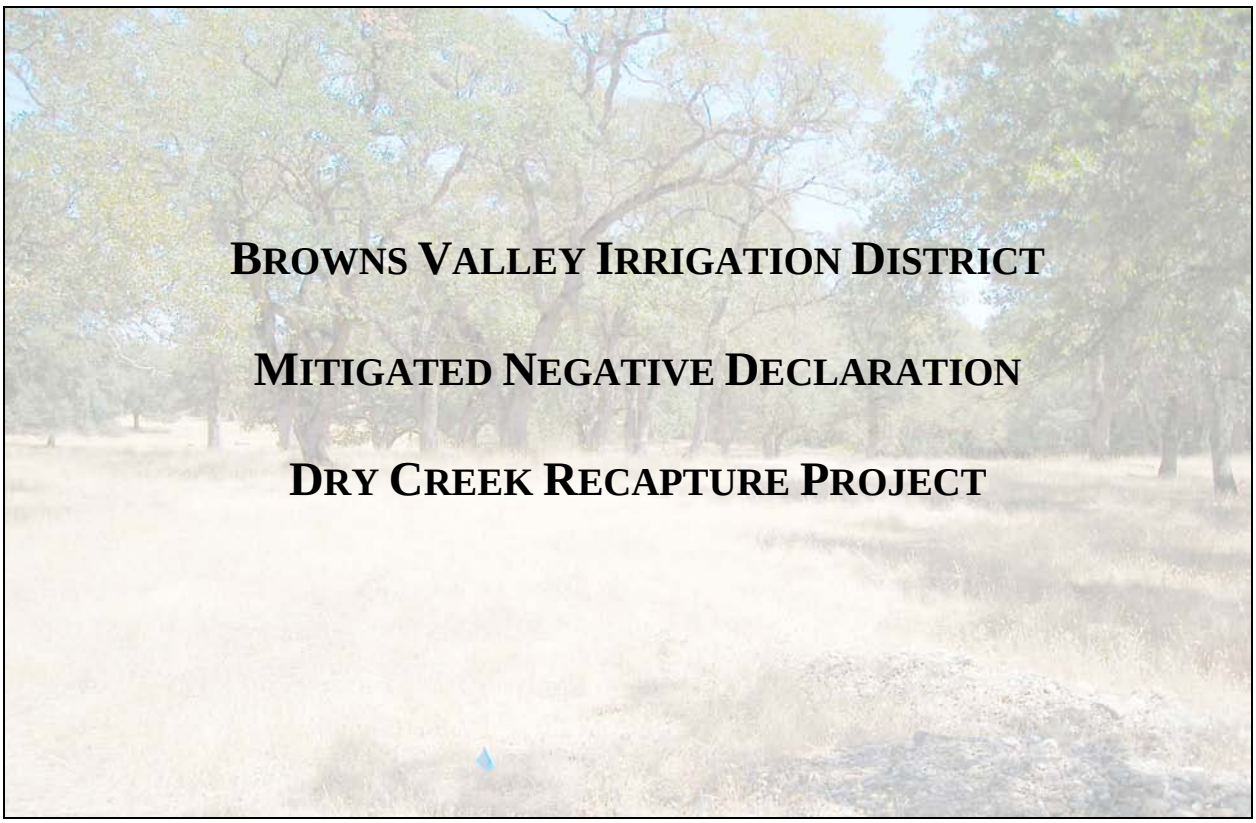

# BROWNS VALLEY IRRIGATION DISTRICT

# MITIGATED NEGATIVE DECLARATION

# DRY CREEK RECAPTURE PROJECT

**DECEMBER 2009**

OWNER/APPLICANT:


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**BROWNS VALLEY IRRIGATION DISTRICT**

**MITIGATED NEGATIVE DECLARATION**
**FOR THE**
**DRY CREEK RECAPTURE PROJECT**

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## 1.0 PROJECT DESCRIPTION

Browns Valley Irrigation District ("BVID") is proposing a tailwater recapture project ("Project") that will relieve irrigation water supply constraints by pumping water from French Dry Creek ("Dry Creek") at times when Dry Creek flows are primarily composed of tailwater from irrigated lands draining to Little Dry Creek. It is estimated that this influx of tailwater raises Dry Creek's temperature by an average of 4–5° Celsius and introduces sediment, nutrients, and other constituents into the Creek approximately 1.8 miles upstream of its confluence with the Yuba River. By pumping from Dry Creek downstream of the confluence with Little Dry Creek, the project will remove some of the thermal and pollutant load from the Creek before it reaches the Yuba River. This warmer reclaimed water will be delivered into BVID's Pipeline Canal and applied by its customers to rice lands where the elevated water temperature benefits rice production. Application of tailwater recaptured from Dry Creek to the agricultural lands within BVID will reduce the District's demand for water diverted directly from the Yuba River. Therefore, the Project will balance the reduction in inflow to the Yuba River from Dry Creek with an equivalent reduction in direct diversions from the Yuba River. The Project proposes to recapture up to a maximum of 10 cfs of irrigation return flow from Dry Creek during the irrigation season, which typically runs from April through October.

The Project includes construction of a collection system consisting of a collection chamber, electric pump, and infiltration gallery, near and under Dry Creek; and installation of approximately 11,000 linear feet of underground pipeline with its terminus in an existing irrigation canal known as the Pumpline Canal, which is fed by BVID's existing Yuba River pumping station. The proposed pipeline will be 24 inches in diameter and will generally run parallel to Dry Creek and the Yuba River. The proposed Dry Creek pumping station location and pipeline alignment are above both the highwater mark and floodplain of Dry Creek and the Yuba River. Installation of the underground pipeline will require a construction zone 30 feet in width, which will generally be 15 feet on either side of the route's centerline. Construction of the Project will necessitate selective removal of some trees and other native and non-native vegetation along the pipeline route. The total disturbed area is estimated to be 7.58 acres.

The inlet to the tailwater recapture pipeline will be located along Dry Creek near the Highway 20 bridge. The collection system, as currently designed, will utilize an infiltration gallery to draw water from Dry Creek. The infiltration gallery will be installed by trenching from the pumping plant location to and under Dry Creek. Installation of the infiltration gallery and intake pipe will require a 100-foot construction corridor from the Creek to the pumping station. A small pumping station will lift the water from the Dry Creek infiltration gallery over the high point in the pipeline alignment and deliver it to the head of the Pumpline Canal. The pumping station will consist of two electric pumps housed in an enclosed structure.

## 2.0 PROJECT LOCATION

The Project is located between State Highway 20 and the Yuba River in the Browns Valley area of Yuba County, California. The Project area lies within portions of Sections 21, 22, 28, and 29; Township 16N, Range 5E, Mt Diablo BM. Water flows in Dry Creek include releases from Collins Reservoir and irrigation tailwater from agricultural uses. Dry Creek flows enter the Yuba River, which then flows into the Feather and Sacramento Rivers, and finally enters into the Sacramento-San Joaquin Delta.

## 2.1 SITE INFORMATION

| | |
|---|---|
| General Plan Designation | Agriculture/Rural-Residential |
| Zoning District | Agriculture/Rural-Residential – 05 (A/RR05) |
| Project Size | 11,000 linear feet of pipeline, an infiltration gallery, and a pumping station |
| Present Use and Development | Undeveloped, rural lands used for agricultural grazing. Project will traverse an existing private RV campground and private ranches. |
| Surrounding Uses/Zoning | North: Agricultural<br>South: Agricultural<br>East: Agricultural<br>West: Agricultural |
| Access | Various existing access points including via the Sycamore RV Campground (paved encroachment), the PG&E Substation access (dirt encroachment), and a dirt surfaced ranch road. |
| Public Services | Water Supply: BVID irrigation tailwaters from Dry Creek<br>Sewage: N/A<br>Fire: CALFIRE<br>Other: N/A |

**FIGURE 1: VICINITY MAP**

**FIGURE 2: PROPOSED PROJECT ROUTE**

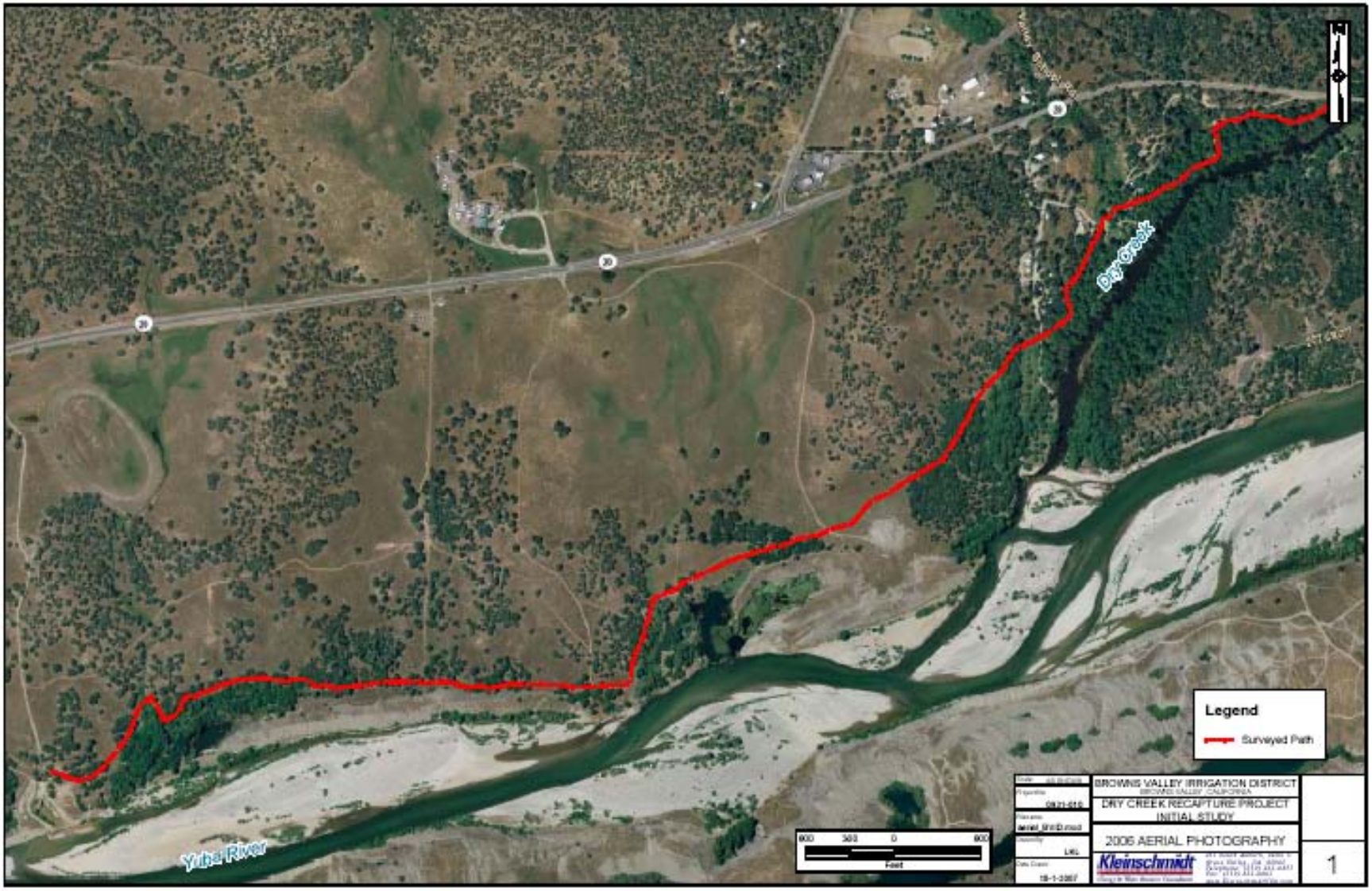
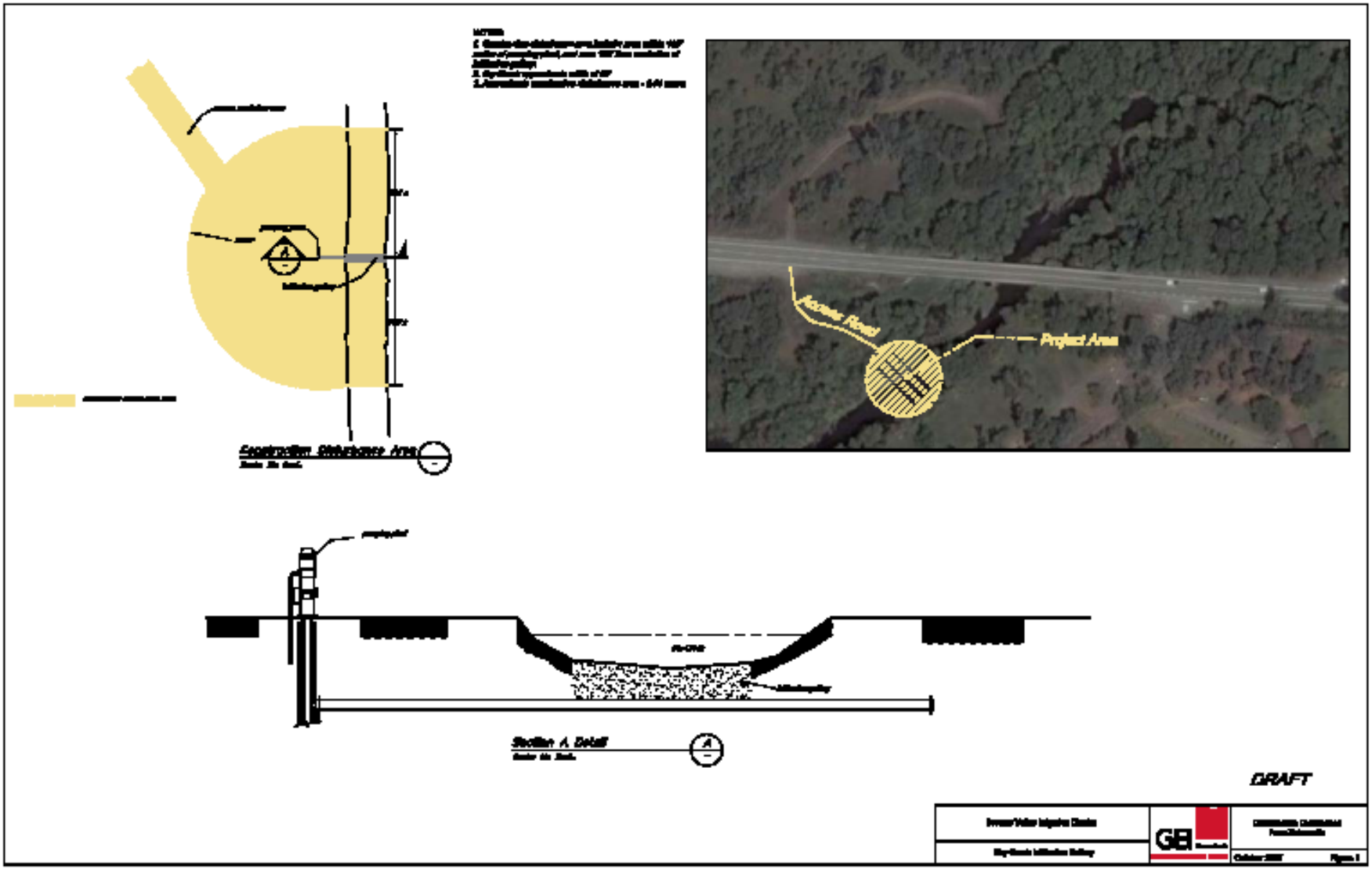


**FIGURE 3: SCHEMATIC OF THE PROPOSED INFILTRATION GALLERY UNDER DRY CREEK**



## 3.0 ENVIRONMENTAL SETTING

The study area is located within the Sierra Nevada foothills, situated in open grasslands, oak woodlands, seasonal drainages, swales, and creeks. The project area also includes a sycamore grove, which is located within a recreational vehicle park/campground. The majority of the Project route is used for cattle grazing, with a portion of the site bordering dredge-pilings placed as training walls for the Yuba River.

**Slope/Topography:** The 7.58-acre study area consists of relatively flat terrain with elevations averaging 145 ± feet above mean sea level throughout. The nearest major drainage course, the Yuba River, is located south of the planned construction area, and ranges between approximately 115 and 650 feet from the intended route of the proposed pipeline. The Project route is separated from the Yuba River by a training wall formed of old mine tailings. The route will be nearly level, with a slight southwesterly decrease in elevation to allow gravity flows to reach the discharge point at the Pumpline Canal.

**Fauna:** Wildlife species that commonly occur in the oak woodland, grassland, riparian forest, and wetland habitats that make up the Project area include wide-ranging animals, such as raptors (red-tailed hawk, turkey vulture {*Cathartes aura*}), coyotes (*Canis latrans*), deer, ducks, herons, foxes, bobcats, and, occasionally, mountain lions. Animals with a shorter range include quail, wild turkey, song birds (during their non-migratory season); and small mammals such as ring-tail cat, northern river otter, raccoons, skunks, and, California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and grassland-associated passerines. Reptiles commonly found in these habitat types include fence lizards, skinks, whiptails, alligator lizards, garter snakes, rattlesnakes, gopher snakes, and kingsnakes.

In addition to the terrestrial habitat, the Project area includes a portion of the in-channel habitat of French Dry Creek ("Dry Creek"). Dry Creek is a natural stream system occupied at times by certain warm water species of fish, aquatic insects, and some amphibians. However, the headwaters of Dry Creek have been impounded by the dam creating Collins Reservoir since the first half of the twentieth century, and the Creek has since been highly regulated and used for conveyance of irrigation water by the BVID. Collins Reservoir has a storage capacity of 57,000 acre feet and is operated by BVID under State Water Resources Control Board ("SWRCB") Licenses 13608, 13609, and 13610 to provide water for its approximately 1,500 customers. The water is used for both agricultural and domestic water supplies. The Project area is also in the vicinity of the Yuba River, which is one of the major California rivers. The Yuba River provides multiple benefits, including fishery and wildlife habitat, water supply, hydroelectric power, and recreation use. The north, middle, and south forks of the Yuba River join upstream of the Project area near Englebright Reservoir. The Yuba River meets the Feather River downstream of the Project area, near Yuba City.

**Flora:** The Project traverses areas primarily consisting of rolling oak woodlands and runs adjacent to training walls, formed of old mine tailings, for the Yuba River. Oak woodland/foothill pine is mixed community dominated by Interior Live Oak, *Quercus wislizenii*; Blue Oak, *Quercus douglasii*; and Gray pine, *Pinus sabiniana*. The oak woodland is embedded in a matrix of a grassland understory. The species composition of the grassland is a mixture of native and non-native grasses that vary in grazing intensity, aspect, soil disturbance, and soil type. In general, the annual grassland is characterized by a mix of annual grasses and weedy forbs, including

medusa-head, soft chess, hare barley, slender wild oat, ripgut brome, yellow star-thistle, red-stem filaree, tarweed, several species of brodiaea, dove weed, and blue wild rye. Native grasses, while sparse, include purple needlegrass and fescues. The annual grasslands in the Project area are grazed by cattle, llama, and/or other farm herbivores for a portion of the year.

Valley riparian forest habitat is found adjacent to Dry Creek, the Yuba River, and areas of surface water. The riparian forest is a healthy, mature, and expanding zone exhibiting a diversified level of succession. It constitutes a high resource value because of water, thermal cover, migration corridors; and diverse nesting, feeding, and lodging for many birds and animal species. Dry Creek, Little Dry Creek, and the Yuba River support riparian forest habitat. Within the vicinity of the Project, Dry Creek manifests two distinct "dominant" canopy trees, Cottonwood and Sycamore Riparian Forests.

**Archaeology:** In this part of Yuba County, prehistoric-period habitation sites are primarily found adjacent to streams or on ridges or knolls, especially those with a southern exposure. This region is known as the enthnographic-period territory of the Nisenan, also called the Southern Maidu. The Nisenan, who had permanent settlements along major rivers in the Sacramento Valley and foothills, would travel annually into higher elevations to hunt or gather seasonal plant resources. The proposed linear project area, paralleling Dry Creek and Yuba River, is relatively flat terrain, averaging 145± feet in elevation and receives predominantly south exposure. The *1867 GLO plat of T 16N/R 5E* shows surface diggings, cultivated fields, and a residence within the immediate or surrounding vicinity of the Project area. *USGS 1885-86 Smartsville Sheet and 1909 Browns Valley quadrangle* illustrates the vicinity as devoid of cultural evidence. Still, there are identified resources within a quarter mile of the linear Project area.

**Soils:** Onsite soils, as described in the *Soil Survey of Yuba County, California* (published by the USDA Natural Resources Conservation Service), are predominately Redding-Corning complex 3–8 percent slopes. This soil is on high fan terraces. Native vegetation mainly consists of annual grasses and forbs. This unit is about 35 percent Redding gravelly loam and 35 percent Corning gravelly loam with small "inclusions" of Corning, Redding, and unnamed soil units. The "unnamed" inclusions have been identified as "hydric" soils within seasonal wetlands "vernal pools" due to ponding for long durations. Several of these inclusions were observed near the study area; however, the pipeline route has been designed to avoid these seasonally ponded areas. Except for the "inclusions," the Redding-Corning soils are not identified as "hydric" in the *Hydric Soil Listing for Yuba County*.

**Surrounding Land Uses:** Surrounding land uses are predominantly agriculture with grazing being the most frequent agricultural use. The agricultural uses occur within a landscape of oak woodlands. In addition, the surrounding region includes a few rural residences, Hammon Grove Park (operated by Yuba County), and a private RV and camping facility. Little Dry Creek, French Dry Creek, and the Yuba River are the major waterways in the local vicinity.

**Existing Structures:** Existing structures in the Project area include the Yuba River pumping station and the Pumpline Canal at the terminus of the Project, which conveys water pumped from the Yuba River under BVID's Pre-1914 appropriative water right and a contractual entitlement from the Yuba County Water Agency ("YCWA"). BVID's pre-1914 appropriative water right and the point of diversion of that right at the Pumpline Canal on the lower Yuba River are discussed at pages 158

through 160 of the SWRCB's Revised Decision 1644 ("RD-1644"). At the northeast end of the Project is the Highway 20 bridge crossing over Dry Creek. The proposed collection system, including the pumping station and infiltration gallery, will be located in the vicinity of the bridge.

## 4.0 SUMMARY OF PROPOSED MITIGATION MEASURES

### 4.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

| | | | | | |
|---|---|---|---|---|---|
| — | 5.1 Aesthetics | — | 5.2 Agricultural Resources | ✓ | 5.3 Air Quality |
| ✓ | 5.4 Biological Resources | ✓ | 5.5 Cultural Resources | — | 5.6 Geology and Soils |
| — | 5.7 Hazards and Hazardous Materials | ✓ | 5.8 Hydrology and Water Quality | — | 5.9 Land Use and Planning |
| ✓ | 5.10 Noise | — | 5.11 Population and Housing | — | 5.12 Public Services |
| — | 5.13 Recreation | — | 5.14 Transportation and Traffic | — | 5.15 Utilities and Service Systems |
| — | 6.0 Mandatory Findings of Significance | | | | |

### 4.2 RECOMMENDED MITIGATION MEASURES

The following table provides a summary of mitigation measures recommended for the potentially significant impacts identified within the Checklist (Section 5.0). Also included in the table is recommended timing for implementation of the mitigation measures.

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
|---|---|---|
| ***5.3 AIR QUALITY*** | | |
| MM 5.3.1 | Construction shall comply with the FRAQMD BMPs for construction related emissions and fugitive dust emissions measures set forth in Rule 3.16 of the Feather River Air Quality Management District Regulations regarding emissions for construction activities. The following shall apply:<br><br>1) <u>All grading operations</u> on a project should be suspended when winds exceed 20 miles per hour or when winds carry dust beyond the property line despite implementation of all feasible dust control measures. | Throughout construction activities. |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
|---|---|---|
| | 2) Construction sites shall be watered as directed by the Department of Public Works or Air Quality Management District and as necessary to prevent fugitive dust violations.<br><br>3) An operational water truck should be onsite at all times. Apply water to control dust as needed to prevent visible emissions violations and offsite dust impacts.<br><br>4) Onsite dirt piles or other stockpiled particulate matter should be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce wind blown dust emissions. Incorporate the use of approved non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas.<br><br>5) All transfer processes involving a free fall of soil or other particulate matter shall be operated in such a manner as to minimize the free fall distance and fugitive dust emissions.<br><br>6) Apply approved chemical soil stabilizers according to the manufacturers' specifications, to all-inactive construction areas (previously graded areas that remain inactive for 96 hours) including unpaved roads and employee/equipment parking areas.<br><br>7) To prevent track-out, wheel washers should be installed where project vehicles and/or equipment exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip. Alternatively, a gravel bed may be installed as appropriate at vehicle/equipment site exit points to effectively remove soil buildup on tires and tracks to prevent/diminish track-out.<br><br>8) Paved streets shall be swept frequently (water sweeper with reclaimed water recommended; wet broom) if soil material has been carried onto adjacent paved, public thoroughfares from the project site.<br><br>9) Provide temporary traffic control as needed during all phases of construction to improve traffic flow, as | |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
|---|---|---|
| | deemed appropriate by the Department of Public Works and/or Caltrans and to reduce vehicle dust emissions. An effective measure is to enforce vehicle traffic speeds at or below 15 mph.<br><br>10) Reduce traffic speeds on all unpaved surfaces to 15 miles per hour or less and reduce unnecessary vehicle traffic by restricting access. Provide appropriate training, onsite enforcement, and signage.<br><br>11) Reestablish ground cover on the construction site as soon as possible and prior to final occupancy, through seeding and watering.<br><br>12) Disposal by Burning: Open burning is yet another source of fugitive gas and particulate emissions and shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth wastes) or other legal or illegal burn materials (trash, demolition debris, et. al.) may be conducted at the project site. Vegetative wastes should be chipped or delivered to waste to energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials offsite for disposal by open burning.<br><br>13) Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40 percent opacity or Ringelmann 2.0). Operators of vehicles and equipment found to exceed opacity limits shall take action to repair the equipment within 72 hours or remove the equipment from service.<br><br>14) The primary contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained.<br><br>15) Minimize idling time to 5 minutes – saves fuel and reduces emissions.<br><br>16) An operational water truck should be onsite at all times. Apply water to control dust as needed to prevent dust impacts offsite. | |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
|---|---|---|
| | 17) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.<br><br>18) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.<br><br>19) No open burning of removed vegetation during infrastructure improvements. Vegetative material should be chipped or delivered to waste to energy facilities.<br><br>20) Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require California Air Resources Board (ARB) Portable Equipment Registration with the State or a local district permit. The owner/operator shall be responsible for arranging appropriate consultations with the ARB or the District to determine registration and permitting requirements prior to equipment operation at the site. | |
| ***5.4 BIOLOGICAL RESOURCES*** | | |
| MM 5.4.1 | All elderberry bushes occurring within 50 feet of the limits of the construction corridor shall be protected by placing distinctive orange construction fencing and signage to prevent inadvertent impacts to the shrubs. The fencing shall be placed 10 feet from the dripline of the shrubs in order to avoid impacts to their root systems. Construction personnel shall be made aware of the location of the shrubs and advised of their status. | Prior to ground disturbing activities in the vicinity of the identified resources. |
| MM 5.4.2 | The pond that occurs within 50 feet of the limits of the construction corridor and shall be protected by placing distinctive orange construction fencing and signage to prevent inadvertent impacts to potential Northwestern Pond Turtle habitat (NWT). The fencing shall be placed 10 feet from the edge of the pond in order to avoid impacts to the | Prior to ground disturbing activities in the vicinity of the identified resources. |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
|---|---|---|
| | shoreline of the pond and the potential NWT habitat. Construction personnel shall be made aware of the location of the pond and advised of its status. | |
| MM 5.4.3 | Prior to ground-disturbing activities in the vicinity of the pond and wetland, a pre-construction survey for the presence of California Black Rails shall be conducted. The survey shall be performed using recorded vocalization since this species responds to these recordings, and shall occur no more than 14 days prior to construction activities taking place. | Prior to construction activities in the vicinity of the identified resources. |
| MM 5.4.4 | Prior to ground-disturbing activities that include tree removal, a pre-construction survey for the presence of Long-eared Owls shall be conducted. The survey shall be conducted in the evening/nighttime, and shall occur no more than 14 days prior to construction activities taking place. | Prior to ground disturbing activities in the vicinity of the identified resources. |
| MM 5.4.5 | If the initial construction activities occur between March 1 and July 31, which is the breeding season for raptors and most migratory bird species, pre-construction nesting surveys will be conducted by a qualified wildlife biologist to ensure that raptor nests are not being disturbed during construction operations.<br><br>A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (March–April) and no more than 30 days prior to the initiation of these activities during the late breeding season (May–July). During this survey, the qualified wildlife biologist shall inspect all trees in and immediately adjacent to the impact areas for raptor and migratory bird nests.<br><br>If the survey does not identify any nesting raptor species on or near the construction site, further mitigation is not required. However, should any raptor species be found nesting on or near the construction site (within 500 feet of construction activities), the following mitigation measures shall be implemented:<br><br>1) Prior to any grading activities, BVID, in consultation with the CDFG, shall avoid all birds of prey or migratory bird nest sites located in the construction area during the breeding season while the nest is occupied with adults and/or eggs or young. The occupied nest | Prior to construction activities in the vicinity of the identified resources. |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
|---|---|---|
| | shall be monitored by a qualified wildlife biologist to determine when the nest is no longer used. Avoidance shall include the establishment of a no-disturbance buffer zone around the nest site. The size of the buffer zone shall be determined in consultation with the CDFG. Highly visible temporary construction fencing shall delineate the buffer zone.<br><br>2) If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after July 31 or until the adults and young are no longer dependent on the nest site, as determined by a qualified biologist. | |
| MM 5.4.6 | Trees to be preserved within the Project area and immediately adjacent to the construction zone should be protected with high-visibility fencing placed at least one foot outside the dripline. Excavating or trenching within the dripline of a protected tree should be avoided whenever practical. However, if unavoidable, any authorized cut or fill occurring within the dripline of any preserved tree should be supervised by an experienced botanist, Registered Professional Forester (RPF), or by an International Society of Arboriculture (ISA) Certified Arborist. Roots larger than one inch in diameter shall be clean cut with pruners, loppers, or handsaws after trenching. If construction equipment cuts any roots larger than three inches in diameter, the root should be cut squarely to remove any scraps, rips, or breaks. Pruning, cabling, and other corrective measures for preserved trees should be specified by an experienced botanist or by an RPF or arborist, and should conform to the pruning standards of the Western Chapter of ISA. | Prior to ground disturbing activities in the vicinity of the identified resources. |
| MM 5.4.7 | Prior to ground-disturbing activities, the Project Manager will ensure that a secure development barrier will be placed around the seasonal swales and wetlands that will not be impacted. There are no permanent changes to surface hydrology anticipated from the installation of the pipeline that would adversely affect these protected features. During construction activities, the seasonal swales and wetland areas will be protected with the installation of storm wattles, silt fencing, or other sediment-catching materials, along with orange construction fencing to prevent disturbance of these areas. Adequate erosion and sediment controls (i.e., storm wattles) will be installed | Prior to construction activities in the vicinity of the identified resources. |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
|---|---|---|
| | around the periphery of all tributaries and wetlands, and will be routinely managed to prevent disturbances to said areas.<br><br>To avoid sediment or other materials from entering these habitats, if there is a build-up of soils or other materials along the storm wattles, these materials will be graded away from the protected areas routinely and/or prior to a storm event. A staging area, upland away from these protected areas and within the project corridor, should be established for all construction equipment and refueling operations to avoid pollutants from entering any sensitive habitats. | |
| MM 5.4.8 | Prior to any construction activities, the Project Manager will obtain a Streambed Alteration Agreement from CDFG for work within Dry Creek and the other identified watercourses. The Agreement may include additional mitigation measures and construction specifics that can further insure impacts will be less than significant. | Prior to construction activities in the vicinity of the identified resources. |
| MM 5.4.9 | Disturbance to the bed and bank of Dry Creek associated with installation of the infiltration gallery will occur in August (or as otherwise determined by CDFG). If necessary, and if approval from CDFG is received, Creek flows, which are regulated by Collins Reservoir, will be temporarily reduced during construction activities within the channel to the minimum flows required by CDFG. Creek flows will then be diverted around the construction zone, which is estimated to be approximately 50 feet in width. The construction zone shall be limited to a 50-foot corridor within the streambed. Sandbags will be placed across the active channel above and below the construction zone and will be lined with plastic to ensure flows are adequately blocked and diverted. A diversion pipe will be installed to divert Dry Creek flows around the construction zone. Immediately downstream of the downstream diversion barrier, a silt curtain will be installed to ensure any inadvertent release of sediment is filtered out before entering the stream system below the construction site. Once construction is complete, and the bed and bank have been restored and stabilized to CDFG's satisfaction, the diversion structures and sediment curtain shall be removed. All construction activities within the stream zone, including bed and bank, shall be coordinated with CDFG. | Prior to construction activities in the vicinity of the identified resources. |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
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| MM 5.4.10 | The two seasonal creek crossings within the private campground will be constructed during the winter months from November through March, both to comply with landowner requests and to take advantage of typically lower flows outside of storm events. The following conditions, in addition to any measures required by the CDFG Streambed Alteration Agreement (MM 5.4.8), are required for construction activities associated with the two seasonal creek crossings:<br><br>1) No construction within the creek zone (including bed and bank) shall occur within 24 hours of a forecasted storm event. Additionally, prior to any storm event, any disturbed soils shall be stabilized or covered to prevent sediment from entering the stream.<br><br>2) Prior to construction activities, a temporary diversion pipe shall be placed 15 feet above and below the pipeline alignment to reroute any existing flows around the construction zone to ensure that disturbed soils will not enter flows and impact water quality.<br><br>3) The bed and bank of the creeks shall be restored and stabilized consistent with requirements of the Streambed Alteration Agreement prior to removing the diversion pipe and restoring flows to the channel. | Prior to construction activities in the area of the identified resources. |
| MM 5.4.11 | Prior to construction activities, BVID shall provide notification and obtain authorization from the U.S. Army Corps of Engineers ("USACE") under Nationwide Permit 12 for Utility Line Activities. The BVID shall also contact the regional USACE and the CVRWQB to obtain, or have waived, a Section 401/404 water quality certification. The following conditions of Nationwide Permit12 shall be implemented during construction within wetlands and waters of the United States:<br><br>1) The Wetland Delineation prepared by Marcus H. Bole and Associates shall be submitted to the USACOE for verification.<br><br>2) Excavated material shall be placed on an upland site and within the 30-foot wide construction corridor, and<br><br>a. All excavated material shall be stabilized with straw | Prior to construction activities within the area of the identified resources. |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
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| | bales, filter cloth, etc. to prevent reentry into the waterway.<br>b. All excavated material will be placed back into the trench to the original contour and all excess excavated material shall be completely removed from the wetlands within 30 days after the pipeline has been laid through the wetlands areas.<br><br>3) Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high-water mark, must be permanently stabilized at the earliest practicable date. Work shall be performed within waters for the U.S. during periods of low- to no-flow whenever possible.<br><br>4) Heavy equipment working within the wetlands shall be placed on mats or some other method that will minimize soil disturbance. | |
| ***5.5 CULTURAL RESOURCES*** | | |
| MM 5.5.1 | If the dam and the irrigation ditch identified in the report titled "Cultural Resources Inventory report for the Browns Valley Irrigation District Tail Water Recapture Project by Pacific Legacy Inc., April 2008," cannot be avoided; then these resources shall be thoroughly evaluated by a qualified cultural resources professional prior to any ground disturbing activities in the vicinity. No work shall occur in the area until authorized by the qualified professional. | Prior to ground disturbing activities in the vicinity of the identified resources. |
| MM 5.5.2 | Implement a plan to address the inadvertent discovery of buried cultural resources. The Project Manager will take the following steps during Project construction. The Project Manager shall require that if cultural resources—such as chipped or ground stone, midden deposits, historic debris, building foundations, human bone, or paleontological resources—are inadvertently discovered during ground-disturbing activities, the construction crews will stop all work in that area and within 100 feet of the find until a qualified archaeologist or paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with BVID and other appropriate agencies. Should any artifacts be discovered, and their disposition be necessary, | Prior to Project commencement. |

| MITIGATION MEASURE # | MITIGATION | IMPLEMENTATION |
|---|---|---|
| | the Project Manager shall consult with culturally affiliated Native Americans. | |
| MM 5.5.3 | Implement a plan to address the discovery of human remains. The Project Manager will take the following steps during construction activities. If remains of Native American origin are discovered during project construction, it will be necessary to comply with state laws concerning the disposition of Native American burials, which fall within the jurisdiction of the NAHC of California (Public Resources Code). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:<br><br>1. The Yuba County Coroner has been informed and has determined that no investigation of the cause of death is required; and<br><br>2. If the Corner determines or has reason to believe that the remains are of Native American origin, then the Corner must contact BVID and the NAHC within 48 hours to inform them of that determination.<br><br>3. After being informed by the Corner, the NAHC shall identify and notify the most likely descendent. The most likely descendant then will then make a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98. The most likely descendant may request to make a site inspection and BVID will provide access to the site for an inspection as soon as possible.<br><br>4. If the NAHC has been unable to identify a descendent or the descendent fails to make a recommendation within 48 hours after being notified by the commission, then BVID may rebury the remains with appropriate dignity outside the project area in accordance with Public Resources Code section 5097.98(e). | Prior to Project commencement. |

| *5.8 HYDROLOGY AND WATER QUALITY* | | |
|---|---|---|
| MM 5.8.1 | All construction activities, excepting the installation of the pipeline section located within the private RV campground, will be conducted during the dry season (typically May–October) when rainfall, which may dislodge loose soil and create runoff, is least likely to occur.<br><br>In order to minimize impacts to guests of the campground, installation of the pipeline through this facility will occur during the off-season. Mitigation measures 5.8.2 through 5.8.6 shall be adhered to at all times during construction activities. Additionally, the following measures shall be implemented:<br><br>1) No construction shall occur within 24 hours of forecasted rain events.<br><br>2) Prior to all rain events, disturbed soils shall be prevented from leaving the site and entering watercourses by installing appropriate erosion control measures such as silt fencing, straw wattles, or similar methods. Additionally, all spoil piles shall be covered with plastic to prevent soil erosion from the immediate site.<br><br>3) During storm events, all erosion control BMPs shall be monitored and maintained to ensure that all measures are performing properly. | Throughout construction activities. |
| MM 5.8.2 | During construction, excavated (loose) soil will be protected with appropriately installed sediment control methods such as straw wattles, silt fencing, and/or fiber matting. | Ongoing, throughout construction activities. |
| MM 5.8.3 | Following backfilling of buried pipe, excess excavated soils will be smoothed out on site, adhering as much as possible to the preexisting topographic relief. By maintaining the original land contours (e.g., avoiding the creation of spoil piles, etc.), the pattern of overland flow of water from precipitation will be unaffected and current drainage patterns will be preserved. | Ongoing, through-out construction activities. |
| MM 5.8.4 | Excess soil will be confined to upland areas only and will be placed well away of the high water mark of the waterways. | Ongoing, through-out construction activities. |
| MM 5.8.5 | Upon completion of the Project, areas of disturbed soil, including locations of buried pipe, temporary staging areas, and areas containing excess soil, will be secured with sterile | Prior to Project completion, and or, prior to rain events. |

| | | |
|---|---|---|
| | straw mulch and seeded with a native plant mix either manually or through hydroseeding. Such revegetation efforts will prevent soil erosion during the subsequent rainy season as well as ensure revegetation during the following growing season. | |
| MM 5.8.6 | The Project Manager will monitor erosion control methods at revegetation sites during the rainy season to ensure their efficacy and to ensure that erosional runoff is not occurring. | Monitoring will occur periodically throughout the following rain season. |
| MM 5.8.7 | Prior to any construction activities, the Project Manager shall contact the CVRWQCB to determine whether a NPDES permit is required for Project construction. Should a NPDES permit be required, the Project Manager shall obtain the permit and adhere to the requirements in that permit. | Prior to construction activities. |
| MM 5.8.8 | Prior to any recapture of tailwater associated with this Project, the District will consult with SWRCB to determine whether or not BVID must file a petition to add a point of rediversion on Dry Creek under its appropriative water rights licenses. Should a petition to add a point of rediversion to its water rights licenses be required by the SWRCB, BVID will file obtain that petition and obtain approval from the SWRCB before pumping and conveying any tailwater using the Project facilities. | Prior to construction. |
| MM 5.8.9 | BVID will develop and adhere to an operating and monitoring program to ensure that only tailwater from its irrigation deliveries from Collins Reservoir is captured for recirculation. This operating and monitoring program is outlined below:<br><br>1) The Project will operate only in the irrigation season when BVID is delivering water to customers from Collins Reservoir.<br><br>2) Return flows will be monitored at key locations along Dry Creek and other key locations within BVID. Pumping under the Project will be limited based on observed return flows and will be limited to a maximum rate of 10 cfs.<br><br>3) Prior to recapture of any tailwater from Dry Creek, BVID will install a flow gage directly upstream of the infiltration gallery to monitor flows and to ensure that the quantity of water recaptured from the creek does not exceed the tailwater portion of the flow. The gage shall be monitored daily during the irrigation season when | Prior to pumping activities. |

| | | |
|---|---|---|
| | pumping occurs.<br><br>4) Recapture under the Project will occur only when flow in Dry Creek is greater than the minimum bypass flow requirement identified in the agreement with CDFG. This condition will ensure that BVID is fulfilling its fish flow obligations under the agreement.<br><br>5) Any time that BVID is recapturing tailwater at the Project pumping station, there will be an equal and concurrent reduction in BVID's diversions from the Yuba River at its Pumpline facilities. | |
| ***5.10 NOISE*** | | |
| MM 5.10.1 | Construction within 1,000 feet of occupied dwellings and guests within the recreational campground will be limited to the hours between 6:00 a.m. and 5:00 p.m. on weekdays and non-holidays. | Throughout project activities in the vicinity of the private recreational campground. |
| MM 5.10.2 | All construction equipment will be equipped with sound control devices no less effective than those provided on the original equipment. No equipment will have an unmuffled exhaust. | Throughout construction activities. |
| MM 5.10.3 | Appropriate additional noise-reducing measures will be implemented, including but not limited to the following:<br><br>1) Changing the location of stationary construction equipment to avoid long-term noise sources from impacting residents and guests of the campground.<br><br>2) Shutting off idling equipment when in the vicinity of the campground or any residences along the pipeline route.<br><br>3) Rescheduling construction activity to occur when residents or guests of the campground are minimal.<br><br>4) Notifying nearby residents 48 hours in advance of construction activities. | Throughout construction activities. |

## 5.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and are is evaluated as follows:

Potentially Significant: Known significant environmental impacts.

Less Than Significant with Mitigation Incorporated: Potentially significant impacts which can be mitigated to less than significant levels.

Less Than Significant Impact: Impacts which are not considered significant.

No Impact: The project will not result in any impacts.

Reviewed Under Previous Document: The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case. Discussion should include reference to the previous documents, a citation of the page or pages where the information is found, and identification of mitigation measures incorporated from those previous documents. NOTE: Where applicable, this box should be checked in addition to one indicating significance of the potential environmental impact.

## 5.1 AESTHETICS

| **Will the proposal result in:** | **Potentially Significant Impact** | **Less Than Significant with Mitigation Incorporated** | **Less Than Significant Impact** | **No Impact** | **Reviewed Under Previous Document** |
|---|---|---|---|---|---|
| **a.** Have a substantial adverse effect on a scenic vista? | | | | X | |
| **b.** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a scenic highway? | | | | X | |
| **c.** Substantially degrade the existing visual character or quality of the site and its surroundings? | | | X | | |
| **d.** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | | X | |

**Setting:** The Project is located in a rural area of Yuba County, beginning near the Highway 20 bridge at Dry Creek and ending at the Pumpline Canal near the Yuba River pumping station approximately two miles away. The only portion of the Project that may be visible to the public is the pump station housing at the beginning of the project near Highway 20. The remainder of the Project consists of the underground installation of a water pipeline and will not be visible once construction is complete. Construction activities will result in the removal of natural vegetation within the construction zone, along approximately 30-foot-wide corridor for the pipeline and a 100-foot-diameter zone in the vicinity of the pumping station and infiltration zone, adjacent to Dry Creek and the Highway 20 bridge. It is expected the construction zones will naturally re-vegetate within a few years after completion of construction.

**Impact Discussion:**

(a) There are no identified scenic vistas in the Project area. The majority of the Project is located within privately owned agricultural lands that are not accessible or visible to the general public. The pipeline portion of the Project will be installed below ground and will not be visible once

construction activities are complete. The pumping station will be located adjacent to Highway 20 and the Dry Creek bridge. Although the pump station may be visible to the eastbound traffic on State Highway 20, it is not considered a scenic vista; and at the higher speeds at which vehicles generally travel on Highway 20, most persons are unlikely to notice the facility. Therefore, there will be **no impact.**

(b, d) The Project will be almost entirely underground, with the exception of the pumping station structure. The pumping station will be located adjacent to State Highway 20 and near Dry Creek. However, the station will be constructed below grade of the Highway and visibility of the structure is expected to be limited. **No impact.**

(c) There are two sections of the Project that may be visible to the public: the pumping station and the pipeline route through Sycamore RV Park at the beginning of the Project and near Highway 20. Because most of the Project consists of an underground pipeline, visual impacts associated with structures are expected to be minimal. While installation of the pipeline will require a 30-foot-wide construction zone over the centerline of the pipeline route that will create a temporary degradation of the visual character of the area, the impacts will be temporary and no long-term effects are anticipated. Trees within the construction zone will be selectively removed during the installation of the 24-inch pipeline. However, the project route is located primarily in remote areas not visible by publicly traveled roadways. Because the pipeline will be installed underground, visual impacts are expected to be **less than significant**.

The pumping station will consist of two pumps housed within a structure that will be located between Dry Creek and State Highway 20 near the State Highway 20/Dry Creek Bridge. Because the pumping station will be located below grade of the Highway, is unlikely to be visible to most persons traveling at highway speeds, and the Highway is not deemed a scenic highway in the Yuba County General Plan or other local planning documents, impacts are expected to be **less than significant**.

**Mitigation and Residual Impact:** No significant impacts to aesthetics/visual resources are anticipated and no mitigation is recommended. No residual impacts are anticipated.

## 5.2 AGRICULTURAL RESOURCES

| **Will the proposal:** | **Potentially Significant Impact** | **Less Than Significant with Mitigation Incorporated** | **Less Than Significant Impact** | **No Impact** | **Reviewed Under Previous Document** |
|---|---|---|---|---|---|
| **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? | | | | X | |
| **b.** Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X | |
| **c.** Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | | | | X | |

**Setting:** The Project is located in a rural area of Yuba County, dominated by agricultural uses consisting primarily of grazing. The majority of the project transverses grazing lands that consist of grass and oak woodlands. A portion of the Project, including the pumping station and infiltration gallery, is located on County-owned property, adjacent to a privately owned RV campground.

**Impact Discussion:**

(a–c) Because the pipeline will be installed underground, the Project will not result in the conversion of any important farmlands, nor will it in result in any conflicts with existing zoning or Williamson Act contracts. **No impact.**

**Mitigation and Residual Impact:** Since there are no potentially significant impacts to agricultural resources, no mitigation is required.

## 5.3 AIR QUALITY

| **Will the proposal result in:** | **Potentially Significant Impact** | **Less Than Significant with Mitigation Incorporated** | **Less Than Significant Impact** | **No Impact** | **Reviewed Under Previous Document** |
|---|---|---|---|---|---|
| **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 | | | |

**Setting:** The Project is located in a rural area of rolling hills where the Sierra foothills meet the floor of California's Central Valley. The nearest city is Marysville, approximately 14 miles to the west of the Project. Other notable sources of pollutants in the area include Highway 20, immediately adjacent to the northeast portion of the Project, and Beale Air Force Base, approximately five miles to the south.

Air quality is determined primarily by the type and quantity of contaminants emitted into the atmosphere, the size and topography of the air quality district, and its meteorological conditions. State and federal criteria pollutant emission standards have been established for six pollutants: carbon monoxide (CO), ozone ($O_3$), particulate matter (PM10 [particulate matter 10 microns in diameter or less] and PM 2.5 [particulate matter 2.5 microns in diameter or less]), nitrogen dioxide

($NO_2$), sulfur dioxide ($SO_2$), and lead (Pb). Yuba County has been designated a non-attainment for both ozone and PM10 by the ARB.

The air quality management agencies with jurisdiction over Yuba County include the U.S. Environmental Protection Agency (EPA), California Air Resources Board (ARB), and the Feather River Air Quality Management District (FRAQMD). The FRAQMD is responsible for ensuring that state and federal emission standards are not violated. The FRAQMD develops and enforces air quality regulations for non-vehicular sources, issues permits, participates in air quality planning, and operates a regional air-quality monitoring network.

Impacts analyzed in this document include construction-related impacts and potential impacts resulting from the pumping station operations.

**Impact Discussion:**

(a) The Project area is located within the Northern Sacramento Valley Planning Area 2006 Air Quality Attainment Plan. The project will not conflict with the implementation of this or any applicable air quality plan. **No impact.**

(b) Construction activities associated with the Project will result in temporary increases in airborne particulates in the form of dust and heavy equipment exhaust. Although there will be a temporary increase in airborne particulates and emissions, no long-term impacts to air quality are anticipated once the construction is completed. Both temporary and long-term impacts are expected to be **less than significant with mitigation incorporated** and will not significantly contribute to any air quality violations in the County.

(c) Both temporary impacts, resulting from Project construction activities, and long-term impacts, associated with the pumping station, are expected to be less than significant with the incorporation of mitigation measures 5.3.1 and will not significantly contribute to the non-attainment status of the County. **Less than significant with mitigation incorporated.**

(d, e) The Project is located primarily within agricultural lands and no sensitive receptors were identified within those areas. However, a portion of the pipeline is located within a privately owned RV campground in which visitors could potentially be impacted by pollutant concentrations resulting from construction activities. In order to reduce potential impacts to these sensitive receptors, mitigation measure 5.3.1 is recommended. **Less than significant with mitigation incorporated.**

**Mitigation and Residual Impact:** Adherence to the following mitigation measure and standard best management practices (BMPs) from the Air Pollution Control District would adequately mitigate potential emissions resulting from the project. Residual impacts would be less than significant

**MM 5.3.1** Construction shall comply with the FRAQMD BMPs for construction related emissions and fugitive dust emissions measures set forth in Rule 3.16 of the Feather River Air Quality Management District Regulations regarding emissions for construction activities. The following shall apply:

1) All grading operations on a project should be suspended when winds exceed 20 miles per hour or when winds carry dust beyond the property line despite implementation of all feasible dust control measures.

2) Construction sites shall be watered as directed by the Department of Public Works or Air Quality Management District and as necessary to prevent fugitive dust violations.

3) An operational water truck should be onsite at all times. Apply water to control dust as needed to prevent visible emissions violations and offsite dust impacts.

4) Onsite dirt piles or other stockpiled particulate matter should be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce wind blown dust emissions. Incorporate the use of approved non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas.

5) All transfer processes involving a free fall of soil or other particulate matter shall be operated in such a manner as to minimize the free fall distance and fugitive dust emissions.

6) Apply approved chemical soil stabilizers according to the manufacturers' specifications, to all-inactive construction areas (previously graded areas that remain inactive for 96 hours) including unpaved roads and employee/equipment parking areas.

7) To prevent track-out, wheel washers should be installed where project vehicles and/or equipment exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip. Alternatively, a gravel bed may be installed as appropriate at vehicle/equipment site exit points to effectively remove soil buildup on tires and tracks to prevent/diminish track-out.

8) Paved streets shall be swept frequently (water sweeper with reclaimed water recommended; wet broom) if soil material has been carried onto adjacent paved, public thoroughfares from the project site.

9) Provide temporary traffic control as needed during all phases of construction to improve traffic flow, as deemed appropriate by the Department of Public Works and/or Caltrans and to reduce vehicle dust emissions. An effective measure is to enforce vehicle traffic speeds at or below 15 mph.

10) Reduce traffic speeds on all unpaved surfaces to 15 miles per hour or less and reduce unnecessary vehicle traffic by restricting access. Provide appropriate training, onsite enforcement, and signage.

11) Reestablish ground cover on the construction site as soon as possible and prior to final occupancy, through seeding and watering.

12) Disposal by Burning: Open burning is yet another source of fugitive gas and particulate emissions and shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth wastes) or other legal or illegal burn materials (trash, demolition debris, et. al.) may be conducted at the project site. Vegetative wastes should be chipped or delivered to waste to energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials offsite for disposal by open burning.

13) Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40 percent opacity or Ringelmann 2.0). Operators of vehicles and equipment found to exceed opacity limits shall take action to repair the equipment within 72 hours or remove the equipment from service.

14) The primary contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained.

15) Minimize idling time to 5 minutes – saves fuel and reduces emissions.

16) An operational water truck should be onsite at all times. Apply water to control dust as needed to prevent dust impacts offsite.

17) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.

18) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.

19) No open burning of removed vegetation during infrastructure improvements. Vegetative material should be chipped or delivered to waste to energy facilities.

20) Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require California Air Resources Board (ARB) Portable Equipment Registration with the State or a local district permit. The owner/operator shall be responsible for arranging appropriate consultations with the ARB or the District to determine registration and permitting requirements prior to equipment operation at the site.

## 5.4 BIOLOGICAL RESOURCES

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service? | | X | | | |
| **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 Game or the U.S. Fish and Wildlife Service? | | X | | | |
| **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? | | X | | | |
| **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 wildlife nursery sites? | | | X | | |
| **e.** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X | |
| **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? | | | | X | |

**Setting:** The Project area consists of gently rolling hills that lie within the BVID's boundaries. Elevations along the pipeline route are relatively flat with an average elevation of 145± feet. The Project area is bordered by the Yuba River to the south and Dry Creek to the east. Highway 20 is located north of the project area and provides the primary vehicular access to the area. The site is within the Sacramento Valley geographic sub-region of the California Floristic Province. The Yuba Gold Fields are located south and west of the proposed Project area.

The District has a Mediterranean climate characterized by hot, dry summers and mild, rainy winters. Data collected at a weather station located in the Browns Valley area (at the UC Sierra Foothill Research Extension Center and operated by USDA) shows that annual precipitation generally ranges from 9 to 52 inches. Average annual precipitation is 28 inches. Annual precipitation occurs almost exclusively as rainfall, and mostly from October through May. Mean monthly minimum air temperatures are typically in the high 30s and low 40s F during November through March. While mean maximum air temperatures are around 90º F during July and August. Recorded extremes are 14º F and 109º F, respectively (UC, 2007).

The Lower Yuba River is a broad, gravelly river widely known for its anadromous fishery, which includes, among others, steelhead trout, and fall-, spring-, and late fall-run Chinook salmon. This prized fishery has been challenged for several decades beginning with hydraulic mining in the early 1900s, which encouraged damming of the river for water diversions. Englebright Reservoir, upstream of the Project area and Daguerre Point Dam, downstream of the Project area, were originally constructed to capture sediments dislodged during mining. Although Daguerre Point Dam provides two fish ladders for fish migration upstream, Englebright Reservoir effectively blocks fish passage above that dam. In addition to reduced access to spawning sites, other environmental factors of concern that affect anadromous fish survival in this reach of the Yuba River are water temperature and instream flows. These variables are in turn related to important features of fish habitat, including water depth, velocity, turbidity, and dissolved oxygen.

In accordance with an August 10, 1972, agreement with the California Department of Fish and Game (CDFG), BVID is required to bypass a minimum of 3.3 cfs or an amount equal to the inflow to Collins Reservoir, whichever is less, at all times between November 1 and June 30 of the following year. The required bypass flow is reduced to the lesser of 1.0 cfs or the reservoir inflow in years in which Collins Reservoir does not spill.[1]

**Impact Discussion:**

(a) A special-status plant and wildlife survey of the Project area was performed by Marcus H. Bole and Associates in Spring 2008. The survey was conducted in a manner to identify any rare or endangered plant species that may be present during the spring blooming period. During the survey, no special status plant species were observed within the Project area. Most of the species with potential to occur in the area have a very low potential to occur at the Project site due to the following conditions, which have had a major impact on these species at this site:

- Intensive cattle grazing over a prolonged period of time, presumably for long durations.
- Introduction of pasture grasses, forbs, and other non-native invasive species. The non-native grasses' phenology is such that they are able to out-compete most native annual grasses and forbs throughout the valley and foothill regions.

Although no rare, threatened, or endangered wildlife species were observed in the Project area during the Spring 2008 survey, potential habitat does exist in the project area for four species: the Valley Elderberry Longhorn Beetle (VELB), the Northwestern Pond Turtle (NPT), California Black Rail (CBR), and the Long-eared Owl. There are several elderberry shrubs that occur adjacent to the proposed construction area, approximately 25–40 feet from the limits of the construction corridor. Based on current construction plans, there are no expected impacts to these shrubs. Surveys showed no exterior evidence of the beetle; i.e., exit holes, frass and/or shredded wood. These shrubs will be protected by the implementation of Mitigation Measure 5.4.1.

[1] California Department of Fish and Game Agreement to resolve protest of Application 23757. 1972.

Within the vicinity of the construction area there is a perennial pond that could potentially provide suitable habitat for the Northwestern Pond Turtle. The pond is medium in size and occurs approximately 50 feet from the limits of the construction area. Because suitable habitat occurs onsite, there is a potential for the NPT to occur on or near the construction area. The pond will be protected by the implementation of Mitigation Measure 5.4.2.

The potential for California Black Rail to occur within the proposed construction area is very low, as the pond and wetland do not have dense thickets of cattails. However, because three adjacent quads have numerous sightings of the CBR and are in close proximity to the proposed construction area, it is recommended that a pre-construction survey be performed prior to ground disturbances in the vicinity of the pond and wetland (see Mitigation Measure 5.4.3).

Although no Long-eared Owls were noted during the surveys, there is the potential to occur within the proposed Project area. With suitable habitat in the Project area, consisting of hardwood woodlands and open grasslands, the potential to occur within the Project area is high. A pre-construction survey should be performed to ensure that no disturbance to this State Species of Concern (see Mitigation Measure 5.4.4).

No raptor nests were located in the proposed pipeline corridor. However, the Project area does contain suitable foraging habitat for Cooper's hawk, sharp-shinned hawk, golden eagle, bald eagle, and non-special-status nesting raptors and other migratory birds. Installation of the proposed pipeline could potentially affect, either directly or through habitat modifications, nesting of these species. Tree removal, grading, or other construction activities during the breeding season (generally March 1 through August 15) can cause abandonment of active nests of raptors and other migratory birds if they are found nesting on or adjacent to the project site. Causing the abandonment or removing active nests (with eggs or young) of non-special status migratory birds and raptors is a violation of the State Fish and Game Code and the federal Migratory Bird Treaty Act. Pre-construction surveys would result in the avoidance of active nests of special-status and other bird species. To avoid this impact, Mitigation Measure 5.4.5 should be implemented.

Water Temperature is one of the most important environmental parameters affecting the distribution, growth, and survival of fish populations. Lethal water temperatures affect fish populations by directly reducing population size.[2] Dry Creek is not suitable for salmonids due to excessive water temperatures during the summer months. Many fish behavior and physiological functions, such as spawning, are controlled by temperature. Dry Creek is regulated by releases from Collins Reservoir for the purpose of irrigation water delivery, and temperatures are approximately 68$^{o}$ F (20$^{o}$ C) by late September (BVID 2001 temperature data), making it unsuitable for salmonids. Salmon and steelhead require a temperature range between 54$^{o}$ to 57$^{o}$ F (12$^{o}$ to 14$^{o}$ C) for spawning, while their eggs require temperatures below 57$^{o}$ F for proper development. Growth of juvenile salmon and steelhead is generally optimal in the temperature range of 50$^{o}$ to 60$^{o}$ F (10$^{o}$ to 15.5$^{o}$ C).[3] Based on water temperature data provided by the District, Dry Creek's summer temperature averages are considerably higher than is suitable for salmonid habitat.

[2] Lower Yuba River Accord EIR/EIS. June 2007.
[3] Boles, Gerald. 1997. Upper Sacramento River Watershed Water Temperature Assessment.

Although the Yuba River supports juvenile and adult salmonids, Dry Creek flows and water temperatures are unsuitable for salmonids and no impacts to passage or rearing habitat within Dry Creek are anticipated. Correspondence from the CA Department of Fish and Game (CDFG) to the SWRCB (July 19, 2001) states that "Summer and fall flows in Dry Creek are virtually nonexistent under normal conditions. Juvenile and adult Chinook salmon and steelhead trout are not attracted into Dry Creek under normal hydrologic conditions because of the nonexistent flows." This correspondence further states that adult and juvenile salmonids that may be attracted into Dry Creek as a result of increased flows from Collins Reservoir (as part of a 2001 water transfer) would likely be exposed to adverse water temperatures.

Although the Yuba River supports juvenile and adult salmonids, Dry Creek's summer flows and water temperatures are unsuitable for salmonids. There are no known populations of salmonids that reside in or return to Dry Creek. As a result, and because the pumping of recaptured irrigation water will only occur during the irrigation season when water temperatures are not conducive to salmonid habitat, no impacts to passage or rearing habitat within Dry Creek are anticipated. This is consistent with the CDFG's regulation of Dry Creek, which has resulted in BVID's not being required to maintain flows in the creek for purposes of maintaining salmonids. **No impact.**

(b) The Project construction zone, including the installation area for the pumps, infiltration gallery, and a 15-foot-wide corridor on either side of the pipeline (30 feet total), will result in the modification of 7.58 acres of wildlife habitat as shown in the table below:

| VEGETATION | ACREAGE |
|---|---|
| Barren | 0.11 |
| Grassland | 0.86 |
| Modified landscape for campground | 0.11 |
| Oak Woodland | 2.8 |
| Riparian Forest (Cottonwood dominated) | 1.9 |
| Riparian Forest (Sycamore dominated) | 1.7 |
| Swale | 0.1 |
| **Total** | **7.58** |

In the oak woodland/foothill Pine, sycamore riparian forest, and valley riparian forest, much of the vegetation within the 30-foot wide construction zone, including many large trees, will be removed to allow for installation of the pipeline. Direct impacts to trees will vary and depend on the specific placement of the pipeline in relation to the existing location of native trees. BVID is proposing to selectively remove only those trees that are a direct impediment to placement of the pipeline. BVID will also take steps to minimize tree removal by leaving in place those trees that can be trimmed or avoided altogether. Because of the good health and stewardship of the existing habitat, it is possible that after pipeline installation, the natural vegetation and trees will naturally re-seed and restore the habitat values for wildlife. However, the future passive restoration of the native habitats is difficult to predict. Modification of this habitat, even on a temporary basis, is a potentially significant impact. In addition to the direct vegetation removal during construction, the pipeline will be

periodically maintained and monitored during its life. Growth of tree roots directly above the pipeline could create obstruction and would therefore be prevented by BVID. Growth of small shrubs and herbs would not be precluded. As a result of this Project, the long-term distribution of trees will be somewhat different from today and may result in fragmentation on a small scale. Implementation of Mitigation Measure 5.4.6 will reduce potential impacts to a less than significant level. **Less than significant with mitigation incorporated.**

(c) A wetland delineation was prepared by Marcus H. Bole & Associates in Spring 2008. The survey and delineation identified seasonal wetlands and swales, two unnamed seasonal creeks, and a perennial stream (Dry Creek) that flows directly into the Yuba River. The Project includes a collection system that consists of an infiltration gallery under Dry Creek. Additional impacts to wetland areas will be caused by the installation of a 24-inch pipeline across the seasonal wetlands, swales, and creeks. There is also a freshwater emergent pond that is located approximately 50 feet outside the limits of the construction area. The wetland delineation identified 0.12± acres of potentially jurisdictional wetland habitats located within the subject properties.

There is one seasonal wetland related to a seasonal drainage area near the mid-portion of the Project route, and which has connectivity to the Yuba River. The pipeline will cross the seasonal wetland, resulting in disturbance of 0.019± acres of wetlands. Adherence to the special, general, and regional conditions in the Nationwide 12 permit will result in wetland impacts that are less than significant.[4]

There are three seasonal swales that run perpendicular to the proposed pipeline route. Seasonal precipitation is conveyed within these swales from the north to the south and empties into the Yuba River. These seasonal swales contain a sparse amount of seasonal wetland vegetation and hydric soil conditions.

Two seasonal creeks will be crossed by the pipeline construction. Seasonal creeks are used to carry supplemental irrigation waters and, consequently, may have flows for a majority of the year. Water flows from one creek, from north to the southwest, through a sycamore grove within a campground near Highway 20. The riparian corridor associated with this creek extends approximately 25 feet on either side of the creek. The creek and its riparian corridor will be impacted at the site where the pipeline will be laid perpendicularly across the creek. A second seasonal creek within the campground, which is dry for a majority of the year, will be crossed where a roadway culvert conveys flows under a dirt road.

The owners of the private campground require that construction through their property occur during the winter months (November through March) to minimize exposure of their guests to disruption associated with construction activities. Because flows within the two creeks are supplemented with irrigation drainage, they are typically at their lowest volumes during the winter months in the absence of storm events. Construction methods for both of these crossings will consist of trenching perpendicularly across the creek so as to minimize the area impacted. A temporary diversion pipe will be placed within the creek to reroute the flows around the construction zone to ensure that disturbed soils will not enter flows and impact

[4] Marcus H. Bole and Associates. September 3, 2008. Delineation of Waters of the United States and Biological Inventory for the 7.58± Acre study Area, Browns Valley Irrigation Tailwater Recapture Project.

water quality. The bed and bank of the creeks will be restored and stabilized, consistent with requirements of the Streambed Alteration Agreement, prior to restoring flows to the channel. Mitigation Measure 5.4.10 addresses potential impacts to the seasonal creek from the construction. Impacts will be temporary and less than significant with mitigation incorporated.

Dry Creek flows directly into the Yuba River. The proposed infiltration gallery will be installed under Dry Creek, with the collection chamber and pump station placed on the west side of the creek, and outside and above the ordinary highwater mark. Construction of the infiltration gallery will consist of trenching across the creek and installing infiltration pipes under the creek bed. Disturbance within the bed and bank of the creek will occur in August, or when flows are at their lowest. If necessary creek flows, which are regulated by Collins Reservoir, will be temporarily reduced during construction activities within the channel to the minimum required flows per the 1972 CDFG agreement, or as determined by CDFG under the Streambed Alteration Agreement. Creek flows will then be diverted around the construction zone, which is estimated to be approximately 50 feet in width, the distance of the channel. While the flows are diverted around the construction zone, trenching and placement of the infiltration gallery piping can occur without introducing sediment into flowing waters. Prior to removing the diversion, the Creek bed and bank wall be restored in coordination with and to the satisfaction of CDFG through the Streambed Alteration Agreement process. Mitigation Measures 5.4.8 and 5.4.9 address these potential impacts.

The construction of the pump station, infiltration gallery, and pipeline will result in minor and temporary impacts to potential waters of the United States. Within the 7.58-acre Project area, features that would come under jurisdiction of Section 404 of the Clean Water Act include seasonal swales, seasonal creeks, and Dry Creek. Proposed pipeline alignments are designed to avoid potential waters of the U.S. to the maximum extent practical; however, impacts to approximately 0.019 $\pm$ acres of wetlands and other waters of the U.S. are expected to occur. Adherence to the special, general, and regional conditions in the Nationwide 12 permit, and the implementation of Mitigation Measures 5.4.7 through 5.4.11 will result in wetland impacts that are **less than significant with mitigation incorporated.**

(d) The proposed Project consists of an underground pipeline, which will create a number of temporary construction impacts. While scattered use by deer was observed during the field survey conducted in August 2007, it is not anticipated that the Project will have significant impacts to deer or other animal migration as it will be placed underground.

Fish and aquatic insects that inhabit Dry Creek may be affected by trenching for and installation of the pipeline and associated pumps, although these effects will be temporary. This impact can be avoided by scheduling construction during the month of August, when flows are lowest and any aquatic species are least likely to be impacted. After Project completion, BVID will continue to maintain the minimum required water flows in Dry Creek that CDFG requires for fisheries under the 1972 agreement. As discussed above in paragraph (a), Dry Creek is not suitable for salmonids due to excessive water temperatures during the summer months. Therefore, the overall effect after Project completion may be a net benefit for fish in the Yuba River, because it is anticipated that thermal loads from Dry Creek will be reduced. Increases in diversion from Dry Creek will be balanced by a decrease in diversion

from the main stem of the Yuba River and will not result in any impediments to movement (see Mitigation Measure 5.8.9). Impacts will be **less than significant** and no additional mitigation measures are required.

(e) There are no significant conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Although the Yuba County General Plan contains policies to protect oak woodlands and other habitats, these are not codified. As an independent government agency, BVID is not required to comply with discretionary policies in the Yuba County General Plan. **No impact**.

(f) There are no significant conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plans because none exist. Although Yuba and Sutter Counties jointly have begun discussions for a proposed HCP/NCCP, this plan has not yet been adopted nor is adoption anticipated in the next few years due to delays in the planning process. **No impacts**.

**Mitigation and Residual Impact:** Adherence to the following mitigation measures would reduce impacts to less than significant levels. Residual impacts would be less than significant.

**MM 5.4.1** All elderberry bushes occurring within 50 feet of the limits of the construction corridor shall be protected by placing distinctive orange construction fencing and signage to prevent inadvertent impacts to the shrubs. The fencing shall be placed 10 feet from the dripline of the shrubs in order to avoid impacts to their root systems. Construction personnel shall be made aware of the location of the shrubs and advised of their status.

**MM 5.4.2** The pond that occurs within 50 feet of the limits of the construction corridor and shall be protected by placing distinctive orange construction fencing and signage to prevent inadvertent impacts to potential Northwestern Pond Turtle habitat (NWT). The fencing shall be placed 10 feet from the edge of the pond in order to avoid impacts to the shoreline of the pond and the potential NWT habitat. Construction personnel shall be made aware of the location of the pond and advised of its status.

**MM 5.4.3** Prior to ground-disturbing activities in the vicinity of the pond and wetland, a pre-construction survey for the presence of California Black Rails shall be conducted. The survey shall be performed using recorded vocalization since this species responds to these recordings, and shall occur no more than 14 days prior to construction activities taking place.

**MM 5.4.4** Prior to ground-disturbing activities that include tree removal, a pre-construction survey for the presence of Long-eared Owls shall be conducted. The survey shall be conducted in the evening/nighttime, and shall occur no more than 14 days prior to construction activities taking place.

**MM 5.4.5** If the initial construction activities occur between March 1 and July 31, which is the breeding season for raptors and most migratory bird species, pre-construction nesting surveys will be conducted by a qualified wildlife biologist to ensure that raptor nests are not being disturbed during construction operations.

A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (March–April) and no more than 30 days prior to the initiation of these activities during the late breeding season (May–July). During this survey, the qualified wildlife biologist shall inspect all trees in and immediately adjacent to the impact areas for raptor and migratory bird nests.

If the survey does not identify any nesting raptor species on or near the construction site, further mitigation is not required. However, should any raptor species be found nesting on or near the construction site (within 500 feet of construction activities), the following mitigation measures shall be implemented:

1) Prior to any grading activities, BVID, in consultation with the CDFG, shall avoid all birds of prey or migratory bird nest sites located in the construction area during the breeding season while the nest is occupied with adults and/or eggs or young. The occupied nest shall be monitored by a qualified wildlife biologist to determine when the nest is no longer used. Avoidance shall include the establishment of a no-disturbance buffer zone around the nest site. The size of the buffer zone shall be determined in consultation with the CDFG. Highly visible temporary construction fencing shall delineate the buffer zone.

2) If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after July 31 or until the adults and young are no longer dependent on the nest site, as determined by a qualified biologist.

**MM 5.4.6** Trees to be preserved within the Project area and immediately adjacent to the construction zone should be protected with high-visibility fencing placed at least one foot outside the dripline. Excavating or trenching within the dripline of a protected tree should be avoided whenever practical. However, if unavoidable, any authorized cut or fill occurring within the dripline of any preserved tree should be supervised by an experienced botanist, Registered Professional Forester (RPF), or by an International Society of Arboriculture (ISA) Certified Arborist. Roots larger than one inch in diameter shall be clean cut with pruners, loppers, or handsaws after trenching. If construction equipment cuts any roots larger than three inches in diameter, the root should be cut squarely to remove any scraps, rips, or breaks. Pruning, cabling, and other corrective measures for preserved trees should be specified by an experienced botanist or by an RPF or arborist, and should conform to the pruning standards of the Western Chapter of ISA.

**MM 5.4.7** Prior to ground-disturbing activities, the Project Manager will ensure that a secure development barrier will be placed around the seasonal swales and wetlands that will not be impacted. There are no permanent changes to surface hydrology anticipated from the installation of the pipeline that would adversely affect these protected features. During construction activities, the seasonal swales and wetland areas will be protected with the installation of storm wattles, silt fencing, or other sediment-catching materials, along with orange construction fencing to prevent disturbance of these areas. Adequate erosion and sediment controls (i.e., storm wattles) will be installed around the periphery of all tributaries and wetlands, and will be routinely managed to prevent disturbances to said areas.

To avoid sediment or other materials from entering these habitats, if there is a build-up of soils or other materials along the storm wattles, these materials will be graded away from the protected areas routinely and/or prior to a storm event. A staging area, upland away from these protected areas and within the project corridor, should be established for all construction equipment and refueling operations to avoid pollutants from entering any sensitive habitats.

**MM 5.4.8** Prior to any construction activities, the Project Manager will obtain a Streambed Alteration Agreement from CDFG for work within Dry Creek and the other identified watercourses. The Agreement may include additional mitigation measures and construction specifics that can further insure impacts will be less than significant.

**MM 5.4.9** Disturbance to the bed and bank of Dry Creek associated with installation of the infiltration gallery will occur in August (or as otherwise determined by CDFG). If necessary, and if approval from CDFG is received, Creek flows, which are regulated by Collins Reservoir, will be temporarily reduced during construction activities within the channel to the minimum flows required by CDFG. Creek flows will then be diverted around the construction zone, which is estimated to be approximately 50 feet in width. The construction zone shall be limited to a 50-foot corridor within the streambed. Sandbags will be placed across the active channel above and below the construction zone and will be lined with plastic to ensure flows are adequately blocked and diverted. A diversion pipe will be installed to divert Dry Creek flows around the construction zone. Immediately downstream of the downstream diversion barrier, a silt curtain will be installed to ensure any inadvertent release of sediment is filtered out before entering the stream system below the construction site. Once construction is complete, and the bed and bank have been restored and stabilized to CDFG's satisfaction, the diversion structures and sediment curtain shall be removed. All construction activities within the stream zone, including bed and bank, shall be coordinated with CDFG.

**MM 5.4.10** The two seasonal creek crossings within the private campground will be constructed during the winter months from November through March, both to comply with landowner requests and to take advantage of typically lower flows

outside of storm events. The following conditions, in addition to any measures required by the CDFG Streambed Alteration Agreement (MM 5.4.8), are required for construction activities associated with the two seasonal creek crossings:

1) No construction within the creek zone (including bed and bank) shall occur within 24 hours of a forecasted storm event. Additionally, prior to any storm event, any disturbed soils shall be stabilized or covered to prevent sediment from entering the stream.

2) Prior to construction activities, a temporary diversion pipe shall be placed 15 feet above and below the pipeline alignment to reroute any existing flows around the construction zone to ensure that disturbed soils will not enter flows and impact water quality.

3) The bed and bank of the creeks shall be restored and stabilized consistent with requirements of the Streambed Alteration Agreement prior to removing the diversion pipe and restoring flows to the channel.

**MM 5.4.11** Prior to construction activities, BVID shall provide notification and obtain authorization from the U.S. Army Corps of Engineers ("USACE") under Nationwide Permit 12 for Utility Line Activities. The BVID shall also contact the regional USACE and the CVRWQB to obtain, or have waived, a Section 401/404 water quality certification. The following conditions of Nationwide Permit12 shall be implemented during construction within wetlands and waters of the United States:

1) The Wetland Delineation prepared by Marcus H. Bole and Associates shall be submitted to the USACE for verification.

2) Excavated material shall be placed on an upland site and within the 30-foot wide construction corridor, and

   a. All excavated material shall be stabilized with straw bales, filter cloth, etc. to prevent reentry into the waterway.
   b. All excavated material will be placed back into the trench to the original contour and all excess excavated material shall be completely removed from the wetlands within 30 days after the pipeline has been laid through the wetlands areas.

3) Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high-water mark, must be permanently stabilized at the earliest practicable date. Work shall be performed within waters of the U.S. during periods of low- to no-flow whenever possible.

4) Heavy equipment working within the wetlands shall be placed on mats or some other method that will minimize soil disturbance.

## 5.5 CULTURAL RESOURCES

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | | X | | | |
| **b.** Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | | | X | | |
| **c.** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | X | | |
| **d.** Disturb any human remains, including those interred outside of formal cemeteries? | | | X | | |

**Setting:** In this part of Yuba County, prehistoric-period habitation sites are primarily found adjacent to streams or on ridges or knolls, especially those with a southern exposure. This region is known as the enthnographic-period territory of the Nisenan, also called the Southern Maidu. The Nisenan had permanent settlements along major rivers in the Sacramento Valley and foothills, and would travel yearly into higher elevations to hunt or gather seasonal plant resources. The proposed linear Project area, paralleling Dry Creek and Yuba River, encompasses broad to steep slopes between 150 feet and 175 feet elevation and receives predominantly southern exposure. Given the environmental setting, there is moderate to high potential for prehistoric or ethnohistoric-period Native American sites in the project area.

The *1867 GLO plat of T 16N/R 5E* shows surface diggings, cultivated fields, and a residence within the immediate or surrounding vicinity of the project area. *USGS 1885-86 Smartsville Sheet and 1909 Browns Valley quadrangle* illustrates the vicinity as being devoid of cultural evidence. Still, there are identified resources within a quarter mile of the linear project area. Given the recorded resources and the known patterns of local historic land use, there is a moderate to high potential for identifying historic-period cultural resources in the project area.

Gold was first discovered in the Yuba region in 1848. In the Browns Valley region, rich deposits of gold-bearing quartz were reportedly first found in 1850. By 1851, a crude mill to crush quartz was constructed in Browns Valley. The Sweet Vengeance Mine, in production from 1863 to 1867, was one of the important mines of the 1860s. The decline in mining activities began around 1875. With the decline of mining, the economic base shifted to agriculture. Cattle raising for both beef and dairy, as well as the cultivation of alfalfa, grains, nuts, grapes, and citrus became widespread. In order to provide a reliable water source for agricultural production, the Browns Valley Irrigation District was established in 1888. The Browns Valley Ditch was initiated in 1890 to supply water for the region. The water for the ditch came from the Yuba River, northeast of the project area. Water was first transported through the ditch in April 1892. Water is currently supplied to the Browns Valley Ditch from Collins Reservoir. At present there are 55,000 acres within BVID, which are served by 200 miles of open ditches and 70 miles of pipeline.

A systematic intensive pedestrian survey of the 30-foot-wide corridor that corresponds to the proposed pipeline route was performed on March 4, 2008, by Pacific Legacy, Inc. The field survey identified seven cultural features within the pipeline corridor, five of which are segments of roads most likely related to agricultural activities in the area. The road segments were not formally recorded. An earthen dam, measuring 4–5 feet high and 130 feet in length, was noted. A large channel cuts through the dam on the eastern side and a narrow gap, possibly a cow path, exists on the western side. Also noted was a ditch, measuring 3 feet wide and 18 inches deep, with a U-shaped berm on the east side. The ditch may have been associated with historic mining or irrigation activities. The dam and the ditch are not recorded resources and no other information is known about their use or origins; both sites were recorded by Pacific Legacy as a result of this survey.

**Impact Discussion:**

(a) A records search performed by the North Central Information Center identified no historic resources within the defined Project area. However, there are recorded resources within a quarter mile of the Project area. To further investigate the cultural resource potential of the Project area, a field survey of the entire Project route was performed in April 2008. Of the seven historic resources identified in the Project area, two were identified by Pacific Legacy, Inc. as being potentially significant: an earthen dam and a water conveyance ditch. Should the Project route necessitate disturbance to either of these resources, Mitigation Measure 5.5.1 will ensure that impacts will be **less than significant with mitigation incorporated**.

(b) No archaeological resources were identified or previously recorded in the Project area; the proposed project is not expected to cause a substantial adverse change in the significance of an archaeological resource. However, the records search provided by the North Central Information Center identified the area as having a moderate-to-high potential for prehistoric- or ethnohistoric-period Native American sites in the area. Because the project requires altering the natural ground surface, and because subsurface findings cannot be determined prior to ground disturbance, the possibility remains that archaeological sites now buried or obscured by vegetation would be exposed and damaged during construction activities. Damage to, or destruction of, such resources is considered a potentially significant impact. Implementation of Mitigation Measures 5.5.2 would reduce this impact to a **less than significant** level.

(c) No paleontological resources have been recorded within the Project area; however, because the project consists of ground disturbing activities such as trenching, there is the potential for impacts. The potential for buried remains exists and these could be unearthed during construction activities such as trenching. The direct or indirect destruction of paleontological resources or a unique geologic feature would be a significant impact. The impact of the project can be reduced to **less than significant** by implementing Mitigation Measure 5.5.2.

(d) Interred human remains are not known to be located within or near the Project area; thus, no significant impacts are anticipated. However, it is possible that construction activities could result in the inadvertent discovery of remains during construction activities. This potential impact could potentially be significant. The impact will be reduced to a **less than significant** level with the implementation of Mitigation Measure 5.5.3.

**Mitigation and Residual Impact:** The following mitigation measure would reduce impacts to cultural resources to a less than significant level:

**MM 5.5.1** If the dam and the irrigation ditch identified in the report titled "Cultural Resources Inventory report for the Browns Valley Irrigation District Tail Water Recapture Project by Pacific Legacy Inc., April 2008," cannot be avoided; then these resources shall be thoroughly evaluated by a qualified cultural resources professional prior to any ground disturbing activities in the vicinity. No work shall occur in the area until authorized by the qualified professional.

**MM 5.5.2** Implement a plan to address the inadvertent discovery of buried cultural resources. The Project Manager will take the following steps during Project construction. The Project Manager shall require that if cultural resources—such as chipped or ground stone, midden deposits, historic debris, building foundations, human bone, or paleontological resources—are inadvertently discovered during ground-disturbing activities, the construction crews will stop all work in that area and within 100 feet of the find until a qualified archaeologist or paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with BVID and other appropriate agencies. Should any artifacts be discovered, and their disposition be necessary, the Project Manager shall consult with culturally affiliated Native Americans.

**MM 5.5.3** Implement a plan to address the discovery of human remains. The Project Manager will take the following steps during construction activities. If remains of Native American origin are discovered during project construction, it will be necessary to comply with state laws concerning the disposition of Native American burials, which fall within the jurisdiction of the NAHC of California (Public Resources Code). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

1. The Yuba County Coroner has been informed and has determined that no investigation of the cause of death is required.

2. If the Corner determines or has reason to believe that the remains are of Native American origin, then the Corner must contact BVID and the NAHC within 48 hours to inform them of that determination.

3. After being informed by the Corner, the NAHC shall identify and notify the most likely descendent. The most likely descendant then will then make a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98. The most likely descendant may request to make a site inspection and BVID will provide access to the site for an inspection as soon as possible.

4. If the NAHC has been unable to identify a descendent or the descendent fails to make a recommendation within 48 hours after being notified by the

commission, then BVID may rebury the remains with appropriate dignity outside the project area in accordance with Public Resources Code section 5097.98(e).

## 5.6 GEOLOGY AND SOILS

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Expose people or structures to potential adverse effects, including the risk of loss, injury or death involving: | | | | X | |
| **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 anther substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | X | |
| **ii)** Strong seismic ground shaking. | | | | X | |
| **iii)** Seismic-related ground failure, including liquefaction. | | | | X | |
| **iv)** Landslides. | | | | X | |
| **b.** Result in substantial soil erosion or the loss of topsoil? | | X | | | |
| **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? | | | | X | |
| **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? | | | | X | |
| **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? | | | | X | |

**Setting:** On-site soils, as described in the *Soil Survey of Yuba County, California* (published by the USDA Natural Resources Conservation Service), are predominantly Redding-Corning complex 3–8 percent slopes. This soil unit is on high fan terraces. This unit is about 35 percent Redding gravelly loam and 35 percent Corning gravelly loam with small "inclusions" of Corning, Redding, and unnamed soil units. The "unnamed" inclusions have been identified as "hydric" soils within seasonal wetlands due to ponding for long durations, and a number of these inclusions were observed in the Project vicinity. Except for the "inclusions," the Redding-Corning soils are identified as "hydric" in the *Hydric Soil Listing for Yuba County*. Across the Yuba River from the Project to the south are vast areas of dredged mine tailings, known as the Yuba Gold Fields.

**Impact Discussion:**

(a) According to the Yuba County General Plan, the Project area is located in an area classified as a low-severity earthquake zone. No active faults are known to exist near the Project area (California Department of Conservation, 1997). The Project area and the surrounding area

are considered to have low seismic risk with respect to such effects as fault rupture hazard, strong seismic ground shaking, and ground failure (liquefaction). Implementation of the proposed Project does not include the development of any structures that will be used by people, and the Project has no components or features that will increase exposure of people to geologic or related hazards (i.e., liquefaction, expansive soils) compared to current conditions in the project area. Therefore, implementation of the proposed Project would not result in an increased exposure of people or structures to the above-mentioned geologic hazards. There would be **no impact**.

(b) The Project would require temporary disruption of soils, including excavation, stockpiling, and replacement of soils. Soils in the Project area have a moderate-to-high level of erosion hazard, especially where vegetation is removed. Mitigation Measures 5.8.1 through 5.8.5 (see Hydrology section) will reduce the impact to a **less than significant** level.

(c) The Project is not located on an unstable geologic unit. The Yuba County General Plan notes that there is a low potential for land subsidence in the Project area (YCGP, Volume I, Section 2.5.3). The proposed Project would have **no impact**.

(d) The Project site is not located on soils that are considered expansive and would not create a substantial risk to life or property. The Project would have **no impact**.

(e) No housing or development requiring the installation or utilization of septic tanks or wastewater disposal systems is proposed with this Project. **No impact**.

**Mitigation and Residual Impact:** Mitigation for the impact (b) above is provided in the Hydrology Section and adherence to those mitigation measures will reduce impacts to geological processes to less than significant levels. No residual impact is anticipated.

## 5.7 HAZARDS AND HAZARDOUS MATERIALS

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | X | |
| **b.** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment? | | | X | | |
| **c.** Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | X | |
| **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? | | | | X | |

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **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? | | | | X | |
| **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? | | | | X | |
| **g.** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X | |
| **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? | | | | X | |

**Setting:** The proposed Project involves the installation of a water line through diverse rural landscape that includes grazing land, oak woodlands, riparian vegetation, and a private RV campground. Beale Air Force Base is located approximately five miles south of the Project site. Additionally, two small county airports are located approximately 10 miles to the West: Yuba County and Sutter County Airports. Historic activities in the vicinity of the Project include extensive hydraulic mining and dredging activities. To the South and West of the Project site are the Yuba Gold Fields, an area containing vast deposits of mine tailings and dredged materials.

**Impact Discussion:**

(a, b, d) The Project would not directly generate or involve the routine transfer or disposal of hazardous materials. Construction of the pipeline will involve ground disturbance that could potentially expose previously unknown sources of contaminants. Additionally, construction activities will involve small quantities of commonly used materials such as fuels and oils to operate construction equipment. However, this impact is considered less than significant because standard construction procedures will be implemented to reduce the emissions of dust and other pollutants during construction of the proposed project and to contain a spill of fuel or other hazardous materials stored on the Project site. Underground Service Alert North of Northern California and Nevada will be contacted at least 48 hours before construction to allow underground utilities to identify the location of their underground facilities and thus greatly reduce the possibility of hitting an underground source of hazards such as a gas line. Any potentially contaminated areas, if encountered during Project construction, will be evaluated by a qualified hazardous material specialist in the context of applicable local, state, and federal regulations governing hazardous waste. Impacts will be **less than significant**.

(c) The proposed Project will not generate any hazardous emissions or handle hazardous substances or waste, and therefore will have **no impact**.

(e) The Project site is located more than 10 miles east of the Yuba and Sutter Counties' Airparks, approximately 5 miles north of Beale Air Force Base, and outside any airport land use plan or safety zone. There would be **no impact**.

(f) Review of the California Aviation System Plan (California Department of Transportation, 2006) and the California Airports List (Department of Transportation website, 2006) does not indicate the presence of any private airstrips in the vicinity of the Project area. The proposed Project would have **no impact**.

(g) The proposed Project is not located on any public roadways or within any emergency evacuation routes. There will be **no impact**.

(h) The proposed Project does not involve further development and therefore would not expose people or structures to a significant loss, injury, or death attributable to wildfires. The proposed Project would have **no impact**.

**Mitigation and Residual Impact:** Project impacts would be considered less than significant and no mitigation would be necessary.

## 5.8 HYDROLOGY AND WATER QUALITY

| **Will the proposal result in:** | **Potentially Significant Impact** | **Less Than Significant with Mitigation Incorporated** | **Less Than Significant Impact** | **No Impact** | **Reviewed Under Previous Document** |
|---|---|---|---|---|---|
| **a.** Violate any water quality standards or waste discharge requirements? | | X | | | |
| **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? | | | | X | |
| **c.** Substantially alter the existing drainage pattern of the 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? | | X | | | |
| **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? | | | | X | |
| **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? | | | | X | |
| **f.** Otherwise substantially degrade water quality? | | X | | | |

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **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? | | | | X | |
| **h.** Place within a 100-year flood hazard area structures, which would impede or redirect flood flows? | | | | X | |
| **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? | | | | X | |
| **j.** Inundation by seiche, tsunami, or mudflow? | | | | X | |

**Setting:** The Project location is adjacent to the Lower Yuba River, near its confluence with a small tributary, Dry Creek. This reach of the Yuba River is approximately 10.5 miles long, flowing out of Englebright Reservoir from the northeast and running southwest down to Daguerre Diversion Dam. Several miles downstream of the diversion dam, the Yuba River joins the Lower Feather River at Marysville/Yuba City.

The Yuba watershed drains approximately 1,300 square miles on the western slope of the Sierra Nevadas, from a maximum elevation of 9,100 feet to about 30 feet at the mouth. Water quality of the Yuba River is affected by contemporary as well as historic land uses in the watershed. Historic hydraulic mining and other types of resource extraction have contributed arsenic and mercury to the watershed that continue to plague the river today. According to the most current 305(b) list available (2002), the 10-mile reach of the Lower Yuba River below Englebright Dam is impaired due to metal (including mercury) and pesticide contamination. The probable sources contributing to impairment include resource extraction, agriculture return flows, and urban-related runoff/stormwater (U.S. EPA, 2007).[5] Based on the 2002 Assessment, the following uses are not supported in this reach: cultural/ceremonial, flood peak attenuation/flood water storage, wetland habitat, and water quality enforcement. Several other uses are considered threatened,[6] including overall fish, shellfish, and wildlife protection and propagation uses; recreational swimming; commercial and sport fishing; water contact recreation; warm freshwater habitat; and wildlife habitat (U.S. EPA, 2007).

BVID owns and operates Virginia Ranch Dam, which impounds Merle Collins Reservoir on Dry Creek in Yuba County. The District holds Licenses 13608, 13609, and 13610 (Applications 13130, 13873, and 23757). Licenses 13608 and 13609 together authorize diversion to storage from Dry Creek of up to 51,900 acre-feet in Collins Reservoir between October 1 and April 30 of the succeeding year. The licenses also permit BVID to withdraw up to 35,600 acre-feet from storage each year for irrigation, domestic, and recreation uses. License 13610 authorizes BVID to directly divert from Dry Creek at a rate of up to 44.4 cfs for irrigation, domestic, and stock watering uses and a maximum diversion of 11,000 acre-feet annually. The season of diversion

[5] U.S. Environmental Protection Agency (U.S. EPA). 2007. 305(b) Lists/Assessment Unit Information Year 2002. Water Quality Attainments for Lower Yuba River. (2002 Assessment) Available at http://iaspub.epa.gov/tmdl/enviro_v2.wcontrol?p_id305b =CAR5153000020020702135622_00. Accessed November 15, 2007.

[6] Threatened is defined as "All designated uses are currently met but water quality conditions appear to be declining."

under License 13610 is November 1 to June 30 of the succeeding year. Diversions under License 13610 are limited to irrigation of a maximum of 11,000 acres per year. In addition, the District holds Permit 18861 (Application 27302), which authorizes direct diversion and storage of water from Dry Creek for power production. The District also holds License 2182 (Application 8986) for direct diversion of up to 3 cfs for irrigation and domestic uses from Tennessee Creek. BVID's water rights for storage and diversion from storage in Collins Reservoir are the source of tailwater that would be captured and recirculated by the Project.

The proposed season of operation for the Dry Creek Recapture Project would be in accordance with the year-round right of diversion under BVID's licensed appropriative water rights for releases from Collins Reservoir. Most withdrawals from Collins Reservoir under Licenses 13608 and 13609 generally occur during the irrigation season, which, while weather driven, typically runs from April through October of each year. However, to avoid diverting any natural flow from the Dry Creek system, the Project will only operate in the summer and fall dry season of each year, when no precipitation and runoff occurs. The Project would operate only when return flows are available in excess of required releases as determined by the gage installed above the diversion point.

A 1953 agreement with Sydney V. Smith (Smith Agreement) requires BVID to bypass up to 4.46 cfs at the Virginia Ranch Dam during the irrigation season commencing in April to satisfy senior water rights along the Smith Ditch, which diverts water from Dry Creek six miles downstream of the dam and upstream of the site of the proposed Project. The 1972 Agreement with CDFG requires BVID to bypass sufficient water to provide a flow of 3.3 cfs or the natural inflow to Collins Reservoir, whichever is less, at Sicard Flat Ditch three miles downstream of Virginia Ranch Dam at all times except in years that the reservoir does not spill by June 1. The CDFG Agreement allows the minimum bypass flow requirement to be reduced to 1.0 cfs in years that Collins Reservoir does not spill by June 1. Although these agreements provide for releases at Virginia Ranch Dam, which is well upstream of the Project, the amount of tailwater recovered under the Project would be determined by the difference between the 3.3 cfs of required bypass flow and the total flow at the gage to be installed above the proposed pumping station.

No unauthorized diversions of the natural flow of Dry Creek would occur under the Project. In accordance with the 1972 CDFG Agreement and the 1953 Smith Agreement, flows in Dry Creek below Virginia Ranch Dam consist only of dedicated releases from Collins Reservoir (which are then rediverted out of Dry Creek) and of irrigation tailwater resulting from reservoir releases that flow back into the Dry Creek system below the dam. The only tributary to the system below Collins Reservoir is Little Dry Creek, a small seasonal stream that has no natural flow during the dry season except for tailwater. Because flows from Collins Reservoir are regulated solely by BVID for irrigation purposes and to satisfy its bypass flow requirements below the dam, a flow gage located directly upstream of the Project's infiltration gallery will enable BVID to recapture only those flows attributable to tailwater in the system that are in excess of flow requirements met from releases through Virginia Ranch Dam. Because, during the dry season, flows in excess of the required releases from Collins Reservoir are made up entirely of irrigation tailwater draining back into the system, the difference between the minimum flow requirement and the flow measured at the gage will be comprised solely of tailwater from irrigation deliveries that are to be recaptured for further irrigation uses via the Project and Pumpline Canal.

Water quality studies specific to the Project location include monitoring of Dry Creek at the confluence with the Yuba River. Data suggests that adjacent land use, namely agricultural irrigation, may contribute to water quality issues in the creek during summer months. Sampling conducted by BVID during 2001 documented water temperatures at the mouth of Dry Creek during August to be between 7º and 14º C higher than the creek's upstream source, the Collins Reservoir. During certain periods of the year, inflows from Dry Creek have significant effects on heat gain of the Yuba River.[7] According to the data developed by BVID, as the 2001 summer season progressed, Collins Reservoir temperatures increased and the magnitude of the discrepancy lessened such that by late September temperatures at both the Reservoir and the mouth of Dry Creek were around 20º C. Such conditions are unsuitable for salmonids and steelhead.[8] Irrigation return flows filter back into Dry Creek at various locations between Collins Reservoir and the Project location at the Highway 20 overpass, and are the most likely contributors to the increased water temperature observed in Dry Creek during the mid-summer. In addition to increasing stream temperatures, the influx of tailwater also introduces sediment, nutrients, and other constituents to Dry Creek approximately 1.8 miles upstream of its confluence with the Yuba River.

The waters of the lower Yuba River are under the authority of both state and federal entities. Per Section 401 of the Clean Water Act (CWA), a Section 404 permit is required from the United States Army Corps of Engineers (USACE) when a project requires fill or other modification of waters of the U.S., including wetlands. The Central Valley Regional Water Quality Control Board (CVRWQCB) has authority over water allocation and water quality protection of the river, and administers and provides certification per the CWA.[9] Recently, the California State Water Resources Control Board (SWRCB) approved a 2006 pilot program for the Yuba County Integrated Regional Water Management Plan (IRWMP), which will address local water resource planning and management needs for the next 20 years (through 2025). It is intended to help forecast and plan for water demands to fulfill a variety of needs (urban, agricultural, flood protection, ecosystem restoration, and recreational).[10]

Additionally, the Lower Yuba River Accord has been developed after 15 years of collaboration between 17 state and local agencies and organizations. The Lower Yuba River Accord is a landmark agreement and plan that provides for:

1. Higher instream flow requirements to protect lower Yuba River Chinook salmon, steelhead, and other fish species, ranging from 260,000 acre-feet in a dry year to more than 574,000 acre-feet in a wet year—an increase of 25,000 acre-feet in a dry year to more than 170,000 acre-feet in a wet year.

2. Improved water supply reliability for the Department of Water Resources and U.S. Bureau of Reclamation, including a commitment of 60,000 acre-feet per year for the Environmental Water Account and up to an additional 140,000 acre-feet of water in dry years for the State Water Project and Central Valley Project.

[7] Lower Yuba River Accord EIR/EIS. June 2007.
[8] Boles, Gerald. 1997. Upper Sacramento River Watershed Water Temperature Assessment.
[9] Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a federal permit (ex. USACE) to conduct activity that may result in a discharge of a pollutant into waters of the U.S. to obtain certification from the State in which the discharge originates. As a result, proposed fill in waters and wetlands requires coordination with the appropriate RWQCB.
[10] Yuba Country Water Agency (YCWA). 2007. [Online] URL: www.ycwa.com Accessed November 15, 2007.

3. A $6 million long-term lower Yuba River fisheries monitoring, studies, and enhancement program.

4. Improved water supply reliability for Yuba County farmers, along with a responsible conjunctive use program to improve water use efficiency for local farmers.

5. A secure funding source for YCWA and local irrigation districts to finance conjunctive use and water use efficiency activities, levee strengthening, and other water management actions in Yuba County.

Impacts analyzed in this section include impacts from construction and use of the pumping station, pipeline, and infiltration gallery.

**Impact Discussion:**

(a, e, f) The Project involves a certain amount of excavation (approximately 11,000 linear feet), stockpiling, and movement of soil. Such soil disturbance carries with it the risk of unintended discharges into nearby waterways via overland runoff of soil if appropriate measures are not taken to secure loose materials. Such discharges would be prevented, however, through the use of Best Management Practices (BMP). The Project construction area consists of a total of 7.58± acres of potential disturbance. Prior to initiation of the project, BVID will contact the CVRWQCB regarding the need to apply for a National Pollutant Discharge Elimination System (NPDES) permit. In addition, the BMPs described below in Mitigation Measures 5.8.1 through 5.8.5 will be stringently adhered to, as will any additional measures that may be imposed by an NPDES permit or any other regulatory approval.

The proposed Project also includes construction activities involved with the installation of an infiltration gallery composed of permeable material within the bed and bank of Dry Creek, which could result in sedimentation and impacts to water quality. Stream water will leach down into a collection pipe that carries water to the pumping plant, allowing extraction of the water from the creek. Recapture water will be diverted and pumped only when flows at the infiltration gallery exceed the minimum bypass flow identified in the agreement with CDFG (MM 5.8.8). Based on historical irrigation water deliveries and water rights limitations, BVID will divert a maximum of 10 cfs of tailwater through the Project. Because Dry Creek's water quality, and particularly its water temperature and pollutant load, is likely being affected by local agricultural inputs, removal of this water is not expected to adversely affect water quality. It may, in fact, improve water quality, particularly downstream at the confluence with Yuba River where a reduced volume of lower-quality, higher temperature water would enter the river.

During times when the Project will be operating, the summer and fall irrigation periods, flows in Dry Creek consist of return flows from deliveries of irrigation water and dedicated in-stream releases from Collins Reservoir. The only tributary to the system below Collins Reservoir is Little Dry Creek, a small intermittent stream that consists of tailwater during the irrigation season. Because BVID's releases from Collins Reservoir during the irrigation season consist of deliveries for irrigation purposes, the minimum flow required by CDFG,

and the bypass for the Smith Agreement, a flow gage placed directly upstream of the infiltration gallery will enable BVID to measure and recapture only those flows that are in excess of the required CDFG and Smith bypasses from Collins Reservoir. Because, during the dry season, flows in excess of the required bypass from Collins Reservoir are made up entirely of irrigation return flows draining back into the system, the difference measured at the gage will reflect the amount of tailwater that can be reclaimed for further irrigation uses via the Project and Pumpline Canal. Mitigation Measure 5.8.9 has been added to require a flow gage be located just upstream of the infiltration gallery.

Construction activities for installing the infiltration gallery will involve creek bed and bank disturbances, which may temporarily introduce turbidity and contaminants from loosened sediments into Dry Creek within a localized area approximately 100 feet long. The construction activities will occur during the month of August, or when flows are at their lowest. Additionally, the District will be required to work with CDFG to obtain a Streambed Alteration Agreement for the Project, which may require specific mitigation measures for the proposed disturbance to the Creek's bed and bank. These impacts are further described in the Biological Section, and Mitigation Measures 5.4.8 through 5.4.11 address potential impacts resulting from these activities. Impacts will be **less than significant with mitigation incorporated.**

(b) The tailwater proposed for recapture from Dry Creek and reuse by BVID is not a major contributor to groundwater supplies and will not affect aquifer volume or local groundwater table level. **No impact**.

(c, d) The Project includes installing an infiltration gallery under Dry Creek, which will result in a temporary alteration of the water course. However, the contour of the creek bed will be restored to its pre-existing form following completion of the Project. Thus, Dry Creek's course will not be permanently affected by the Project. In addition, BMPs and any additional measures imposed by a Streambed Alteration Agreement will be used to ensure that there are no unintended or indirect effects on the course of either Yuba River or Dry Creek, as detailed below in the mitigation measures. **Less than significant with mitigation incorporated**.

(g–j) According to GIS data from the Federal Emergency Management Agency (FEMA), dated May 1982, the proposed Project area lies adjacent to the 100-year flood zones of the Yuba River and Dry Creek. The pipeline route may cross through the Yuba River 100-year flood zone at the west end of the Project site, and through the Dry Creek 100-year flood zone at the northeast end of the Project. However, the only new above-ground structure that will be constructed will be located at the northernmost end of the project, adjacent to Highway 20. This location is outside of the 100-year flood zone of both waterways. The pipe will be placed subsurface and the land contour will be restored following completion of the Project (see MM 5.8.3); thus, there will be no structures or obstacles within the 100-year floodplain that may impede or redirect flood flows or create hazardous flooding conditions. **No impact.**

**Mitigation and Residual Impact:** The following mitigation measures would reduce impacts to hydrology and water quality resources to a less than significant level:

**MM 5.8.1** All construction activities, excepting the installation of the pipeline section located within the private RV campground, will be conducted during the dry season

(typically May–October) when rainfall, which may dislodge loose soil and create runoff, is least likely to occur.

In order to minimize impacts to guests of the campground, installation of the pipeline through this facility will occur during the off-season. Mitigation measures 5.8.2 through 5.8.6 shall be adhered to at all times during construction activities. Additionally, the following measures shall be implemented:

1) No construction shall occur within 24 hours of forecasted rain events.

2) Prior to all rain events, disturbed soils shall be prevented from leaving the site and entering watercourses by installing appropriate erosion control measures such as silt fencing, straw wattles, or similar methods. Additionally, all spoil piles shall be covered with plastic to prevent soil erosion from the immediate site.

3) During storm events, all erosion control BMPs shall be monitored and maintained to ensure that all measures are performing properly.

**MM 5.8.2** During construction, excavated (loose) soil will be protected with appropriately installed sediment control methods such as straw wattles, silt fencing, and/or fiber matting.

**MM 5.8.3** Following backfilling of buried pipe, excess excavated soils will be smoothed out on site, adhering as much as possible to the preexisting topographic relief. By maintaining the original land contours (e.g., avoiding the creation of spoil piles, etc.), the pattern of overland flow of water from precipitation will be unaffected and current drainage patterns will be preserved.

**MM 5.8.4** Excess soil will be confined to upland areas only and will be placed well away of the high water mark of the waterways.

**MM 5.8.5** Upon completion of the Project, areas of disturbed soil, including locations of buried pipe, temporary staging areas, and areas containing excess soil, will be secured with sterile straw mulch and seeded with a native plant mix either manually or through hydroseeding. Such revegetation efforts will prevent soil erosion during the subsequent rainy season as well as ensure revegetation during the following growing season.

**MM 5.8.6** The Project Manager will monitor erosion control methods at revegetation sites during the rainy season to ensure their efficacy and to ensure that erosional runoff is not occurring.

**MM 5.8.7** Prior to any construction activities, the Project Manager shall contact the CVRWQCB to determine whether a NPDES permit is required for Project construction. Should a NPDES permit be required, the Project Manager shall obtain the permit and adhere to the requirements in that permit.

**MM 5.8.8** Prior to any recapture of tailwater associated with this Project, the District will consult with SWRCB to determine whether or not BVID must file a petition to add a point of rediversion on Dry Creek under its appropriative water rights licenses. Should a petition to add a point of rediversion to its water rights licenses be required by the SWRCB, BVID will file obtain that petition and obtain approval from the SWRCB before pumping and conveying any tailwater using the Project facilities.

**MM 5.8.9** BVID will develop and adhere to an operating and monitoring program to ensure that only tailwater from its irrigation deliveries from Collins Reservoir is captured for recirculation. This operating and monitoring program is outlined below:

1) The Project will operate only in the irrigation season when BVID is delivering water to customers from Collins Reservoir.

2) Return flows will be monitored at key locations along Dry Creek and other key locations within BVID. Pumping under the Project will be limited based on observed return flows and will be limited to a maximum rate of 10 cfs.

3) Prior to recapture of any tailwater from Dry Creek, BVID will install a flow gage directly upstream of the infiltration gallery to monitor flows and to ensure that the quantity of water recaptured from the creek does not exceed the tailwater portion of the flow. The gage shall be monitored daily during the irrigation season when pumping occurs.

4) Recapture under the Project will occur only when flow in Dry Creek is greater than the minimum bypass flow requirement identified in the agreement with CDFG. This condition will ensure that BVID is fulfilling its fish flow obligations under the agreement.

5) Any time that BVID is recapturing tailwater at the Project pumping station, there will be an equal and concurrent reduction in BVID's diversions from the Yuba River at its Pumpline facilities.

## 5.9 LAND USE AND PLANNING

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Physically divide an established community? | | | | X | |
| **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? | | | | X | |
| **c.** Conflict with any applicable Habitat Conservation Plan or Natural Communities Conservation Plan? | | | | X | |

**Setting:** The proposed Project involves the installation of a water line through diverse rural landscape that includes grazing land, oak woodlands, riparian vegetation, and a private RV park. Beale Air Force Base is located approximately five miles South of the Project site. Additionally, two small county airports are located approximately ten miles to the West: Yuba County and Sutter County Airports. Historic activities in the vicinity of the Project include extensive hydraulic mining and dredging tailings. To the South and West of the Project site are the Yuba Gold Fields, an area containing vast deposits of hydraulic mining sediments and dredged materials. Hammon Grove Park, a county-operated facility, is located directly across Dry Creek and approximately 0.25 miles east of Project. Hammon Grove Park is a 43-acre day-use-only park focusing on the historical mining activities in the region.

**Impact Discussion:**

(a) The Project would consist of installing an underground water pipeline primarily through rural landscape that includes grazing land, oak woodlands, riparian vegetation, and a private RV campground. Although the Project does traverse an established recreation campground, the pipeline is underground and will not result in any permanent division of community. There will be **no impact.**

(b) The proposed Project will occur mostly on privately owned land via an easement that has been granted to BVID for access and use of the properties. Land use on private properties is generally subject to the Yuba County General Plan and Zoning Ordinance. However, installation of water production-related facilities by independent government agencies such as BVID are not subject to local land use regulations. Therefore, the proposed Project will not affect any land use plan, policy, or regulation that is applicable. No change in land use is proposed nor would any result from the installation of the Project. There will be **no impact**.

(c) Although a preliminary planning process to develop a joint Habitat Conservation Plan or Natural Community Conservation Plan at some future date has been started by Yuba and Sutter Counties, it has not yet been released to the public nor approved by relevant agencies. Therefore, there is no such plan that is applicable to the project area and the proposed Project will not conflict with any such plan. There will be **no impact**.

**Mitigation and Residual Impact:** The proposed Project would not result in any adverse impacts to Land Use; therefore, no mitigation is required.

## 5.10 NOISE

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **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? | | X | | | |
| **b.** Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | | X | | |
| **c.** A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | X | | |
| **d.** A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | X | | |
| **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? | | | | X | |
| **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? | | | | X | |

**Setting:** The proposed Project area lies within Yuba County and is subject to noise requirements established by the County. The proposed Project area is generally rural, with agriculture being the predominant land use. The Project would begin adjacent to Highway 20 and within a privately owned RV campground. The primary noise producers in the Project area consist of vehicles traveling on Highway 20, in addition to occasional aircraft flying overhead from Beale Air Force Base. Noise-sensitive land uses near the proposed Project area include the private RV campground, a county-owned park (Hammon Grove Park) to the east of the Project site, and a single-family residence to the east.

**Impact Discussion:**

(a, d) Noise impacts associated with Project construction would result in temporary or periodic increases in ambient noise levels, especially during grading and trenching/tunneling activities. Construction noise would result from operation of machinery and equipment used in the construction process. The table below identifies the construction equipment likely to be used at the project site. This table also provides typical noise levels produced by each piece of equipment based on information developed by the Federal Transit Administration (2006) and on predictive calculations developed by the City of Boston to regulate construction noise during that City's "Big Dig" construction project (Massachusetts Turnpike Authority 2000 in Thalheimer, 2000).

| EQUIPMENT | TYPICAL NOISE LEVEL 50 FEET FROM SOURCE (DBA) |
|---|---|
| Excavator | 85 |
| Rubber tired backhoe/loader | 80 |
| Rubber tired loader | 85 |
| Concrete truck | 85 |
| Small compactors | 82 |
| Small skid loader | 85 |
| Truck and trailer for delivery of pipe | 88 |
| Water truck | 88 |
| Pickup trucks | 55 |
| Fuel/oil service truck | 88 |
| Air compressor | 80 |
| Generator | 82 |

*Source: Federal Transit Administration 2006 and Massachusetts Turnpike Authority 2000 in Thalheimer, 2000*

The majority of the Project runs through a diverse rural landscape that includes grazing land, oak woodlands, and riparian vegetation with no residences in the near vicinity. However, the pumping station and a portion of the pipeline are proposed to be installed through a recreational camping facility. Also, the pipeline will be located directly across Dry Creek and approximately 0.25 miles west of Hammon Grove Park, a Yuba County Park. Hammon Grove Park is a 43-acre day-use-only park focusing on the historical mining activities in the region. The following mitigation measures will reduce any potential impacts to **less than significant with mitigation incorporated**.

(b) Construction activities associated with the proposed Project may result in a minor amount of ground vibration. Vibration from construction activity is typically below the threshold of perception when the activity is more than about 50 feet from the receiver. Vibration from these activities will be short-term and will end when construction is completed. Because construction activity would not involve high-impact activities (i.e., pile driving) and would be short-term in nature, this impact is **less than significant**. No mitigation is required.

(c) A pumping station will be constructed adjacent to the Highway 20 bridge at the very northeast end of the Project area. The pumping station will house two electric pumps, which will operate when water is withdrawn from the Creek and pumped into the system. The closest noise receptors consist of guests of a private campground, approximately one-quarter mile away. Although there may be a small increase in ambient noise levels associated with the pumping station, the impact is considered **less than significant** due to the proximity to Highway 20, which is a significant source of noise in the Project vicinity.

(e, f) The Project site is not located within an airport zone. The proposed Project will not expose sensitive receptors to excessive noise levels from airport/aircraft operations. There is **no impact** and no mitigation required.

**Mitigation and Residual Impact:** The proposed Project may result in potentially significant impacts associated with noise; therefore, the following mitigation is required.

**MM 5.10.1** Construction within 1,000 feet of occupied dwellings and guests within the recreational campground will be limited to the hours between 6:00 a.m. and 5:00 p.m. on weekdays and non-holidays.

**MM 5.10.2** All construction equipment will be equipped with sound control devices no less effective than those provided on the original equipment. No equipment will have an unmuffled exhaust.

**MM 5.10.3** Appropriate additional noise-reducing measures will be implemented, including but not limited to the following:

1) Changing the location of stationary construction equipment to avoid long-term noise sources from impacting residents and guests of the campground.
2) Shutting off idling equipment when in the vicinity of the campground or any residences along the pipeline route.
3) Rescheduling construction activity to occur when residents or guests of the campground are minimal.
4) Notifying nearby residents 48 hours in advance of construction activities.

## 5.11 POPULATION AND HOUSING

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | | | | X | |
| **b.** Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X | |
| **c.** Displace substantial numbers of people necessitating the construction of replacement housing elsewhere? | | | | X | |

**Setting:** Yuba County is located on the edge of California's Central Valley, with portions of the County covering the Valley floor and the Sierra Foothills. The County is primarily very rural in nature. The Project is located in a rural area of the lower foothills and transverses lands utilized mainly for cattle grazing and rural residences.

**Impact Discussion:**

(a) The Project consists of agricultural irrigation water lines and will not result in the induction of population growth in the area. **No impact**.

(b, c) The proposed Project would not displace existing housing or require the construction of replacement housing. **No impact** is anticipated.

**Mitigation and Residual Impact:** The proposed Project would not adversely impact housing or population, therefore, no mitigation is required.

## 5.12 PUBLIC SERVICES

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| 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: | | | | X | |
| **a.** Fire Protection? | | | | X | |
| **b.** Police Protection? | | | | X | |
| **c.** Schools? | | | | X | |
| **d.** Parks? | | | | X | |
| **e.** Other public facilities? | | | | X | |

**Setting:** The Project is located in a rural area of Yuba County, in the Sierra Foothills. The Project transverses agricultural lands and consists of an underground irrigation water pipeline and a pumping station and infiltration gallery near Highway 20 and Dry Creek. Given the nature of the facilities and on-going operational requirements, BVID's operation of the Project is unlikely to impose any new or altered demands on other public services.

**Impact Discussion:**

(a–e) The Project provides an enhancement to water infrastructure that supports the Browns Valley Irrigation District. This Project will allow the District to better serve its agricultural customers while also enhancing water quality of the main stem of the Yuba River. **No impact**.

**Mitigation and Residual Impact:** No potential significant impacts to public facilities from the Project would result; therefore, no mitigation is required.

## 5.13 RECREATION

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **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? | | | | X | |
| **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? | | | | X | |

**Setting:** The Project is located near the confluence of Dry Creek and the Yuba River. There are two parks in the Project vicinity: Hammon Grove Park is a county park located directly to the east of the Project, and a privately owned and operated park known as Sycamore RV Park and Campground. Across the Yuba River and to the south and west are the Yuba Gold Fields, portions of which are owned by BLM and available to the public for recreational use. Additionally, the Project runs parallel to the Yuba River for approximately one mile. The Yuba River is used by fisherman and for low-impact recreational activities such as swimming and kayaking.

**Impact Discussion:**

(a–b) The Project consists of the underground installation of an agricultural irrigation water line and construction of a pump station to introduce water into that line to assist in meeting existing demands and deliveries. There will be no increase in population within the area as a result of the Project. As a result, the Project will not increase public demand for existing or new recreational facilities or attract the public to the area for recreational purposes. **No impact.**

**Mitigation and Residual Impact:** The Project would not cause a significant impact to recreational facilities or opportunities; therefore, no mitigation is necessary.

## 5.14 TRANSPORTATION/TRAFFIC

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections? | | | X | | |
| **b.** Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | | | | X | |
| **c.** Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substandard safety risks? | | | | X | |

| Will the proposal result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **d.** Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | X | | |
| **e.** Result in inadequate emergency access? | | | | X | |
| **f.** Result in inadequate parking capacity? | | | | X | |
| **g.** Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | | | | X | |

**Setting:** Access to the Project will be by various existing road encroachments off of Highway 20. The pumping station and a portion of the pipeline will be accessed by an existing paved encroachment utilized by a private RV campground. An existing dirt PG&E Substation access encroachment will be used for access to the western portion of the Project. The remaining access is via a private, dirt agricultural encroachment. All access points are directly off of Highway 20. No work is proposed within the highway right-of-way. The following table provides estimates of vehicle trips over the construction life of the Project.

| ACTIVITY | ADT (ONE-WAY TRIPS) | DAYS | TOTAL TRIPS |
|---|---|---|---|
| Personnel trips | 12 | 90 | 1080 |
| Semi-truck and trailer trips (sand deliveries, equipment deliveries) | 8 | 75 | 600 |
| Supply deliveries (pipeline, concrete, etc.) | 2 | 35 | 70 |
| **Total** | **22** | ***** | **1750** |

**The number of days noted are not cumulative; it is anticipated that the Project will result in approximately 9 round trips per day.*

**Impact Discussion:**

(a) The majority of the construction equipment will be staged within the Project's construction zone along the pipeline route, which will minimize trips on State and County roadways. Also, any impacts will be temporary as the Project is estimated to be completed in 100 days. After completion, BVID staff and contractors are expected to visit the Project site only once per day. This is not expected to create any significant impacts to Highway 20, which on average experiences approximately 18,470 trips per day west of the intersection of Marysville Road and 8,385 ADT west of the intersection.[11] The impact will be **less than significant**.

(b) The Project will not result in significant congestion of pertinent roadways. The Project is located within two miles of the District's office and maintenance yard, where all equipment and materials that are not staged on the Project route will be housed. Access between the yard and Project is via a county road and Highway 20, neither of which are considered congested. As discussed above, BVID's on-going operation of the Project will not cause the service standards of any of the affected roadways to be exceeded. **No impact.**

[11] Caltrans State Route 20 Transportation Corridor Concept Report. May 2009.

(c) The Project will not result in any increase in air traffic or impede air traffic in any way. No impact to airways is anticipated. **No impact.**

(d) There may be a temporary increase in roadway hazards as a result of construction equipment making left-hand turns off of Highway 20. However, most of the equipment will be staged on the Project route, which will limit the number of trips on the publicly traveled roadways. The impact is expected to be **less than significant**.

(e–g) The Project will not result in an increase in population or concentration of people and so emergency access and parking requirements are not applicable. There will be no impact to alternative transportation. There will be **no impact**.

**Mitigation and Residual Impact:** No impacts to transportation/circulation would occur as a result of the Project; therefore, no mitigation is required.

### 5.15 UTILITIES AND SERVICE SYSTEMS

| **Will the proposal result in:** | **Potentially Significant Impact** | **Less Than Significant with Mitigation Incorporated** | **Less Than Significant Impact** | **No Impact** | **Reviewed Under Previous Document** |
|---|---|---|---|---|---|
| **a.** Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | X | |
| **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? | | | | X | |
| **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? | | | | X | |
| **d.** Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | X | |
| **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 projected demand in addition to the provider's existing commitments? | | | | X | |
| **f.** Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | | X | |
| **g.** Comply with federal, state, and local statutes and regulations related to solid waste? | | | | X | |

**Setting:** The Project consists of the installation of an infiltration gallery, pumping facility, and water pipeline for the conveyance of irrigation water for agricultural uses. The pipeline will be installed underground and resurfaced with native soils. The only impervious surfaces resulting from the Project will be the housing for the pumping facility, which will be minimal.

**Impact Discussion:**

(a–e) The Project does not require hook-up to wastewater or domestic water facilities. There are no stormwater facilities that will be impacted by the Project construction activities because the majority of the Project occurs in rural agricultural fields. As a result, no expansion of existing or new utility services or construction of new facilities will be required by the Project, and **no impact** on water, wastewater, or stormwater drainage facilities is anticipated.

(f, g) The Project will incur some solid waste disposal needs as part of the construction process. However, the impacts will be temporary, occurring only during construction activities, and will not have a significant impact on the capacity of the applicable landfill. All materials for disposal resulting from the Project's construction activities will be disposed of in compliance with federal, state, and local statutes and regulations. **No impact** is anticipated.

**Mitigation and Residual Impact:** No impacts to utilities and service systems would occur as a result of the Project; therefore, no mitigation is required.

## 6.0 MANDATORY FINDINGS OF SIGNIFICANCE

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **1.** Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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? | | | X | | |
| **2.** Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals? | | | | X | |
| **3.** 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.) | | | X | | |
| **4.** Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | | | X | |
| **5.** Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR ? | | | | X | |

(1–5) The discussion in the Checklist portion of this proposed Mitigated Negative Declaration demonstrates that this Project will not create any impacts described in items 2, 4, and 5. Where impacts may be created in regard to items 1 and 3, any such impacts are temporary and will be reduced to a less than significant level by the incorporation of the mitigation measures recommended in this document. Any possible incremental effects of the proposed Project would not be cumulatively considerable when viewed in connection with any past, current and probable future projects identified in the vicinity of the Project.

## 7.0 REFERENCES


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State Water Resources Control Board. 2003. Revised Decision 1644, In the Matter of Fishery Resources and Water Right Issues of the Lower Yuba River. July 16, 2003.

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_____. Yuba County. 2008. Yuba County Zoning Ordinance. March 2008, updated July 9, 2008.

Yuba County Water Agency. 2007a. Yuba County Integrated Regional Water Management Plan. Available at www.ycwa.com. Accessed on November 15, 2007.

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## 8.0 PERMITS AND REGULATORY APPROVALS

The table below provides a preliminary list of potential permits or regulatory approvals that may be required for the Project. Note that in some cases Project notification to the appropriate permitting agency is sufficient.

POTENTIAL PERMITS AND REGULATORY APPROVALS REQUIRED FOR THE PROJECT

| APPROVING AGENCY | REQUIRED PERMIT/APPROVAL | REQUIRED FOR: |
|---|---|---|
| CA Department of Fish and Game | Streambed Alteration Agreement | Stream crossing, working within bed and bank of Dry Creek. |
| Regional Water Quality Control Board | NPDES | Stormwater discharges associated with construction activity. |
| USACE/Water Quality Control Board | Notification of Project | Disturbance to 0.019± acres of seasonal wetlands. |

## 9.0 RECOMMENDATIONS

**On the basis of the Initial Study, staff recommends the following:**

____ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration ("ND") be prepared.

_X_ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated will successfully mitigate the potentially significant impacts. Staff recommends the preparation of a Mitigated ND.

____ Finds that the proposed project MAY have a significant effect on the environment, and recommends that an Environmental Impact Report ("EIR") be prepared.

____ Finds from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas:

_____ With Public Hearing ___X___ Without Public Hearing

PREVIOUS DOCUMENT: None

SIGNED:_____ DATE: _____