimize storm water pollution resulting from erosion and sediment migration from the construction, borrow, and staging areas. These temporary control measures would include implementing construction staging in a manner that minimizes the amount of area disturbed at any one time; secondary containment for storage of fuel and oil; and the management of stockpiles and disturbed areas by means of earth berms, diversion ditches, straw wattles, straw bales, silt fences, gravel filters, mulching, re-vegetation, and temporary covers as appropriate. Erosion and storm water pollution control measures would be consistent with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities requirements, and would be included in a site specific Storm Water Pollution Prevention Plan (SWPPP).

After completion of construction activities, the temporary facilities would be demobilized and site restoration measures would be implemented to minimize soil erosion. Site restoration measures for areas disturbed by construction activities, including the borrow area and laydown/staging areas, may include regrading, reseeding, construction of permanent diversion ditches, use of straw wattles and bales, application of straw mulch, and other measures deemed appropriate to meet all applicable erosion control requirements.

Implementation of Mitigation Measure HYDRO-1 would be required to ensure that project construction would not violate any water quality standards or waste discharge requirements. Therefore, project construction would not violate standards or contribute substantially to an existing or projected air quality violation, would not result in a new or substantially more severe impact, and no additional mitigation is required.

Operation. As described in 2015 IS/MND, the proposed replacement of aging sewer infrastructure with newer, more reliable infrastructure would prevent leaks or other infrastructure failures, and improving the alignment, profile, and drainage of the MPUD access road would reduce erosion and sedimentation potential. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

- b) **Less than Significant.** The project would involve construction, replacement, and relocation of sewer facilities outside of the floodplain and would not result in any new demand for water or groundwater. The replacement facilities would not increase impervious surface such that groundwater recharge would be altered. Therefore, the project would not interfere with groundwater recharge. Consistent with the 2015 IS/MND, the project would not create increased demand for groundwater, substantially interfere with groundwater recharge, or result in lower water tables. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- c,d,e) **Less than Significant.** As described in the 2015 IS/MND, the project would modify drainage patterns of the site, but not in a manner that would result in substantial erosion, siltation, increased runoff, or flooding on- or off-site. Modifications to the MPUD access road would improve site drainage to reduce erosion potential. The project would not increase impervious surfaces on-site, and areas disturbed during construction would be stabilized. Thus, the project would not increase runoff or result in flooding that would exceed the capacity of stormwater drainage systems. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- f) **No Impact.** Consistent with the 2015 IS/MND and as discussed further under criterion a), the project would not result in any substantial temporary or permanent risks to water quality. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

- g,i) **No Impact.** Consistent with the 2015 IS/MND, the project would not develop housing or other structures that would result in more people working or visiting the area. Thus, the project would not expose people or structures to significant risk due to flooding. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- h) **Less than Significant.** Consistent with the 2015 IS/MND, the project would temporarily disturb the floodplain during project construction. However, the project would remove sewer facilities from the 100-year floodplain, reducing impediments to flood flows. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- j) **No Impact.** The project site is not subject to inundation by seiche, tsunami, or mudflow because the project site is generally flat and is not located near any large water bodies. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- k) **Less than Significant.** The project site is within the jurisdiction of the Lahontan RWQCB, which has developed a Water Quality Control Plan for the Lahontan Region (Lahontan RWQCB 2019). Alpine County has also established a groundwater management plan (Alpine County 2006). The project would not conflict with or obstruct implementation of either of these plans because the project would result in long-term benefits to water quality by removing sewer facilities from the floodplain and, as discussed further under criterion b), would not substantially affect nearby groundwater supplies. For these reasons, this impact would be less than significant. Although this impact was not examined in the 2015 IS/MND, the project would not result in a new significant impact, and no additional mitigation would be required.

4.11 LAND USE AND PLANNING

Section 3.10 of the 2015 IS/MND evaluates the impacts of the project related to land use and planning.

4.11.1 Environmental Checklist and Discussion

Land Use & Planning	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Physically divide an established community?	Yes	No	No	N/A
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Yes	No	No	N/A

- a) **No Impact.** Consistent with the 2015 IS/MND, the project would not create any barriers that would divide an established community. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- b) **Less than Significant.** The project would not involve changing the land use of the project site. Thus, consistent with the 2015 IS/MND, the project would not conflict with any applicable plans, policies, or regulations regarding the land use of the site. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

4.12 MINERAL RESOURCES

Section 3.11, of the 2015 IS/MND evaluates the impacts of the project on mineral resources.

4.12.1 Environmental Checklist and Discussion

Mineral Resources	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Yes	No	No	N/A
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Yes	No	No	N/A

a,b) **No Impact.** Surface Mining and Reclamation Act Mineral Land Classification Report data is not available for Alpine County (DOC 2020). Within the county, known or suspected mineral deposits, primarily sand and gravel, have been identified by the California Division of Mines and Geology. These deposits are protected by appropriate land use designations and buffers identified within the County’s Land Use Map (Alpine County 2017). However, no mineral resources of regional, statewide, or local importance, including sand and gravel, are known to be present in the project site or vicinity. Additionally, the project would not involve the removal of large amounts of soil or earth. Therefore, the project would not result in the loss of availability of any known mineral resource of value. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

4.13 NOISE

Section 3.12 of the 2015 IS/MND evaluates the impacts of the project related to noise.

4.13.1 Environmental Checklist and Discussion

Noise	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Yes	No	No	N/A
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Yes	No	No	N/A
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	Yes	No	No	N/A
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	Yes	No	No	N/A
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	Yes	No	No	N/A
f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	Yes	No	No	N/A

a,c,d) **Less than Significant. Construction Noise.** As discussed in the 2015 IS/MND, construction noise would be temporary. The nearest noise-sensitive receptors are single-family residences located across SR 89 and approximately 230 feet or further from where project construction activity would occur. These residences are relatively distant from the project site and are separated from the project site by the highway, which would help to attenuate project-related construction noise at these receptors. Construction hours would be limited to 8 a.m. to 6 p.m., Monday through Friday, and 9 a.m. to 3 p.m. on weekends, pursuant to the construction noise exemption specified in Section 18.68.090.F.1 of the Alpine County Code. Because of the temporary and intermittent nature of construction noise and because construction activity would occur during the county's exempt daytime hours, the project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

Operational Noise. Consistent with the 2015 IS/MND, the project would not modify any long-term sources of noise. The types of operational, noise-generating equipment used would be similar to the types of equipment currently used in existing on-site facilities. Additionally, the replacement facilities would be located in land designated as open space north of SR 89, which is not a noise-sensitive area. The nearest noise-sensitive receptors, located approximately 230 feet across SR 89, are not close enough to the proposed facilities to result

in the exposure of residences to disruptive noise that would exceed county standards. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

- b) **Less than Significant.** Consistent with the 2015 IS/MND, the project would not generate any long-term sources of groundborne vibration. While some construction activities would generate vibration, it would not have the potential to cause structural damage or human annoyance. Any vibration-generating construction activity would be short-term, would occur during the less sensitive daytime hours, and would be of low intensity. Project construction would not also require the use of vibration-intensive equipment such as pile drivers. Rather, project construction would use equipment that generates lower levels of ground vibration, such as excavators and dump trucks. These types of common construction equipment do not generate substantial levels of ground vibration that could result in structural damage or human annoyance, except at extremely close distances, which would not occur as part of the project. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- e,f) **No Impact.** The project is not located within an airport land use plan or within two miles of a public airport or public use airport. Additionally, the project is not located within two miles of a private airstrip. Alpine County Airport is the closest airport and is located approximately 2.5 miles north of the project site. The project would also not include any new land uses where people would live or work. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

4.14 POPULATION AND HOUSING

Section 3.13 of the 2015 IS/MND evaluates the impacts of the project on population and housing.

4.14.1 Environmental Checklist and Discussion

Population & Housing	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Yes	No	No	N/A
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	Yes	No	No	N/A
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	Yes	No	No	N/A

a) **No Impact.** Consistent with the 2015 IS/MND, the project would not increase MPUD Staff and would not increase the capacity of the wastewater system, and thus, would not indirectly support population growth or increase housing demand in Markleeville. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

b,c) **No Impact.** Consistent with the 2015 IS/MND, no housing units exist on the project site. The project would not displace any existing housing units or people, nor would the project construct any housing. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

4.15 PUBLIC SERVICES

Section 3.14 of the 2015 IS/MND evaluates the impacts of the project on public services.

4.15.1 Environmental Checklist and Discussion

Public Services	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	Yes	No	No	N/A
ii) Police protection?	Yes	No	No	N/A
iii) Schools?	Yes	No	No	N/A
iv) Parks?	Yes	No	No	N/A
v) Other public facilities?	Yes	No	No	N/A
a) Less than Significant. Consistent with the 2015 IS/MND, the project would have no impact on population and would not increase the demand for school services or substantially modify the need for fire protection services or police protection in Markleeville. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.				

4.16 RECREATION

Section 3.15 of the 2015 IS/MND evaluates the impacts of the project on recreation.

4.16.1 Environmental Checklist and Discussion

Recreation	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Yes	No	No	N/A
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Yes	No	No	N/A

- a) **No Impact.** Consistent with the 2015 IS/MND, the project would have no impact on population and would not modify the use or demand of existing local or regional parks or other recreational facilities. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- b) **Less than Significant.** The sewer infrastructure improvements would remove facilities from the floodplain, improving water quality, but would other have no impact on the development of new recreational facilities, nor require expansion of existing recreational facilities. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

4.17 TRANSPORTATION AND TRAFFIC

Section 3.16 of the 2015 IS/MND evaluates the impacts of the project on transportation and traffic.

4.17.1 Environmental Checklist and Discussion

TRANSPORTATION & TRAFFIC	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Yes	No	No	N/A
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways?	Yes	No	No	N/A
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	No	N/A	N/A	N/A
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Yes	No	No	N/A
e) Result in inadequate emergency access?	Yes	No	No	N/A
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	Yes	No	No	N/A
g) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No	No	No	N/A

a,b) **No Impact.** Consistent with the 2015 IS/MND, the project would not conflict with any congestion management programs or plans, ordinances, or policies regarding Markleeville’s circulation system. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

c) **No Impact.** Consistent with the 2015 IS/MND, the project would not change air traffic patterns. The Alpine County Airport is the closest airport to the project site and is located approximately 2.5 miles to the north. The project would have no effect on the number of flights or the operation of the airport because the project would not result in increased visitation to the project site. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

- d) **Less than Significant.** Consistent with the 2015 IS/MND, the project would improve the existing MPUD access road to improve the configuration and drainage. All site modifications related to driveway design would meet Caltrans standards for size, angle, and sight lines. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- e) **Less than Significant.** Consistent with the 2015 IS/MND, the project would improve emergency access because modifications to the existing MPUD access road alignment, profile, and drainage would make the route safer and more reliable year-round. Additionally, relocation of sewer facilities outside of the floodplain would eliminate the need for maintenance or emergency vehicles to enter inundated areas of the site during flooding events. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- f) **No Impact.** The project would not alter any public transit facilities, bikeways, or pedestrian facilities. Thus, the project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- g) **Less than Significant.** Temporary construction activities would result in a temporary increase in vehicle trips to the project site during construction by workers and equipment. However, the project would not alter existing land uses, would not generate new residents or businesses, and the minor increase in system maintenance activities would not appreciably alter the vehicle miles traveled. This is a less-than-significant impact and no mitigation is required.

4.18 UTILITIES AND SERVICE SYSTEMS

Section 3.17 of the 2015 IS/MND evaluates the impacts of the project on utilities and service systems.

4.18.1 Environmental Checklist and Discussion

UTILITIES & SERVICE SYSTEMS	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Yes	No	No	N/A
b) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	No	No	No	N/A
c) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	Yes	No	No	N/A
d) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	Yes	No	No	N/A
e) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Yes	No	No	N/A
f) Comply with federal, state, and local statutes and regulations related to solid waste?	Yes	No	No	N/A

- a) **No Impact.** The project would not alter population, housing, nor commercial or recreational facilities that would require increased wastewater services. The project itself does not require wastewater services, but rather would move sewer infrastructure out of the floodplain. Consistent with the 2015 IS/MND, the project would not alter MPUD's ability to meet wastewater treatment requirements. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- b) **Less than Significant.** Since adoption of the 2015 IS/MND, the CEQA Appendix G questions have been revised to include impacts related to the relocation or construction of new or expended electric power, natural gas, and telecommunications facilities. Despite having not been examined in the 2015 IS/MND, the project would not result in a new significant impact regarding these types of facilities because the project would not increase demand for electric power, natural gas, or telecommunications.

Consistent with the 2015 IS/MND, the project would extend the life span and reliability of Markleeville's aging wastewater facilities. However, it would not expand capacity or modify the service area of the wastewater system. The direct environmental effects of construction and operation of the modified sewer system are evaluated throughout the 2015 IS/MND, and the appropriate coverage of the project in that document is validated in this addendum.

The project would result in improvements to Markleeville's stormwater drainage system because the project would involve modifying the MPUD access road to improve drainage and relocating sewer facilities out of the floodplain. In this way, the project would improve on-site drainage patterns and reduce impediments to stormwater flows.

The project would not result in a new or substantially more severe impact regarding water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, and no additional mitigation would be required.

- c) **Less than Significant.** Consistent with the 2015 IS/MND, the project would require water during construction for dust control. However, this demand would be short-term and would not require substantial quantities of water. The relocation of sewer infrastructure would not result in a long-term increase in water demand. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- d) **No Impact.** Consistent with the 2015 IS/MND, the project would not require wastewater services but would provide wastewater services for the community. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.
- e,f) **Less than Significant.** Consistent with the 2015 IS/MND, the project would require disposal of waste material during construction. However, waste generated by the project would be minimal and would not be in excess of State or local standards. All waste would be disposed consistent with all federal, State, and local regulatory standards. The project would not result in a new or substantially more severe impact, and no additional mitigation would be required.

4.19 WILDFIRE

Section 3.8 of the 2015 IS/MND evaluates the impacts of the project related to hazards and hazardous materials, which includes risks related to wildland fires. However, wildfire as a distinct environmental resource topic was not evaluated in the 2015 IS/MND because this topic was not required by CEQA until 2019. Therefore, this addendum includes a full analysis of wildfire impacts.

4.19.1 Environmental Checklist and Discussion

WILDFIRE	Impact Examined in 2015 IS/MND?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2015 IS/MND Address / Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project...				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No	No	No	N/A
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No	No	No	N/A
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No	No	No	N/A
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No	No	No	N/A

Section 3.8, "Hazards and Hazardous Materials," of the 2015 IS/MND evaluated impacts of the project related to wildfire hazard. However, since adoption of the 2015 MND, the CEQA Guidelines have added wildfire as a distinct environmental resource topic with several new Appendix G criteria that vary from the single wildfire-related criterion included in the 2015 IS/MND. For these reasons, this addendum includes a full analysis of wildfire impacts to reflect the current CEQA Guidelines.

The majority of the project site and surrounding area is within the State Responsibility Area (SRA) and is within a very-high fire hazard severity zone (CAL FIRE 2020). Alpine County is currently preparing a Wildfire Risk Mitigation Plan to reduce wildfire risk and protect important resources in the county (Alpine County 2020). In 2009, a Community Wildfire Protection Plan was prepared to include recommendations for mitigating wildland fire threats to property. The document includes mitigation such as identifying wildland urban interface areas, reduce fire fuels, and develop partnerships to reduce fire risk (Alpine County 2018).

The California Department of Forestry (CDF) is responsible for providing wildland fire protection on all State and private timberlands, watersheds, and rangelands in Alpine County. The CDF contracts out this responsibility to USFS. In general, the USFS is adequately prepared to protect developed areas. However, Forest Service fire fighters are not equipped, trained, or legally permitted to fight structural fires. The County is served by volunteer fire departments located in the population centers of the county for structural fire protection. Fire protection in Markleeville is

provided by Eastern Alpine Fire and Rescue Volunteer Fire Department (Woodfords Fire Department). Alpine County Fire Station #92 and Woodfords Fire Station are located along Hot Springs Road, adjacent to downtown Markleeville.

- a) **Less than Significant.** The project would not require any road closures or result in delays along any emergency evacuation or response routes. Therefore, the project could not impair an adopted emergency response plan or emergency evacuation plan. The project would result in a less-than-significant impact on emergency access and no mitigation would be required.
- b) **Less than Significant.** The project site is located in a historic floodplain, which does not have a steep incline. As discussed in the 2015 IS/MND, project would not involve construction of new structures that would result in increased human exposure to wildfire hazards. Thus, the project would not result in the uncontrolled spread of a wildfire or the exposure of project occupants to pollutant concentrations from a wildfire. The project would result in a less-than-significant impact and no mitigation would be required.
- c) **Less than Significant.** Temporary construction activity could involve limited risk of fire due to equipment and vehicles used during construction as well as certain worker behavior, such as smoking and disposing of cigarettes or parking vehicles on dry vegetation. However, once operational, the relocated sewer infrastructure would not exacerbate existing fire risk. As discussed in the 2015 IS/MND, the project would not involve new structures (i.e., residences, schools) that would result in a substantial in human exposure to wildland fire hazards. Therefore, the project would result in a less-than-significant impact and no mitigation would be required.
- d) **Less than Significant.** As discussed in Section 4.10, "Hydrology and Water Quality," runoff occurs naturally within the project area and flooding events have occurred historically and are likely to occur in the future. However, the project would improve the drainage patterns on-site and relocate sewer infrastructure out of the flood zone, which would decrease potential exposure of people and structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Additionally, the project site does not have steep slopes. For these reasons, the project would result in a less-than-significant impact and no mitigation would be required.

4.19.2 Conclusion

As described in Chapter 3 of this document, "Project Description," and Chapter 4, "Coverage Under the 2015 IS/MND," none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent document have occurred. As documented throughout the environmental checklist and discussion, changes to the approved 2015 Project in connection with the Markleeville Sewer Pump Station Relocation and Improvements Project and any altered conditions since adoption of the MND in 2015 would:

- ▶ not result in any new significant environmental effects, and
- ▶ not substantially increase the severity of previously identified significant effects.

In addition, no new information of substantial importance has arisen that shows that:

- ▶ the Project would have new significant effects,
- ▶ the Project would have substantially more severe effects,
- ▶ mitigation measures or alternatives previously found to be infeasible would in fact be feasible, or
- ▶ mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment.

Therefore, the differences between the approved project as evaluated in the 2015 IS/MND, and the sewer system modifications now being considered constitute changes consistent with CEQA Guidelines Section 15164. Through this addendum, MPUD has determined that no subsequent negative declaration is required for the Markleeville Sewer Pump Station Relocation and Improvements Project.

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5 MITIGATION MEASURES

The following mitigation measures were adopted upon approval of the 2015 MND and would be applicable to the mitigation of impacts associated with the Markleeville Sewer Pump Station Relocation and Improvements Project. To support proper implementation of the adopted mitigation measures, additional clarification and prescriptive measures have been provided herein.

5.1 AIR QUALITY

Mitigation Measure AQ-1 (per page 3-30 of the 2015 IS/MND)

The following fugitive dust control measures, as outlined in the GBUAPCD's Rule 401, shall be implemented during construction to ensure that particulate matter (i.e., fugitive dust) emissions would be limited. MPUD shall take reasonable precautions to prevent visible particulate matter from being airborne, under normal wind conditions, beyond the property from which the emission originates. Reasonable precautions include, but are not limited to:

- ▶ Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
- ▶ Application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dusts;
- ▶ Installation and use of hoods, fans, and fabric filters, to enclose and vent the handling of dusty materials. Adequate contaminant methods shall be employed during such handling operations;
- ▶ Use of water, chemicals, chuting, venting, or other precautions to prevent particulate matter from becoming airborne in handling dusty materials to open stockpiles and mobile equipment; and
- ▶ Maintenance of roadways in a clean condition.

5.2 BIOLOGICAL RESOURCES

Mitigation Measure BIO-1: A pre-construction plant survey within the project disturbance footprint shall be conducted a qualified biologist to identify any special status plants and create construction exclusion areas.

Mitigation Measure BIO-1a: Conduct Special-Status Plant Surveys and Implement Avoidance Measures and Mitigation

- ▶ Prior to implementation of project activities and during the period when special-status plant species with potential to occur in the project site (Table 4-2) are most identifiable (generally, the blooming period of flowering plants or sporophyte period of bryophytes), a qualified botanist will conduct protocol-level surveys for special-status plants within the project site following survey methods from the CDFW Protocols for Surveying and Evaluating Impacts on Special Status Native Plant Populations and Natural Communities (CDFW 2018). The qualified botanist will 1) be knowledgeable about plant taxonomy, 2) be familiar with plants of the Sierra Nevada region, including special-status plants and sensitive natural communities, 3) have experience conducting floristic botanical field surveys as described in CDFW 2018, 4) be familiar with the *California Manual of Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at <http://vegetation.cnps.org/>), and 5) be familiar with federal and state statutes and regulations related to plants and plant collecting.
- ▶ If special-status plants are not found, the botanist will document the findings in a letter report to MPUD and no further mitigation will be required.
- ▶ If special-status plant species are found, the occupied habitat will be avoided completely, if feasible (i.e., project objectives can still be met). This may include establishing a no-disturbance buffer around the plant population and demarcation of this buffer by a qualified botanist using flagging or high-visibility construction fencing. The size of

the buffer will be determined by the qualified botanist and will be large enough to avoid direct or indirect impacts on the plant.

Table 4-2 Typical Blooming Period for Special-Status Plants that May Occur within the Project Site¹

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mountain bent grass												
Upswept moonwort												
Davy's sedge												
Porcupine sedge												
Liddon's sedge												
Western valley sedge												
Marsh willowherb												
Blandow's bog moss ²	-	-	-	-	-	-	-	-	-	-	-	-
Alder buckthorn												

¹ Blooming periods vary annually based on annual climatic variation and across species range. It is essential to base survey timing on current conditions in the survey year and it is recommended that reference populations are visited to verify species are identifiable during the survey period.

² Non-blooming bryophyte species

Source: Data compiled by Ascent Environmental in 2021; CNPS 2020

- ▶ If special-status plants are found during rare plant surveys and cannot be avoided, MPUD will consult with CDFW or U.S. Fish and Wildlife Service (USFWS), as appropriate depending on species status, to determine the compensation necessary to achieve no net loss of occupied habitat or individuals. Mitigation measures may include, but are not limited to, preserving and enhancing existing populations, creating off-site populations on mitigation sites through seed collection or transplantation at a 1:1 ratio, and restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. Potential mitigation sites could include suitable locations within or outside of the project site. MPUD will develop and implement a site-specific mitigation strategy describing how unavoidable losses of special-status plants will be compensated. Success criteria for preserved and compensatory populations will include:
 - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
 - Compensatory and preserved populations will be self-producing. Populations will be considered self-producing when:
 - plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.
 - If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.

Mitigation Measure BIO-2: Pre-construction wildlife and amphibian surveys of the disturbance footprint shall be conducted by qualified biologists to identify any special status wildlife and amphibian species present, designate exclusion zones, and/or perform removals.

Mitigation Measure BIO-2a: Implement Limited Operating Period or Conduct Focused Surveys for Ringtail

- ▶ To minimize the potential for loss of ringtail and active ringtail dens, project activities (e.g., tree removal, other vegetation removal, ground disturbance, staging) within habitat potentially suitable for ringtail (i.e., forest habitat, scrub habitat, riparian habitat) will be conducted outside of the ringtail maternity season (not well defined, but approximately April 15–July 31), if feasible.
- ▶ If the limited operating period is not feasible, and construction activities would occur from April 15–July 31, additional preconstruction surveys would be required. No more than 30 days before initiation of project activities, within potentially suitable ringtail habitat, a qualified biologist with experience conducting ringtail surveys will conduct a focused survey for potential ringtail dens (e.g., hollow trees, snags, rock crevices) within the project site. The qualified biologist will document sightings of individual ringtails, as well as potential dens.
- ▶ If individuals or potential or occupied dens are not found, the qualified biologist will submit a letter report summarizing the results of the survey to MPUD, and further mitigation will not be required.
- ▶ If ringtails are identified or if potential dens are located, an appropriate method will be used by the qualified wildlife biologist to confirm whether a ringtail is occupying the den. This may include use of remote field cameras, track plates, or hair snares. Other devices, such as a fiber optic scope, may be utilized to determine occupancy.
 - If potential dens are not occupied, the entrances will be temporarily blocked so that no other animals occupy the project site during project activities, but only after it has been fully inspected. The blockage will be removed once the project activities are completed.
 - If a den is found to be occupied by a ringtail, a no-disturbance buffer will be established around the occupied den. The no-disturbance buffer will include the den tree (or other structure) plus a suitable buffer as determined by the biologist in coordination with CDFW. Project activities in the no-disturbance buffer will be avoided until the den is unoccupied as determined by the qualified wildlife biologist in coordination with CDFW.

Mitigation Measure BIO-2b: Conduct Preconstruction Surveys for Sierra Nevada Mountain Beaver and Implement Protective Buffers

- ▶ No more than 30 days prior to any ground disturbance or vegetation removal activities within 200 feet of Markleeville Creek, a preconstruction survey for Sierra Nevada mountain beaver will be conducted by a qualified biologist familiar with the species. Surveys would consist of burrow searches within habitat suitable for the species.
- ▶ If individuals or occupied burrows are not found, the qualified biologist will submit a letter report summarizing the results of the survey to MPUD, and further mitigation will not be required.
- ▶ If active breeding/burrow sites are identified within 250 feet of project activities, MPUD will implement a limited operating period during the Sierra Nevada mountain beaver breeding season (February 1–July 31) during which no ground disturbance, vegetation or tree removal, or staging activities will occur within 250 feet of the identified burrow. The limited operating period, area within which it is implemented (e.g., 250-foot buffer), and activities allowed or prohibited within the limited operating period may be adjusted through consultation with CDFW.

Mitigation Measure BIO-2c: Conduct Preconstruction Surveys for Sierra Nevada Snowshoe Hare and Western White-Tailed Jackrabbit and Implement Protective Buffers

- ▶ No more than 30 days prior to any ground disturbance or vegetation removal activities during the Sierra Nevada snowshoe hare and western white-tailed jackrabbit breeding season (February 1–July 31), a preconstruction survey for nests of both species will be conducted by a qualified biologist familiar with the species. Surveys would consist of walking transects to determine whether active nests of either species are present within suitable habitat areas of the project site (e.g., scrub, forest).
- ▶ If individuals or active nests are not found, the qualified biologist will submit a letter report summarizing the results of the survey to MPUD, and further mitigation will not be required.

- ▶ If active nests are identified, MPUD will implement a limited operating period during the Sierra Nevada snowshoe hare and western white-tailed jackrabbit breeding season (February 1–July 31) during which no ground disturbance, vegetation or tree removal, or staging activities will occur within 250 feet of the identified nest. The limited operating period, area within which it is implemented (e.g., 250-foot buffer), and activities allowed or prohibited within the limited operating period may be adjusted through consultation with CDFW.

Mitigation Measure BIO-2d: Conduct Focused Special-Status Bat Surveys and Implement Avoidance Measures

- ▶ In the early planning stages of the project, a qualified biologist familiar with bats and bat ecology and experienced in conducting bat surveys will conduct surveys for bat roosts in suitable habitat (e.g., large trees, crevices, cavities, exfoliating bark, bridges, unoccupied buildings) within and adjacent to the project site.
- ▶ If no evidence of bat roosts is found, the qualified biologist will submit a letter report summarizing the results of the survey to MPUD, and no further study will be required.
- ▶ If evidence of bat roosts is observed, the species and number of bats using the roost will be determined. Bat detectors shall be used if deemed necessary to supplement survey efforts by the qualified biologist.
- ▶ A no-disturbance buffer of 250 feet will be established around active pallid bat, Townsend’s big-eared bat, or western red bat roosts, and project activities will not occur within this buffer until after the roosts are unoccupied.
- ▶ If roosts of pallid bat, Townsend’s big-eared bat, or western red bat are determined to be present and must be removed, the bats will be excluded from the roosting site before the tree, building, or other structure is removed. A program addressing compensation, exclusion methods, and roost removal procedures will be developed in consultation with CDFW before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter) or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion from active maternity roosts will not occur while females in maternity colonies are nursing young. Exclusion efforts may be restricted during other periods of sensitive activity (e.g., during hibernation). The loss of each roost (if any) will be replaced in consultation with CDFW and may require construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. If determined necessary during consultation with CDFW, replacement roosts will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and a qualified biologist confirms that bats are not present in the original roost site, the roost tree, building, or other structure may be removed or sealed to prevent bats from reentering.

Mitigation Measure BIO-3: Impacts to active nests will be avoided by the establishment and maintenance of buffers around the nests. The appropriate size and shape of the buffers will be determined by a qualified biologist in consultation with the CDFW, and may vary depending on the nest location, nest stage, and construction activity. No project activity will occur within the buffer area until the biologist confirms that the nest is no longer active. Monitoring will be conducted to confirm that the Project activities are not resulting in detectable adverse effects to the active nests.

Mitigation Measure BIO-3a: Conduct Focused Surveys for Special-Status Birds and Other Native Nesting Birds and Implement Protective Buffers

- ▶ To minimize the potential for loss of special-status bird species, raptors, and other native birds, project activities (e.g., tree removal, other vegetation removal, ground disturbance, staging) will be conducted during the nonbreeding season (approximately September 1–January 31, as determined by a qualified biologist), if feasible. If project activities are conducted during the nonbreeding season, no further mitigation will be required.
- ▶ Within 14 days before the onset of project activities during the breeding season (approximately February 1 through August 31, as determined by a qualified biologist), a qualified biologist familiar with birds of California and with experience conducting nesting bird surveys will conduct focused surveys for special-status birds, other nesting raptors, and other native birds and will identify active nests within 500 feet of the project site (where accessible).
- ▶ Impacts on nesting birds will be avoided by establishing appropriate buffers around active nest sites identified during focused surveys to prevent disturbance to the nest. Project activity will not commence within the buffer areas

until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer will not likely result in nest abandonment. A qualified biologist will determine the appropriate buffer size for non-raptor nests after a site- and nest-specific analysis. Buffers typically will be 500 feet for raptors and 100 feet for non-raptor species. Factors to be considered for determining buffer size will include presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and proposed project activities. The size of the buffer may be adjusted if a qualified biologist determines that such an adjustment would not be likely to adversely affect the nest. Any buffer reduction for a special-status species will require consultation with CDFW. Periodic monitoring of the nest by a qualified biologist during project activities will be required if the activity has potential to adversely affect the nest, the buffer has been reduced, or if birds within active nests are showing behavioral signs of agitation (e.g., standing up from a brooding position, flying off the nest) during project activities, as determined by the qualified biologist.

Mitigation Measure BIO-4: Implement Avoidance Measures and Compensate for Unavoidable Impacts on Riparian Habitat

- ▶ Before implementation of project activities, riparian habitats previously mapped during preparation of the 2015 IS/MND will be flagged or fenced with brightly visible construction flagging and/or fencing under the direction of a qualified biologist and no project activities (e.g., vegetation removal, ground disturbance, staging) will occur within these areas. Foot traffic by personnel will also be limited in these areas to prevent the introduction of invasive or weedy species or inadvertent crushing of plants. Periodic inspections during construction will be conducted by the monitoring biologist to maintain the integrity of exclusion fencing/flagging throughout the period of construction involving ground disturbance.

If riparian habitat in the project site cannot be avoided, the following measures will be implemented:

- ▶ A Streambed Alteration Notification will be submitted to CDFW, pursuant to Section 1602 of the California Fish and Game Code. If proposed project activities are determined to be subject to CDFW jurisdiction, MPUD will abide by the measures to protect fish and wildlife resources, required by any executed agreement, prior to any vegetation removal or activity that may affect the resource. Measures to protect fish and wildlife resources shall include, at a minimum, a combination of the following mitigation.
 - ▶ MPUD will compensate for the loss of riparian habitat such that no net loss of habitat function and values occurs by:
 - restoring riparian habitat function and value within the project site;
 - restoring degraded riparian habitat outside of the project site;
 - purchasing riparian habitat credits at a CDFW-approved mitigation bank; or
 - preserving existing riparian habitat of equal or better value to the affected riparian habitat through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function (at least 1:1).
 - ▶ MPUD will prepare and implement a Compensatory Mitigation Plan that will include the following:
 - For preserving existing riparian habitat outside of the project site in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title).
 - For restoring or enhancing riparian habitat within the project site or outside of the project site, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.
 - Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by MPUD (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.

Mitigation Measure BIO-5: Implement Avoidance Measures and Compensate for Unavoidable Impacts on Wetlands

- ▶ Before implementation of project activities, a qualified biologist will mark the jurisdictional boundaries of the onsite wetlands with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway).
- ▶ Project activities (e.g., ground disturbance, vegetation removal, staging) will be prohibited within the wetland boundaries. The qualified biologist will periodically inspect the materials demarcating the wetland boundaries to confirm that they are intact and visible, and wetland impacts are being avoided.
- ▶ If it is determined that fill of waters of the United States would result from project implementation, authorization for such fill will be secured from U.S. Army Corps of Engineers (USACE) through the Section 404 permitting process. Any waters of the United States that would be affected by the project will be replaced or restored on a no-net-loss basis in accordance with the applicable USACE mitigation guidelines in place at the time of construction. In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, Section 401 Water Quality Certification from the Lahontan RWQCB will be obtained.
- ▶ If it is determined that fill of waters of the state, including state-protected wetlands, cannot be avoided, MPUD will submit an application for discharges of dredged or fill material to the Lahontan RWQCB before commencing activity that may result in discharge of dredged or fill material to waters of the state. MPUD will not commence any activity in waters of the state until permitted by the Lahontan RWQCB and MPUD will implement all protection measures and comply with all conditions of the permit.
- ▶ MPUD will restore all waters of the state following completion of project construction. A draft restoration plan outlining design, implementation, assessment, and maintenance for restoring temporary disturbance areas will be submitted to the Lahontan RWQCB with the application for discharge of dredged or fill material to waters of the state and will be implemented as approved by the Lahontan RWQCB.
- ▶ If any waters of the state cannot be restored on site, MPUD will implement a compensatory mitigation plan resulting in no net loss of the overall abundance, diversity, and condition of aquatic resources based on an assessment of the affected watershed. MPUD may compensate for loss of waters of the state by purchasing credits from a RWQCB-approved mitigation bank or in-lieu fee program, or through restoration or establishment of wetlands or non-wetland waters comparable to those affected by the project.

5.3 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Mitigation Measure CR-1: Prepare a Section 106 Cultural Resources Inventory and Evaluation Report and/or Historic Properties Survey Report, Historic Properties Evaluation Report, and Archaeological Survey Report

Consistent with Mitigation Measure CR-1, "Prepare a Section 106 Cultural Resources Inventory and Evaluation Report and/or Historic Properties Survey Report, Historic Properties Evaluation Report, and Archaeological Survey Report," of the 2015 IS/MND, an updated cultural resources inventory was conducted in 2020 by Natural Investigations Company in compliance with Section 21083.2 of the CEQA statutes, Section 15064.5 of the CEQA Guidelines, and Section 106 of the federal National Historic Preservation Act (NHPA). The 2020 Cultural Resources Inventory Report includes a cultural resources literature search, Sacred Lands File search, paleontological sensitivity analysis, intensive pedestrian survey of the area of potential effects (APE), and an inventory report (NIC 2020).

Mitigation Measure CR-2: Avoidance and Protection Measures for Rock Wall #1 of the National Register Listed Alpine County Courthouse

Consistent with Mitigation Measure CR-2, "Avoidance and Protection Measures for Rock Wall #1 of the National Register Listed Alpine County Courthouse," of the 2015 IS/MND, the project site boundary has been revised. The sewer improvements project boundary does not include Wall #1 associated with the National-Register-listed Alpine County Courthouse. Wall #1 would be avoided and protected.

Mitigation Measure CR-3: Construction Crew Education/Tailboard Meeting and Accidental Discovery of Archaeological Resources Procedures

Prior to the start of construction, MPUD will ensure that all construction personnel, including construction forepersons and field supervisors receive training by a qualified professional archaeologist, as defined by the Secretary of the Interior, and who is experienced in teaching non-specialists, to ensure they can recognize cultural resources materials in the event any are discovered during construction.

Furthermore, to avoid any potential adverse effect from the proposed project on accidentally discovered buried historical resources as defined in CEQA Guidelines Section 15064.5(a)(c), MPUD will distribute a cultural resources ALERT sheet to the project's prime contractor; to any project subcontractor (including firms providing services such as demolition, excavation, grading, etc.), or utilities firms involved in soils disturbing activities within the project site. The ALERT sheet provides workers notice that cultural resources may be encountered during excavation and instructions on what to do if evidence of an archaeological site is encountered. Prior to any soils disturbing activities being undertaken, each contractor is responsible for ensuring that the ALERT sheet is circulated to all field personnel, including: machine operators, field crew, supervisory personnel, etc. The prime contractor will provide MPUD with a signed affidavit from the responsible parties (prime contractor, subcontractor[s], and utilities firms) confirming that all field personnel have received copies of the ALERT Sheet.

Should any indication of an archaeological resource be encountered during any soils disturbing activity of the project, the contractor will immediately notify MPUD and suspend any soils disturbing activities within 150 feet of the discovery until the find can be assessed by a qualified professional archaeologist, the qualified professional will determine what additional measures should be undertaken.

The qualified professional archaeologist will advise MPUD as to whether the discovery is an archaeological resource, retains sufficient integrity, and it of potential scientific, historical, and/or cultural significance. If an archaeological resource is present, the archaeological consultant will identify and evaluate the archaeological resource. The archaeological consultant will make a recommendation as to what action, if any, is warranted. Based on this information, if warranted, specific additional measures may be implemented.

Measures might include: preservation in situ of the archaeological resource; an archaeological monitoring program; and/or an archaeological testing program. MPUD may also require that a site security program be implemented if the resource is at risk from vandalism, looting, or other damaging actions.

The archaeological consultant will submit a final report that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archaeological resource will be provided in a separate removable insert within the final report.

Copies of the final report will be sent to Alpine County and the Central California Information Center, along with copies of any formal recordation forms (CA DPR 523 series) and/or documentation for nomination to the NRHP/CRHR. In instances of high public interest or interpretive value, Alpine County may require a different final report content, format and distribution from that presented above.

Mitigation Measure CR-4: Preserve Human Remains if Encountered

If human remains are encountered during construction, MPUD will notify the Alpine County Coroner immediately, as required by California PRC Code §5097.98. A qualified professional archaeologist will also be contacted immediately. If the County Coroner determines that the remains are Native American, the Coroner will then contact the NAHC, pursuant to Section 7050.5[c] of the California Health and Safety Code.

There will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie human remains until the County Coroner has determined that no investigation of the cause of death is required or if remains are Native American. If the remains are of Native American in origin:

- ▶ Within 24 hours of notification, the NAHC will identify a Native American "most likely descendant" (MLD) to make a recommendation regarding appropriate treatment of the human remains.

- ▶ If the identified MLD fails to make a recommendation within 48 hours of being notified, Alpine County will work with the NAHC to determine appropriate means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in PRC Section 5097.98.

5.4 HYDROLOGY AND WATER QUALITY

Mitigation Measure HYRO-1 (per page 3-77 of the 2015 IS/MND)

Temporary erosion/runoff best management control measures will be implemented during construction to minimize storm water pollution resulting from erosion and sediment migration from the construction, borrow, and staging areas. These temporary control measures will include implementing construction staging in a manner that minimizes the amount of area disturbed at any one time; secondary containment for storage of fuel and oil; and the management of stockpiles and disturbed areas by means of earth berms, diversion ditches, straw wattles, straw bales, silt fences, gravel filters, mulching, re-vegetation, and temporary covers as appropriate. Erosion and storm water pollution control measures will be consistent with NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities requirements, and will be included in a site specific SWPPP.

After completion of construction activities, the temporary facilities will be demobilized and site restoration measures will be implemented to minimize soil erosion. Site restoration measures for areas disturbed by construction activities, including the borrow area and laydown/staging areas, may include regrading, reseeding, construction of permanent diversion ditches, use of straw wattles and bales, application of straw mulch, and other measures deemed appropriate to meet all applicable erosion control requirements.

6 REFERENCES

6.1 INTRODUCTION

No references are used in this chapter.

6.2 AGRICULTURAL AND FORESTRY RESOURCES

California Department of Conservation. 2016. California Important Farmland Finder. Available: <https://maps.conservation.ca.gov/DLRP/CIFF>. Accessed: February 8, 2021.

DOC. See California Department of Conservation.

6.3 AIR QUALITY

California Air Resources Board. 2019. Maps of State and Federal Area Designations. Available: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>. Accessed: January 14, 2021.

CARB. See California Air Resources Board.

6.4 BIOLOGICAL RESOURCES

Alpine County. 2003. Alpine County General Plan Conservation Element. Available: <https://www.alpinecountyca.gov/DocumentCenter/View/51/General-Plan?bidId=>. Accessed November 23, 2020.

Biogeographic Information and Observation System. 2014 (March 1). Lahontan Cutthroat Trout Range [ds1273]. Originated by N. Santos. UC Davis Center for Watershed Sciences. Davis. Retrieved January 25, 2021.

BIOS. See Biogeographic Information and Observation System.

California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>. Accessed November 19, 2020.

CDFW. See California Department of Fish and Wildlife.

California Natural Diversity Database. 2020. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed September 15, 2020.

CNDDDB. See California Natural Diversity Database.

California Native Plant Society. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available: <http://www.rareplants.cnps.org>. Accessed September 15, 2020.

CNPS. See California Native Plant Society.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation. Second edition. California Native Plant Society Press, Sacramento, California, USA.

Sweitzer, R., C. Thompson, K. Purcell, R. Barrett, D. Tempel, and Z. Peery. 2015. Sierra Nevada Adaptive Management Project. Appendix D: Fisher Team Final Report. Available: http://snamp.ucanr.edu/static/documents/2015/09/03/D_Fisher_Chapter_final_small.pdf. Accessed November 23, 2019.

U.S. Fish and Wildlife Service. 2020. Information for Planning and Consultation electronic records search. Available: <https://ecos.fws.gov/ipac/>. Accessed November 16, 2020.

USFWS. See U.S. Fish and Wildlife Service.

Xerces Society for Invertebrate Conservation. 2018. A Petition to the State of California Fish and Game Commission to List the Crotch Bumble Bee (*Bombus crotchii*), Franklin's Bumble Bee (*Bombus franklini*), Suckley Cuckoo Bumble Bee (*Bombus suckleyi*), and Western Bumble Bee (*Bombus occidentalis occidentalis*) as Endangered Under the California Endangered Species Act. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline>. Accessed November 16, 2020.

Zielinski, W. J., T. E. Kucera, and R. H. Barrett. 1995. Current Distribution of the Fisher, *Martes pennanti*, in California. *California Fish and Game*. 81:104-112.

6.5 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Cardno ENTRIX. 2014a. *Cultural Resources Inventory and Recommendations Letter Report for the Markleeville Creek Restoration Project, Alpine County, California*. Prepared for the County of Alpine and Alpine Watershed Group.

Natural Investigations Company. 2020 (December). *Confidential Cultural Resources Inventory for the Markleeville Sewer Pump Station Relocation and Sewer System Modifications Project, Markleeville, Alpine County, California*.

NIC. See Natural Investigations Company.

6.6 ENERGY

Alpine County. 2016. *Energy Action Plan*. Available: https://www.alpinecountyca.gov/DocumentCenter/View/1732/Final-AlpineCo-EAP-Adopted_2016_12_06?bidId=. Accessed: December 4, 2020.

California Air Pollution Control Officers Association. 2016. California Emissions Estimator Model Version 2016.3.2.

California Air Resources Board. 2017. EMFAC2017 Web Database. Available: <https://arb.ca.gov/emfac/2017/>. Accessed January 8, 2021.

CAPCOA. See California Air Pollution Control Officers Association.

CARB. See California Air Resources Board.

6.7 GEOLOGY, SOILS, AND SEISMICITY

Natural Investigations Company. 2020 (December). *Confidential Cultural Resources Inventory for the Markleeville Sewer Pump Station Relocation and Sewer System Modifications Project, Markleeville, Alpine County, California*.

NIC. See Natural Investigations Company.

6.8 HAZARDS AND HAZARDOUS MATERIALS

CalEPA. See California Environmental Protection Agency.

California Environmental Protection Agency. 2021. Cortese List Data Resources. Available: <https://calepa.ca.gov/sitecleanup/corteselist/>. Accessed: February 8, 2021.

6.9 HYDROLOGY AND WATER QUALITY

Alpine County. 2006. *Alpine County Groundwater Management Plan*. Available: <http://www.cwsd.org/alpine-county-groundwater-management-plan/>. Accessed: February 8, 2021.

Lahontan Regional Water Quality Control Board. 2019. *Water Quality Control Plan for the Lahontan Region*. Available: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.html

Lahontan RWQCB. See Lahontan Regional Water Quality Control Board.

6.10 MINERAL RESOURCES

Alpine County. 2017. *Alpine County General Plan*. Available: <https://www.alpinecountyca.gov/DocumentCenter/View/51/General-Plan?bidId=>.

California Department of Conservation. 2020 (August). Publications of the SMARA Mineral Land Classification Project Dealing with Mineral Resources in California. Accessed October 25, 2020. Available: <https://www.conservacion.ca.gov/cgs/Documents/Publications/SMARA-Publications-California-SECURED.pdf>

DOC. See California Department of Conservation.

6.11 WILDFIRE

Alpine County. 2018 (November). *Hot Springs Road Reconstruction Project Initial Study/Mitigated Negative Declaration*. Available <http://www.alpinecountyca.gov/DocumentCenter/View/1596>

———. 2020. *2020 Wildfire Risk Mitigation Plan*. Available: <https://alpinecountyca.gov/504/2020-Wildfire-Risk-Mitigation-Plan>. Accessed: January 6, 2021.

California Department of Forestry and Fire Protection. 2020. Fire Hazard Severity Zone Viewer. Accessed October 18, 2020. Available: <https://egis.fire.ca.gov/FHSZ/>

CAL FIRE. See California Department of Forestry and Fire Protection.

6.12 MITIGATION MEASURES

California Department of Fish and Wildlife. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>. Accessed November 19, 2020.

CDFW. See California Department of Fish and Wildlife.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. *A Manual of California Vegetation*. Second edition. California Native Plant Society Press, Sacramento, California, USA.

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