Initial Study

Central Amador Water Project
Water Right Application

Prepared for:

Amador Water Agency
12800 Ridge Road
Sutter Creek, CA 95685

May 2016
Initial Study for the Amador Water Agency Central Amador Water Project
Water Right Application

CEQA Lead Agency and Contact Person

Gene Mancebo
Amador Water Agency
12800 Ridge Road
Sutter Creek, CA 95685
(209) 223-3018

Project Sponsor

Amador Water Agency
Table of Contents

Chapter 1  Introduction ......................................................................................................................... 1-1
  1.1  Purpose of this Document ............................................................................................................. 1-1
  1.2  Scope of this Document ............................................................................................................... 1-1
  1.3  Impact Terminology ...................................................................................................................... 1-1

Chapter 2  Project Description ............................................................................................................. 2-1
  2.4  Project Overview ......................................................................................................................... 2-1
  2.5  Purpose and Need for Project ...................................................................................................... 2-1
  2.6  Background ................................................................................................................................. 2-1
    2.6.1  Water Rights ....................................................................................................................... 2-2
  2.7  Existing Facilities and Operational Requirements ........................................................................ 2-5
  2.8  Permits Required ......................................................................................................................... 2-5

Chapter 3  Environmental Checklist Form .......................................................................................... 3-1
  3.1  Aesthetics .................................................................................................................................. 3-3
  3.2  Agriculture and Forestry Resources ......................................................................................... 3-3
  3.3  Air Quality ............................................................................................................................... 3-4
  3.4  Biological Resources .................................................................................................................. 3-5
  3.5  Cultural Resources .................................................................................................................... 3-7
  3.6  Geology and Soils ...................................................................................................................... 3-7
  3.7  Greenhouse Gas Emissions ......................................................................................................... 3-8
  3.8  Hazards and Hazardous Materials ............................................................................................. 3-9
  3.9  Hydrology and Water Quality .................................................................................................... 3-10
  3.10  Land Use and Planning ............................................................................................................. 3-12
  3.11  Mineral Resources .................................................................................................................. 3-12
  3.12  Noise ....................................................................................................................................... 3-13
  3.13  Population and Housing ........................................................................................................... 3-14
  3.14  Public Services .......................................................................................................................... 3-14
  3.15  Recreation ............................................................................................................................... 3-15
  3.16  Transportation/Traffic .............................................................................................................. 3-16
  3.17  Utilities and Service Systems .................................................................................................... 3-17
  3.18  Mandatory Findings of Significance ......................................................................................... 3-18

Chapter 4  Report Preparation ............................................................................................................ 4-1
  4.1  Report Authors ............................................................................................................................ 4-1
  4.2  References .................................................................................................................................. 4-1

List of Figures

Figure 2-1: Vicinity Map ..................................................................................................................... 2-3
Figure 2-2: Diversion Locations .......................................................................................................... 2-4
## Acronym List

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF</td>
<td>acre-feet</td>
</tr>
<tr>
<td>AFY</td>
<td>acre-feet per year</td>
</tr>
<tr>
<td>AWA</td>
<td>Amador Water Agency</td>
</tr>
<tr>
<td>CAWP</td>
<td>Central Amador Water Project</td>
</tr>
<tr>
<td>CDFW</td>
<td>California Department of Fish and Wildlife</td>
</tr>
<tr>
<td>CEQA</td>
<td>California Environmental Quality Act</td>
</tr>
<tr>
<td>cfs</td>
<td>cubic feet per second</td>
</tr>
<tr>
<td>EIR</td>
<td>Environmental Impact Report</td>
</tr>
<tr>
<td>FERC</td>
<td>Federal Energy Regulatory Commission</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse gases</td>
</tr>
<tr>
<td>HCP</td>
<td>Habitat Conservation Plan</td>
</tr>
<tr>
<td>IS</td>
<td>Initial Study</td>
</tr>
<tr>
<td>JVID</td>
<td>Jackson Valley Irrigation District</td>
</tr>
<tr>
<td>PG&amp;E</td>
<td>Pacific Gas and Electric Company</td>
</tr>
<tr>
<td>RMC</td>
<td>RMC Water and Environment</td>
</tr>
<tr>
<td>SAA</td>
<td>Streambed Alteration Agreement</td>
</tr>
<tr>
<td>SWRCB</td>
<td>State Water Resources Control Board</td>
</tr>
<tr>
<td>WTP</td>
<td>Water Treatment Plant</td>
</tr>
</tbody>
</table>
Chapter 1  Introduction

1.1 Purpose of this Document

The Amador Water Agency (AWA) has filed a water right application with the State Water Resources Control Board (SWRCB), requesting approval to directly divert up to 1,050 acre-feet per year (AFY) of water from Bear River and North Fork Mokelumne River and store up to 1,400 AFY in Lower Bear River Reservoir (Project). The amount taken by direct diversion and rediversion from storage for consumptive uses in the central portion of Amador County would not exceed 1,050 AFY. The water rights process involves water right Permit 12167 of Jackson Valley Irrigation District (JVID). Currently, JVID is authorized to directly divert 3,850 acre-feet of water from March through October each year at Pardee Reservoir. JVID’s permit provides that of that amount, 1,050 acre-feet may revert to upstream diversions. AWA is requesting such reversion. AWA’s proposed direct diversion and storage may reduce water flow along the Mokelumne River between the AWA diversions and Pardee Reservoir. However there would be no net change in water flow downstream of Pardee Dam.

The proposed diversions and storage would be accomplished using existing infrastructure. No new water facility infrastructure would be required.

AWA has prepared this Initial Study (IS) to provide the public and Responsible and Trustee Agencies reviewing the proposed Project with information about the potential impacts on the environment. AWA proposes to complete an Environmental Impact Report (EIR) for the proposed Project and is using this Initial Study to focus environmental review. This project-level Initial Study evaluates potential environmental impacts associated with the Project and identifies potentially significant impacts that require further study to determine whether or not such impacts are significant, and if so, whether or not they can be mitigated to less than significant levels with mitigation. These include the Project’s potential direct impacts on hydrology and aquatic biological resources, and indirect impacts that could be associated with growth that could be accommodated by the Project. These environmental topics will be addressed in detail in a focused EIR to be prepared for this Project.

1.2 Scope of this Document

The IS was prepared to examine any impacts on environmental resources that would result from approval of the Project. Areas of potential impacts that were evaluated include:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

1.3 Impact Terminology

The environmental impact analysis for each resource defines the criteria used to judge whether an impact may be significant based on the CEQA Initial Study Checklist and regulatory agency standards. Impacts that exceed identified threshold levels are considered significant. In describing the significance of
impacts, the following categories of significance are used and are based on the best professional judgment of the preparers of the Initial Study:

**No Impact:** An effect that would have no impact, or would have a positive impact on the environment, such as reducing an existing environmental problem.

**Less than Significant:** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures.

**Less than Significant with Mitigation:** An impact is potentially significant, but can be reduced to below the threshold level (to less than significant) given reasonable and available mitigation measures.

**Potentially Significant:** An impact that may cause substantial impacts above the threshold level. Such an impact requires further evaluation necessitating the preparation of an EIR for the project and may require consideration of mitigation measures if, after further evaluation, the impact is determined to be significant.
Chapter 2  Project Description

2.4 Project Overview

AWA has filed a water right application (Application 5647X03) requesting year-round direct diversion of up to 1,050 AF from Bear River and the North Fork Mokelumne River and the annual storage of up to 1,400 AF in Lower Bear River Reservoir during the period of October 1 to July 15. The total amount to be directly diverted and rediverted from storage for consumptive uses on an annual basis would not exceed 1,050 acre-feet. To achieve the direct diversion of 1,050 acre-feet annually, the application is coupled with a request that of JVID’s currently authorized direct diversion right of 3,850 acre-feet pursuant to its Permit 12167, 1,050 acre-feet revert to AWA as contemplated in said permit. Under AWA’s application, water would either be diverted or re-diverted from the Bear River and North Fork of the Mokelumne River at four different locations:

1) Bear River at Lower Bear River Reservoir Dam
2) North Fork Mokelumne River at Salt Springs Reservoir Dam
3) North Fork Mokelumne River at Tiger Creek Afterbay Dam
4) Tiger Creek at Tiger Creek Regulator Dam

AWA’s proposed points of diversion and rediversion are upstream from JVID’s current point of diversion at Pardee Reservoir. Water would be diverted, stored, and conveyed to the Buckhorn Water Treatment Plant (WTP) for delivery within AWA’s Central Amador Water Project (CAWP) service area. AWA’s pending water right application for the Project does not require the development or construction of any new water supply infrastructure, as existing facilities owned by AWA or Pacific Gas and Electric Company (PG&E) would be used to store and convey the water. Figure 2-1 shows the Project vicinity.

2.5 Purpose and Need for Project

AWA expects water use in the CAWP service area to increase in the future beyond the amount allowed in its existing water right Permit 17579, and for that reason, filed Application 5647X03, along with the above-referenced reversion request. AWA’s existing Permit 17579 allows the direct diversion of 1,150 AFY and the storage of 1,600 AFY at Lower Bear River Reservoir, with the total taken for consumptive use by direct diversion and rediversion from storage not to exceed 1,150 AFY. In 2006, AWA’s annual diversion for the CAWP service area was 1,149.7 AF, which was very close to the amount of water allowed under the permit. Although water use declined during the recession and was further reduced due to conservation during the multi-year drought that extended through 2015, AWA has projected that the need for water has not decreased and will likely increase in the future.

2.6 Background

CAWP was constructed in the late 1970s to provide surface water to communities in central Amador County hard hit by the multi-year drought being experienced at that time. The service area is generally along the Highway 88 corridor near the communities of Pine Grove, Mace Meadows, Sunset Heights, Ridgeway Pines, Rabb Park, Pioneer and Pine Acres (see attached map). CAWP currently draws raw water via the Gravity Supply Pipeline from PG&E’s Tiger Creek Regulator Reservoir to the Buckhorn WTP in Pioneer. The Buckhorn WTP currently provides treated water on a wholesale basis to three retail water purveyors, and provides treated water for direct retail sale to customers. There are currently about 3,500 parcels actively using water. Most water services are for residential use; however, there are some commercial services. Over the last 5 years, the total annual water use under AWA’s existing water right permit (Permit 17579) has ranged from about 777 acre-feet (AF) to about 952 AF.

The sources of supply for CAWP are the North Fork Mokelumne River (North Fork) and Bear River (tributary to the North Fork). Water rediverted by AWA at PG&E’s Tiger Creek Regulator Reservoir may be comprised of natural flow or stored Bear River water released from PG&E’s Lower Bear River
Reservoir. PG&E delivers water to its Tiger Creek Regulator Reservoir by way of facilities owned and operated by it in connection with its Mokelumne Hydroelectric Project (Federal Energy Regulatory Commission [FERC] Project No. 137). Use of the PG&E facilities by AWA is per an agreement between the two parties, most recently amended in 2012. PG&E's facilities used by AWA consist of the following: Lower Bear River Reservoir; Bear River Tunnel and Penstock; Salt Springs Reservoir and Powerhouse; Tiger Creek Conduit; Tiger Creek Regulator Reservoir; and Tiger Creek Forebay, Powerhouse and Afterbay. Tiger Creek Afterbay serves as a standby point of direct diversion and rediversion of water released from storage in Lower Bear River Reservoir in the event that AWA is unable to divert from the Regulator.

2.6.1 Water Rights

In 1960, the predecessor of the SWRCB issued water right Permit 12167 to JVID authorizing it to directly divert 5,000 acre-feet from Pardee Reservoir at a rate not to exceed 50 cubic feet per second (cfs) from March 1 through October 31. The permit was made subject to a condition that up to 2,200 of the 5,000 acre-feet could revert to water users within Amador County, such as AWA, upstream of JVID’s diversion point (Pardee Reservoir). A reversion is allowed only after a determination is made by the state indicating that the reverted water is needed by the upstream water user requesting the reversion.

In 1979, the SWRCB issued Permit 17579 to AWA as a result of Decision 1490. As part of the Decision, the SWRCB approved the reversion of 1,150 acre-feet from JVID's permit. Permit 17579 has a 1927 priority based on an assignment of a portion of State-filed Application 5647 to AWA pursuant to procedures set forth in California Water Code (Code) sections 10500-10506. Permit 17579 authorizes a year-round direct diversion of 1,150 AF at a rate not to exceed 3 cfs and the storage of 1,600 AFY in Lower Bear River Reservoir with the limitation that the total that can be taken from the sources for consumptive use whether by direct diversion or rediversion from storage is 1,150 AFY.

AWA has submitted Application 5647X03 to the SWRCB, and if approved, JVID's Permit 12167 would be further reduced by 1,050 AFY in favor of AWA. Together with the previous reversion amount of 1,150 AFY, this would bring the total amount of reversion to 2,200 AFY. Relative to the Agency's existing water right Permit 17579, the new permit would effectively:

- Increase the maximum rates of direct diversion allowed from the Bear River and North Fork Mokelumne River from 3 cubic feet per second (cfs) to 5 cfs, with the combined rate between these sources not to exceed 5 cfs.
- Increase the amount of water that may be diverted into storage annually at Lower Bear River Reservoir from 1,600 AF to 3,000 AF.
- Increase the amount of water that may be beneficially used annually, whether by direct diversion or re-diversion of water released from storage, from 1,150 AF to 2,200 AF.

The new permit also would have a 1927 priority as the Agency, in conjunction with the filing of Application 5647X03, submitted a petition for partial assignment of State Application 5647 pursuant to Water Code sections 10500-10506.
Figure 2-1: Vicinity Map
Figure 2-2: Diversion Locations

Map showing diversion locations along the Bear River. Key points include:

1. Point of Diversion: Lower Bear River Reservoir Dam, located at 39°48'26.8" N, 120°50'47.7" W.
2. Diversion Channel: Tiger Creek Diversion Channel, located at 39°48'46.3" N, 120°50'04.2" W.
3. Diversion Channel: Salt Springs Diversion Channel, located at 39°48'05.5" N, 120°49'20.0" W.
4. Diversion Channel: CAWP Service Area, located at 39°48'10.5" N, 120°50'01.0" W.

Legend:
- CAWP Service Area
- Lower Bear River Reservoir
- Salt Springs Reservoir
- Bear River Tunnel
- Powerhouse
- Tiger Creek Regulator Reservoir
- Tiger Creek Afterbay
- CAWP Water Right Application
- Initial Study
- Chapter 2
- Project Description

May 2016
Amador Water Agency
2.7 Existing Facilities and Operational Requirements

The Project would use existing facilities of AWA and PG&E, which have ample capacity for the increased diversion rates and storage amounts. Lower Bear River Reservoir has a total storage capacity of about 51,400 AF. AWA leases storage capacity in the reservoir under an existing agreement with PG&E that allows for increasing the AWA's storage allocation from 1,600 AF to 3,000 AF with a pre-condition of compliance with CEQA, which will be provided by this document.

PG&E is required to maintain certain minimum flows for streams affected by PG&E's hydroelectric operations within the Mokelumne River system, including the North Fork Mokelumne River, Bear River, and Tiger Creek. Minimum flow criteria are set forth in Appendix A to PG&E's Relicensing Settlement Agreement for its Mokelumne River Project (FERC No. 137) dated July 21, 2000. Under the terms of the AWA's agreement with PG&E, PG&E is solely responsible for providing and maintaining the specified minimum flows, notwithstanding AWA's diversions under its existing and future appropriative water rights.

2.8 Permits Required

Anticipated permits include, but may not be limited to:

- Water right permit from SWRCB
Chapter 3 Environmental Checklist Form

1. Project Title: Central Amador Water Project Water Right Application

2. Lead Agency Name and Address: Amador Water Agency
   12800 Ridge Road
   Sutter Creek, CA 95685

3. Contact Person and Phone Number: Gene Mancebo
   Amador Water Agency
   12800 Ridge Road
   Sutter Creek, CA 95685
   (209) 223-3018

4. Project Location: Amador County, with diversion facilities on Bear River,
   Tiger Creek and North Fork of Mokelumne River

5. Project Sponsor’s Name: Amador Water Agency

6. General Plan Designation: Not Applicable, no new facilities would be constructed

7. Zoning: Not applicable, no new facilities would be constructed

8. Description of Project: Amador Water Agency has applied to the SWRCB for a water right permit
to store 1,400 AFY in Lower Bear River Reservoir and to directly divert 1,050 AFY of water that is
currently diverted by the Jackson Valley Irrigation District at a location downstream of AWA’s
proposed diversion locations. No new facilities would need to be constructed.

9. Surrounding Land Uses and Setting. Project facilities already exist and are generally located in
open space and agricultural areas, with some portions of the existing conveyance system extending
through residential suburban areas.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or
participation agreement.)
   - Water right permit for the Amador Water Agency from State Water Resources Control Board
Environmental Factors Potentially Affected

The proposed Project could potentially have direct effects on the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☐ Land Use
☐ Aesthetics
☒ Population and Housing
☐ Cultural and Paleo. Resources
☐ Transportation and Circulation
☐ Noise
☐ Environmental Justice
☐ Air Quality
☐ Wind and Shadow
☐ Recreation
☐ Utilities and Service Systems
☐ Public Services
☐ Biological Resources
☐ Indian Trust Assets
☐ Geology and Soils
☒ Hydrology and Water Quality
☐ Hazards/Hazardous Materials
☐ Mineral/Energy Resources
☐ Agricultural and Forestry Resources
☐ Greenhouse Gas Emissions
☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

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

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

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Gene Mancebo __________________________ Amador Water Agency ____________________
Printed Name For

8-31-2016
Date
3.1 Aesthetics

<table>
<thead>
<tr>
<th>Would the Project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>c) Substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a-d) Because no facilities would be constructed, there would be no effects on scenic vistas or scenic resources, and the Project would not degrade the existing visual character of the Project area. PG&E would still be required to maintain minimum flows in the North Fork Mokelumne River, Bear River and Tiger Creek (FERC 2000), so no change in the visual character of any of these streams would occur. Because no new facilities are needed, the Project would not create any sources of light or glare.

Mitigation Measures: None required or recommended.

3.2 Agriculture and Forestry Resources

<table>
<thead>
<tr>
<th>Would the Project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>
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))?

| Mitigation Measures: | None required or recommended. |

| Would the Project: | |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | X |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | | X |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | | X |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | | X |
| e) Create objectionable odors affecting a substantial number of people? | | | | X |
Discussion

a-e) The Project would not generate any construction-period emissions because there is no construction associated with the proposed Project. Operation of the Project would use existing facilities and is not expected to result in additional emissions. Water would be diverted at the existing intakes, and conveyed to users through AWA’s existing gravity system. Conveyance of surface water would not be a source of odors. The Project thus would not result in new operational emissions.

Mitigation Measures: None required or recommended.

3.4 Biological Resources

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?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Discussion

a) Terrestrial species of concern that could occur in the Project area include a variety of plants and wildlife species such as the California tiger salamander, California red-legged frog, giant garter snake, vernal pool fairy shrimp, vernal pool tadpole shrimp, and valley elderberry longhorn beetle (AWA 2009). However, the Project does not include construction of new facilities and thus would have no effects on any terrestrial species of concern.

Because the Project may have a small effect on flows at times in the North Fork Mokelumne River and Bear River, it could have the potential to affect aquatic species of concern. PG&E would still be responsible for maintaining minimum flows in these streams, but when flows are above the minimum flow requirements, there may be slight reductions in flows. The Mokelumne River watershed upstream of Pardee Reservoir supports populations of resident trout and other fish species, as well as being considered for potential experimental reintroduction of fall-run Chinook salmon. A more detailed analysis of potential effects on aquatic biota will be presented in an EIR.

b) As noted above, the Project may result in a minor change in water levels at times, but minimum flows would still be maintained. Effects on riparian habitat will be addressed in an EIR.

c) The Project requires no new construction and thus would not involve direct removal, filling or hydrological interruption of any federally protected wetlands as defined by Section 404 of the Clean Water Act.

d) Although anadromous fish historically occurred in the Project area, the portions of the Mokelumne River and its tributaries above Pardee Reservoir are no longer accessible to migratory fish. The Project would thus not interfere with fish migration but could affect resident fish. Because no new facilities would be constructed, there is no possibility that the Project would interfere with migration of terrestrial wildlife species. A more detailed evaluation of potential impacts to resident fish populations will be presented in the EIR.

e) Because the Project would not require construction of new facilities, there would be no need for tree removal. Because there are no effects on terrestrial biological resources, there would be no conflicts with policies protecting biological resources.

f) There are no Habitat Conservation Plans or Natural Community Conservation Plans that cover the Project area.

Mitigation Measures: Mitigation would be developed if needed based on the analysis of effects on aquatic biota.
3.5 Cultural Resources

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?  

- Impact
- Incorporation
- Mitigation
- No Impact

b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?  

- Impact
- Incorporation
- Mitigation
- No Impact

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?  

- Impact
- Incorporation
- Mitigation
- No Impact

d) Disturb any human remains, including those interred outside of formal cemeteries?  

- Impact
- Incorporation
- Mitigation
- No Impact

Discussion

a-d) Because there would be no construction of facilities, there would be no ground disturbance with the potential to affect archaeological, historic, or paleontological resources, or to disturb human remains.

Mitigation Measures: None required or recommended.

3.6 Geology and Soils

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.  

- Impact
- Incorporation
- Mitigation
- No Impact

ii) Strong seismic ground shaking?  

- Impact
- Incorporation
- Mitigation
- No Impact
iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Discussion

a-e) Because there would be no construction of facilities, the Project would not expose people or structures to any geologic hazards, would not result in erosion, would not locate structures on unstable or expansive soils, and would not include use of septic systems.

Mitigation Measures: None required or recommended.

### 3.7 Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Less Than Significant Impact</th>
<th>Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

Would the Project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Discussion

a,b) Because there would be no construction of facilities, the Project would not generate any construction-period emissions of greenhouse gases. Operation of the Project would use existing
facilities and is not expected to result in additional greenhouse gas emissions. Water would be conveyed through AWA’s existing gravity supply line.

*Mitigation Measures:* None required or recommended.

### 3.8 Hazards and Hazardous Materials

<table>
<thead>
<tr>
<th>Would the Project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>
Discussion

a-d) The Project involves no new facilities and would not require use or transport of hazardous materials. There would be no hazardous emissions associated with operation, and because no new facilities would be constructed, there is no potential to locate facilities within any hazardous materials sites compiled pursuant to Government Code Section 65962.5.

e,f) Operation of the Project would require no new facilities and operation of existing facilities would not result in safety hazards relative to any nearby public airport operations.

g) Because there are no new facilities required for the Project, and thus no construction, there is no potential for interference with an emergency response plans or evacuation plans.

h) There are no activities or new facilities that would expose people or structures to the risk of wildland fires.

Mitigation Measures: None required or recommended.

3.9 Hydrology and Water Quality

Would the Project:

a) Violate any water quality standards or waste discharge requirements?  

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion of siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm...
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>water drainage systems or provide substantial additional sources of polluted runoff?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>f) Otherwise substantially degrade water quality?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>j) Inundation of seiche, tsunami, or mudflow?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

**Discussion**

a,f) Because the Project does not require construction of any new facilities, there would be no potential for construction-related water quality impacts. The Project proposes to divert water from the North Fork Mokelumne River and Bear River at existing diversion points and convey water using existing conveyance facilities.

b) The Project does not include any groundwater pumping and would not construct any new facilities. There thus would not be any increase in impervious surface, and therefore no interference with groundwater recharge.

c,d,e) The Project does not include construction of any new facilities, and thus has no potential to alter drainage patterns, increase runoff or to cause erosion or siltation. Ongoing operation of existing facilities that would be used for the Project would not be changed in such a way as to increase runoff, erosion, or siltation.

The Project would result in diversion and storage of additional water at existing diversion points. There may be an incremental reduction in flows at times in the North Fork Mokelumne River and Bear River between the AWA diversion points and the existing JVID diversion at Pardee Reservoir. PG&E would still maintain minimum flows, but flows may be reduced by up to 2 cfs during periods when existing flows are above those minimums. A more detailed evaluation of potential flow impacts will be conducted, and presented in the EIR for the Project.

g-j) The Project does not include housing or other new structures within flood hazard areas and does not include any new structures that would expose people to the risk of flooding or inundation of seiche, tsunami or mudflow.

**Mitigation Measures:** Mitigation would be developed if needed based on detailed analysis to be conducted for the EIR.
3.10 Land Use and Planning

Would the Project:

a) Physically divide an established community? ☐ ☐ ☐ ☒

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? ☐ ☐ ☐ ☒

c) Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan? ☐ ☐ ☐ ☒

Discussion

a-c) The Project does not include any new facilities and thus would not divide an established community and has no potential to conflict with land use plans, policies or regulations. There are no Habitat Conservation Plans or Natural Community Conservation Plans that cover the Project area.

Mitigation Measures: None required or recommended.

3.11 Mineral Resources

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? ☐ ☐ ☐ ☒

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? ☐ ☐ ☐ ☒

Discussion

a,b) Because the Project includes no new facilities, there would be no effect on the availability of mineral resources.
Mitigation Measures: None required or recommended.

3.12 Noise

Would the Project result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

- c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

- d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?

- f) For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

Discussion

- a-d) There would be no construction noise because no new facilities would be constructed. Operation of the Project would use existing facilities and is not expected to result in increased operational noise. Water would be diverted at existing diversion points, and conveyed to AWA users through the existing conveyance system. The Project thus would not increase operational noise.

- e,f) Operation of the Project would require no new facilities and would not include construction of housing that would expose people to noise from airport operations.

Mitigation Measures: None required or recommended.
3.13 Population and Housing

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)?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a) The Project would provide a water supply that would increase the availability of water to the CAWP service area. Because the Project would potentially accommodate additional growth in the Project area, this will be evaluated in the EIR for the Project, which will also consider the potential indirect impacts associated with that growth. Potential indirect impacts on public services, recreation, traffic and transportation, and utilities and service systems will be evaluated in the Growth Inducement section of the EIR.

b, c) Because no new facilities would be constructed, the Project would not displace housing or people.

Mitigation Measures: None required or recommended for direct impacts of the Project. The potential for mitigation for indirect impacts will be considered in the EIR.

3.14 Public Services

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:

Fire protection?  ☐  ☐  ☐  ☒
Police protection?  ☐  ☐  ☐  ☒
Schools?  ☐  ☐  ☐  ☒
Parks?  ☐  ☐  ☐  ☒
Other public facilities?  ☐  ☐  ☐  ☒

**Discussion**

a) The Project would not require construction of new facilities and would not require provision of new or physically altered public service facilities. Potential for indirect impacts to public services associated with possible accommodation of growth in the Project area will be evaluated in the EIR for the Project.

**Mitigation Measures:** None required or recommended for direct impacts of the Project. The potential for mitigation for indirect impacts will be considered in the EIR.

### 3.15 Recreation

<table>
<thead>
<tr>
<th>Would the Project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

**Discussion**

a, b) The Project would not affect recreational opportunities in the North Fork Mokelumne River, Bear River and Tiger Creek because PG&E would be required to maintain minimum flows in each of these streams. These minimum flows were established to ensure that streamflows are adequate to support recreational uses, including whitewater boating. As noted in Section 3.13, Population and Housing, the indirect effects of growth on recreation, such as park use, will be evaluated in the growth inducement section of the EIR.

**Mitigation Measures:** None required or recommended.
3.16 Transportation/Traffic

Would the Project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of a 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 intersection, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to level of services standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Result in inadequate emergency access?

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Discussion

a-c) The Project would not generate construction or operational traffic and thus would not conflict with any plan, ordinance or policy regarding effectiveness of the circulation system. Because it would not generate any traffic, the Project would also not conflict with any congestion management program or violate any level of service standards. The Project would not change air traffic patterns. As noted in Section 3.13, Population and Housing, the indirect effects of growth on traffic and transportation will be evaluated in the growth inducement section of the EIR.
d-f) No facilities would be constructed, so there would be no design features or uses that could result in traffic hazards, and there would be no effect on emergency access. The Project would have no effect on programs regarding public transit, bicycle or pedestrian facilities.

*Mitigation Measures:* None required or recommended.

### 3.17 Utilities and Service Systems

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

**Discussion**

a-c) The Project does not require the construction of any new water or wastewater treatment facilities. The Project would be operated completely with existing facilities. The Project also would not require any new storm drainage facilities.
d) As part of the Project, AWA has applied to the SWRCB for a water right permit to serve the CAWP service area, as more fully discussed earlier in this document. This environmental document evaluates the effects of that application if approved.

e) The Project would not result in any demand for wastewater treatment.

f,g) The Project would not generate any solid waste, and would not require any disposal of solid waste.

As noted in Section 3.13, Population and Housing, the indirect effects of growth on utilities and service systems will be evaluated in the growth inducement section of the EIR.

*Mitigation Measures:* None required or recommended.

### 3.18 Mandatory Findings of Significance

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

b) Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

*Discussion*

a) Because the Project would be implemented entirely with existing facilities, there is no potential for impacts on terrestrial biota or cultural resources associated with construction or operation of new facilities. Potential effects of minor changes in flows in the North Fork Mokelumne River and Bear River on aquatic species will be evaluated in the EIR.

b) The only potential physical effect of the Project may be a minor reduction in flows at times in the North Fork Mokelumne River and Bear River between AWA’s proposed points of diversion and the existing JVID diversion point in Pardee Reservoir. Potential cumulative effects of flow reduction will be considered in the EIR.
c) The Project would have no direct adverse effects on human beings. As noted in Section 3.13, Population and Housing, the indirect effects of growth will be evaluated in the growth inducement section of the EIR.
This page intentionally left blank
Chapter 4  Report Preparation

4.1 Report Authors
This report was prepared by AWA with assistance from RMC Water and Environment (RMC). Staff that were involved include:

Amador Water Agency
  • Gene Mancebo

RMC Water and Environment
  • Robin Cort
  • Katie Cole
  • Dave Richardson

4.2 References

AWA 2004. Application 5647X03 to Appropriate Water by Permit and Petition to Change the Point of Diversion of Permit 17579 (Application 5647B), filed October 7, 2004

AWA 2013. Letter to SWRCB regarding Application 5467X03 of Amador Water Agency Proposed Changes

This page intentionally left blank