City of Atwater

Bert Crane Wastewater Treatment Plant Discharge Improvements Project

Public Review Draft

Environmental Impact Report

August 2026

Prepared for:

City of Atwater
1350 Broadway
Atwater, CA 95301

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Chapter 1 EXECUTIVE SUMMARY

1.1 Purpose and Intended Use of EIR

This EIR is an informational document which shall be considered by the City as Lead Agency prior to its approval or disproval of a project (PRC *Section 21061*). The purpose of this EIR is to identify the significant effects on the environment of the Project, to identify alternatives to the Project, and to indicate the way those significant effects can be mitigated or avoided (PRC *Section 21002.1*). Each public agency is required by CEQA to mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so. The Lead Agency is responsible for considering the effects, both individual and collective, of all activities involved in the Project.

This EIR intends to inform the Lead Agency, decision makers, and the public generally of the significant environmental effect of the Project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Project (CEQA Guidelines *Section 15121*). While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under CEQA Guidelines *Section 15091*, Findings, and if necessary, by making a statement of overriding considerations under *Section 15093*, Statement of Overriding Considerations. Generally, when a Project EIR is prepared under CEQA, no subsequent or supplemental EIR is required by the Lead Agency unless certain circumstances arise as outlined in PRC *Section 21166* and CEQA Guidelines *Section 15162*, Subsequent EIRs and Negative Declarations, *Section 15163*, Supplement to an EIR, and *Section 15164*, Addendum to an EIR or Negative Declaration.

1.1.1 Lead Agency, Responsible and Trustee Agencies

The Lead Agency for the Project is the City of Atwater. Per CEQA, "Lead Agency" means the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect, or substantial or potentially substantial, adverse change in the environment. In addition, "Responsible Agency" means a public agency, other than the lead agency, which as responsibility for carrying out or approving a project and "Trustee Agency" means a state agency that has jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. Permits and approvals for the Project from the Lead Agency and Responsible and Trustee Agencies are listed in Chapter 2. Project Description.

1.2 Project Summary

1.2.1 Project Location

The Project in the jurisdiction of the City of Atwater and County of Merced, California, located east of South Bert Crane Road, between Bear Creek and Oak Avenue Alignment. The site includes portions of six (6) parcels identified as Merced County Assessor Parcel Number (APN) 056-200-026, 056-200-011, 056-200-021, 056-200-024, 065-020-012, and 056-200-002, totaling approximately 7.67 acres. The site also includes approximately 3,390 feet of South Bert Crane Road right-of-way (ROW).

1.2.2 Project Description

The City of Atwater owns and operates the Bert Crane Regional Wastewater Treatment Plant (WWTP), located on the southeast corner of South Bert Crane Road and Oak Avenue Alignment (APN 056-200-026), which provides tertiary-level treatment for wastewater. Treated effluent from the WWTP is currently released via an effluent pump station and a 42-inch force main into the Atwater/Peck Drain, which flows through Joseph Gallo Farms (Gallo Ranch), where a significant portion is diverted for agricultural and wetland use.

In order to meet Sustainable Groundwater Management Act (SGMA) groundwater recharge requirements, the City of Atwater intends to construct improvements to discharge its treated effluent to the Merced Irrigation District (MID) via Black Rascal Creek or Bear Creek. These improvements would connect into the existing force main with a tee fitting and automatic actuated butterfly valves integrated into the City's Supervisory Control and Data Acquisition (SCADA) system. The improvements would allow the City to redirect effluent flows to the Gallo Ranch, the creeks, or both.

A Discharge Study was prepared to evaluate three (3) alternatives for future improvements for discharge into either Black Rascal Creek or Bear Creek: Alternative 1 – Bert Crane Road Alignment, Alternative 2 – South WWTP Alignment, and Alternative 3 – Deckert Lateral Alignment. All three (3) alternatives share common infrastructure improvement recommendations, such as connecting to the existing force main from the WWTP, construction of a new pump station, and construction of an outfall structure. The Discharge Study is provided as Appendix D. The following summarizes the recommended improvements that are applicable to each alternative:

- Installation of a 42-inch x 42-inch x 18-inch tee
- Installation of a 42-inch automatic actuated butterfly valve
- Installation of an 18-inch automatic actuated butterfly valve
- Installation of an air relief valve
- Installation of an 18-inch magnetic flow meter
- Construction of a pump station
- Installation of power source and connection to City SCADA system
- Construction of an outfall structure equipped with a flap valve.

The alternative specific improvements are as follows:

- Alternative 1 would include construction of 4,400 linear feet of 18-inch pipeline, traffic control, and flow diversion and dewatering. A new outfall structure into Bear Creek would be constructed.
- Alternative 2 would include construction of 4,300 linear feet of 18-inch pipeline and flow diversion and dewatering. A new outfall structure into Black Rascal Creek would be constructed
- Alternative 3 would include connection to the existing Deckert Lateral culvert, construction of 5,400 linear feet of 18-inch pipeline, increases to MIDs Deckert Lateral capacity, replacing the existing MID outfall structure to Black Rascal Creek, and traffic control.

This Environmental Impact Report evaluates the potential environmental impacts of all three (3) proposed alternatives—Alternative 1 (Bert Crane Road Alignment), Alternative 2 (South WWTP Alignment), and Alternative 3 (Deckert Lateral Alignment).

1.2.3 Project Objectives

The objectives of the proposed Project are to:

- **Comply with SGMA recharge requirements:** Redirect treated effluent from Atwater/Peck Drain to MID-managed creeks (Black Rascal Creek or Bear Creek) to support sustainable groundwater management in the Merced Subbasin.
- **Enhance effluent discharge flexibility:** Install infrastructure allowing SCADA-controlled diversion of WWTP flows between Gallo Ranch, MID creeks, or both, ensuring operational reliability during varying wastewater volumes and water demands.
- **Minimize environmental impacts:** Construct improvements using standard engineering practices (e.g., open-trench pipeline, pump station) that avoid sensitive habitats where feasible while meeting U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) permitting standards.

1.3 Areas of Controversy

This Draft EIR addresses potential environmental impacts associated with the proposed Project that are known to the City of Atwater, were raised during the Notice of Preparation process, or were raised during preparation of this Draft EIR. This Draft EIR discusses potential environmental impacts associated with biological resources, cultural resources, geology and soils, hydrology and water quality, tribal cultural resources, and cumulative impacts.

1.3.1 Notice of Preparation

A notice of preparation (NOP) was issued to inform agencies and the public that an EIR was being prepared for the project and to solicit views of agencies and the public regarding the scope and content of the document. Scoping meetings were held to allow written and oral expressions of those views, provide information about the proposal, and answer questions. A summary of the written and oral comments and the issues raised by the public, agencies, and organizations, as well as the comment letters can be found in Section 2.4.1 Notice of Preparation, below, and, in their entirety, are included in Appendix B. The purpose of the NOP and the scoping meeting was to provide notification that an EIR was being prepared for the project and to solicit input on the scope and content of the environmental document. Appendix B of this Draft EIR contains the NOP and all comments received during and after the scoping period.

1.4 Issues to be Resolved

Section 15123 of the State CEQA Guidelines requires the summary section of a Draft EIR to identify issues to be resolved in the EIR, including the choice among alternatives and whether or how to mitigate the significant project effects. The major issues to be resolved by the City regarding the project are whether:

- Recommended mitigation measures should be adopted or modified.
- Additional mitigation measures need to be applied to the proposed project.
- The proposed project should or should not be approved or an alternative approved.

1.5 Summary of Impacts and Mitigation Measures

1.5.1 Significant Impacts

A “significant effect on the environment” means a substantial, or potentially substantial, adverse change in the environment (PRC *Section 21068*). In evaluating the significance of the environmental effect of a project, the Lead Agency is required to consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project (CEQA Guidelines *Section 15064*). As detailed in Chapter 4. Evaluation of Environmental Impact, the following areas have potentially significant impacts that would be mitigated to a less than significant level with the implementation of the recommended measures in this EIR: Biological Resources, Cultural Resources, Geology and Soils, Hydrology and Water Quality, and Tribal Cultural Resources.

1.5.2 Significant Unavoidable Impacts

Consistent with *Section 15126.2(c)* of the State CEQA Guidelines, this EIR identifies significant impacts that remain unavoidable even after implementing feasible mitigation. The EIR concludes that the proposed Project would not result in any significant and unavoidable environmental impacts. Because no significant and unavoidable impacts are identified, approval of the Project would not require adoption of a Statement of Overriding Considerations under CEQA Guidelines Section 15093.

1.5.3 Cumulative Impacts

CEQA defines cumulative impacts as *"two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts."* Consistent with *Section 15130* of the CEQA Guidelines, this EIR evaluates potential environmental impacts that are individually limited but cumulatively significant. These impacts can arise from the proposed Project when combined with other past, present, or reasonably foreseeable future projects. Cumulative impacts analysis is provided in Chapter 4. Evaluation of Environmental Impact for each environmental issue area.

1.5.4 Project Alternatives

CEQA Guidelines *Section 15126.6* requires an analysis of reasonable alternatives to the proposed project. This analysis must consider alternatives that could feasibly achieve most of the project's objectives while reducing significant environmental impacts. The range of alternatives should be guided by a "rule of reason," focusing on potentially feasible options that avoid or lessen significant effects. The following alternatives are evaluated in this Draft EIR, as further described in Chapter 5. Project Alternatives.

- No Project Alternative
- Reduced-Impact Discharge Alternative
- Local Recharge Alternative

1.6 Summary Matrix

In accordance with State CEQA Guidelines *Section 15123(b)(1)*, Table 1-1 presents a summary of the environmental impacts identified, the associated mitigation measures proposed, and the resulting significance

levels after mitigation for pertinent environmental issue area evaluated in this EIR. Evaluation of each issue area is provided in Chapter 4. Evaluation of Environmental Impacts.

Table 1-1: Executive Summary Matrix

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.1. Biological Resources			
Impact 4.1-1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Potentially Significant	**Mitigation Measure BIO-1:** To mitigate potential impacts on nesting raptors and other migratory birds, including Swainson's hawk and ferruginous hawk, the following measures shall be implemented. 1) Avoidance: To avoid impacts to nesting raptors protected under the Migratory Bird Treaty Act and California Fish and Game Code, removal of orchard trees or other suitable nesting vegetation should be conducted, where feasible, outside the nesting season (September 1 through January 31). 2) Pre-Construction Survey: If Project construction activities must occur during the Swainson's hawk nesting season (February 15 to August 31), pre-construction activity surveys shall be conducted for Swainson's hawk nests in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley, Swainson's Hawk Technical Advisory Committee (CDFG 2000). The timing and the number of phases of surveys can be adjusted based on the timing of the construction schedule. The surveys may be phased to coincide with active construction areas plus a 0.5-mile buffer of those areas. If no active nests are observed during the surveys, no additional action is required. . 3) Avoidance/Minimization (if present): No mature trees that could be used by nesting Swainson's hawk will be removed during construction of the Project. If an active Swainson's hawk nest is discovered at any time within 0.5 miles of active construction, a qualified biologist shall complete an assessment of the potential for current construction activities to impact the nest. The assessment shall consider the type of construction activities, the location of construction relative to the nest, the visibility of construction activities from the nest location, and other existing disturbances in the area that are not related to the construction activities of this Project. Based on this assessment, the biologist shall determine if construction activities can proceed, and the level of nest monitoring required. Construction activities shall not occur within 500 feet of an active nest but depending upon conditions at the site this distance may be reduced. Full-time monitoring to evaluate the effects of construction activities on nesting Swainson's hawks	Less than Significant

may be required. The qualified biologist shall have the authority to stop work if it is determined that Project construction is disturbing the nest. These buffers may need to increase depending on the sensitivity of the nesting Swainson's hawk to disturbances and at the discretion of the qualified biologist. No avoidance would be needed if construction occurs near a known Swainson's hawk nest outside of the Swainson's hawk nesting season. A copy of all documentation and results of surveys shall be submitted to the City of Atwater Community Development Department for mitigation monitoring compliance.

Mitigation Measure BIO-2: To mitigate potential impacts on burrowing owl and American badger, the following measures shall be implemented.

1) Pre-Construction Survey: A qualified biologist shall conduct a pre-construction survey within 30 days prior to any ground-disturbing activities (e.g., grading, grubbing, trenching) to identify the presence/absence for burrowing owl and American badger or their burrows/dens within and immediately adjacent to the work areas. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If no individuals or occupied burrows/dens are detected, no further action is required.

2) Avoidance/Minimization (if present): If dens/burrows/nests that could support any of these special-status species are discovered during the preconstruction survey, the avoidance buffers outlined below shall be established, and den or burrow monitoring shall be conducted in accordance with the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (CDFG 2012).

No work shall occur within these buffers unless the biologist approves and monitors the activity. A copy of the preconstruction survey report shall be submitted to the Lead Agency as evidence of compliance.

Burrowing Owl (active burrows)

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting	April 1-Aug 15	200 m	500 m	500 m
Nesting	Aug 16-Oct 15	200 m	200 m	500 m

Nesting	Oct 16-Mar 31	50 m	100 m	500 m

American badger/SJKF

- Potential or Atypical den – 50 feet
- Known den – 100 feet
- Natal Den –Contact CDFW for consultation

3) If burrows that could support this species are discovered during the pre-construction clearance survey, the avoidance buffers outlined below should be established, and burrow monitoring shall be conducted in accordance with the California Department of Fish and Game (CDFG) Staff Report on Burrowing Owl Mitigation (CDFG 2012). No work shall occur within these buffers. If occupied burrowing owl burrows cannot be avoided by the appropriate buffer below, an Incidental Take Permit (ITP) issued by the CDFW under the California Endangered Species Act (CESA) to authorize "take" that is incidental to an otherwise lawful activity, may be required before any work within the buffer. Copies of all correspondence and reports submitted to CDFW or other regulatory agencies shall be provided to the City of Atwater Community Development Department for mitigation monitoring compliance.

Mitigation Measure BIO-3: To mitigate potential impacts on Sanford's arrowhead, the following measures shall be implemented.

1) Focused Survey: A qualified biologist shall conduct a focused botanical survey for Sanford's arrowhead within suitable aquatic habitat in Black Rascal Creek and/or Bear Creek prior to any ground-disturbing activities (e.g., grading, grubbing, trenching, or in-channel work) during the species' identifiable period (blooming season May through October). Survey results shall be reported to the City of Atwater Community Development Department for mitigation monitoring compliance. If Sanford's arrowhead is not detected, no further action is required.

2) Avoidance/Minimization (if present): If Sanford's arrowhead is detected, the project design and construction methods shall be adjusted, where feasible, to avoid direct impacts (e.g., micro-siting of structures, establishment of no-work buffers, or minor alignment shifts). If complete avoidance is not feasible, the qualified biologist shall, in consultation with California Department of Fish and Wildlife, as appropriate, develop and

		implement a plan for impact minimization that includes but is not limited to plant protection, seed collection, or salvage/translocation. A copy of the approved plan shall be submitted to the City of Atwater Community Development Department for mitigation monitoring compliance prior to the issuance of grading permits. **Mitigation Measure BIO-4:** To mitigate potential impacts on northwest pond turtle and tricolored blackbird, the following measures shall be implemented. 1) Pre-Construction Survey: A qualified biologist shall conduct a pre-construction survey within 500 feet of any outfall structure within 30 days prior to any ground-disturbing activities (e.g., grading, grubbing, trenching) to identify the presence/absence for northwest pond turtle and tricolored blackbird. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If these species are not detected, no further action is required. 2) Avoidance/Minimization (if present): If northwestern pond turtle is detected, a qualified biologist, under any necessary California Department of Fish and Wildlife approvals or permits, shall implement appropriate avoidance measures such as capture and relocation of individuals to suitable nearby habitat outside the work area and establishment of exclusion fencing, as needed, to prevent re-entry during construction. 3) If an active tricolored blackbird nesting colony is found, the biologist shall establish an appropriate no-disturbance buffer and recommend schedule or work-area adjustments so that construction does not occur within the buffer until the nesting attempt is complete, as confirmed by the biologist. The avoidance/minimization measures and monitoring results shall be documented and provided to California Department of Fish and Wildlife, as appropriate, and to the City of Atwater Community Development Department. **Mitigation Measure BIO-5:** To mitigate potential impacts on special-status bats, including western red bat, the following measures shall be implemented. 1) Pre-Construction Survey: A qualified biologist shall conduct a pre-construction survey for special-status bats (including pallid bat, western	

		mastiff bat, and western red bat) within a 100-foot radius of the disturbance area along riparian habitat prior to any ground-disturbing or vegetation-removal activities to identify any potential roosting habitat. Surveys shall use established methodology, including visual inspection, ultrasonic detectors, and dusk and dawn emergence surveys. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If no roosting bats are detected, no further action is required. 2) Avoidance/Minimization (if present): If special-status bats are found to occupy the survey area, a 100-foot no-disturbance buffer shall be established around the roost site, and a replacement roost site shall be installed prior to initiation of work activities to allow sufficient time for bats to relocate. Avoidance and minimization measures shall be implemented in coordination with the California Department of Fish and Wildlife, as appropriate, and documentation shall be provided to the City of Atwater Community Development Department for mitigation monitoring compliance. **Mitigation Measure BIO-6:** To mitigate potential impacts on California tiger salamander, the following measures shall be implemented. 1) Pre-Construction Survey: For Alternative 2, a qualified biologist shall conduct a pre-construction survey prior to any ground-disturbing activities to identify and mark any upland burrow refugia (e.g., ground squirrel burrows) within the non-native grassland habitat that could support California tiger salamander. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If no potential refugia are identified, no further action is required. 2) Avoidance/Minimization (if present): A minimum 50-foot no-disturbance buffer shall be established around identified upland burrow refugia. If avoidance of identified burrows is not feasible, the applicant shall consult with the California Department of Fish and Wildlife to determine whether the Project can avoid take and, if necessary, obtain appropriate take authorization prior to any work within the buffer. Copies of all correspondence and reports submitted to CDFW shall be provided to the	

		City of Atwater Community Development Department for mitigation monitoring compliance. **Mitigation Measure BIO-7:** To mitigate potential impacts on Crotch's bumble bee, the following measures shall be implemented. 1) Focused Survey: A qualified biologist shall conduct focused surveys for Crotch's bumble bee within the limited areas of potentially suitable habitat prior to any ground-disturbing activities. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If Crotch's bumble bee is not detected, no further action is required. 2) Avoidance/Minimization (if present): If Crotch's bumble bee or an active nest or colony is detected, the qualified biologist shall establish an appropriate no-disturbance buffer around the occupied habitat and, in consultation with the California Department of Fish and Wildlife as appropriate, implement avoidance and minimization measures until the biologist confirms the species is no longer present or the nesting attempt is complete. Copies of all correspondence and reports submitted to CDFW shall be provided to the City of Atwater Community Development Department for mitigation monitoring compliance. **Mitigation Measure BIO-8:** A Worker Environmental Awareness Program shall be developed and implemented for all personnel who could access the site prior to commencing any disturbance activities. The program shall consist of an on-site or center presentation that will describe the locations and types of sensitive plant, wildlife, and sensitive natural communities (collectively, "Biological Resources") on and near the site, an overview of the laws and regulations governing the protection of Biological Resources, the reasons for protecting the Biological Resources, the specific protection and avoidance measures that are applicable to the site, and the identity of designated points of contact should questions or issues arise, including the qualified biologist. The program shall provide training to recognize, avoid, and report to applicable qualified biologists any Biological Resources on the site. 1) The Worker Environmental Awareness Program shall emphasize the need to avoid contact with on-site wildlife and avoid entry into areas where	

		Biological Resources have been identified based on pre-disturbance field surveys, and to implement the buffer avoidance or other protection measures established by the United States Fish and Wildlife Service (USFWS) shall be identified by the California Department of Fish and Wildlife (CDFW) or required by the Biological Resource mitigation measures. The training shall emphasize the importance of not feeding or domesticating wildlife and the need to avoid any trash, micro-trash, or potential food waste on-site, except in animal-proof containers emptied daily, to avoid attracting or causing adverse impacts to special-status wildlife. 2) All on-site personnel must sign a statement verifying that they have completed the Worker Environmental Awareness Program and that they understand and agree to implement the biological requirements for the worksite. If signed employee statements are not available, documentation may be provided by Worker Environmental Awareness Program training records, which shall be kept by the applicant for a minimum of five years. Each applicant shall maintain a list of all persons who have completed the training program and shall provide the list to the County or to State and federal wildlife agency representatives upon request.	
Impact 4.1-2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Potentially Significant	**Mitigation Measure BIO-9:** Prior to the issuance of any grading or building permit, the Project proponent/developer shall submit a formal notification to the US Army Corps of Engineers (ACOE), Water Resources Control Board (SWRCB), Central Valley Flood Protection Board (CVFPB) and California Department of Fish and Wildlife (CDFW). If no comments or requests for additional permitting are received by the agencies, no further action is necessary. A copy of all correspondence shall be submitted to the lead agency. If a regulatory agency comments or requests additional permitting, the following actions may be taken. A copy of all correspondence and subsequent permitting and/or reports shall be made available to the Lead Agency. The report shall include information as shown below as a plan if necessary and shall outline compliance with the following:: 1. Delineation of all jurisdictional features at the project site. Potential jurisdictional features within the project boundary identified in the jurisdictional delineation report may be shown in plan form. 2. If the Project has a potential to directly or indirectly impact jurisdictional aquatic resources, a formal aquatic resource delineation of these areas shall	Less than Significant

		be performed by a qualified professional to determine the extent of agency jurisdiction and permits/authorizations from the appropriate regulating agencies (Central Valley Regional Water Quality Control Board (RWQCB), CDFW and US Army Corps of Engineers (USACE) shall be obtained prior to disturbance to jurisdictional features. 3. If it is determined that drainage is jurisdictional and cannot be avoided, the Project proponent shall obtain a Section 401 Waters Quality Certification from the RWQCB, a Section 404 permit from USACE and a Lake and Streambed Alteration Agreement under Section 1602 from the CDFW, if required prior to impacting any waters. 4. As part of these authorizations, compensatory mitigation may be required by the regulating agencies to offset the loss of aquatic resources. If so, and as part of the permit application process, a qualified professional shall draft a Mitigation and Monitoring Plan to address implementation and monitoring requirements under the permit to ensure that the Project would result in no net loss of habitat functions and values. The Plan shall contain, at a minimum, mitigation goals and objectives, mitigation location, a discussion of actions to be implemented to mitigate the impact, monitoring methods and performance criteria, extent of monitoring to be conducted, actions to be taken in the event that the mitigation is not successful, and reporting requirements. The Plan shall be approved by the appropriate regulating agencies and compensatory mitigation shall take place either on site or at an appropriate off-site location. 5. Any material/spoils generated from project activities containing hazardous materials shall be located away from jurisdictional areas or special-status habitat and protected from storm water run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. Protection measures should follow project-specific criteria as developed in a Stormwater Pollution Prevention and Protection Plan (SWPPP). 6. Equipment containing hazardous liquid materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and at least 50 feet outside the delineated boundary of jurisdictional water features. 7. Any spillage of material shall be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials	

		properly disposed. For all spills, the project foreman or designated environmental representative shall be notified.	
Impact 4.1-3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Potentially Significant	Mitigation Measure BIO-9 (See Impact 4.1-2.)	Less than Significant
Impact 4.1-4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Potentially Significant	Mitigation Measures BIO-1 through BIO-9	Less than Significant
Impact 4.1-5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	No Impact	None required	Not Applicable
Impact 4.1-6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	No Impact	None required	Not Applicable
Impact 4.1-7. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to biological resources.	Potentially Significant	Mitigation Measures BIO-1 through BIO-9	Less than Significant
4.2. Cultural Resources			

Impact 4.2-1. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Potentially Significant	Mitigation Measure CUL-1: Prior to issuance of grading permits, the Project proponent shall retain a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) to conduct a pedestrian survey and subsurface testing program (including shovel test pits and/or mechanically excavated trenches at 10–20-meter intervals) within all areas of ground disturbance identified as archaeologically sensitive, including Bear Creek/Black Rascal Creek corridors and adjacent floodplains. The archaeologist shall prepare a technical report documenting survey methods, findings, and recommendations, including resource eligibility under CEQA Guidelines section 15064.5, to be submitted to the City for review and approval. If significant archaeological resources are identified: a. The archaeologist shall first evaluate avoidance or preservation in place as the preferred mitigation, designing a site protection plan (e.g., capping, buffer zones) if feasible. b. If avoidance/preservation is infeasible, the archaeologist shall conduct Phase II testing to confirm significance and delineate site boundaries. c. For confirmed historical or unique archaeological resources, data recovery excavation shall be performed using standard techniques (screening, feature excavation, artifact analysis) sufficient to reduce the resource to a non-significant level per CEQA Guidelines section 15126.4(b). A final data recovery report shall be prepared and submitted to the City and the Central California Information Center (CCIC). Inadvertent discovery protocol: If previously unknown historical, archaeological, or cultural resources are encountered during construction, work shall stop within 50 feet of the find. The qualified archaeologist shall be retained immediately to evaluate the discovery and implement the above procedures. No further grading shall occur in the vicinity until the City approves mitigation measures and verifies implementation. All artifacts recovered shall be curated at a City-approved repository (e.g., CCIC) capable of long-term preservation. This measure shall be included on all grading plans, improvement plans, and construction contracts, enforced through City permit conditions, and verified via field inspections and reporting.	Less than Significant

Impact 4.2-2. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially Significant	Mitigation Measure CUL-1	Less than Significant
Impact 4.2-3. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Potentially Significant	**Mitigation Measure CUL-2**. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent remains until the Merced County Coroner has determined that the remains are not subject to any provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the Merced County Coroner determines that the remains are not subject to his or her authority and if the County Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone, the Native American Heritage Commission (NAHC). After notification, the NAHC will follow the procedures outlined in Public Resources Code Section 5097.98, that include notification of most likely descendants (MLDs), and recommendations for treatment of the remains. The MLDs will have 48 hours after notification by the NAHC to make their recommendations (PRC Section 5097.98). This measure shall be included in all grading and improvement plans and in all construction contracts and shall be enforced by the City through permit conditions and field inspections.	Less than Significant
Impact 4.2-4. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant	Potentially Significant	Mitigation Measure CUL-1 and CUL-2	Less than Significant

cumulative impact with respect to cultural resources.			
4.3. Geology and Soils			
Impact 4.3-1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides?	Less than Significant	None required	Not Applicable
Impact 4.3-2. Would the project result in substantial soil erosion or the loss of topsoil?	Less than Significant	None required	Not Applicable
Impact 4.3-3. Would the project 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?	Less than Significant	None required	Not Applicable
Impact 4.3-4. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant	None required	Not Applicable
Impact 4.3-5. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not	Less than Significant	None required	Not Applicable

available for the disposal of wastewater?			
Impact 4.3-6. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	Potentially Significant	Mitigation Measure GEO-1: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for unique paleontological/geological resources shall be conducted. The following procedures shall be followed: If unique paleontological/geological resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that unique paleontological/geological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified paleontologist shall be consulted to determine whether the resource requires further study. The qualified paleontologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to, excavation of the finds and evaluation of the finds. If the resources are determined to be significant, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any paleontological/geological resources recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study. If unique paleontological/geological resources are found during the field survey or literature review, the resources shall be inventoried and evaluated for significance. If the resources are found to be significant, mitigation measures shall be identified by the qualified paleontologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include a paleontological monitor. The monitoring period shall be	Less than Significant

		determined by the qualified paleontologist. If additional paleontological/geological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.	
Impact 4.3-7. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to geology and soils.	Potentially Significant	Mitigation Measure GEO-1 (See Impact 4.3-6.)	Less than Significant
4.4. Hydrology and Water Quality			
Impact 4.4-1. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than Significant	None required	Not Applicable
Impact 4.4-2. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than Significant	None required	Not Applicable
Impact 4.4-3. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a	Potentially Significant	Mitigation Measure BIO-9	Less than Significant

manner which would result in flooding on- or off-site; 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; or impede or redirect flood flows?			
Impact 4.4-4. Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?	Less than Significant	None required	Not Applicable
Impact 4.4-5. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	None required	Not Applicable
Impact 4.4-6. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to hydrology and water quality.	Less than Significant	None required	Not Applicable
4.5. Tribal Cultural Resources			
Impact 4.5-1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred	Potentially Significant	Mitigation Measure CUL-1 and CUL-2	Less than Significant

place, or object with cultural value to a California Native American tribe, and that is Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			
Impact 4.5-2. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to tribal cultural resources.	Potentially Significant	Mitigation Measure CUL-1 and CUL-2	Less than Significant

Chapter 2 INTRODUCTION

2.1 Summary of Proposed Project

A detailed description of the Bert Crane Wastewater Treatment Plant Discharge Improvements Project ("Project" or "proposed Project") is presented in Chapter 2. Project Description. The Project includes construction and operation of new effluent conveyance and discharge facilities to provide the City of Atwater with additional flexibility in managing treated wastewater and to support Sustainable Groundwater Management Act (SGMA) compliance. The City owns and operates the Bert Crane Regional Wastewater Treatment Plant (WWTP), which currently provides tertiary treatment and discharges treated effluent via an existing effluent pump station and 42-inch force main to the Atwater/Peck Drain, where a substantial portion of the flow is diverted at Joseph Gallo Farms (Gallo Ranch) for agricultural and wetland uses.

Under the proposed Project, the City would construct new infrastructure to redirect some or all of the treated effluent from the existing force main to the Merced Irrigation District (MID) system for discharge to either Black Rascal Creek or Bear Creek. The improvements would include installation of a tee on the existing 42-inch force main, associated 42-inch and 18-inch automatic actuated butterfly valves, an 18-inch magnetic flow meter, an air relief valve, a new pump station, electrical and control facilities tied into the City's SCADA system, and a new outfall structure equipped with a flap valve. From the point of connection, a new 18-inch pipeline would extend along one of several potential alignments evaluated in this EIR to an outfall location on either Black Rascal Creek or Bear Creek, or to the existing Deckert Lateral with an upgraded MID outfall to Black Rascal Creek.

The proposed improvements would allow the City to actively manage and divert treated effluent among Gallo Ranch, Black Rascal Creek, and Bear Creek, either individually or in combination, depending on operational, hydrologic, and regulatory conditions.

2.2 Type of EIR

The City of Atwater ("City"), as the Lead Agency, determined that the Project requires the preparation of an EIR in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code (PRC) *Section 21000, et. seq.*) and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, *Section 15000, et seq.*), and rules, regulations, and procedures for implementing CEQA as adopted by the City.

This EIR has been prepared as a Project EIR pursuant to CEQA Guidelines *Section 15161*. Per CEQA, "project" means the whole of an action or activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment (PRC *Section 21065*; CEQA Guidelines *Section 15378*). CEQA Guidelines *Section 15161* states that a Project EIR examines the environmental impacts of a specific development project, focusing primarily on the changes in the environment that would result from the development project, including examination of all phases of the project including planning, construction, and operations.

2.3 Purpose and Intended Use of EIR

This EIR is an informational document which shall be considered by the City as Lead Agency prior to its approval or disproval of a project (PRC *Section 21061*). The purpose of this EIR is to identify the significant effects on the

environment of the Project, to identify alternatives to the Project, and to indicate the way those significant effects can be mitigated or avoided (PRC *Section 21002.1*). Each public agency is required by CEQA to mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so. The Lead Agency is responsible for considering the effects, both individual and collective, of all activities involved in the Project.

This EIR intends to inform the Lead Agency, decision makers, and the public generally of the significant environmental effect of the Project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Project (CEQA Guidelines *Section 15121*). While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under CEQA Guidelines *Section 15091*, Findings, and if necessary, by making a statement of overriding considerations under *Section 15093*, Statement of Overriding Considerations. Generally, when a Project EIR is prepared under CEQA, no subsequent or supplemental EIR is required by the Lead Agency unless certain circumstances arise as outlined in PRC *Section 21166* and CEQA Guidelines *Section 15162*, Subsequent EIRs and Negative Declarations, *Section 15163*, Supplement to an EIR, and *Section 15164*, Addendum to an EIR or Negative Declaration.

2.4 Environmental Review Process

2.4.1 Notice of Preparation

The environmental review process began with a Notice of Preparation ("NOP") which is a brief notice sent by a Lead Agency to notify the Responsible Agencies, Trustee Agencies, the Office of Planning and Research, and the general public that the Lead Agency plans to prepare an EIR for the project. The purpose of the NOP is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR. The NOP, including notice of a public scoping meeting, was distributed for a 30-day response period in accordance with requirements under CEQA Guidelines *Section 15082* on January 9, 2026. The public scoping meeting was held virtually on January 22, 2026.

Comments Received

Three (3) comment letters were received in response to the NOP, and zero (0) comments were received during the scoping meeting. Comments received were considered in preparation of the analysis in this EIR. Letters are attached in Appendix B. Comments generally cover the following issues:

- **Air Quality/Greenhouse Gas Emissions:** The San Joaquin Valley Air Pollution Control District (SJVAPCD) stated that the Project's annual construction and operational criteria pollutant emissions are not expected to exceed the District's significance thresholds identified in its Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) and recommended best practices and regulatory coordination, including use of the cleanest available off-road construction equipment, consideration of screening-level health risk evaluation for nearby sensitive receptors, evaluation of nuisance odor potential, and compliance with applicable District requirements.
- **Biological Resources:** The California Department of Fish and Wildlife (CDFW) recommended that the EIR include biological technical studies and impact analysis for special-status species and habitats that could occur in or adjacent to the Project site, including (among others) California tiger salamander, tricolored blackbird, Swainson's hawk, western burrowing owl, Crotch's bumble bee, northwestern pond turtle,

western spadefoot, special-status bats, American badger, and northern legless lizard, as well as potential impacts to riparian, wetland, and aquatic features along Bear Creek and Black Rascal Creek.

- **Hydrology and Water Quality:** CDFW noted potential applicability of Fish and Game Code section 1600 et seq. (Lake and Streambed Alteration) and potential CESA compliance considerations if take cannot be avoided, and recommended that the EIR address water rights/change petition requirements for changes in treated wastewater discharge (Water Code section 1211) and analyze downstream flow/fisheries considerations, SGMA-related considerations (including groundwater dependent ecosystems), and cumulative impacts associated with diversions and related groundwater recharge actions.
- **Tribal Cultural Resources:** The Native American Heritage Commission (NAHC) provided guidance regarding compliance with AB 52 and, where applicable, SB 18, including recommendations to consult with traditionally and culturally affiliated California Native American tribes early in the process, complete appropriate cultural resources records searches (CHRIS) and Sacred Lands File requests, and ensure procedures are in place for confidentiality and for the treatment of inadvertent discoveries, including Native American human remains, consistent with applicable state requirements.

2.4.2 Draft EIR

This document constitutes the Draft EIR. Upon completion of the Draft EIR, the City will file a Notice of Completion ("NOC") with the Office of Planning and Research in accordance with CEQA Guidelines *Section 15085*. The City will also provide public notice of the availability, or Notice of Availability ("NOA"), of the Draft EIR at the same time the NOC is sent to the Office of Planning and Research, pursuant to CEQA Guidelines *Section 15087*. The review period for this Draft EIR will be 45 days. Public comment on the Draft EIR will be accepted in written form. Comments or questions on this Draft EIR Should be addressed to:

City of Atwater
Justin Vinson, Public Works Director
1350 Broadway, Atwater, CA 95301
jvinson@atwater.org

2.4.3 Final EIR

Following the 45-day review period, a Final EIR will be prepared. As part of preparing the Final EIR, the Lead Agency will evaluate comments on environmental issues received from people who reviewed the Draft EIR and will prepare a written response. A written response, or Response to Comments, will be provided at least 10 days prior to certifying the EIR in accordance with requirements under CEQA Guidelines *Section 15088*, Evaluation and Response to Comments.

Prior to approving the Project, the Lead Agency will certify that the Final EIR has been completed in compliance with CEQA, was presented to the decision-making body, was reviewed and considered by the decision-making body, and reflects the Lead Agency's independent judgment and analysis. The Lead Agency will not decide to approve or carry out the Project unless the Project as approved will not have a significant effect on the environment or the Lead Agency has a) eliminated or substantially lessened all significant effects on the environment where feasible as shown in the written findings; and b) determined that any remaining significant effects on the environment found to be unavoidable are acceptable due to overriding concerns as described in CEQA Guidelines *Section 15093*, Statement of Overriding Considerations.

2.5 Scope of the EIR

This Draft EIR provides full environmental setting, regulatory setting, impact analysis, and mitigation measures for the following environmental topics: Biological Resources, Cultural Resources, Geology and Soils, Hydrology and Water Quality, and Tribal Cultural Resources.

The Initial Study, provided in Appendix C, concluded that all other environmental topics including Aesthetics, Agriculture and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire, would result in no impact or less than significant impact without mitigation. In accordance with CEQA Guidelines *Section 15128*, these topics are not analyzed in detail in this EIR. A summary for each of these topics can be found in Chapter 4.6, Effects Not Found to Be Significant, which briefly explains the basis for the conclusions in the Initial Study and incorporates that document by reference into this EIR.

2.6 EIR Organization

Content requirements for EIRs are identified in CEQA Guidelines *Sections 15122 through 15132*. This Draft EIR is organized into the following chapters in accordance with the content requirements of CEQA.

- **Chapter 1. Executive Summary:** contains a summary of the proposed actions and its consequences, and identifies a) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; b) areas of controversy known to the Lead Agency including issues raised by agencies and the public; and c) issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.
- **Chapter 2. Introduction:** outlines the purpose of the EIR, provides a summary of the proposed Project, defines the scope of the environmental evaluation, summarizes the EIR preparation and certification process, and details the scope and organization of the Draft EIR.
- **Chapter 3. Project Description:** provides a description of the Project including the location, objectives, technical, economic, and environmental characteristics, and intended uses of the EIR.
- **Chapter 4. Evaluation of Environmental Impacts:** describes the physical environmental conditions ("Environmental Setting") of the Project site, the regulatory environment that may be applicable to the Project ("Regulatory Setting"), significance thresholds by which impacts are determined ("Thresholds of Significance"), and consideration and discussion of environmental impacts identified in Section 2.6 Scope of the EIR above. This chapter also provides a conclusion for each impact including less than significant impact (LTS), significant impact (S), or significant and unavoidable impact (SU), identifies any recommended mitigation measures, and addresses cumulative impacts.
- **Chapter 5. Project Alternatives:** identifies a range of reasonable alternatives to the Project which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project and evaluates the comparative merits of the alternatives.
- **Chapter 6. Other CEQA-Required Topics:** provides an analysis of other CEQA-required topics including growth-inducing effects, significant and irreversible effects, significant and unavoidable impacts, substantial adverse effects on protected fish, wildlife, and plant species, substantial adverse effects on human beings, and effects not found to be significant.

- **Chapter 7. Report Preparation:** identifies agencies, organizations, private individuals, and references consulted in preparing the Draft EIR, and the preparers of the Draft EIR.
- **Appendices:** contain the NOP, comment letters, technical calculations, and other documentation and reports prepared in conjunction with this Draft EIR.

Chapter 3 PROJECT DESCRIPTION

3.1 Project Area

3.1.1 Location

The Project in the jurisdiction of the City of Atwater and County of Merced, California, located east of South Bert Crane Road, between Bear Creek and Oak Avenue Alignment (Figure 3-1). The site includes portions of six (6) parcels identified as Merced County Assessor Parcel Number (APN) 056-200-026, 056-200-011, 056-200-021, 056-200-024, 065-020-012, and 056-200-002, totaling approximately 7.67 acres. The site also includes approximately 3,390 feet of South Bert Crane Road right-of-way (ROW). The site is a portion of Section 35, Township 7 South, Range 12 East, and a portion of Section 02, Township 8 South, Range 12 East, Mount Diablo Base and Meridian. Figure 3-2 shows the Project vicinity. The centroid of the Project area is 37°16'40.8"N 120°37'27.5"W.

3.1.2 Land Use and Zoning

General Plan Land Use Designation

The Project site has a County of Merced General Plan land use designation of Agricultural (Figure 3-3).

Zoning

The Project site is predominately in the County of Merced A-1 – General Agricultural zone district (Figure 3-4). APN 056-200-026 is within the City of Atwater and does not have a designated zone district.

3.1.3 Setting and Surrounding Uses

Site Characteristics

The pump station site is located on the Bert Crane Regional Wastewater Treatment Plant (WWTP) parcel (APN 056-200-026), along the eastern boundary under Alternatives 1 and 2 and along the northern boundary under Alternative 3. The area proposed for the pump station is currently vacant and contains no existing improvements or structures. The proposed underground pipeline alignments would be located within existing dirt roads between agricultural fields and along South Bert Crane Road, which is a paved two-lane roadway without curb, gutter, or sidewalk.

The topography of the Project area is gently sloping, with no abrupt or highly variable changes in grade. Ground elevations are approximately 119 feet above mean sea level at the northwest corner of the WWTP site and gradually decline to roughly 114 feet near the southern Bear Creek connection. At the Applegate Road/Oak Avenue intersection, where Alternative 3 would connect to the Deckert Lateral, the elevation is approximately 123 feet above mean sea level, reflecting the natural fall of the land toward the nearby creek corridors.

The existing biotic conditions and resources of the pump station site can primarily be defined as ruderal and herbaceous vegetation with heavy alternation due to discing and grading. Row crops are present along portions of the dirt roads paralleling the proposed pipeline alignments. Scattered trees, primarily non-native species, occur along South Bert Crane Road and the Oak Avenue Alignment road edges. Water features include Bear Creek, Black Rascal Creek, and Deckert Lateral, where outfall structures are proposed. The site consists of flat to gently sloping agricultural soils with deep percolation in most locations, occasional shallow water tables, and rare flooding.

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Surrounding Uses

Existing uses, land use designations, and zone districts of surrounding properties are shown in Table 3-1. Current surrounding land uses include agricultural operations and rural residences. The Bert Crane WWTP is located to the northwest of the site.

Table 3-1: Existing Uses, General Plan Designations, and Zone Districts of Surrounding Properties

Direction from Project Site	Existing Use	General Plan Designation	Zone District
North	Agricultural	Agricultural	A-1 General Agricultural
East	Agricultural, WWTP, Single-Family Residence	Agricultural	A-1 General Agricultural
South	Agricultural, Bear Creek, Black Rascal Creek	Agricultural	A-1 General Agricultural
West	Agricultural, Single-Family Residence	Agricultural	A-2 Exclusive Agricultural

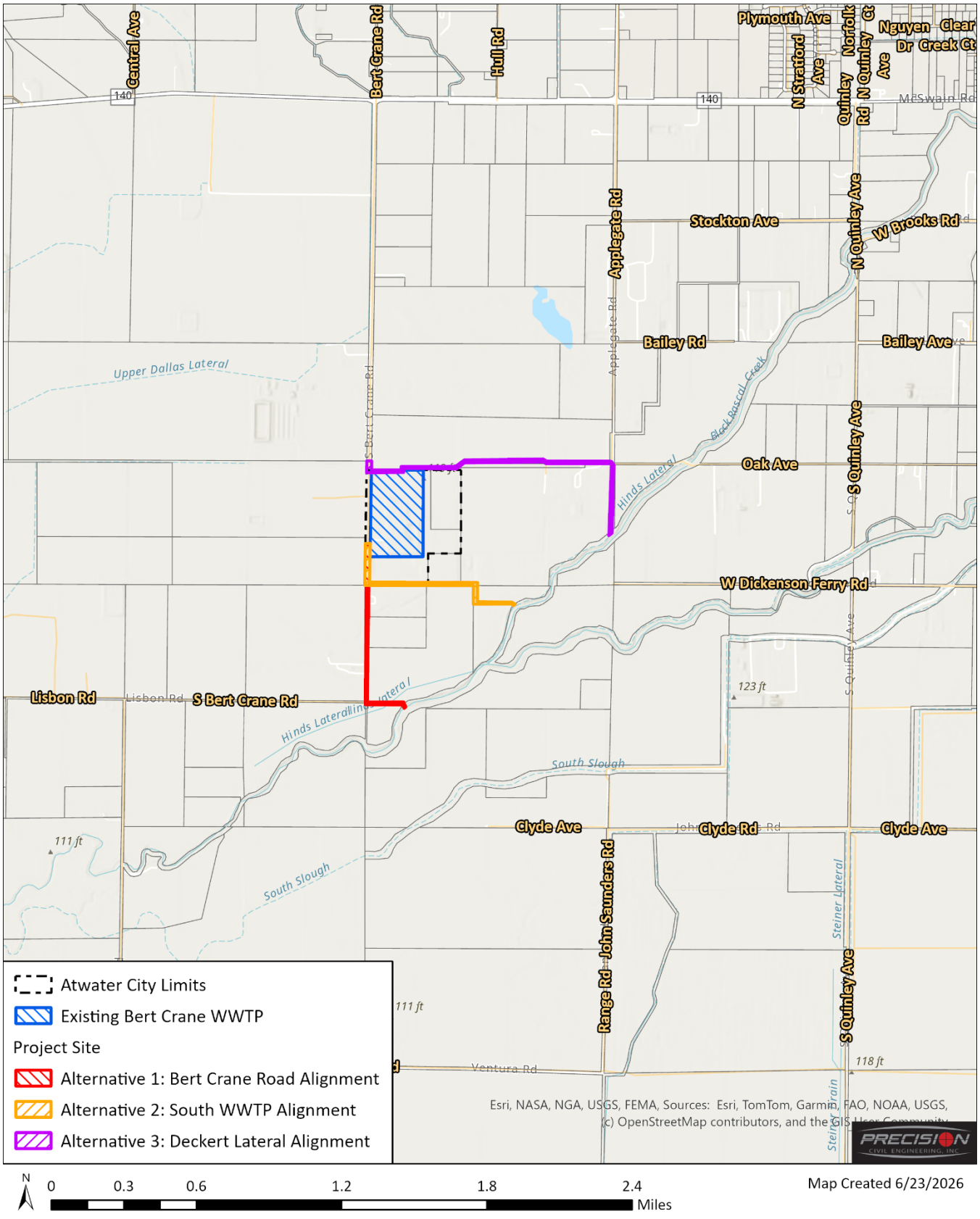


Figure 3-1 Location Map

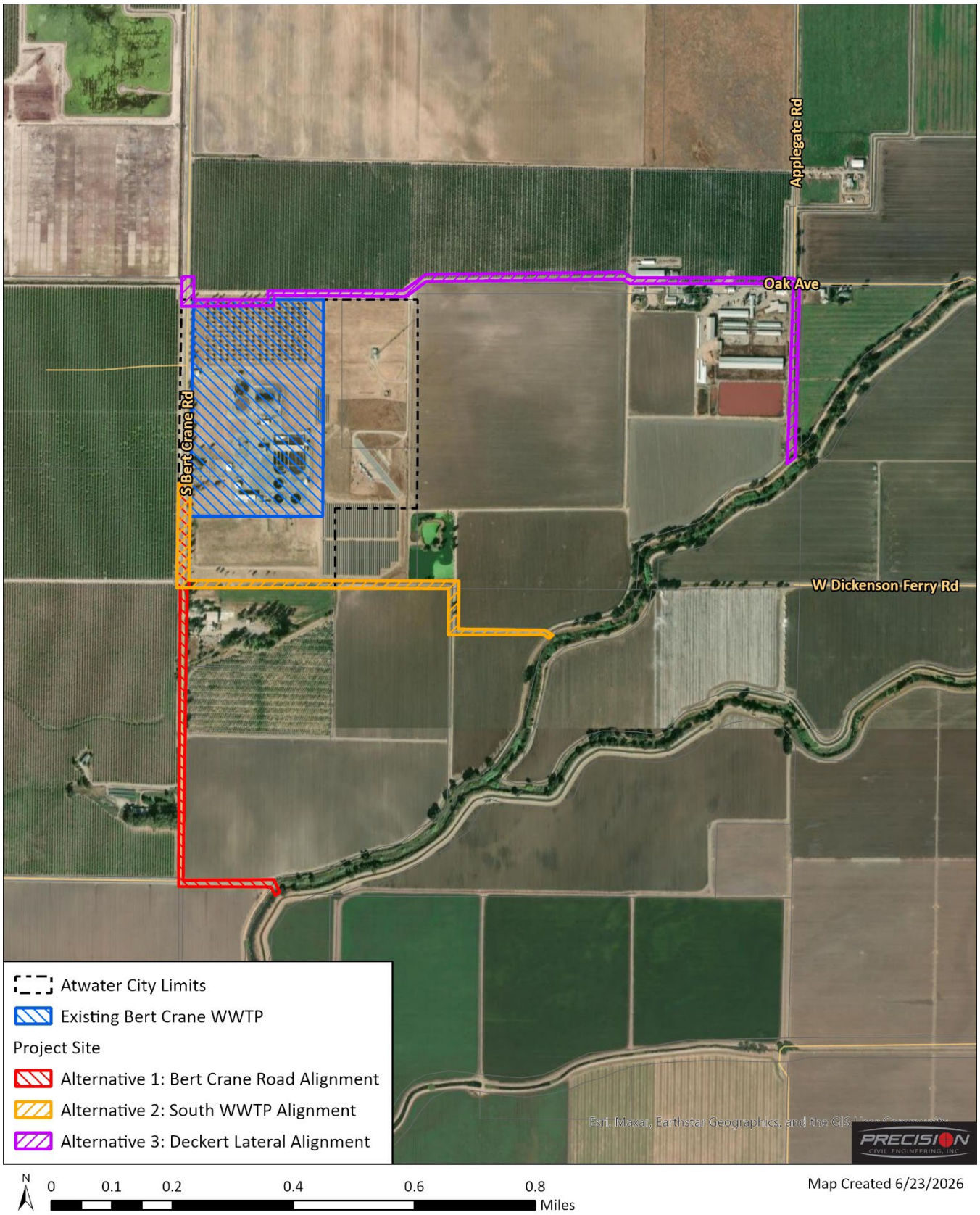


Figure 3-2 Project Vicinity Map

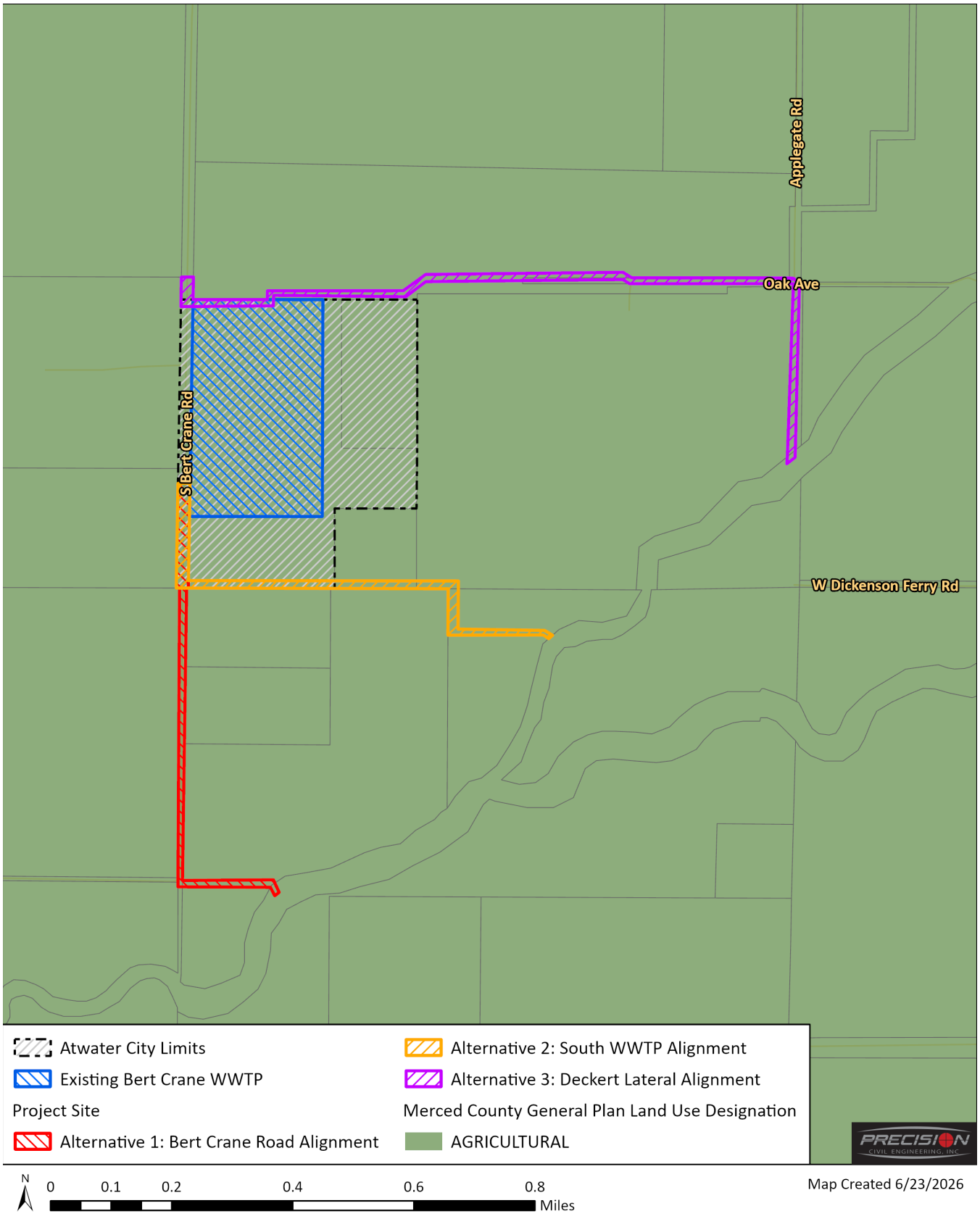


Figure 3-3 General Plan Designated Land Use Map (Existing)

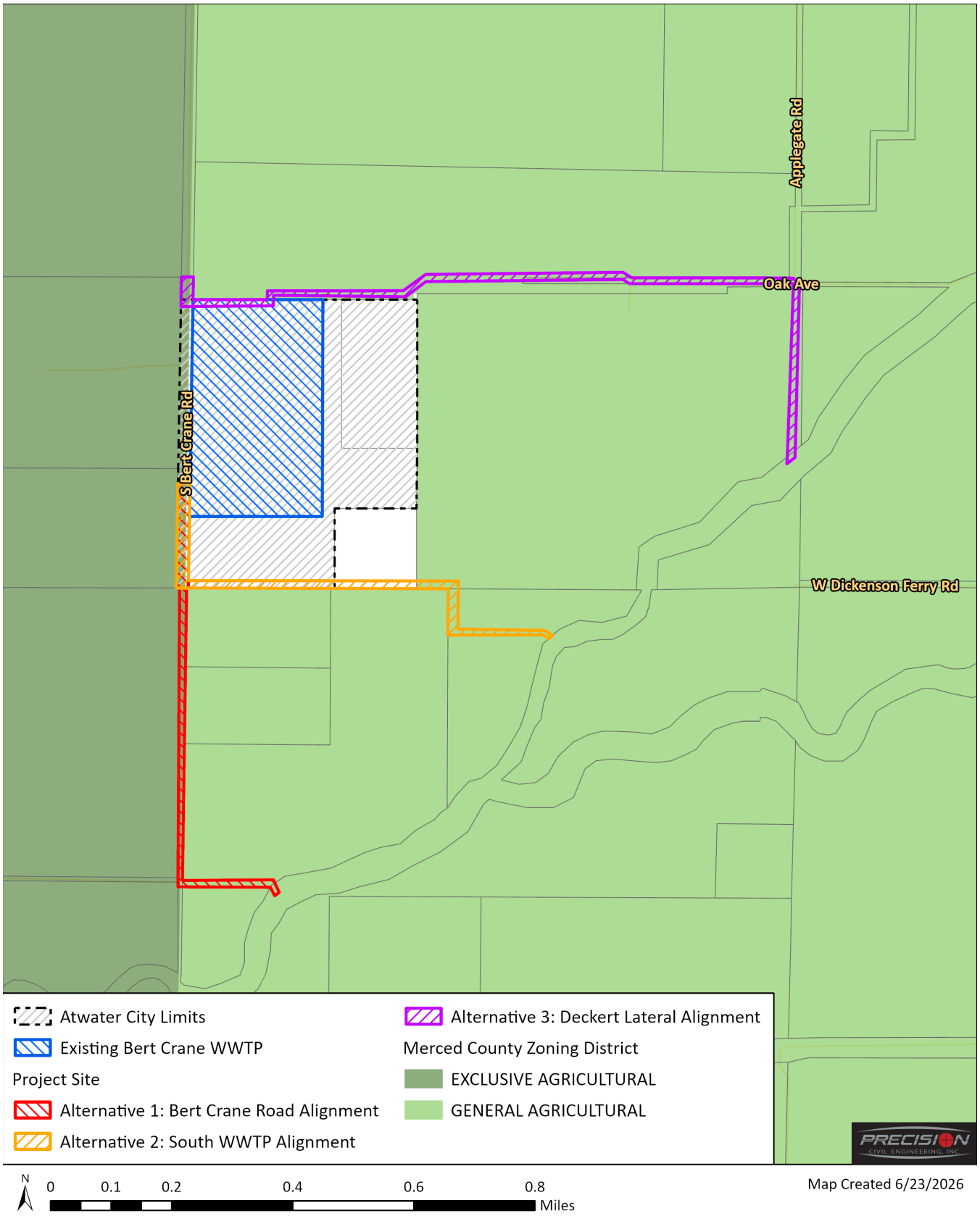


Figure 3-4 Merced County Zoning Map (Existing)

3.2 Project Description

The City of Atwater owns and operates the Bert Crane Regional Wastewater Treatment Plant (WWTP), located on the southeast corner of South Bert Crane Road and Oak Avenue Alignment (APN 056-200-026), which provides tertiary-level treatment for wastewater. Treated effluent from the WWTP is currently released via an effluent pump station and a 42-inch force main into the Atwater/Peck Drain, which flows through Joseph Gallo Farms (Gallo Ranch), where a significant portion is diverted for agricultural and wetland use.

In order to meet Sustainable Groundwater Management Act (SGMA) groundwater recharge requirements, the City of Atwater intends to construct improvements to discharge its treated effluent to the Merced Irrigation District (MID) via Black Rascal Creek or Bear Creek. These improvements would connect into the existing force main with a tee fitting and automatic actuated butterfly valves integrated into the City's Supervisory Control and Data Acquisition (SCADA) system. The improvements would allow the City to redirect effluent flows to the Gallo Ranch, the creeks, or both.

A Discharge Study was prepared to evaluate three (3) alternatives for future improvements for discharge into either Black Rascal Creek or Bear Creek: Alternative 1 – Bert Crane Road Alignment, Alternative 2 – South WWTP Alignment, and Alternative 3 – Deckert Lateral Alignment. All three (3) alternatives share common infrastructure improvement recommendations, such as connecting to the existing force main from the WWTP, construction of a new pump station, and construction of an outfall structure. The following summarizes the recommended improvements that are applicable to each alternative:

- Installation of a 42-inch x 42-inch x 18-inch tee
- Installation of a 42-inch automatic actuated butterfly valve
- Installation of an 18-inch automatic actuated butterfly valve
- Installation of an air relief valve
- Installation of an 18-inch magnetic flow meter
- Construction of a pump station
- Installation of power source and connection to City SCADA system
- Construction of an outfall structure equipped with a flap valve.

The alternative specific improvements are as follows:

- Alternative 1 would include construction of 4,400 linear feet of 18-inch pipeline, traffic control, and flow diversion and dewatering. A new outfall structure into Bear Creek would be constructed.
- Alternative 2 would include construction of 4,300 linear feet of 18-inch pipeline and flow diversion and dewatering. A new outfall structure into Black Rascal Creek would be constructed
- Alternative 3 would include connection to the existing Deckert Lateral culvert, construction of 5,400 linear feet of 18-inch pipeline, increases to MIDs Deckert Lateral capacity, replacing the existing MID outfall structure to Black Rascal Creek, and traffic control.

This Environmental Impact Report evaluates the potential environmental impacts of all three (3) proposed alternatives—Alternative 1 (Bert Crane Road Alignment), Alternative 2 (South WWTP Alignment), and Alternative 3 (Deckert Lateral Alignment).

3.2.1 Project Components

This section describes the overall components of the Project known at this time.

Site Preparation

The pump station site is currently vacant with no existing structures or improvements. Site preparation would include clearing of ruderal vegetation, minor grading for drainage and pad construction, and excavation for foundations, utilities, and the pump station vault. Pipeline corridors along dirt roads and South Bert Crane Road would require clearing, trenching, and temporary traffic control. Creek outfalls would involve localized flow diversion and dewatering. No building demolition is required.

Site Layout

Alternative 1 – Bert Crane Road Alignment: Alternative 1 proposes connecting the existing 42-inch treated effluent pipeline with an 18-inch force main along Bert Crane Road and flowing into Bear Creek via an outfall structure. The specific improvements for this alternative include construction of 4,400 linear feet of 18-inch pipeline, traffic control, and flow diversion and dewatering.

The pipeline alignment travels from the WWTP parcel (i.e., APN 056-200-026), along the Bert Crane Road right-of-way, and along a dirt road to the outfall structure. The pump station is located on the WWTP parcel. An easement is required for the improvements situated on parcel 065-020-011 towards Bear Creek. Figure 3-5 shows the site plan of Alternative 1.

Alternative 2 – South WWTP Alignment: Alternative 2 proposes connecting the existing 42-inch treated effluent pipeline with an 18-inch force main south of the WWTP and flowing into Rascal Creek via an outfall structure. The specific improvements for this alternative include construction of 4,300 linear feet of 18-inch pipeline and flow diversion and dewatering.

The pipeline alignment travels from the WWTP parcel, passing by the city-owned parcel (i.e., APN 056-200-021), and along dirt roads to the outfall structure. The pump station is located on the WWTP parcel. An easement will be required for the pipe segment located within parcels 056-200-024 and 065-020-012. Figure 3-6 shows the site plan of Alternative 2.

Alternative 3 – Deckert Lateral Alignment: Alternative 3 proposes connecting the existing 42-inch treated effluent pipeline with an 18-inch force main north of the WWTP, then east towards the intersection between Applegate Road and Oak Avenue, and discharge to the creek via the Deckert Lateral. The specific improvements for this alternative include construction of 5,400 linear feet of 18-inch pipeline, connection to the existing Deckert Lateral culvert, increasing the capacity of Deckert Lateral, replacing the existing MID outfall structure to Black Rascal Creek, and traffic control.

The pipeline alignment travels along the Oak Avenue Alignment right-of-way. The pump station is located on the WWTP parcel. An easement will be required for the pipe segment along parcel 056-200-002 until it reaches the existing Deckert Lateral culvert at the intersection of Oak Avenue and Applegate Road. Figure 3-7 shows the site plan of Alternative 3.

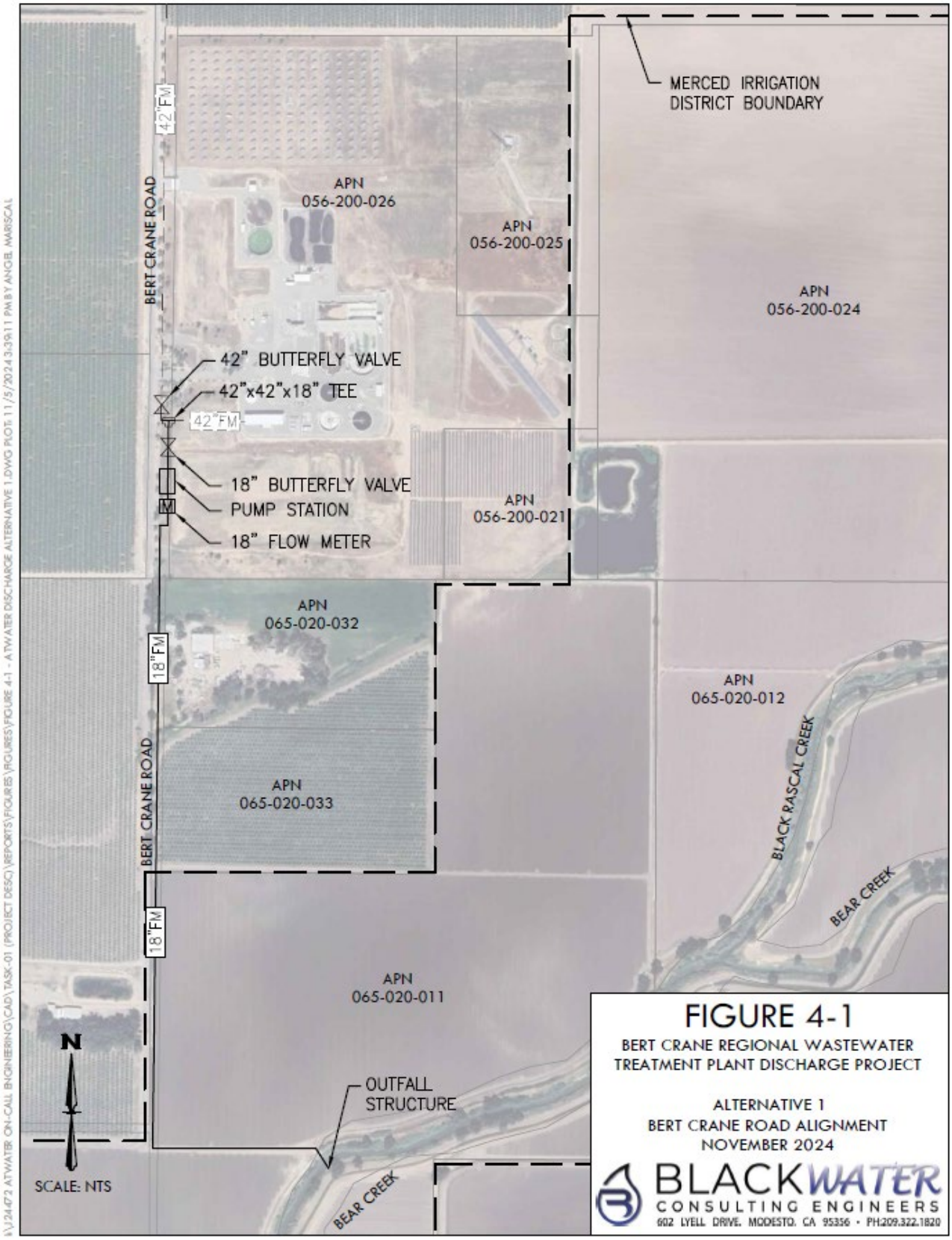


Figure 3-5 Alternative 1 Site Plan

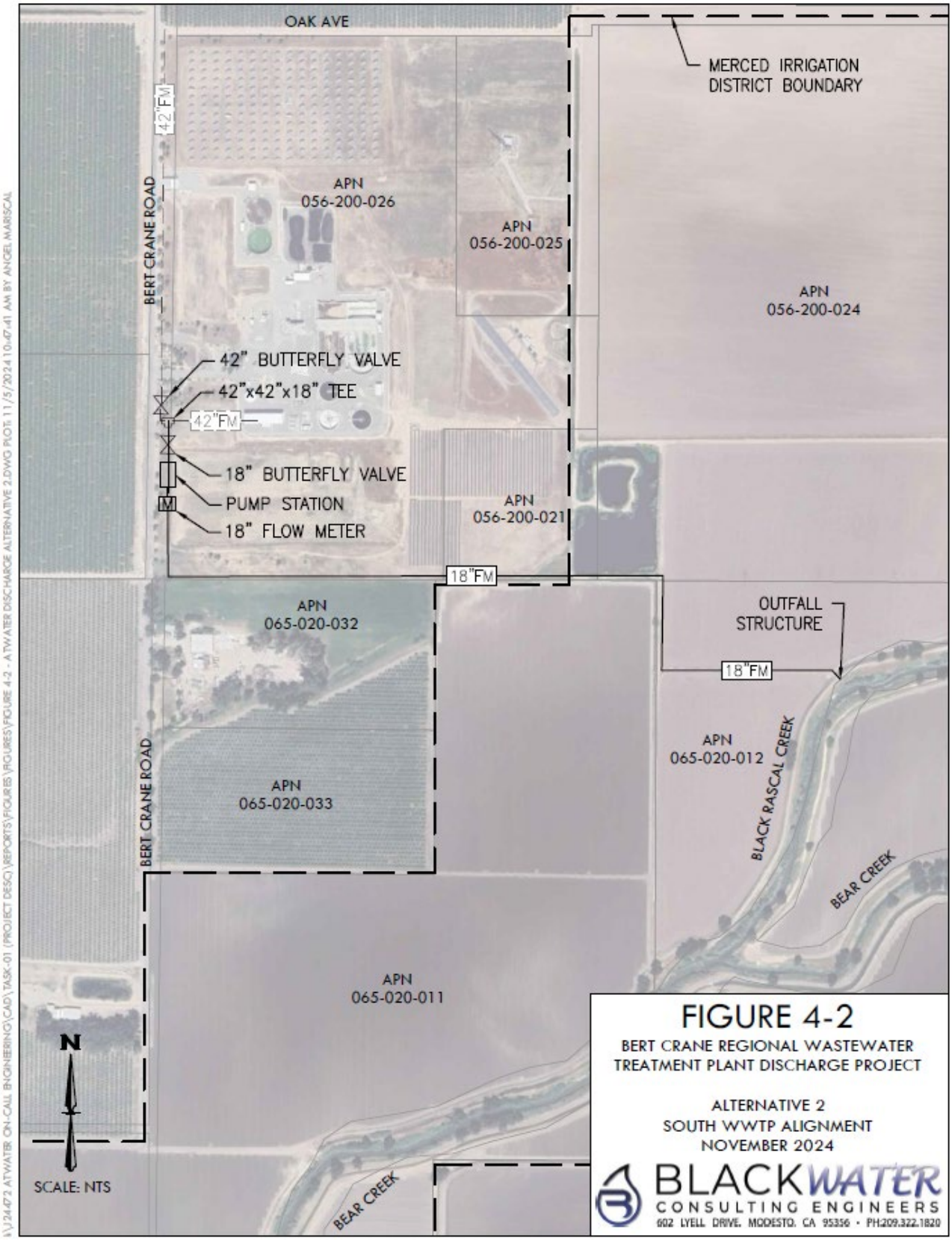


Figure 3-6 Alternative 2 Site Plan

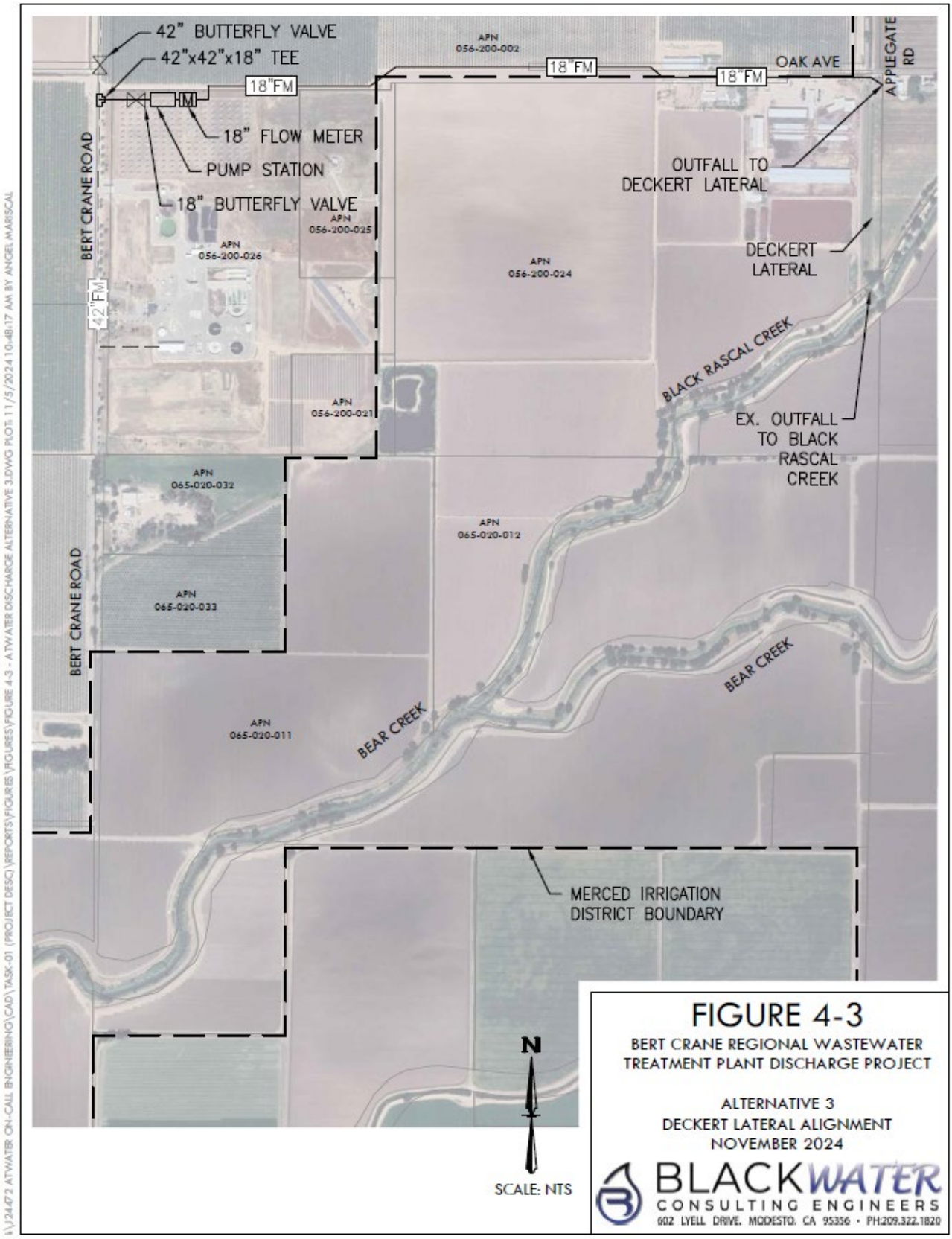


Figure 3-7 Alternative 3 Site Plan

3.3 Project Objectives

The objectives of the proposed Project are to:

- **Comply with SGMA recharge requirements:** Redirect treated effluent from Atwater/Peck Drain to MID-managed creeks (Black Rascal Creek or Bear Creek) to support sustainable groundwater management in the Merced Subbasin.
- **Enhance effluent discharge flexibility:** Install infrastructure allowing SCADA-controlled diversion of WWTP flows between Gallo Ranch, MID creeks, or both, ensuring operational reliability during varying wastewater volumes and water demands.
- **Minimize environmental impacts:** Construct improvements using standard engineering practices (e.g., open-trench pipeline, pump station) that avoid sensitive habitats where feasible while meeting U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) permitting standards.

3.4 Project Approvals and Permitting

3.4.1 City Approvals and Permits

The City of Atwater is the Lead Agency responsible for approving the proposed Project. The Project requires approval by the City, including approval of a contract for design and construction of the Bert Crane Wastewater Treatment Plant Discharge Improvements Project and certification of this Environmental Impact Report. Implementation of the Project would also require subsequent City approvals and permits, including, but not limited to, site utilities permits, encroachment permits for work within public rights-of-way, grading permits, and building permits for the pump station and associated facilities.

3.4.2 Other Agency Approvals and Permits

In addition to City approvals, implementation of the Project would require the following permits from other regulatory agencies, as described in Table 3-2.

Table 3-2: Other Agency Approvals and Permits

Agency	Permit/Approval	Description
California Department of Fish and Wildlife (CDFW)	Lake and Streambed Alteration (LSA) Agreement	Required for work impacting the bed, channel, or bank of Bear Creek, Black Rascal Creek, or Deckert Lateral.
Merced County	Encroachment Permit	Required for construction within County rights-of-way along South Bert Crane Road.
Merced Irrigation District (MID)	Encroachment Permit	Required for pipeline connections and work within MID facilities, including Deckert Lateral upgrades under Alternative 3.
Central Valley Flood Protection Board (CVFPB)	Encroachment Permit	Required for work within 100 feet of non-leveed regulated streams (Bear Creek, Black Rascal Creek).
State Water Resources Control Board (SWRCB) / Central Valley Regional Water Quality Control Board (CVRWQCB)	CWA Section 401 Water Quality Certification	Required in conjunction with USACE Section 404 permit for outfall construction and streambed impacts.

U.S. Army Corps of Engineers (USACE)	CWA Section 404 Permit	Required for discharge of dredged or fill material into Waters of the U.S. at creek outfalls.

The Project would also require preparation of a Stormwater Pollution Prevention Plan (SWPPP) under the NPDES General Construction Permit due to ground disturbance exceeding one acre and proximity to waterways.

Subsequent implementation of the Project may require additional review from Responsible and Trustee Agencies exercising discretionary authority over the permits listed above, including the California Department of Fish and Wildlife, Central Valley Regional Water Quality Control Board, U.S. Army Corps of Engineers, Merced Irrigation District, Merced County, and Central Valley Flood Protection Board. No other state or federal discretionary approvals beyond those identified in Table 3-2 are anticipated at this time.

Chapter 4 EVALUATION OF ENVIRONMENTAL IMPACTS

4.0 Evaluation Approach

4.0.1 Significance Determination

A "significant effect on the environment" means a substantial, or potentially substantial, adverse change in the environment (PRC *Section 21068*). In evaluating the significance of the environmental effect of a project, the Lead Agency is required to consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project (CEQA Guidelines *Section 15064*).

Per CEQA, a direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project (e.g., dust, noise, and traffic of heavy equipment from construction of a sewage treatment plant) and an indirect physical change in the environment is a physical change in the environment, which is not immediately related to the project, but which is caused indirectly by the project (e.g., construction of a new sewage treatment plant may facilitate population growth due to increase in capacity and may lead to an increase in air pollution).

A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant (CEQA Guidelines *Section 15064.7*). The evaluation of environmental impacts in this EIR identifies the standards used to determine the significance of impacts for each resource topic in accordance with CEQA Guidelines *Section 15126*. The significance is determined by comparing the effects of the Project to the baseline condition and determining whether substantial, or potentially substantial, adverse change in the environment would occur.

4.0.2 Baseline Conditions

An EIR must include a description of the physical environmental conditions in the vicinity of the project (CEQA Guidelines *Section 15125*). Per CEQA, this environmental setting will normally constitute the baseline physical conditions by which a leady agency determines whether an impact is significant. Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced from both a local and regional perspective. As described in Chapter 2 Introduction, the City issued a Notice of Preparation for the Project on January 9, 2026. Existing environmental conditions of the Project site and area are described under each resource topic, "Environmental Setting." This setting generally serves as the baseline against which environmental impacts of the Project are evaluated.

4.0.3 Cumulative Impacts

CEQA requires an EIR to consider whether the Project's incremental effects, when viewed in combination with the effects of past, present, and reasonably foreseeable future projects, would be cumulatively considerable. (PRC

Section 21083; CEQA Guidelines *Sections 15064(h), 15130*) Accordingly, this EIR evaluates cumulative impacts on a topic-by-topic basis in each resource section by comparing the Project's incremental contribution against the relevant cumulative setting, existing regulatory context, and reasonably foreseeable future development. Where appropriate, the analysis considers whether the Project would combine with other projects or conditions to produce a significant cumulative impact, and whether mitigation would reduce the Project's contribution to a less-than-cumulatively-considerable level. The cumulative conclusion for each resource topic is presented in the cumulative impact subsection at the end of that impact analysis.

4.1 Biological Resources

Technical Analysis

A Biological Resource Assessment was conducted by Argonaut Ecological Consulting, Inc., dated January 16, 2026. The assessment includes assessing the types of current habitats and sensitive species associated with the habitats. The biological evaluation methods include performing site reconnaissance, reviewing public and commercial databases, historical and current aerial photographs, and other published information and data. The Project site was surveyed in November 2025 and inspected to determine the suitability of the site's habitat for species of concern. The Report is provided in Appendix A and results are incorporated herein.

4.1.1 Environmental Setting

Land Use

The Bert Crane WWTP and all alternatives are located within a highly agricultural area south, southwest of the City of Atwater. The surrounding land uses row crops, orchards, rural residential homes, dairies, and public roadways. The lands have been in agricultural production for many decades. The site of the Bert Crane WWTP and associated solar panel farm was fallow habitat until 2010 when the treatment plant construction began. It took about three (3) years for the WWTP construction to be completed. There was an existing radio control club (Merced County Radio Control Club) on the east side of the WWTP property and that facility remains in use.

Topography and Drainage

The WWTP occurs at an elevation of roughly 110 ft. (mean sea level). The elevation along the alternatives ranges from 105-118 feet on the levees along Black Rascal Creek/Bear Creek. The existing WWTP is located roughly 0.5 miles northwest of the confluence of Black Rascal Creek into Bear Creek. Bear Creek flows west into the San Luis National Wildlife Refuge and the San Joaquin River. Therefore, drainage is to the southwest.

Potential Waters/Wetlands

The National Wetland Inventory Map (NWI) was used to identify any known, historically mapped wetlands. The NWI mapping is based on a combination of aerial photography and other sources and is not always reliable, nor can be used to determine legal or regulatory boundaries of waters/wetland features. Field surveys of the Project alternative was conducted to confirm the presence or absence of wetlands and other water features.

The predominant waters/wetland features in the region are Black Rascal Creek and Bear Creek. These are nearly perennial waterways that appear as blue-line stream on U.S. Geographic Survey (USGS) topographic maps since at least 1914. It should be noted that in 1914, Black Rascal Creek was labeled as Black Rascal Slough, but on more recent topographic maps, it is labeled as Hinds Lateral. For purposes of this report, we rely on the naming

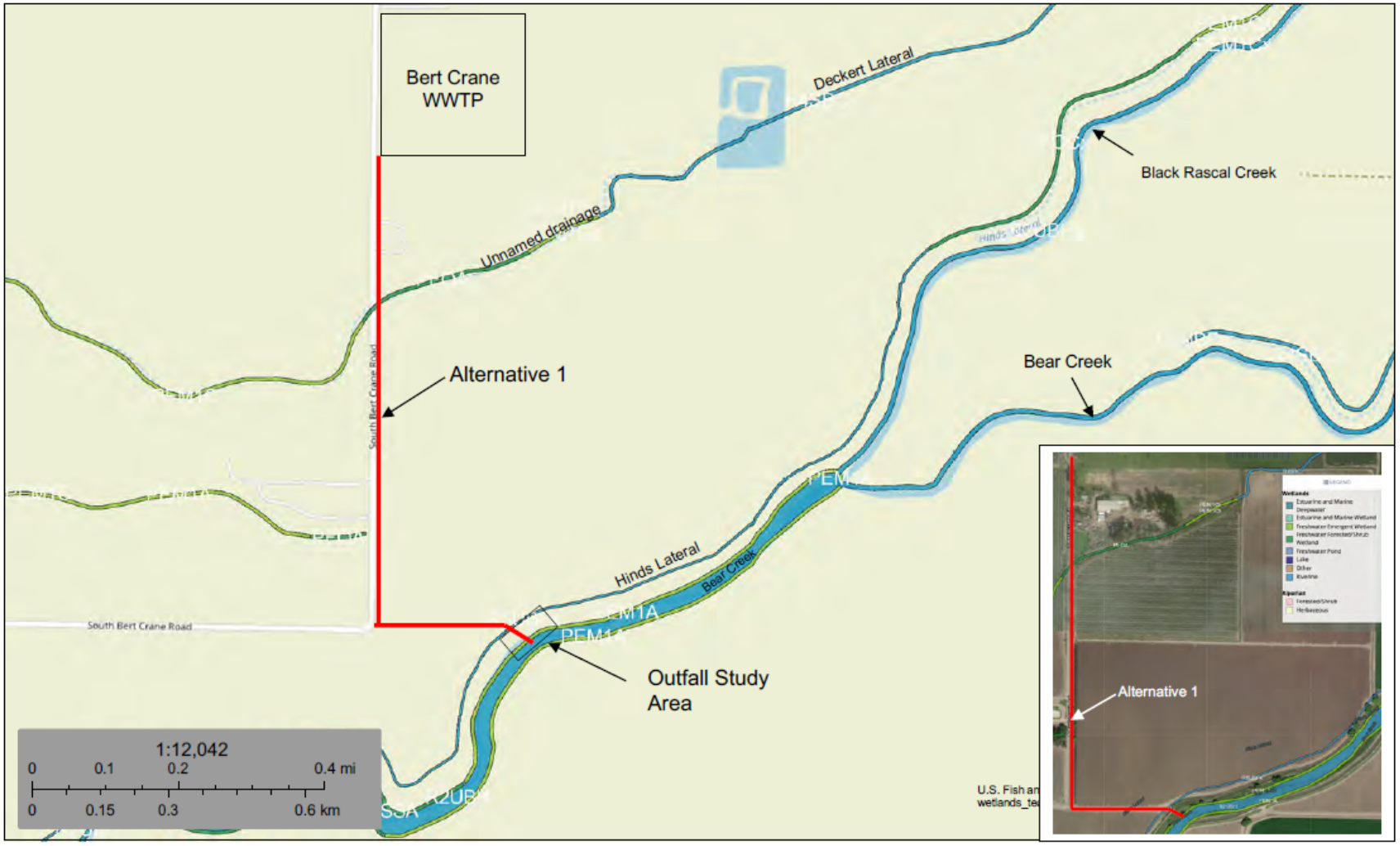
convention used in the NWI mapping, which places the Hinds Lateral running along the north side of Bear Creek and Black Rascal Creek flows into Bear Creek from the northeast along the 1914 alignment of Black Rascal Slough.

In addition to these near perennial waters, the NWI mapping also shows other water features to include agricultural laterals and a stormwater pond.

Figure 4-1 details the mapped waters/wetlands shown on the NWI maps within the Project site. Table 4-1 provides information on the mapped features shown on the NWI maps for each alternative.

U.S. Fish and Wildlife – Special-Status Species Database

The U.S. Fish and Wildlife Service (USFWS) operates an "Information for Planning and Consultation" (IPaC) database, which is a project planning tool for the environmental review process that provides general information on the location of special-status species that are "known" or "expected" to occur (note: the database does not provide occurrences; refer to the California Department of Fish and Wildlife – Natural Diversity Database below). Specifically, the database identifies 10 endangered species and 11 migratory birds that are potentially affected by activities on the Project site. The list of species is provided in Appendix A.



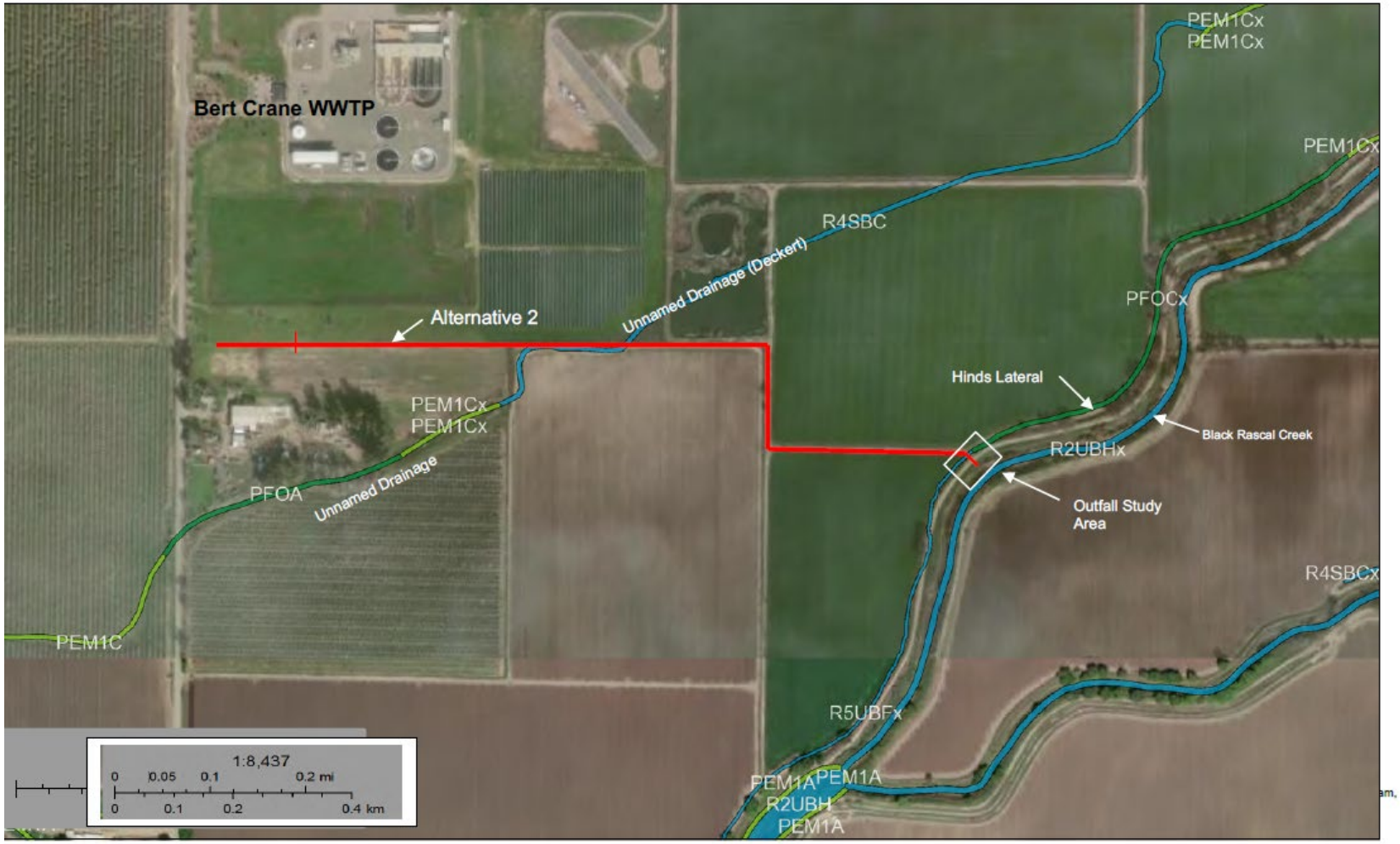
January 6, 2026

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper



January 8, 2026

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
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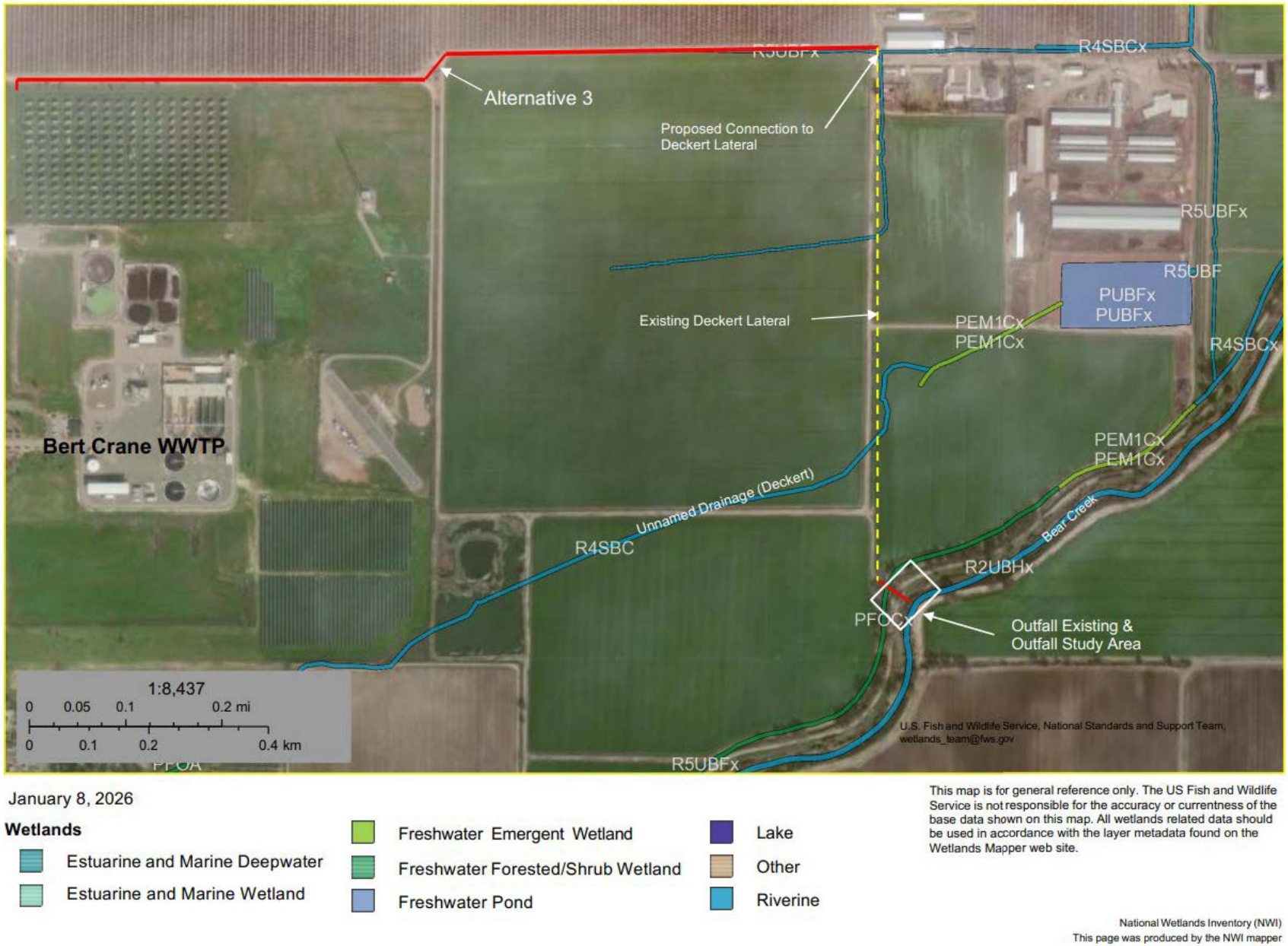


Figure 4-1 National Wetland Inventory Mapping for each Alternative

Table 4-1: National Wetland Inventory Mapping Water/Wetland Features

Water/Wetland Feature	Cowardin Code & Description	Associated with Alternative
Black Rascal Creek	R2UBH: Riverine, lower perennial, unconsolidated bottom, permanently flooded	2, 3
	PEM1A: Palustrine, emergent, persistent, temporarily flooded	2,3
Bear Creek	R2UBH: Riverine, lower perennial, unconsolidated bottom, permanently flooded	1
	PEM1A: Palustrine, emergent, persistent, temporarily flooded	1
Hinds lateral	R5UBFx: Riverine, unknown perennial, unconsolidated bottom, semi permanently flooded, excavated	1, 2, 3
	PFOCx: Palustrine, forested, seasonally flooded, excavated	1
Unnamed Drainage #1 (Deckert Lateral)	R4SBc: Riverine, intermittent, streambed, seasonally flooded	2, 3
	PFOA: Palustrine, forested, temporarily flooded	2
Unnamed Drainage #2	R5UBFx: Riverine, unknown perennial, unconsolidated bottom, semi permanently flooded, excavated	1

Alternative 1 Habitat

Alternative 1 extends from the WWTP and runs along the east side of South Bert Crane Road south to just north of Bear Creek. The alignment crosses through the easement along a residential/rural ranch property just south of the WWTP but otherwise runs through agricultural land. At a hair-pin turn at the south end of Bert Crane Road, the alignment turns left and follows a farm access road to the north levee of Bear Creek (just downstream of the confluence of Black Rascal Creek with Bear Creek).

The habitat immediately south of the WWTP along Bert Crane Road includes pasture, ruderal and riparian/waters. At the northern end of the alignment, the habitat along the road is pasture land/fallow. Moving south, the road is lined with trees (approximately 18 individual trees including Valley oak (Quercus lobata, Western sycamore (Plantanus racemose), gum (Coriymbia sp), and willow (Salix sp.). It is assumed some of these trees may be impacted by Project, unless the alignment can be moved outside the dripline to the east.

Alternative 2 Habitat

Alternative 2 extends from the southern end of the WWTP and follows the southern boundary of the WWTP property through habitat characterized as pasture/fallow land. The alignment passes south of an existing ponding basin (off-site) through non-native grassland habitat. The ponding basin is not identified on the NWI mapping. This basin appears to be an off-channel storage basin for water from the Deckert Lateral. The alignment would need to cross the Deckert Lateral within the non-native grassland habitat. The lateral is roughly 8 feet in width.

From the southeast corner of the basin parcel, the alignment turns south for a short distance along a farm access road, then east along another farm access road and up the Bear Creek levee embankment, crossing over the Hinds Lateral via a culvert. There is no woody vegetation at the top of bank where the proposed outfall is located. The vegetation along the top of bank and down slope is made up of non-native grasses, giant canary reed, and some willow saplings.

Alternative 3 Habitat

Alternative 3 begin at the northern end of the WWTP property near the solar field and follows a farm access road south of an existing orchard to the north, and continues along farm access roads until the alignment turns south and connects with the existing Deckert Lateral. There is no vegetation community along Alternative 3 (other than orchards and row crops). The land use along the existing Deckert Lateral is row crops south of an existing dairy. Therefore, increasing the capacity of Deckert Lateral from the connection to the outfall would not impact any natural habitat.

There are mature trees along the Black Rascal Creek in the location of the existing and proposed outfall. The trees are located on the outside and inside banks of the levee (as opposed to the top of bank). The remainder of the vegetation is made up of forbs and weeds. There is some emergent/streamside vegetation at the lower reach of the interior bank.

4.1.2 Regulatory Setting

Federal Regulations

Section 401 of the Clean Water Act

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredged or fill material into waters of the United States (U.S.), as administered by the Army Corps of Engineers. The definition of "waters of the U.S." encompasses waters with a direct connection to interstate commerce via a tributary system, or an indirect connection through a nexus defined in ACOE regulations. In non-tidal waters, the jurisdictional boundary extends laterally to the ordinary high-water mark (OHWM) of the waterbody, and beyond the OHWM to the limit of any adjacent wetlands. The OHWM is the line on the shore established by water fluctuations, indicated by physical characteristics like a clear natural line on the bank, changes in soil, and the destruction of terrestrial vegetation (33 CFR 328.3). In tidal waters, jurisdiction extends to the high tide line or the limit of adjacent wetlands. Wetlands are defined as areas inundated or saturated by surface or groundwater with sufficient frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation adapted for saturated soil conditions. Non-wetland waters generally include any water body with an identifiable OHWM that is not otherwise exempt from regulation.

Federal Migratory Bird Treaty Act

The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711), Bald and Golden Eagle Protection Act (16 United States Code [USC] Section 668), and Federal Endangered Species Act (FESA; 16 USC § 153 *et seq.*).

The Migratory Bird Treaty Act (MBTA) was first enacted in 1918 to protect migratory birds between the United States and Great Britain (acting on behalf of Canada). The MBTA makes it illegal for anyone to take, possess, import, transport, purchase, barter, offer for sale, or purchase any migratory birds, nests, or eggs unless a federal agency has issued a permit. The USFWS has statutory authority and responsibility for enforcing the MBTA. This act was revised in 2004 to include all species native to the U.S. or its territories due to natural biological or ecological processes (70 FR 12710, March 15, 2005). The MBTA does not include nonnative species whose occurrences in the U.S. result solely from intentional or unintentional human introduction. The USFWS maintains a list of bird species not protected under the MBTA.

In January 2021, the USFWS published a new rule in the Federal Register. Under the rule change, the unintentional killing of migratory birds does not violate the MBTA. Only the intentional “pursuing, hunting, taking, capturing, killing, or attempting to do the same ... directed at migratory birds, their nests, or their eggs” would be illegal under the changes.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) (16 USC § 1531 et seq.), implemented by the U.S. Fish and Wildlife Service (USFWS), prohibits the "take" of federally listed wildlife species. Notably, the destruction of federally listed plants on private property is not federally prohibited and does not require a permit. Under FESA, "take" encompasses actions such as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Incidental Take refers to harm or death of a listed species that occurs during the course of otherwise lawful activities. Authorization for incidental take can be obtained from the USFWS through either Section 7 (interagency consultation for federal actions) or Section 10(a) (Incidental Take Permit for non-federal actions). This process assesses whether a project would jeopardize a listed species' continued existence and dictates necessary avoidance or mitigation measures. While not fully protected by FESA, the USFWS advises addressing candidate species in project planning due to the potential for their listing before project completion. FESA defines "harm" as an act that actually kills or injures wildlife. A 1999 USFWS clarification (Federal Register) emphasized that "harm" can also include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

State Regulations

Regional Water Quality Control Board

Under Section 401 of the Clean Water Act (CWA), the State Water Resources Control Board (SWRCB) requires water quality certification for all activities needing a Section 404 permit. The Regional Water Quality Control Board (RWQCB) is responsible for regulating these activities and issuing the necessary water quality certifications. Additionally, the RWQCB has the authority to regulate the discharge of "waste" into waters of the State under the Porter-Cologne Water Quality Control Act.

Porter-Cologne Water Quality Control Act

Enacted in 1969 (California Water Code Section 13000 et seq.), the Porter-Cologne Water Quality Control Act tasks the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (Water Boards) with preserving and enhancing all beneficial uses of California’s waters. The Act empowers the Water Boards to set water quality objectives and regulate pollution from both point and nonpoint sources affecting surface and groundwater. Under the federal Clean Water Act's Section 401, the Water Boards, overseen by the USEPA, also certify that activities impacting waters of the U.S. meet California's water quality standards.

Importantly, the Porter-Cologne Act defines "waters of the State" more broadly than federal jurisdiction, encompassing all surface and groundwater (including saline waters) within California, whether natural or artificial, and regardless of federal jurisdiction. This allows the Water Boards to issue Waste Discharge Requirement (WDR) permits for projects affecting only federally non-jurisdictional state waters. Consequently, California retains jurisdiction over isolated waters, and the RWQCB regulates all activities, including dredging and filling, in waters of the State not under USACE authority, such as vernal pools lacking a connection to Traditional Navigable Waters.

California Wetlands Conservation Policy

Since 1993, California has had a Wetlands Conservation Policy (Executive Order W-59-93), commonly known as the "No Net Loss" policy for wetlands. This established a state mandate to develop a policy framework and strategy for protecting the State's wetland ecosystems. Importantly, the policy was intended for voluntary implementation and not on a project-by-project basis (EO W-59-93, Section III).

State Wetland Definition and Procedures

In 2020, California adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. This state definition of wetland differs from the federal definition by potentially including non-vegetated areas if other wetland criteria are met. "Wetlands of the State" encompass: 1) natural wetlands, 2) wetlands created by modifying Waters of the State (historically), and 3) artificial wetlands meeting specific criteria. The State definition has limited exemptions, including industrial or municipal wastewater, certain stormwater treatment facilities, agricultural crop irrigation, industrial processing or cooling water, and rice fields flooded for growing.

California Department of Fish and Wildlife

As a Trustee Agency under CEQA, the California Department of Fish and Wildlife (CDFW) is responsible for reviewing project impacts on plant and wildlife. The CDFW has broad jurisdiction under Fish and Game Code Section 1802 for the conservation, protection, and management of fish, wildlife, native plants, and essential habitats. Additionally, the CDFW regulates projects that could "take" state-listed threatened or endangered species (Fish and Game Code Section 2081).

The CDFW also has jurisdiction over all perennial and intermittent streams under Fish and Game Code Sections 1601-1603, requiring Streambed Alteration Agreements for any work within the stream zone that could alter the natural flow or the physical characteristics of any river, stream, or lake. When issuing these agreements, CDFW must comply with CEQA, typically relying on the lead agency's review but acting as the lead agency itself if no local CEQA review was performed.

California Endangered Species Act

The California Endangered Species Act (CESA) (Government Code Sections 2050 - 2089.25) protects approximately 250 plant and animal species at risk of extinction in California. CESA prohibits the import, export, "take" (killing), possession, purchase, or sale of listed species or their parts without proper authorization.[1] CDFW can issue Incidental Take Permits (ITPs) under Section 2081 for projects that may negatively impact state-listed (endangered or threatened) species or their habitats. California also has "fully protected" species, for which adverse impacts are prohibited, and California Species of Special Concern (CSC). Unlike the federal ESA, CDFW cannot require landowners to apply for an ITP. Landowners are legally responsible for avoiding the take of state-listed species if they do not obtain a permit. CDFW (and USFWS) can pursue enforcement for illegal takes.

California Fish and Game Code

[1] California Department of Fish and Wildlife. Threatened and Endangered Species. Accessed December 16, 2025, https://wildlife.ca.gov/Conservation/CESA

Sections 3503, 3503.5, and *3513* of the California Fish and Game Code specifically protect native birds and raptors. Mitigation for avoidance of impacts to nesting birds is typically necessary to comply with these Sections of the Fish and Game Code in CEQA. [2]

Section 3503*: It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.*

Section 3503.5*: It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.*

Section 3513*: It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.*

California Environmental Quality Act

The CEQA Guidelines require a review of projects to determine their environmental effects and identify mitigation measures to reduce impacts to a less than significant level. The Guidelines state that an effect may be significant if it affects rare and endangered species. Section 15380 of the Guidelines defines rare to include listed species and allows agencies to consider rare species other than those designated as State or Federal threatened or endangered but that meet the standards for rare under the Federal or State endangered species acts. On this basis, plants designated as rare by non-regulatory organizations (e.g., California Native Plant Society), species of special concern defined by CDFW, candidate species defined by USFWS, and other designations must be considered in CEQA analyses.

Local Regulations

City of Atwater General Plan

The Atwater General Plan Open Space and Conservation Element identified and mapped 21 special-status species to have the potential to occur, and five (5) species have been observed in or near the Atwater Planning Area. The Atwater General Plan outlined policies related to the conservation of biological resources:

GOAL CO-6. *Minimize impacts of development on wildlife and wildlife habitat, particularly special status species.*

> ***Policy CO-6.1.*** *Consider opportunities for habitat preservation and enhancement in conjunction with public facility projects, particularly parks and storm drainage facilities.*
>
> ***Policy CO-6.2.*** *Encourage the preservation of corridors between natural habitat areas to allow for the movement of wildlife and to prevent the creation of "biological islands."*
>
> > ***Implementation Program CO-6.a.*** *When new development or redevelopment activities are proposed in locations with the potential for special status species to occur, require the project applicant to submit a report by a qualified biologist addressing the presence or absence of any*

[2] The California Biologist's Handbook. California Fish and Game Code. Accessed on December 16, 2025, https://biologistshandbook.com/regulations/state-regulations/state-fish-and-game-code/#:~:text=Section%203503,any%20regulation%20made%20pursuant%20thereto.%E2%80%9D

special status species on the development site. The report shall include recommendations for avoiding or minimizing impacts on any special status species or habitat found to be present.

City of Atwater Municipal Code

City of Atwater Municipal Code *Chapter 12.32 – Trees* establishes regulations for the installation, maintenance, and preservation of trees along City streets.

4.1.3 Environmental Impacts and Mitigation Measures

Methodology

The assessment of biological resources is based on federal and state databases on special-status species, occurrences, and wetlands, field investigations, and Biological Resource Assessment (see Appendix A) completed for this Project, General Plan policies and information, and qualitative information about the Project area.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, the proposed Project would be considered to have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact Assessment

Impact 4.1-1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

To assess the potential presence of special-status species, a review of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) was performed within the Atwater quadrangle. A larger search area to include quadrangles outside of the Atwater quadrangle is not warranted given the size and location of the Project. The query indicates the potential presence of several species within region of the Project site. However, there are no known records of special status species within or near the Project site. The field review conducted November 2025 indicates a low potential for any special status species to be present based on location and habitat conditions. Table 4-2 summarizes the review results potential occurrence on the Project site.

Table 4-2: Summary of Special Status Species, Potential Occurrence, and Impact – Wildlife

Common Name	Status	Effects	Occurrence in the Project site
Birds			
Swainson's hawk	--/CT	ME	**Likely Absent.** Nests in mature trees. Limited suitable nesting habitat along pipeline alignments but may nest within 0.5-mile radius of proposed outfalls.
Tricolored blackbird	--/CT	NE	**Potentially Present.** Species nest in emergent wetland habitat (tule), etc. Could potentially be present within creek zones.
Western burrowing owl	--/CE	ME	**Potentially Present.** Nests within grassland habitat with suitable prey base. May also nest in agricultural land within old pipe or structures. Suitable habitat present within pasture land that supports ground burrowing mammal population (ground squirrels) or in non-native grassland habitat.
Ferruginous hawk	--/--	ME	**Likely Absent.** Prefers open grassland habitats with suitable prey base. Small amount of suitable habitat present.
Mammals			
American badger	--/--	ME	**Potentially Present.** Occurs in open areas with suitable prey base. Burrows underground.
San Joaquin kit fox	FE/CT	NE	**Likely absent.** Forages throughout the San Joaquin Valley but avoids populated areas. Unlikely that any suitable denning habitat is present but could occur within or use habitat within the Project site for foraging. No potential denning habitat observed.
Western red bat		ME	**Potentially Present.** Tree dwelling bat (broad-leafed deciduous trees) and strong associated with mature stands of cottonwoods, sycramore, valley oaks, etc. Potential suitable nest sites along Hinds Laterals and other waterways.
Amphibians, Reptiles & Invertebrates			
Vernal pool fairy shrimp	FT/--	NE	**Absent.** Occurs in seasonal wetlands/vernal pools. No suitable habitat present.
California tiger salamander	FT/CT	ME	**Potentially Present.** Some potential upland habitat located along western edge of Alternative 2 (non-native grassland) and south end of WWTP.
Northern California legless lizard	--/--	NE	**Absent.** Occurs in moist, warm loose soils with plant cover. Moisture is essential. No suitable habitat present within or near Project site.
Northwest pond turtle	PFT/--	ME	**Potentially Present.** Occupies slow moving waterways and is semi aquatic. Could occur within Black Rascal Creek or Bear Creek.
Western spadefoot	--/--	NE	**Absent.** Species requires seasonal wetlands or intermittent streams for breeding habitat. No suitable breeding habitat within or near the Project site and no records near the Project site.
California linderiella	--/--	NE	**Absent.** No suitable habitat (vernal pools or seasonal wetlands present within Project site).
Crotch's bumble bee	--/-- SSC	ME	**Likely Absent.** The Project site habitat is dominated by highly managed agricultural field with little marginal suitable habitat for this species. According to the bumble bee watch observations, the nearest record is over 5 miles to the west near the San Luis National Wildlife Refuge. Additional field work may be needed in limited areas of potential suitable habitat.

Hardhead	--/-- SSC	NE	**Likely Absent.** Large minor that are found in clear, deep, slow-moving pools in mid-to-low elevation streams and rivers. They do not tolerate low-oxygen environments and highly unlikely to be present within Bear Creek/Black Rascal or Hinds lateral.
Plants			
Sanford's arrowhead	--/--	ME	**Potentially Present.** Species prefers slow moving slough and streams. Could be present within Project site including Black Rascal Creek, Bear Creek, or Hinds lateral. Unlikely present in Deckert lateral or unnamed drainage because of intermittent and seasonal flows.

Plant species for which there is no suitable habitat:

Vernal pool smallscale (Atriplex peristens)

Colusa grass (Neostapfia colusana)

Status= Listing of special status species, unless otherwise indicated

CE: California listed as Endangered

CT: California listed as Threatened

SSC: California Species of Special Concern

FE: Federally listed as Endangered

FT: Federally listed as Threatened

PFT: Proposed for Federally Listed as Threatened

1B.1, 1B.2, 2B.2, 2B.3: California Native Plant Society Ranking

Effects = Effect determination

NE: No Effect

ME: May Effect, not likely to adversely effect

Definition of Occurrence Indicators:

Present/Potentially Present: Species recorded in the area and some habitat elements in the Project site similar to known occurrences.

Absent/Likely Absent: Species not recorded in the Project site and/or suitable habitat or critical habitat components not present.

As analyzed in Table 4-5, some species have potential to occur on site. These species are discussed below.

- Western burrowing owl (*Athena cunicularia)*: Burrowing owl is a ground nesting owl that prefers grassland or pasture habitat with existing ground burrows (made by ground squirrels or other ground burrowing mammals). The owl will also use any structure (dry cistern, old pipes, etc.) for nesting. The species is a year-round resident in most areas of the Central Valley. The pasture habitat just south of the WWTP facilities and the grassland habitat near the ponding basin (near Deckert Lateral) supports a dense ground squirrel population. No evidence of owl occupation was found but individuals could occupy the area in the future.
- American badger (*Taxidea taxu*): American badger is a ground nesting mammal found in open area with suitable prey base. No evidence of occupation was found, but presence cannot be ruled out without further field surveys.
- Western red bat (*Lasiurus frantzii*): A tree dwelling bat that occurs in low-elevation riparian forests. Associated with cottonwoods, sycamores, valley oaks, etc. There are no records within or near the Project site, but there is some suitable habitat along Bear Creek/Black Rascal Creek and presence cannot be ruled out without additional field surveys prior to construction.

- Swainson's hawk (*Buteo swainsoni*): Medium size hawk that nests in mature trees and hunts in agricultural area. No raptor nests were found but future nesting along Bear Creek/Black Rascal Creek cannot be ruled out without additional field surveys prior to construction.
- Tricolored Blackbird (*Agelaius tricolor*): Nests in dense emergent vegetation along slow moving streams/creeks. Nominal habitat is present within the Project site but presence is unlikely.
- Ferruginous hawk (Buteo regalis): Medium sized hawk that nests primarily in mature trees but will nest on the ground if no tree nesting habitat is available. Unlikely to be present within the Project site because of the minor amount of suitable habitat.
- Northwest pond turtle (*Actinemys marmorata*): Medium sized semi-aquatic turtle that prefers slow moving streams and creeks. For nesting, overwintering, or aestivating during the hot, dry summer, this turtle needs adjacent open, dry, and relatively undisturbed terrain within 500 m of the water's edge. Both Black Rascal Creek and Bear Creek may provide suitable habitat for this species.
- California tiger salamander (*Ambystoma californiense):* Breeds in seasonal wetlands/vernal pools or stock ponds without a predator population. No suitable breeding habitat is present within the Project site, but potential suitable habitat occur roughly 0.3 miles northeast of the Project site. The small amount of non-native grassland at the south end of the WWTP could provide upland aestivation habitat (associated with Alternative 2). There agricultural fields and access roads throughout the remainder of the Project site does not provide suitable aestivation habitat.
- Crotch's bumble bee (Bombus crotchii): A California Species of Special Concern that nests in underground rodent burrows and requires suitable floral resources. The Project site is dominated by highly managed agricultural fields with little marginal suitable habitat for this species, and according to Bumble Bee Watch observations the nearest record is over five miles to the west near the San Luis National Wildlife Refuge. The species is likely absent; however, additional focused field work may be needed in the limited areas of potentially suitable habitat, and presence cannot be ruled out without such surveys.
- Sanford's arrowhead (*Sagittaria sanfordii*): Aquatic plant that grows in slow moving streams and sloughs. Bloom in late summer. Suitable habitat present within Black Rascal Creek/Bear Creek.

Therefore, impacts to western burrowing owl, American badger, and nesting raptors, Sanford's arrowhead, northwest pond turtle, tricolored blackbird, special-status bats (including western red bat), California tiger salamander, and Crotch's bumble bee are considered **potentially significant**.

Mitigation Measures

Implement *Mitigation Measure BIO-1* through *Mitigation Measure BIO-8.*

Mitigation Measure BIO-1: *To mitigate potential impacts on nesting raptors and other migratory birds, including Swainson's hawk and ferruginous hawk, the following measures shall be implemented.*

1) *Avoidance: To avoid impacts to nesting raptors protected under the Migratory Bird Treaty Act and California Fish and Game Code, removal of orchard trees or other suitable nesting vegetation should be conducted, where feasible, outside the nesting season (September 1 through January 31).*

2) *Pre-Construction Survey: If Project construction activities must occur during the Swainson's hawk nesting season (February 15 to August 31), pre-construction activity surveys shall be conducted for Swainson's hawk nests in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley, Swainson's Hawk Technical Advisory Committee (CDFG 2000). The timing and the number of phases of surveys can be adjusted based on the timing of the construction*

schedule. The surveys may be phased to coincide with active construction areas plus a 0.5-mile buffer of those areas. If no active nests are observed during the surveys, no additional action is required. .

3) *Avoidance/Minimization (if present): No mature trees that could be used by nesting Swainson's hawk will be removed during construction of the Project. If an active Swainson's hawk nest is discovered at any time within 0.5 miles of active construction, a qualified biologist shall complete an assessment of the potential for current construction activities to impact the nest. The assessment shall consider the type of construction activities, the location of construction relative to the nest, the visibility of construction activities from the nest location, and other existing disturbances in the area that are not related to the construction activities of this Project. Based on this assessment, the biologist shall determine if construction activities can proceed, and the level of nest monitoring required. Construction activities shall not occur within 500 feet of an active nest but depending upon conditions at the site this distance may be reduced. Full-time monitoring to evaluate the effects of construction activities on nesting Swainson's hawks may be required. The qualified biologist shall have the authority to stop work if it is determined that Project construction is disturbing the nest. These buffers may need to increase depending on the sensitivity of the nesting Swainson's hawk to disturbances and at the discretion of the qualified biologist. No avoidance would be needed if construction occurs near a known Swainson's hawk nest outside of the Swainson's hawk nesting season. A copy of all documentation and results of surveys shall be submitted to the City of Atwater Community Development Department for mitigation monitoring compliance.*

***Mitigation Measure BIO-2:** To mitigate potential impacts on burrowing owl and American badger, the following measures shall be implemented.*

1) *Pre-Construction Survey: A qualified biologist shall conduct a pre-construction survey within 30 days prior to any ground-disturbing activities (e.g., grading, grubbing, trenching) to identify the presence/absence for burrowing owl and American badger or their burrows/dens within and immediately adjacent to the work areas. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If no individuals or occupied burrows/dens are detected, no further action is required.*

2) *Avoidance/Minimization (if present): If dens/burrows/nests that could support any of these special-status species are discovered during the preconstruction survey, the avoidance buffers outlined below shall be established, and den or burrow monitoring shall be conducted in accordance with the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (CDFG 2012).*

   No work shall occur within these buffers unless the biologist approves and monitors the activity. A copy of the preconstruction survey report shall be submitted to the Lead Agency as evidence of compliance.

   Burrowing Owl (active burrows)

Location	***Time of Year***	***Level of Disturbance***		
		Low	*Med*	*High*
Nesting	*April 1-Aug 15*	*200 m*	*500 m*	*500 m*
Nesting	*Aug 16-Oct 15*	*200 m*	*200 m*	*500 m*
Nesting	*Oct 16-Mar 31*	*50 m*	*100 m*	*500 m*

   American badger/SJKF

Potential or Atypical den – 50 feet

Known den – 100 feet

Natal Den –Contact CDFW for consultation

3) *If burrows that could support this species are discovered during the pre-construction clearance survey, the avoidance buffers outlined below should be established, and burrow monitoring shall be conducted in accordance with the California Department of Fish and Game (CDFG) Staff Report on Burrowing Owl Mitigation (CDFG 2012). No work shall occur within these buffers. If occupied burrowing owl burrows cannot be avoided by the appropriate buffer below, an Incidental Take Permit (ITP) issued by the CDFW under the California Endangered Species Act (CESA) to authorize "take" that is incidental to an otherwise lawful activity, may be required before any work within the buffer. Copies of all correspondence and reports submitted to CDFW or other regulatory agencies shall be provided to the City of Atwater Community Development Department for mitigation monitoring compliance.*

Mitigation Measure BIO-3: *To mitigate potential impacts on Sanford's arrowhead, the following measures shall be implemented.*

1) *Focused Survey: A qualified biologist shall conduct a focused botanical survey for Sanford's arrowhead within suitable aquatic habitat in Black Rascal Creek and/or Bear Creek prior to any ground-disturbing activities (e.g., grading, grubbing, trenching, or in-channel work) during the species' identifiable period (blooming season May through October). Survey results shall be reported to the City of Atwater Community Development Department for mitigation monitoring compliance. If Sanford's arrowhead is not detected, no further action is required.*

2) *Avoidance/Minimization (if present): If Sanford's arrowhead is detected, the project design and construction methods shall be adjusted, where feasible, to avoid direct impacts (e.g., micro-siting of structures, establishment of no-work buffers, or minor alignment shifts). If complete avoidance is not feasible, the qualified biologist shall, in consultation with California Department of Fish and Wildlife, as appropriate, develop and implement a plan for impact minimization that includes but is not limited to plant protection, seed collection, or salvage/translocation. A copy of the approved plan shall be submitted to the City of Atwater Community Development Department for mitigation monitoring compliance prior to the issuance of grading permits.*

Mitigation Measure BIO-4: *To mitigate potential impacts on northwest pond turtle and tricolored blackbird, the following measures shall be implemented.*

1) *Pre-Construction Survey: A qualified biologist shall conduct a pre-construction survey within 500 feet of any outfall structure within 30 days prior to any ground-disturbing activities (e.g., grading, grubbing, trenching) to identify the presence/absence for northwest pond turtle and tricolored blackbird. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If these species are not detected, no further action is required.*

2) *Avoidance/Minimization (if present): If northwestern pond turtle is detected, a qualified biologist, under any necessary California Department of Fish and Wildlife approvals or permits, shall implement appropriate avoidance measures such as capture and relocation of individuals to suitable nearby habitat outside the work area and establishment of exclusion fencing, as needed, to prevent re-entry during construction.*

3) *If an active tricolored blackbird nesting colony is found, the biologist shall establish an appropriate no-disturbance buffer and recommend schedule or work-area adjustments so that construction does not occur within the buffer until the nesting attempt is complete, as confirmed by the biologist. The avoidance/minimization measures and monitoring results shall be documented and provided to California Department of Fish and Wildlife, as appropriate, and to the City of Atwater Community Development Department.*

Mitigation Measure BIO-5: *To mitigate potential impacts on special-status bats, including western red bat, the following measures shall be implemented.*

1) *Pre-Construction Survey: A qualified biologist shall conduct a pre-construction survey for special-status bats (including pallid bat, western mastiff bat, and western red bat) within a 100-foot radius of the disturbance area along riparian habitat prior to any ground-disturbing or vegetation-removal activities to identify any potential roosting habitat. Surveys shall use established methodology, including visual inspection, ultrasonic detectors, and dusk and dawn emergence surveys. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If no roosting bats are detected, no further action is required.*
2) *Avoidance/Minimization (if present): If special-status bats are found to occupy the survey area, a 100-foot no-disturbance buffer shall be established around the roost site, and a replacement roost site shall be installed prior to initiation of work activities to allow sufficient time for bats to relocate. Avoidance and minimization measures shall be implemented in coordination with the California Department of Fish and Wildlife, as appropriate, and documentation shall be provided to the City of Atwater Community Development Department for mitigation monitoring compliance.*

Mitigation Measure BIO-6: *To mitigate potential impacts on California tiger salamander, the following measures shall be implemented.*

1) *Pre-Construction Survey: For Alternative 2, a qualified biologist shall conduct a pre-construction survey prior to any ground-disturbing activities to identify and mark any upland burrow refugia (e.g., ground squirrel burrows) within the non-native grassland habitat that could support California tiger salamander. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If no potential refugia are identified, no further action is required.*
2) *Avoidance/Minimization (if present): A minimum 50-foot no-disturbance buffer shall be established around identified upland burrow refugia. If avoidance of identified burrows is not feasible, the applicant shall consult with the California Department of Fish and Wildlife to determine whether the Project can avoid take and, if necessary, obtain appropriate take authorization prior to any work within the buffer. Copies of all correspondence and reports submitted to CDFW shall be provided to the City of Atwater Community Development Department for mitigation monitoring compliance.*

Mitigation Measure BIO-7: *To mitigate potential impacts on Crotch's bumble bee, the following measures shall be implemented.*

1) *Focused Survey: A qualified biologist shall conduct focused surveys for Crotch's bumble bee within the limited areas of potentially suitable habitat prior to any ground-disturbing activities. The survey results shall be reported by the biologist to the City of Atwater Community Development Department for mitigation monitoring compliance. If Crotch's bumble bee is not detected, no further action is required.*

2) *Avoidance/Minimization (if present): If Crotch's bumble bee or an active nest or colony is detected, the qualified biologist shall establish an appropriate no-disturbance buffer around the occupied habitat and, in consultation with the California Department of Fish and Wildlife as appropriate, implement avoidance and minimization measures until the biologist confirms the species is no longer present or the nesting attempt is complete. Copies of all correspondence and reports submitted to CDFW shall be provided to the City of Atwater Community Development Department for mitigation monitoring compliance.*

Mitigation Measure BIO-8: A Worker Environmental Awareness Program shall be developed and implemented for all personnel who could access the site prior to commencing any disturbance activities. The program shall consist of an on-site or center presentation that will describe the locations and types of sensitive plant, wildlife, and sensitive natural communities (collectively, "Biological Resources") on and near the site, an overview of the laws and regulations governing the protection of Biological Resources, the reasons for protecting the Biological Resources, the specific protection and avoidance measures that are applicable to the site, and the identity of designated points of contact should questions or issues arise, including the qualified biologist. The program shall provide training to recognize, avoid, and report to applicable qualified biologists any Biological Resources on the site.

1) *The Worker Environmental Awareness Program shall emphasize the need to avoid contact with on-site wildlife and avoid entry into areas where Biological Resources have been identified based on pre-disturbance field surveys, and to implement the buffer avoidance or other protection measures established by the United States Fish and Wildlife Service (USFWS) shall be identified by the California Department of Fish and Wildlife (CDFW) or required by the Biological Resource mitigation measures. The training shall emphasize the importance of not feeding or domesticating wildlife and the need to avoid any trash, micro-trash, or potential food waste on-site, except in animal-proof containers emptied daily, to avoid attracting or causing adverse impacts to special-status wildlife.*
2) *All on-site personnel must sign a statement verifying that they have completed the Worker Environmental Awareness Program and that they understand and agree to implement the biological requirements for the worksite. If signed employee statements are not available, documentation may be provided by Worker Environmental Awareness Program training records, which shall be kept by the applicant for a minimum of five years. Each applicant shall maintain a list of all persons who have completed the training program and shall provide the list to the County or to State and federal wildlife agency representatives upon request.*

Significance After Mitigation

Implementation of *Mitigation Measure BIO-1* through *Mitigation Measure BIO-8* would ensure that potential impacts on special-status wildlife and plant species, including nesting raptors and other migratory birds, western burrowing owl, American badger, northwestern pond turtle, tricolored blackbird, special-status bats (including western red bat), California tiger salamander, Crotch's bumble bee, and Sanford's arrowhead, are avoided or minimized through focused pre-construction and roost/burrow surveys, establishment of appropriate no-disturbance buffers, installation of replacement roost habitat, schedule and design adjustments, and agency-coordinated avoidance/relocation or plant protection where necessary. In addition, *Mitigation Measure BIO-8* would require a Worker Environmental Awareness Program to ensure that all personnel are trained to identify, avoid, and report Biological Resources on-site. With these measures in place, impacts to special-status species would be reduced to a less than significant level under CEQA. **Impacts would be less than significant with mitigation incorporated.**

Impact 4.1-2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

According to the National Wetland Inventory (NWI) Map, there are five (5) mapped aquatic features within the Project site: Black Rascal Creek (R2UBH, PEM1A), Bear Creek (R2UBH, PEM1A), Hinds Lateral (R5UBFx, PFOCx), Deckert Lateral (R4SBc, PFOA), and an unnamed drainage (R5UBFx). Table 4-1 lists these features.

Alternative 1

The alignment south of the of the rural ranch crosses an unnamed, but mapped, drainage. The drainage appears to be an extension or remanent of the "Deckert Lateral". The drainage is approximately 50 feet in width and roughly 2 -3 feet lower in elevation than the surrounding ground. There is a narrow fringe of riparian habitat (mostly cottonwood), some invasive plants (giant reed) along the edges and some willow. It is likely this drainage would be considered, at a minimum, a waters of the state and potentially a waters of the U.S.

South of the unnamed drainage and along the alignment extending to the north levee of Bear Creek there is no vegetation or trees (agricultural fields).

At the proposed outfall, there is an existing access ramp from the adjoining field onto the top of levee. The access road crosses over the Hinds Lateral (via a culvert) and there is no woody vegetation at the top of bank. There is sparse vegetation at the top of bank made up of weedy species. On the inside bank slope (creek side), the vegetation is dominated by grasses and herbs (wild mustard, Johnson grass, and willow saplings). No trees would be impacted by construction of an outfall structure at this location.

The top of bank (north bank) is estimated to be at elevation 114 msl. The Ordinary High Water Mark, OHWM, estimated by observing field indicators along both the north and south channel banks, is at elevation 111 feet (msl). The bottom of the channel is estimated at 105 feet msl. Table 4-3 provides an estimate of the impact of this alternative on habitats present.

Table 4-3: Alternative 1 Habitat Impact

Habitat Type	Location	Length (linear feet)	Impact Area (acre)
Non-native grassland	East of WWTP property (APN 056-200-021)	740	0.17
Pasture	South of WWRP along Bert Crane Rd	250	0.06
Agricultural	Along Bert Crane and along farm access road	2,050	0.47
Ruderal	Along Bert Crane Rd and top of levee	500	0.12
Riparian/Waters	Unnamed drainage and Bear Creek	70	0.01
Total		**3,610**	**0.83**

Alternative 2

The top of bank elevation is estimated at 127 feet (msl). The channel bottom is estimated at 115 feet. The Ordinary High Water Mark was estimated in the field at approximately elevation 121 msl. Habitat along the alignment is summarized in Table 4-4.

Table 4-4: Alternative 2 Habitat Impact

Habitat Type	Location	Length (linear feet)	Impact Area (acre)
Non-native grassland	East of WWTP property (APN 056-200-021)	740	0.17
Pasture	Along southern property line of WWTP	1,078	0.25
Agricultural	South of ponding basin and along fields	1,626	0.37
Ruderal	Top of levee bank	45	0.01
Riparian/Waters	Pipeline alignment and Outfall (top of bank and inside bank)	35	0.01
Total		**3,509**	**0.8**

Alternative 3

The top of bank elevation is estimated at 125 feet (msl). The channel bottom is estimated at 112 feet. The Ordinary High Water Mark was estimated in the field at approximately 118 msl. Habitat along the alignment is summarized in Table 4-5.

Table 4-5: Alternative 3 Habitat Impact

Habitat Type	Location	Length (linear feet)	Impact Area (acre)
Agricultural	Farm field/farm access roads	5,785*	1.3
Ruderal	Top of levee bank	30	0.01
Riparian/Waters	Outfall (top of bank and inside bank)	25	0.001
Total		**5,840**	**1.31**
**Of this amount, 2,100 l.f. is associated with the expansion of the Deckert Lateral south connection point with the planned WWTP pipeline.*			

As summarized in Table 4-2 through Table 4-4, the three (3) pipeline alternatives would primarily traverse agricultural, pasture, ruderal, and non-native grassland habitats, with only small areas of riparian/waters directly affected. Alternative 1 would affect approximately 0.01 acre of riparian/waters at the unnamed drainage (Deckert Lateral remnant) and Bear Creek outfall. Alternative 2 would affect approximately 0.01 acre of riparian/waters at the Deckert Lateral crossing and Bear Creek/Hinds Lateral outfall. Alternative 3 would affect approximately 0.001 acre of riparian/waters at the Black Rascal Creek outfall near the existing MID structure. Pipeline alignments primarily traverse agricultural, pasture, ruderal, and non-native grassland habitats, avoiding broader riparian corridors.

The outfall locations are sited at or near the top of bank, in already disturbed levee or access-road areas with limited woody riparian vegetation, and the field surveys indicate that impacts would be confined to narrow bands of streambank herbaceous vegetation and small saplings, with no removal of mature riparian trees required for Alternatives 1 or 2 and only a very small area of bank vegetation affected at the Alternative 3 outfall where mature trees are located on the bank slopes rather than the levee crown.

Any work within the bed, bank, or channel of these aquatic features, including installation of the outfall structures and any necessary bank protection, would require multiple agency approvals: a California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration (LSA) Agreement for work impacting the bed, channel, or bank of

Bear Creek, Black Rascal Creek, or Deckert Lateral; a Central Valley Flood Protection Board (CVFPB) Encroachment Permit for work within 100 feet of non-leveed regulated streams (Bear Creek, Black Rascal Creek); SWRCB/CVRWQCB Clean Water Act (CWA) Section 401 Water Quality Certification in conjunction with a USACE Section 404 permit for outfall construction and streambed impacts; and a U.S. Army Corps of Engineers (USACE) CWA Section 404 Permit for discharge of dredged or fill material into Waters of the U.S. at creek outfalls. Without obtaining the required permits, the Project would result in a substantial adverse effect on riparian habitat or other sensitive natural communities and **impacts would be potentially significant.**

Mitigation Measures

Mitigation Measure BIO-9: *Prior to the issuance of any grading or building permit, the Project proponent/developer shall submit a formal notification to the US Army Corps of Engineers (ACOE), Water Resources Control Board (SWRCB), Central Valley Flood Protection Board (CVFPB) and California Department of Fish and Wildlife (CDFW). If no comments or requests for additional permitting are received by the agencies, no further action is necessary. A copy of all correspondence shall be submitted to the lead agency.*

If a regulatory agency comments or requests additional permitting, the following actions may be taken. A copy of all correspondence and subsequent permitting and/or reports shall be made available to the Lead Agency. The report shall include information as shown below as a plan if necessary and shall outline compliance with the following:

1. *Delineation of all jurisdictional features at the project site. Potential jurisdictional features within the project boundary identified in the jurisdictional delineation report may be shown in plan form.*
2. *If the Project has a potential to directly or indirectly impact jurisdictional aquatic resources, a formal aquatic resource delineation of these areas shall be performed by a qualified professional to determine the extent of agency jurisdiction and permits/authorizations from the appropriate regulating agencies (Central Valley Regional Water Quality Control Board (RWQCB), CDFW and US Army Corps of Engineers (USACE) shall be obtained prior to disturbance to jurisdictional features.*
3. *If it is determined that drainage is jurisdictional and cannot be avoided, the Project proponent shall obtain a Section 401 Waters Quality Certification from the RWQCB, a Section 404 permit from USACE and a Lake and Streambed Alteration Agreement under Section 1602 from the CDFW, if required prior to impacting any waters.*
4. *As part of these authorizations, compensatory mitigation may be required by the regulating agencies to offset the loss of aquatic resources. If so, and as part of the permit application process, a qualified professional shall draft a Mitigation and Monitoring Plan to address implementation and monitoring requirements under the permit to ensure that the Project would result in no net loss of habitat functions and values. The Plan shall contain, at a minimum, mitigation goals and objectives, mitigation location, a discussion of actions to be implemented to mitigate the impact, monitoring methods and performance criteria, extent of monitoring to be conducted, actions to be taken in the event that the mitigation is not successful, and reporting requirements. The Plan shall be approved by the appropriate regulating agencies and compensatory mitigation shall take place either on site or at an appropriate off-site location.*
5. *Any material/spoils generated from project activities containing hazardous materials shall be located away from jurisdictional areas or special-status habitat and protected from storm water run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. Protection measures should follow project-specific criteria as developed in a Stormwater Pollution Prevention and Protection Plan (SWPPP).*

6. *Equipment containing hazardous liquid materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and at least 50 feet outside the delineated boundary of jurisdictional water features.*
7. *Any spillage of material shall be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials properly disposed. For all spills, the project foreman or designated environmental representative shall be notified.*

Significance After Mitigation

Implementation of *Mitigation Measure BIO-6* would ensure that potential impacts to jurisdictional waters, riparian habitat, and other sensitive aquatic resources are identified, avoided where feasible, and subject to regulatory oversight and compensatory mitigation where avoidance is not possible. The required agency notifications and, if requested, subsequent jurisdictional delineation, permitting (e.g., Clean Water Act Section 404/401, Fish and Game Code section 1602), and agency-approved Mitigation and Monitoring Plan would ensure that any unavoidable losses of aquatic habitat are offset and that construction and operational controls protect remaining resources. In addition, the measures in BIO-6 requiring protection of spoil and hazardous materials, placement of equipment outside delineated jurisdictional boundaries, and implementation of site-specific SWPPP BMPs would minimize the risk of sedimentation, pollutant discharge, and incidental disturbance to aquatic communities during construction. With these enforceable commitments, careful siting to favor previously disturbed levee/access locations, and agency approval of compensatory mitigation where required, effects on riparian and other aquatic habitats would be reduced to a level that is local in scale, largely temporary or fully compensated, and therefore less than significant under CEQA. **Impacts would be less than significant with mitigation incorporated.**

Impact 4.1-3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Although no vernal pools or coastal wetlands are present within the Project site, the Project site contains five (5) mapped aquatic features: Black Rascal Creek (R2UBH, PEM1A), Bear Creek (R2UBH, PEM1A), Hinds Lateral (R5UBFx, PFOCx), Deckert Lateral (R4SBc, PFOA), and the unnamed drainage (R5UBFx). As described in Impact 4.1-2, portions of these aquatic features may qualify as jurisdictional waters and associated aquatic resources subject to state and/or federal jurisdiction, and construction of the proposed pipeline crossings, outfalls, and related bank improvements could result in direct disturbance to such features through excavation, fill, grading, or temporary hydrologic interruption. Accordingly, because the Project has the potential to directly or indirectly affect jurisdictional aquatic resources, impacts to state or federally protected wetlands and other aquatic features would be **potentially significant**.

Mitigation Measures

Implement *Mitigation Measure BIO-9*.

Significance After Mitigation

Implementation of *Mitigation Measure BIO-9* would ensure that jurisdictional aquatic resources are identified and delineated prior to disturbance, and that any direct or indirect impacts are avoided where feasible or otherwise subject to the appropriate agency permits, authorizations, and compensatory mitigation requirements. If the Project cannot avoid impacts to jurisdictional aquatic features, the mitigation measure requires consultation with

the applicable regulatory agencies, preparation of any required delineation and mitigation/monitoring plans, compliance with Clean Water Act Sections 401 and 404 and Fish and Game Code section 1602 requirements, and implementation of construction controls to protect aquatic resources from sedimentation, spills, and other indirect effects. With these measures in place, any unavoidable impacts to state or federally protected wetlands or other jurisdictional aquatic resources would be minimized and compensated in accordance with agency-approved requirements, and the impact would be reduced to less than significant. **Impacts would be less than significant with mitigation incorporated.**

Impact 4.1-4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Wildlife movement corridors are linear habitats that function to connect two (2) or more areas of significant wildlife habitat. These corridors may function on a local level as links between small habitat patches (e.g., streams in urban settings) or may provide critical connections between regionally significant habitats (e.g., deer movement corridors). Wildlife corridors typically include vegetation and topography that facilitate the movements of wild animals from one area of suitable habitat to another, in order to fulfill foraging, breeding, and territorial needs. These corridors often provide cover and protection from predators that may be lacking in surrounding habitats. Wildlife corridors generally include riparian zones and similar linear expanses of contiguous habitat.

As detailed in the Biological Resources Assessment prepared for the Project site, all three (3) alternatives would temporarily impact between 0.8 (Alternatives 1,2) and 1.3 (Alternative 3) acres of habitat, including non-native grassland, pasture, agricultural land, ruderal, and riparian/potential waters. These habitat types generally offer limited value for significant wildlife movement or as nursery sites for most native species. Given the disturbed nature of the habitat and the observed wildlife species being generally common and adapted to human-influenced landscapes, the site does not appear to function as a significant pathway for regional wildlife corridor or provide essential breeding/nursery habitat for special-status species. The five (5) mapped aquatic features (Black Rascal Creek, Bear Creek, Hinds Lateral, Deckert Lateral, unnamed drainage) represent riparian corridors that could facilitate local wildlife movement (e.g., northwest pond turtle along streams, Sanford's arrowhead aquatic habitat continuity), but Project impacts are confined to narrow top-of-bank outfall locations (0.001–0.01 acre) at previously disturbed levee access points that would not sever connectivity or impede longitudinal stream movement.

The proposed Project has the potential to temporarily interfere with wildlife movement or nursery sites during construction through vegetation removal, active work zones, equipment staging, and human presence. Specifically, burrowing owl and American badger could experience localized disruption of foraging/movement through temporarily fenced construction areas in open pasture/grassland habitats; northwestern pond turtle movement along Black Rascal Creek/Bear Creek could be indirectly affected by outfall construction noise/activity within exclusion zones; and nesting raptors (Swainson's hawk, ferruginous hawk), tricolored blackbird, and other migratory birds could experience nest disturbance or abandonment if active nests occur in trees/riparian vegetation or emergent wetland patches near alignments/outfalls during the breeding season (February 1–August 31). While observed bird species (sparrow, crow, pigeon) are common, construction activities could result in incidental take of eggs/nestlings of protected migratory birds or less common species potentially present, as identified under Impact 4.1-1, constituting a potentially significant effect under CEQA, the Migratory Bird Treaty Act, and California Fish and Game Code. While the observed bird species (sparrow, crow, pigeon) are generally

common, impacts to any nesting migratory bird, particularly if a less common or sensitive species were to nest on-site, could be considered a significant effect. Impacts are **potentially significant.**

Mitigation Measures

Implement *Mitigation Measure BIO-1* through *Mitigation Measure BIO-9.*

Significance After Mitigation

Implementation of *Mitigation Measure BIO-1* through *Mitigation Measure BIO-9* would ensure that potential impacts on special-status wildlife and plant species, including nesting raptors and other migratory birds, burrowing owl, American badger, northwestern pond turtle, tricolored blackbird, special-status bats (including western red bat), California tiger salamander, Crotch's bumble bee, and Sanford's arrowhead, are avoided or minimized through focused pre-construction and roost/burrow surveys, establishment of appropriate no-disturbance buffers, installation of replacement roost habitat, schedule and design adjustments, and agency-coordinated avoidance/relocation or plant protection where necessary. In addition, *Mitigation Measure BIO-8* would require a Worker Environmental Awareness Program to ensure that all personnel are trained to identify, avoid, and report Biological Resources on-site. *Mitigation Measure BIO-9* would ensure that potential impacts to jurisdictional waters, riparian habitat, and other sensitive aquatic resources are identified, avoided where feasible, and subject to regulatory oversight and compensatory mitigation where avoidance is not possible. With these measures in place, impacts to special-status species would be reduced to a less than significant level under CEQA. **Impacts would be less than significant with mitigation incorporated.**

Impact 4.1-5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The Project is consistent with the City of Atwater's General Plan policies for minimizing impacts of development on wildlife and wildlife habitat since the Biological Resources Assessment (qualified biologist report) fulfills *Implementation Program CO-6.a* by assessing special-status species and recommending *Mitigation Measure BIO-1* through *Mitigation Measure BIO-4* for avoidance/minimization of special-status species and impacts on habitats, which is consistent with *Goal CO-6*.

City of Atwater Municipal Code Chapter 12.32 regulates installation, maintenance, and preservation of trees along City streets. Although Alternative 1 is lined with approximately 18 mature trees (Valley oak, Western sycamore, gum, willow) along Bert Crane Road, the Project alignments and outfalls would be sited outside tree driplines where feasible to avoid impacts, and no City street trees are present within the rural Project site, so Chapter 12.32 does not apply. Therefore, the Project would not conflict with local policies or ordinances protecting biological resources or trees. **No impact.**

Mitigation Measures

None required.

Impact 4.1-6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The Project site is located within the geographic area of the PG&E San Joaquin Valley Operation and Maintenance Habitat Conservation Plan (HCP), which authorizes PG&E's routine operations, maintenance, and minor new construction activities on PG&E gas/electric facilities, easements, and lands. However, the Project is a City

wastewater infrastructure improvement with no connection to PG&E facilities or covered activities, so there would be no conflict with the PG&E HCP.

The Project site is also within the planning area of the USFWS Recovery Plan for Upland Species of the San Joaquin Valley, which provides recovery strategies for endangered and threatened species, including burrowing owl, but is a non-regulatory guidance document that does not impose land use restrictions or create binding compliance obligations for non-federal projects like this one. No other adopted Habitat Conservation Plan, Natural Community Conservation Plan, or approved local/regional/state habitat conservation plan applies to the Project site or activities. **No impact.**

Mitigation Measures

None required.

Impact 4.1-7. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to biological resources.

Cumulative impacts on biological resources in the Project vicinity result from the incremental loss and disturbance of agricultural lands, ruderal areas, and riparian/stream-adjacent habitats over time, particularly along linear waterways that can function as localized movement corridors and nesting/foraging habitat.

The proposed Project would contribute to this cumulative condition through temporary disturbance of between 0.8 and 1.3 acres of habitat (non-native grassland, pasture, agricultural, ruderal, and small areas of riparian/potential waters) and through construction-related disturbance near riparian features where special-status species and other protected migratory birds could nest or occur (e.g., burrowing owl, American badger, nesting raptors, tricolored blackbird, northwestern pond turtle, and Sanford's arrowhead).

Under CEQA, a cumulative impact consists of the project's incremental effect combined with other past, present, and reasonably foreseeable projects, and the analysis focuses on whether the overall cumulative impact could be significant and whether the project's incremental contribution would be "cumulatively considerable." Because the Project could contribute to cumulative disturbance of nesting/nursery functions and localized movement opportunities associated with riparian edges and disturbed uplands through vegetation removal, grading, trenching, and outfall construction activity, the cumulative biological resources impact is conservatively concluded to be **potentially significant.**

Mitigation Measures

Implement *Mitigation Measure BIO-1* through *Mitigation Measure BIO-9.*

Significance After Mitigation

Implementation of *Mitigation Measure BIO-1* through *Mitigation Measure BIO-9*, including focused pre-construction and roost/burrow surveys, seasonal avoidance where feasible, establishment of no-disturbance buffers, installation of replacement roost habitat, species-specific avoidance/relocation/protection measures, worker environmental awareness training, and agency coordination, delineation, permitting, and compensatory mitigation for jurisdictional aquatic resources where required, would reduce the Project's incremental contribution to cumulative biological resources effects. With these measures in place, the Project's contribution to cumulative impacts on special-status species, nesting birds, riparian habitat, and other sensitive aquatic resources would not be cumulatively considerable. **Impacts would be less than cumulatively considerable.**

4.2 Cultural Resources

4.2.1 Environmental Setting

Existing Physical Environment

The Project in the jurisdiction of the City of Atwater and County of Merced, California, located east of South Bert Crane Road, between Bear Creek and Oak Avenue Alignment. The site is a portion of Section 35, Township 7 South, Range 12 East, and a portion of Section 02, Township 8 South, Range 12 East, Mount Diablo Base and Meridian.

The area proposed for the pump station is currently vacant and contains no existing improvements or structures. The proposed underground pipeline alignments would be located within existing dirt roads between agricultural fields and along South Bert Crane Road, which is a paved two-lane roadway without curb, gutter, or sidewalk.

The topography of the Project area is gently sloping, with no abrupt or highly variable changes in grade. Ground elevations are approximately 119 feet above mean sea level at the northwest corner of the WWTP site and gradually decline to roughly 114 feet near the southern Bear Creek connection. At the Applegate Road/Oak Avenue intersection, where Alternative 3 would connect to the Deckert Lateral, the elevation is approximately 123 feet above mean sea level, reflecting the natural fall of the land toward the nearby creek corridors.

Regional Archeological Background

Archaeological evidence indicates that the San Joaquin Valley and adjacent Sierra foothills, including what is now Merced County, have likely been occupied throughout most of the latter part of the Holocene Epoch (approximately the last 10,000 years). Important known prehistoric sites occur near Pacheco Pass in western Merced County, on the valley floor near Dos Palos, and at the comprehensively excavated “Wolfsen Mound” on the west side of the San Joaquin River, demonstrating long-term use of valley-floor landforms similar to those along Bear Creek and Black Rascal Creek. A regional study of buried site potential in the San Joaquin Valley found that large areas of Merced County have moderate to very high potential for buried archaeological deposits, including in agricultural lands where significant cultural remains may exist below the plow zone. [3]

Ethnographically, the Project lies within the territory of the Northern Valley Yokuts, a Penutian-speaking group that occupied the valley floor and lower foothills. Ethnographic information suggests that archaeological deposits in this region may include house floors, hearths, milling features (bedrock mortars, portable mortars and pestles), chipped stone tools, ceramics, baked clay, and burials, occurring both in discrete habitation sites and as isolated finds. Because only a small fraction of Merced County has been systematically surveyed and because archaeological sites are often concentrated near surface water, the broader Bear Creek and Black Rascal Creek corridors are considered sensitive for previously undiscovered prehistoric resources, particularly in relatively undisturbed terrace and floodplain settings.

Historic Background

Euro-American use of the Merced region began with Spanish exploration in the late 18th century, followed by increased travel and settlement associated with the 1848 Gold Rush, when the Central Valley became a major corridor for miners and suppliers traveling to the Sierra Nevada. By the 1850s, productive portions of the Central

[3] County of Merced. (2012). 2030 Merced County General Plan Update Draft Program Environmental Impact Report. Chapter 9, Cultural Resources. Accessed December 17, 2025, http://web2.co.merced.ca.us/pdfs/planning/generalplan/DraftGP/DEIR/9_cultural_mcgpu_eir_2012_11_23f.pdf

Valley, including what is now Merced County, were settled by ranchers and farmers, and the arrival of the Central Pacific Railroad in 1872 connected the area to regional and national markets, accelerating agricultural development. By 1874 much of Merced County was under cultivation, and with the advent of controlled irrigation beginning in the late 19th century, the valley floor was progressively divided into smaller irrigated farms served by an expanding network of canals, ditches, and laterals.

Through the early 20th century, highway improvements and continued irrigation investment transformed the county into a densely settled, highly productive agricultural landscape characterized by farmsteads, small towns, irrigation works, and associated transportation infrastructure. Regional historic inventories document a variety of historic-period resources, including residences, commercial buildings, agricultural complexes, transportation facilities, and irrigation features, though only a subset is formally listed in or determined eligible for the National Register or California Register. Within this broader context, the Bert Crane Regional WWTP area and the Bear Creek and Black Rascal Creek corridors represent long-established agricultural and irrigation landscapes where historic-period resources, if present, are likely to consist of irrigation-related features, farm infrastructure, and transportation improvements associated with 19th- and 20th-century agricultural development rather than early town centers or landmark buildings.

Record Search

The Central California Information Center (CCIC) conducted a California Historical Resources Information System (CHRIS) Record Search for the Project site and surrounding area (0.5-mile radius) on May 9, 2025 (CCIC File Number 13350I). The CCIC Correspondence is provided in the Appendix C of Appendix C. The search results indicate:

(1) There are no formally recorded prehistoric or historic archaeological resources or historic buildings or structures within the Project site.
(2) The Project site is within the overall boundary of the proposed “Merced Irrigation District” (P-24-001909), listed in the Office of Historic Preservation Built Environment Resource Directory (BERD) for Merced County with a National Register of Historic Places rating of “6Y”, determined ineligible for the National Register of Historic Places by consensus through the Section 106 process, not evaluated for the California Register of Historical Resources or for local listing.
(3) There are five (5) water conveyance features within 0.5-mile radius of the Project site, portions of which have been recorded elsewhere in Merced County. Contributing elements to the Merced Irrigation District include Bear Creek Canal (P-24-002046), Black Rascal Creek Canal (P-24-002047), and O’Donnell Lateral (P-24-001679). Non-contributing elements include Gurr Lateral (P-24-002011) and Hinds Lateral (P-24-002012).
(4) The General Land Office survey plat for T7S R12E (dated 1855) does not show any historic features in the south half of Section 35. The General Land Office survey plat for T8S R12E (dated 1856) shows the north half of Section 2 divided into parcels of various acreages.
(5) The 1918 edition of the Atwater USGS quadrangle shows two buildings within the NE ¼ of the NE ¼ of Section 2, T7S, R12E, and a building in the NE ¼ of the SE ¼ of Section 35, T7S R12E. The 1918 edition of the Area USGS quadrangle shows 2 buildings in the NW ¼ of Section 2. No further information is on file for these possible historic buildings.
(6) Prehistoric archaeological resources, including Native American burials, have been found elsewhere in Merced County beneath the plow zone within the environs of the Bear Creek and Black Rascal Creek drainage systems.

Tribal Consultation and Sacred Lands File

A consultation list of tribes with traditional lands or cultural places located within Merced County was requested and received from the California Native American Heritage Commission (NAHC). The City of Atwater sent formal tribal notices pursuant to AB 52 on June 2, 2025, to the tribes included in the NAHC correspondence: Amah Mutsun Tribal Band, Northern Valley Yokut/ Ohlone Tribe, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Wuksachi Indian Tribe/ Eshom Valley Band. A copy of the tribal notice is provided in Appendix E. Consultation ended on July 2, 2025. No responses were received.

In addition, the NAHC Sacred Lands File check, dated May 12, 2025, was negative. A negative SLF check means that the NAHC did not find any records of Native American cultural resources, such as sacred sites, traditional cultural properties, or burial grounds, within the area requested for the search.

4.2.2 Regulatory Context

Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act (NHPA) is the primary federal legislation for historic preservation, aiming to protect the nation's historic, cultural, and natural heritage. It promotes an environment that supports diversity and individual choice.

The NHPA includes specific regulations for federal land-holding agencies and, through Section 106, mandates consideration of cultural resources for any project receiving federal funding, permits, or approvals. As projects subject to the National Environmental Policy Act (NEPA) also fall under Section 106, compliance with the NHPA process can address NEPA's cultural resource requirements. State Historic Preservation Offices (SHPOs) are responsible for implementing Section 106 reviews at the state level. In California, the State Office of Historic Preservation (SHPO) conducts these reviews.

National Register of Historic Places

The NHPA establishes the National Register of Historic Places (National Register), maintained by the National Park Service, and the Advisory Council on Historic Preservation. The National Register is the nation's inventory of significant historic properties. It includes buildings, structures, sites, objects, and districts possessing historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

National Register Eligibility Criteria (36 CFR 60.4):

Age: Generally, properties must be at least 50 years old, though exceptions exist for those of exceptional significance or contributing to historic districts.

Integrity: Properties must retain integrity of location, design, setting, materials, workmanship, feeling, and association.

Significance: Properties must meet at least one of the following criteria:

a. Criterion A: Association with significant historical events.

b. Criterion B: Association with significant persons.

c. Criterion C: Distinctive architectural characteristics or representation of a master's work.

d. Criterion D: Potential to yield important historical or prehistoric information.

Listing in the National Register ensures consideration in federal or federally assisted project planning, eligibility for federal tax benefits, and qualification for federal preservation assistance. Under the California Environmental Quality Act (CEQA), project effects on National Register-listed properties must be evaluated.

The National Register Bulletin series, such as Bulletin #36 for archaeological sites, provides guidance for applying National Register criteria. Properties lacking a clear historical theme or time period ("focus") are unlikely to meet National Register eligibility."

State Regulations

California Environmental Quality Act (CEQA)

State historic preservation regulations affecting this project include the statutes and guidelines contained in the California Environmental Quality Act (CEQA; Public Resources Code sections 21083.2 and 21084.1 and sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA Section 15064.5 requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. Public Resources Code Section 21098.1 further cites: A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.

An “historical resource” includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript that is historically or archaeologically significant (Public Resources Code section 5020.1).

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor’s Office of Planning and Research (OPR), CEQA and Archaeological Resources, 1994. The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associations, and societies be solicited as part of the process of cultural resources inventory.

In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of the antiquity and provides for the sensitive treatment and disposition of those remains (California Health and Safety Code Section 7050.5, California Public Resources Codes Sections 5097.94 et al).

California Register of Historical Resources (Public Resources Code Section 5020 et seq.)

SHPO maintains the California Register of Historical Resources (California Register). Properties listed, or formally designated as eligible for listing, on the National Register of Historic Places are automatically listed on the California Register, as are State Landmarks and Points of Interest. The California Register also includes properties designated under local ordinances or identified through local historical resource surveys.

For the purposes of CEQA, a historical resource is a resource listed in or determined eligible for listing in the California Register. When a project impacts a site, it needs to be determined whether the site is a historical resource. The criteria are set forth in Section 15064.5(a) (3) of the CEQA Guidelines, and are defined as any resource that does any of the following:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

B. Is associated with the lives of persons important in our past;

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

D. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, the CEQA Guidelines, Section 15064.5(a) (4) states: The fact that a resource is not listed in, or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

California Health and Safety Code Sections 7050.5, 7051, and 7054

These sections collectively address the illegality of interference with human burial remains, as well as the disposition of Native American burials in archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation, and reburial procedures.

California Public Resources Code Section 15064.5(e)

This law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction. The section establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project and establishes the Native American Heritage Commission as the entity responsible to resolve disputes regarding the disposition of such remains.

Assembly Bill 52

Assembly Bill (AB) 52 establishes a formal consultation process for California tribes as part of CEQA and equates significant impacts on tribal cultural resources with significant environmental impacts. AB 52 defines a “California Native American Tribe” as a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission. AB 52 requires formal consultation with California Native American Tribes prior to determining the level of environmental document if a tribe has requested to be informed by the lead agency of proposed projects. AB 52 also requires that consultation address project alternatives, mitigation measures, for significant effects, if requested by the California Native American Tribe, and that consultation be considered concluded when either the parties agree to measures to mitigate or avoid a significant effect, or the agency concludes that mutual agreement cannot be reached. Under AB 52, such measures shall be recommended for inclusion in the environmental document and adopted mitigation monitoring program if determined to avoid or lessen a significant impact on a tribal cultural resource.

Local Regulations

City of Atwater General Plan

The Atwater General Plan Open Space and Conservation Element identifies objectives and policies related to historic and cultural resources including:

GOAL CO-9. *Protect and enhance historical and culturally significant resources within the Planning Area.*

Policy CO-9.1. *Ensure consideration and proper handling of prehistoric, cultural, and archaeological resources during the development process.*

Policy CO-9.2. *Preserve and maintain structures and features identified as historically significant by the City, including but not limited to, the Bloss Mansion and Bloss Library. Policy CO-9.3. Encourage public and private efforts to identify, preserve, protect, and/or restore historic buildings, structures, landmarks, and important cultural resources.*

Implementation Program CO-9.a. *Attach the following standard condition to all discretionary development projects: "If a previously unknown archaeological site is uncovered during in the course of development, all development activity in the vicinity of the site shall cease until a qualified archaeologist completes an investigation. The archaeologist shall submit a report to the City that includes a determination of the significance of the site and recommendations on its disposition."*

4.2.3 Environmental Impacts and Mitigation Measures

Methodology

The assessment of cultural resources is based on the environmental setting background, CHRIS Record Search, Sacred Lands File (SLF) check, Tribal Consultation, General Plan policies and information, and qualitative information about the Project site.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, the proposed Project would be considered to have a significant impact on cultural resources if it would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Assessment

Impact 4.2-1. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?

Under CEQA Guidelines *Section 15064.5*, a historical resource is any building, structure, object, prehistoric, site, area, place, record, or manuscript that is listed in, or eligible for listing in, the California Register of Historical Resources, included in a local historical resources inventory, or otherwise determined significant by the lead agency. It can also be any other resource that the lead agency determines to be historically significant. A

The CCIC CHRIS Record Search for the Project site and surrounding area (0.50-mile radius) dated May 9, 2025 (CCIC File Number 13350I) revealed no formally recorded prehistoric or historic archaeological resources or historic buildings or structures within the Project site. The project area lies within the overall boundary of the Merced Irrigation District, but the district has been determined ineligible for the National Register and has not been evaluated for the California Register or local listing, and the water conveyance features present in the area are not listed or determined eligible as historical resources under CEQA.

A consultation list of tribes with traditional lands or cultural places located within Merced County was requested and received from the California Native American Heritage Commission (NAHC) on May 12, 2025. The City of

Atwater sent formal tribal notices pursuant to AB 52 on June 2, 2025, to the tribes included in the NAHC correspondence: Amah Mutsun Tribal Band, Northern Valley Yokut/ Ohlone Tribe, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Wuksachi Indian Tribe/ Eshom Valley Band. Consultation ended on July 2, 2025. No tribe requested consultation or provided information identifying any historical resources or tribal cultural resources within the Project area.

In addition, the NAHC Sacred Lands File (SLF) check dated May 12, 2025, was negative. A negative SLF check means that the NAHC did not find any records of Native American cultural resources, such as sacred sites, traditional cultural properties, or burial grounds, within the area requested for the search.

Because no historical resources as defined by CEQA have been identified within the Project site, the Project would not cause a substantial adverse change in the significance of a historical resource. **Impacts would be less than significant.**

Mitigation Measures

Implement *Mitigation Measure CUL-1.*

Mitigation Measure CUL-1: *Prior to issuance of grading permits, the Project proponent shall retain a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) to conduct a pedestrian survey and subsurface testing program (including shovel test pits and/or mechanically excavated trenches at 10–20-meter intervals) within all areas of ground disturbance identified as archaeologically sensitive, including Bear Creek/Black Rascal Creek corridors and adjacent floodplains. The archaeologist shall prepare a technical report documenting survey methods, findings, and recommendations, including resource eligibility under CEQA Guidelines section 15064.5, to be submitted to the City for review and approval.*

If significant archaeological resources are identified:

a. The archaeologist shall first evaluate avoidance or preservation in place as the preferred mitigation, designing a site protection plan (e.g., capping, buffer zones) if feasible.

b. If avoidance/preservation is infeasible, the archaeologist shall conduct Phase II testing to confirm significance and delineate site boundaries.

c. For confirmed historical or unique archaeological resources, data recovery excavation shall be performed using standard techniques (screening, feature excavation, artifact analysis) sufficient to reduce the resource to a non-significant level per CEQA Guidelines section 15126.4(b). A final data recovery report shall be prepared and submitted to the City and the Central California Information Center (CCIC).

Inadvertent discovery protocol: If previously unknown historical, archaeological, or cultural resources are encountered during construction, work shall stop within 50 feet of the find. The qualified archaeologist shall be retained immediately to evaluate the discovery and implement the above procedures. No further grading shall occur in the vicinity until the City approves mitigation measures and verifies implementation.

Significance After Mitigation

Implementation of *Mitigation Measure CUL-1* would reduce the potentially significant impact on archaeological resources to a less than significant level. The pre-construction archaeological survey and focused subsurface testing program in sensitive areas (creek corridors and floodplains) would identify any significant resources prior to impacts, allowing for avoidance, preservation in place, or data recovery excavation as appropriate under CEQA Guidelines *Section 15064.5* and Secretary of the Interior Standards. Native American monitoring during ground

disturbance near watercourses ensures tribal concerns are addressed, while the inadvertent discovery protocol provides additional protection for unanticipated finds. With implementation of *Mitigation Measure CUL-1*, ground-disturbing activities would not result in a substantial adverse change in the significance of any archaeological resources, and impacts would be **less than significant with mitigation incorporated**.

All artifacts recovered shall be curated at a City-approved repository (e.g., CCIC) capable of long-term preservation. This measure shall be included on all grading plans, improvement plans, and construction contracts, enforced through City permit conditions, and verified via field inspections and reporting.Impact 4.2-2. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Under the CEQA Guidelines, specifically *Section 15064.5*, an archaeological resource is defined as any material evidence of past human life or activities. This encompasses a broad range of physical remains including prehistoric archeological sites, historic archeological sites, and traditional cultural properties. A "substantial adverse change" generally means that the project would destroy, damage, or alter the resource in a way that diminishes its historical, cultural, or scientific value.

The CCIC CHRIS Record Search for the Project site and surrounding area (0.50-mile radius) dated May 9, 2025 (CCIC File Number 13350I) revealed no previously recorded prehistoric or historic archaeological sites within the Project site. However, regional studies and the CHRIS Record Search noted elevated sensitivity for buried archaeological deposits along the Bear Creek and Black Rascal Creek corridors, where undiscovered sites may occur below the plow zone in relatively undisturbed terrace, floodplain, or near-water landforms attractive for prehistoric occupation.

Despite the absence of known resources within the Project site, the possibility remains that previously undiscovered archaeological resources exist below the surface. Ground-disturbing construction activities, including grading and excavation, could inadvertently damage or destroy such unknown resources. Therefore, impacts on archaeological resources are considered **potentially significant**.

Mitigation Measures

Implement *Mitigation Measure CUL-1.*

Significance After Mitigation

Implementation of *Mitigation Measure CUL-1* would reduce the potentially significant impact on archaeological resources to a less than significant level. The pre-construction archaeological survey and focused subsurface testing program in sensitive areas (creek corridors and floodplains) would identify any significant resources prior to impacts, allowing for avoidance, preservation in place, or data recovery excavation as appropriate under CEQA Guidelines *Section 15064.5* and Secretary of the Interior Standards. Native American monitoring during ground disturbance near watercourses ensures tribal concerns are addressed, while the inadvertent discovery protocol provides additional protection for unanticipated finds. With implementation of *Mitigation Measure CUL-1*, ground-disturbing activities would not result in a substantial adverse change in the significance of any archaeological resources, and impacts would be **less than significant with mitigation incorporated**.

Impact 4.2-3. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No evidence of human remains exists within the Project site based on the CCIC records search and NAHC Sacred Lands File. However, under CEQA Guidelines *Section 15064.5(e)* and California Health and Safety Code *Section 7050.5*, the inadvertent discovery of human remains during ground-disturbing activities remains a possibility that cannot be entirely eliminated. Therefore, impacts on human remains are considered **potentially significant**.

Mitigation Measures

Implement *Mitigation Measure CUL-2*.

Mitigation Measure CUL-2*. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent remains until the Merced County Coroner has determined that the remains are not subject to any provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.*

If the Merced County Coroner determines that the remains are not subject to his or her authority and if the County Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone, the Native American Heritage Commission (NAHC).

After notification, the NAHC will follow the procedures outlined in Public Resources Code Section 5097.98, that include notification of most likely descendants (MLDs), and recommendations for treatment of the remains. The MLDs will have 48 hours after notification by the NAHC to make their recommendations (PRC Section 5097.98).

This measure shall be included in all grading and improvement plans and in all construction contracts and shall be enforced by the City through permit conditions and field inspections.

Significance After Mitigation

Mitigation Measure CUL-2 will reduce the potentially significant impact to previously unknown human remains to less than significant by establishing protocols for the discovery and treatment. If human remains are found, work will stop, and the Merced County Coroner will be notified to determine jurisdiction. If the remains are determined to be Native American, the Native American Heritage Commission will be contacted and the procedures in Public Resources Code Section 5097.98 will be followed, including notification of most likely descendants and implementation of their recommendations for treatment and disposition. This measure ensures that any discovered Native American human remains are treated with respect and in accordance with California law. Impacts would be less than significant with mitigation incorporated.

By implementing these measures, the Project establishes a process for addressing the potential discovery of human remains, ensuring evaluation, protection, and treatment, thus reducing the potentially significant impact to a less than significant level. Impacts would be **less than significant with mitigation incorporated**.

Impact 4.2-4. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to cultural resources.

Cumulative impacts to cultural resources generally occur when multiple projects in a region collectively contribute to the destruction, alteration, or loss of significant archaeological, historical, or tribal cultural resources. Cultural

resources are inherently site-specific, and impacts are typically localized to areas of ground disturbance. Therefore, cumulative impacts are most likely in areas of overlapping ground-disturbing activities within archaeologically sensitive zones, such as floodplains, terraces, or other undisturbed landforms along creeks and waterways.

The proposed Project, like other reasonably foreseeable development in the region, involves ground-disturbing activities in proximity to Bear Creek, Black Rascal Creek, and associated floodplains, where previously unknown archaeological resources or human remains could occur. If previously unknown archaeological resources or human remains are discovered, the Project would contribute to a **significant cumulative impact**.

Mitigation Measures

Implement *Mitigation Measure CUL-1 and CUL-2.*

Significance After Mitigation

Implementation of *Mitigation Measure CUL-1* requires pre-construction archaeological surveys, focused subsurface testing, Native American monitoring, and procedures for inadvertent discovery. These measures ensure that any significant resources are avoided, preserved, or scientifically recovered before damage can occur.

Mitigation Measure CUL-2 will reduce the potentially significant impact to previously unknown human remains to less than significant by establishing protocols for the discovery and treatment. If human remains are found, work will stop, and the Merced County Coroner will be notified to determine jurisdiction. If the remains are determined to be Native American, the Native American Heritage Commission will be contacted and the procedures in Public Resources Code Section 5097.98 will be followed, including notification of most likely descendants and implementation of their recommendations for treatment and disposition. This measure ensures that any discovered Native American human remains are treated with respect and in accordance with California law.

With implementation of *Mitigation Measure CUL-1, Mitigation Measure CUL-2,* and adherence to applicable statutory requirements, the proposed Project's incremental contribution to cumulative impacts on historical, archaeological, and human remains would not be cumulatively considerable. While the potential for cumulative cultural resource impacts exists in a general sense due to ongoing development in the region, the Project's compliance with mitigation and regulatory measures ensures that its contribution is less than cumulatively considerable, and cumulative impacts would be effectively managed. **Impacts would be less than cumulatively considerable.**

4.3 Geology and Soils

4.3.1 Environmental Setting

Topography and Local Geology

The Project, located in Merced County, lies within the Great Valley Geomorphic Province, commonly known as the San Joaquin Valley, which comprises expansive alluvial plains and fans formed by sediment sourced primarily from the Sierra Nevada to the east, the Coast Ranges to the west, and the Tehachapi Mountains to the south.

The Project site is situated on flat to gently sloping alluvial plains primarily drained by Bear Creek, Black Rascal Creek, and their tributaries within the broader San Joaquin River system. The site's terrain is predominantly level with minor relief along creek channels; however, natural topography has been substantially modified through long-term farming, irrigation infrastructure, and localized flood control measures.

Paleontological Resources

Paleontology is the study of prehistoric life, including organisms' evolution and interactions with each other and their environments. Paleontological resources include fossil remains, as well as fossil localities and formations that have produced fossil material. Paleontological localities are spatially defined areas where fossils have been found in situ or collected previously, often characterized by specific stratigraphy, lithology, and depositional environments conducive to fossil preservation.

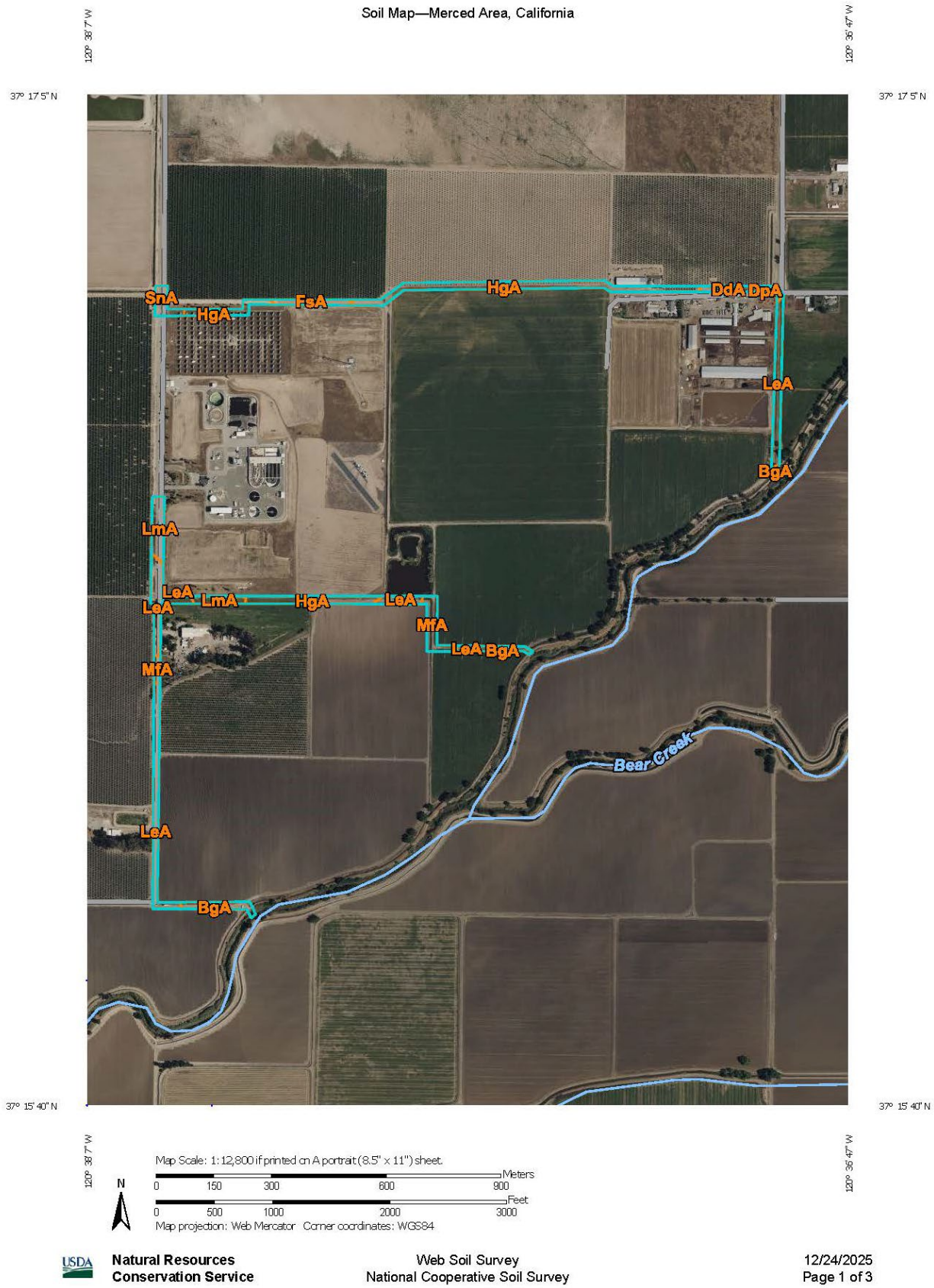
Paleontological resources in the Merced County project area are potentially significant due to Quaternary alluvial and lacustrine sediments that may preserve fossils from the late Pleistocene and Holocene epochs. The San Joaquin Valley, including Merced County, forms part of a paleontologically rich region known for vertebrate remains from the Rancholabrean Land Mammal Age, such as mammoths, ground sloths, horses, camels, dire wolves, and associated fauna reflecting ancient floodplain and lake-margin paleoecologies. Merced County records note 12 paleontological localities primarily in western Coast Range formations (Moreno, Panoche, Kreyenhagen), with Late Pleistocene mammals possible valley wide.

Subsurface Soils

The soil profile of the Project site is listed in Table 4-6 and a distribution map is provided in Figure 4-2.

Table 4-6: Soil Profile of Project Site

Unit Symbol	Unit Name	Depth to water table	Flooding/Ponding frequency	Drainage class	Percent of Project Site
BgA	Burchell silt loam, 0-1 percent slopes	About 0 inches	Rare/None	Somewhat poorly drained	6.9%
DdA	Delhi loamy sand, 0-3 percent slopes, MLRA 17	More than 80 inches	None/None	Somewhat excessively drained	2.7%
DpA	Dinuba sandy loam, 0-1 percent slopes	More than 80 inches	None/None	Moderately well drained	1.4%
FsA	Fresno loam, strongly saline-sodic, 0-1 percent slopes	More than 80 inches	Rare/None	Moderately well drained	3.3%
HgA	Hilar loamy sand, 0-3 percent slopes	More than 80 inches	None/None	Somewhat poorly drained	32.1%
LeA	Landlow silty clay loam, 0-1 percent slopes	About 0 inches	Rare/None	Somewhat poorly drained	33.2%
LmA	Lewis loam, moderately saline-alkani, 0-1 percent slopes	More than 80 inches	Rare/None	Moderately well drained	9.3%
MfA	Marguerite silty clay loam, 0-1 percent slopes	More than 80 inches	None/None	Well drained	7.2%
SnA	Snelling sandy loam, 0-3 percent slopes	More than 80 inches	None/None	Well drained	3.9%


Soil Map—Merced Area, California
120° 38' 7" W
120° 36' 47" W
37° 17' 5" N
37° 15' 40" N
SnA
HgA
FsA
HgA
DdA
DpA
LeA
BgA
LmA
LeA
LeA
LmA
HgA
LeA
MfA
LeA
BgA
MfA
Bear Creek
LeA
BgA
Map Scale: 1:12,800 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 150 300 600 900
Feet
0 500 1000 2000 3000
Map projection: Web Mercator Corner coordinates: WGS84
USDA
Natural Resources Conservation Service
Web Soil Survey
National Cooperative Soil Survey
12/24/2025
Page 1 of 3

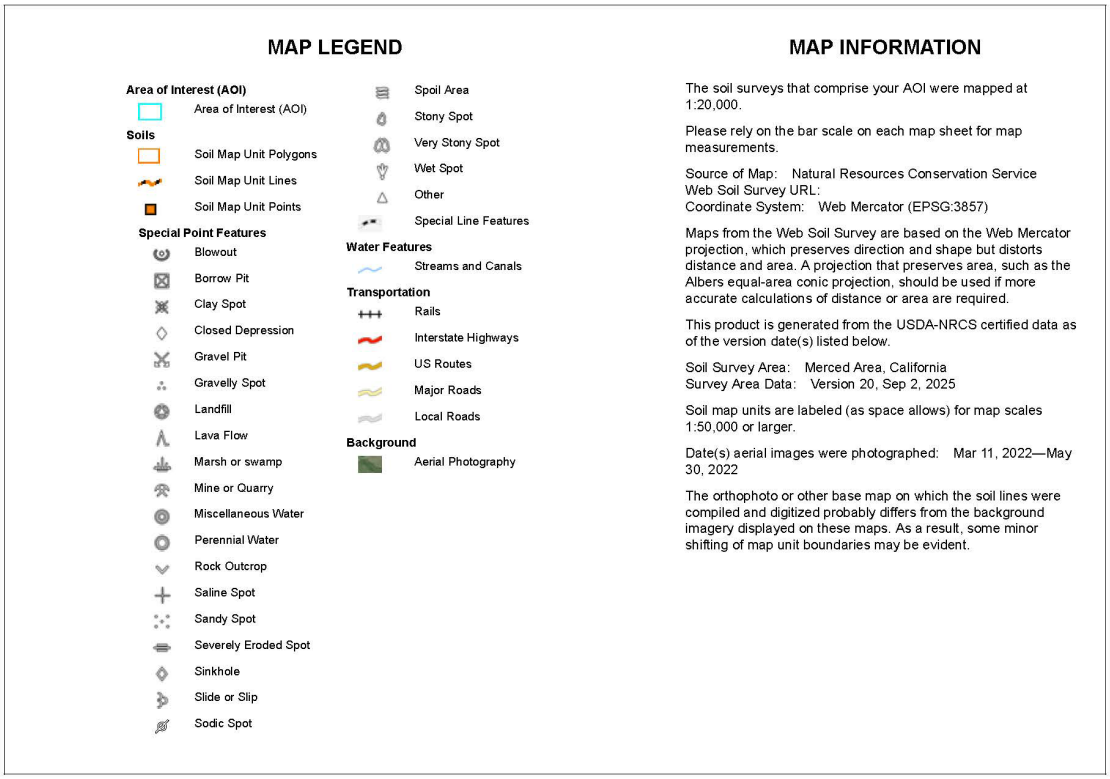


Figure 4-2 Soils Distribution Map

Collapsible and Expansive Soils

Collapsible soils are unsaturated soils that go through a radical rearrangement of particles and greatly decrease in volume upon wetting, additional loading, or both. Expansive soils are those with excessive swelling clay materials such as montmorillonite, that absorbs and swells when wet and drinks when dried. Based on the soil profile of the Project site, there is low potential for collapsible or expansive soils.

Site Drainage

There are seven (7) classes of natural soil drainage according to the Soil Survey Manual by the National Cooperative Soil Survey: excessively drained, somewhat excessively drained, well drained, moderately drained, somewhat poorly drained, poorly drained, and very poorly drained. The classification is based on the frequency and duration of wet periods under conditions similar to those under which the soil was formed. Based on the soil profile of the Project site, the site is somewhat poorly drained along most areas between agricultural fields.

The National Cooperative Soil Survey also provides data on the depth to soil restrictive layer, which is a nearly continuous layer that has one (1) or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil that restricts roots or otherwise provides an unfavorable root environment. Examples include bedrock, cement, dense, and frozen layers.

Geologic Hazards

A brief discussion of the likelihood of geologic hazards occurring in or affect the Project site is provided below based on the City of Atwater General Plan, Merced County Multi-Jurisdictional Hazard Mitigation Plan, and State and national resources.

Faulting

There are no faults within the Project site or vicinity. The nearest faults of major significance are the San Andreas Fault in the western portion of Merced County, approximately 23 miles west of the Project site.

Ground Shaking

Ground shaking intensity is influenced by earthquake magnitude, proximity to the earthquake epicenter, and local geological conditions including type and consolidation of surface deposits. According to the Merced County Multi-Jurisdictional Hazard Mitigation Plan, there is low probability of ground shaking for the Project site.

Liquefaction

Liquefaction is a seismic phenomenon in which loose, saturated, fine-grained granular soils behave similarly to a fluid when subjected to high-intensity ground shaking. Factors that determine liquefaction potential include soil type, soil density, depth to the groundwater table, and duration and intensity of ground shaking. Areas that are most prone to liquefaction are those that are water-saturated, or with a water table of less than 30 feet below the surface. Merced County exhibits low liquefaction potential overall due to its Central Valley location distant from major active faults. According to the California Department of Conservation, Merced County, inclusive of the Project site, is not within a mapped liquefaction zone. [4]

Landslide

Landslides encompass a range of earth movement processes characterized by the downward and outward displacement of soil, rock, and vegetation under the force of gravity. These include slump, rockslide, debris slide, earth flow, and soil creep, among others. Landslides may be naturally triggered or exacerbated by human activities such as mining, construction, grading, irrigation changes, and vegetation removal. Factors influencing landslide susceptibility include slope steepness, soil and rock characteristics, structural geology, moisture content, vegetation cover, and proximity to eroding areas. Landslides are often associated with other hazards like floods, wildfires, and earthquakes, and their occurrence and velocity vary widely, from imperceptibly slow soil creep to rapid catastrophic failures.

Erosion

Erosion is the process whereby soil and rock materials are broken down, transported, and deposited by natural agents such as water and wind. The rate and severity of erosion depend on factors including soil type and permeability, rock characteristics, slope steepness, vegetation cover, and precipitation intensity and patterns. Increased slope and rainfall coupled with reduced or disturbed vegetation, caused by factors such as wildfire, construction, or cultivation, can greatly accelerate erosion. Significant erosion can lead to loss of productive agricultural lands, degradation of aquatic habitats through sedimentation, and accelerated sediment buildup in reservoirs. According to the Atwater General Plan, the northwestern portion of the city's Planning Area is an area subject to wind erosion, since the area is largely situated in Atwater sandy soils, which has been rated as having a severe hazard of wind erosion.

Land Subsidence

[4] California Department of Conservation. 2025. CGS Seismic Hazards Program: Liquefaction Zones. Accessed December 24, 2025, https://maps-cnra-cadoc.opendata.arcgis.com/datasets/cadoc::cgs-seismic-hazards-program-liquefaction-zones/explore?location=36.847473%2C-121.097580%2C9.80

Land subsidence is the vertical sinking of the ground surface over underground voids, often caused by excessive groundwater or oil and gas extraction. Within California's Central Valley, including Merced County, subsidence is commonly linked to groundwater withdrawal to support agricultural irrigation and drinking water supplies. Heavy surface loads such as buildings, roads, and reservoirs, along with manmade vibrations from activities like heavy vehicle traffic or blasting, can accelerate subsidence rates.

4.3.2 Regulatory Setting

Federal Regulations

International Building Code

The International Building Code (IBC) is a model building code that provides safeguards from hazards associated with the built environment. The most current IBC was adopted in 2021, replacing the National Building Code, Uniform Building Code, and Standard Building Code. The IBC is integrated into the California Building Code.

State Regulations

Alquist-Priolo Earthquake Fault Zoning

The Alquist-Priolo Earthquake Fault Zoning Act was adopted in 1972 to mitigate the hazard of faulting to structures for human occupancy. The Act requires the California Geologic Survey to compile maps of traces of Active faults and requires a state geologist to delineate earthquake fault zones along faults that are “sufficiently active” and “well defined.” The Act requires disclosure in real estate transactions and requires local jurisdictions to withhold development permits for a site in an earthquake fault zone until geologic investigations demonstrate that the site is not threatened by surface displacements from future faulting. An active fault is one showing expression of surface rupture within the last 11,000 years. Pursuant to this act, structures for human occupancy are not allowed within 50 feet of the trace of an active fault. Single family wood-frame or steel-frame dwellings up to two (2) stories high and not part of a development of four or more dwelling units is the only exemption to this Act.

Seismic Hazard Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, Section 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to earthquake hazards of liquefaction, earthquake-induced landslides and amplified ground shaking. The purpose of the SHMA is to reduce the threat to public safety and to minimize the loss of life and property by identifying and mitigating these seismic hazards. The SHMA was passed by the legislature following the 1989 Loma Prieta earthquake.

The SHMA requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Single family frame dwellings up to two (2) stories not part of a development of four or more units are exempt from the state requirements. However, local agencies can be more restrictive than state law requires.

2022 California Building Code (CBC)

The California Building Code (CBC) is contained in the California Code of Regulations (CCR), Title 24, Part 2. The 2022 edition of the CBC went into effect on January 1, 2023. Local agencies are required to adopt the provisions of the CBC within 180 days of its publication. The CBC provides minimum standards for building design that are

based on characteristics of a site, occupancy type, configuration, structural system height, and seismic zoning to protect property and people. The CBC contains provisions for earthquake safety based on occupancy type, soil and rock types, and strength of ground motion, among other factors. The CBC also contains requirements for geotechnical investigations for subdivisions that require tentative and final maps to evaluate the site's slope stability, soil strength, position and adequacy of soils, effect of moisture variation, compressibility, liquefaction, settlement, and expansiveness. The CBC, and related regulations, are a component of the Atwater Municipal Code.

Local Regulations

Merced County Multi-Jurisdictional Hazard Mitigation Plan

The Merced County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) 2021-2026 was developed for the hazard mitigation planning process of the unincorporated county and six (6) participating jurisdictions, including Atwater, Dos Palos, Gustine, Livingston, Los Banos, and Merced. The MJHMP identifies natural and human-caused hazards and risks and identifies the hazard mitigation strategy to reduce vulnerability and make communities more disaster resistant and sustainable. The MJHMP was prepared pursuant to the requirements of the Disaster Mitigation Act.

City of Atwater General Plan

The City of Atwater General Plan Safety Element potential hazards in the Planning Area, including seismically-induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure, as well as landslides, subsidence, liquefaction, and other seismic and geologic hazards. The relevant goals and policies that relate to geology and soils are as listed.

GOAL SF-1. *Minimize the threat of personal injury and property damage due to seismic activity.*

> ***Policy SF-1.1.*** *Require all new development and rehabilitation of existing development to be in compliance with all Seismic Zone 3 requirements of the Uniform Building Code.*

GOAL SF-2. *Reduce the potential for property damage and injury resulting from liquefaction.*

> ***Policy SF-2.1.*** *Require a geotechnical study for all projects located in areas that are subject to high groundwater tables, as noted in Figure 5-2, to assess the probability of liquefaction occurrence on project site. The geotechnical study shall identify any required design or construction mitigation to reduce potential impacts.*

GOAL SF-3. *Prohibit activities which could result in ground subsidence.*

> ***Policy SF-3.1.*** *Require all project applications that propose extraction of groundwater to include a report evaluating the potential for subsidence. The report shall discuss appropriate mitigation measures to reduce the potential for subsidence.*
>
> > ***Implementation Program SF-3.a.*** *The City shall annually monitor the elevation of groundwater at City wells, and fluctuations in groundwater levels shall be recorded to determine long-term trends in groundwater elevations.*

4.3.3 Environmental Impacts and Mitigation Measures

Methodology

The assessment of geology and soils is based on information obtained from the Merced County Multi-Jurisdictional Hazard Mitigation Plan, State and National databases, applicable City policies and standards, and qualitative information about the Project area.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, an impact on geology and soils would be significant if implementation of the Project would:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:
   i. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
   ii. Strong seismic ground shaking?
   iii. Seismic-related ground failure, including liquefaction?
   iv. Landslides?
b) Result in substantial soil erosion or the loss of topsoil?
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?
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial direct or indirect risks to life or property?
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Impact Assessment

Impact 4-3.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides?

The following section describes the potential for the Project to expose people or structures to substantial adverse impacts from seismic hazards, including rupture of a known earthquake fault, strong seismic shaking, seismic-related ground failure, soil liquefaction, and landslides.

Surface Fault Rupture

The Project does not include habitable structures and the site is not located within an Alquist-Priolo Earthquake Fault Zone, nor is there evidence of an active fault on or immediately adjacent to the Project site. Therefore, the risk of fault rupture is considered negligible, and **no impact would occur.**

Strong Seismic Shaking

The Project site is in a region of California where seismic events are possible, however, it is not in proximity to major active faults. The nearest fault of major significance is the San Andreas Fault, located in the western portion of Merced County, approximately 23 miles west of the Project site. According to the Merced County Multi-

Jurisdictional Hazard Mitigation Plan, the probability of significant seismic ground shaking at the Project site is considered low.

The Project would construct buried pipelines, a pump station, and associated infrastructure that would not house permanent occupants and therefore present minimal risk of injury or loss of life. In addition, final design of the pump station and structural components would comply with the California Building Code (CBC), which requires consideration of applicable seismic loading conditions to ensure structural integrity. As a result of the region's low probability of strong seismic ground shaking and compliance with applicable design standards, the Project would not result in substantial adverse effects related to seismic ground shaking. **Impacts would be less than significant.**

Seismic-Related Ground Failure including Liquefaction

Liquefaction is most likely to occur where loose, saturated granular soils and high groundwater levels are present. The Project site is not located within a mapped State-designated liquefaction hazard zone. Groundwater in most of the Project site is typically greater than 80 inches in depth, although seasonally elevated moisture conditions may occur in proximity to Bear Creek, Black Rascal Creek, and the Deckert Lateral. Portions of the Project would install facilities near these engineered channels, however, compliance with the California Building Code (CBC) and City of Atwater design standards requires that final design incorporate geotechnical recommendations addressing settlement, liquefaction potential, and lateral stability where applicable.

Pipeline construction, trench backfill compaction requirements, and structural design of the outfall and pump station facilities would be reviewed and approved by the City Engineer and, where applicable, the Merced Irrigation District prior to construction authorization. With implementation of these mandatory engineering standards, the potential for seismic-related ground failure, including liquefaction, to result in substantial adverse effects, would be less than significant. **Impacts would be less than significant.**

Landslides

Landslides, encompassing rockfalls, slope failures, and mud/debris flows, are primarily triggered by a combination of factors, including steep slopes, unstable geological formations, inadequate drainage, and sometimes vegetation removal. The Project site is located within the flat terrain of the San Joaquin Valley and does not contain steep slopes or unstable hillside conditions. Therefore, the potential for landslides at the Project site is considered negligible. **Impacts would be less than significant.**

Mitigation Measures

None required.

Impact 4-3.2. Would the project result in substantial soil erosion or the loss of topsoil?

Soil erosion and loss of topsoil can be caused by natural factors, such as wind and flowing water, and human activity. The Project site is relatively flat, which limits the potential for substantial soil erosion. Development of the Project would require typical site preparation activities such as grading and trenching which may result in the potential for short-term soil disturbance or erosion impacts. Soil disturbance during construction is largely caused by the use of water. Excessive soil erosion could cause damage to existing structures and roadways.

The likelihood of erosion occurring during construction would be reduced through site grading and surfacing, which would be subject to review and approval by the City and County for compliance with applicable standards. Development of the Project would be required to comply with Atwater Municipal Code (AMC) *Chapter 12.22 – Stormwater Management and Discharge Control Ordinance*, which requires that any person performing

construction activities in the City shall prevent pollutants from entering the storm water conveyance system and comply with all applicable Federal, State, and local laws, ordinances or regulations, including but not limited to, the current California NPDES general permit for storm water discharges associated with construction activity (construction general permit). All construction projects, regardless of size, having soil disturbance or activities exposed to storm water must, at a minimum, implement best management practices (BMPs) for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures, and prohibited discharges. Implementation of the BMPs minimizes the potential for the Project to result in substantial erosion or loss of topsoil. In addition, the City's Public Works and Building Departments have prepared a standard set of conditions for proposed developments to the control of dust emissions during grading and other earth moving activities.

The likelihood of erosion would be further reduced through compliance with regulations set by the State Water Resources Control Board (SWRCB). The National Pollutant Discharge Elimination System (NPDES) stormwater permitting programs regulate stormwater quality from construction sites, which includes erosion and sedimentation. Under the NPDES permitting program, the preparation and implementation of a Type 1 Linear Underground/Overhead Projects (LUPs) Stormwater Pollution Prevention Plan (SWPPP) developed by a Qualified SWPPP Developer (QSD) are required for construction activities where greater than 30 percent of construction activities occur within the non-paved shoulders or land immediately adjacent to paved surfaces, or where construction occurs on unpaved improved roads, including their shoulders or land immediately adjacent to them (California Water Board, 2018). A SWPPP must identify potential sources of erosion or sedimentation that may be reasonably expected to affect the quality of stormwater discharges as well as identify and implement Best Management Practices (BMPs) that ensure the reduction of these pollutants during stormwater discharges. Typical BMPs intended to control erosion include sandbags, detention basins, silt fencing, storm drain inlet protection, street sweeping, and monitoring of water bodies. The proposed pipeline component of the Project meets the criteria for a Type 1 LUPs SWPPP. Therefore, the proposed Project must comply with all rules and regulations of a Type 1 LUP site SWPPP for construction-related activities. Construction of the pump station and structural components would be subject to compliance with the General Permit Order No. 2009-0009-DWQ for non-linear projects. Regulations include, but are not limited to, the following BMP requirements to minimize the potential for pollution related to material spills:

- Soil stabilization BMPs
- Sediment control BMPs
- Temporary gravel construction entrance/exit
- Run-on control

No soil erosion or loss of topsoil will result from installation of the proposed Project's underground pipeline distribution system. The SWPPP estimates the sediment risk associated with construction activities and includes best management practices (BMP) to control erosion. BMPs specific to erosion control cover erosion, sediment, tracking, and waste management controls. Implementation of the SWPPP minimizes the potential for the Project to result in substantial soil erosion or loss of topsoil. With these provisions in place, impacts on soil and topsoil by the Project would be considered **less than significant**.

General Permit Order No. 2009-0009-DWQ

Mitigation Measures

None required.

Impact 4-4.3. Would the project 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?

The Project area is located in the San Joaquin Valley, which is characterized by very low relief and flat topography. Because the Project area does not contain steep slopes or geologic features prone to slope failure, the potential for landslides is negligible.

Liquefaction typically occurs in loose, saturated sandy soils during strong seismic shaking. The Project site is not located within a mapped State-designated liquefaction hazard zone, and groundwater conditions in the region are generally deep, although seasonally elevated moisture conditions may occur near the creeks or agricultural drainage features.

Lateral spreading is generally associated with liquefaction in loose, saturated granular soils adjacent to a "free face," such as a canal or creek bank. While portions of the Project would construct facilities near or at Bear Creek, Black Rascal Creek, or the Deckert Lateral, these channels are engineered features, and compliance with applicable engineering standards would ensure that the potential for lateral spreading is low.

Final design of the pump station, foundations, and structural components would be subject to the California Building Code (CBC), which requires preparation of a site-specific geotechnical investigation to establish seismic and soil design parameters. Pipeline alignments, trenching, and creek outfall structures would also be subject to review and approval by the City Engineer and, where applicable, the Merced Irrigation District, which require adherence to standard engineering specifications for trench stability, bedding and backfill, bank protection, and erosion control. These review processes occur during final engineering design and permitting and must be satisfied prior to issuance of a construction permit. Compliance with these regulatory requirements ensures that soil stability, liquefaction, settlement, and related geotechnical conditions are adequately addressed in project design.

Land subsidence in the San Joaquin Valley is generally associated with groundwater extraction, however, the Project does not involve groundwater withdrawal and would not contribute to subsidence.

With compliance with applicable design standards, preparation of a project-level geotechnical study, and implementation of standard construction specifications and erosion protection measures, the Project would not result in substantial adverse effects related to unstable soils, liquefaction, lateral spreading, subsidence, or collapse. **Impacts would be less than significant.**

Mitigation Measures

None required.

Impact 4-4.4. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are typically fine-grained clays with high shrink-swell potential, commonly identified by plasticity index or expansion index criteria consistent with Table 18-1-B of the Uniform Building Code (1994). Available soil

survey information indicates that soils within the Project site generally consist of loam, sandy loam, and silty clay loam units typical of the San Joaquin Valley. While some localized areas contain silty clay loam that may exhibit moderate shrink-swell characteristics, the Project does not propose habitable structures or foundations that would house permanent occupants. Project components consist primarily of buried pipeline, a pump station, and associated infrastructure.

Final design of the pump station and structural components would be subject to the California Building Code (CBC), which requires a site-specific geotechnical evaluation to determine soil engineering properties, including expansion potential, and to incorporate appropriate design measures such as foundation design, slab reinforcement, trench backfill specifications, and moisture control where necessary. However, these components are not habitable structures, and therefore, there is no direct or indirect risk to life related to expansive soils. The City's review of grading and construction plans would also ensure appropriate bedding and backfill for buried pipeline facilities to prevent damage related to shrink-sell behavior.

With compliance with the CBC and applicable engineering design standards, the Project would not be exposed to substantial risks to life or property associated with expansive soils. **Impacts would be less than significant.**

Mitigation Measures

None required.

Impact 4-4.5. Would the project 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?

The Project does not propose the installation or use of septic systems or other onsite wastewater treatment systems. **No impact would occur.**

Mitigation Measures

None required.

Impact 4-4.6. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

No known unique paleontological resources or unique geologic features have been identified on the Project site. The site's relatively flat topography and general geological context do not suggest the presence of any such features. However, there is the potential for encountering undiscovered resources during ground-disturbing activities and impacts would be potentially significant if the resource, site, or feature were directly or indirectly destroyed by such activities. Impacts are therefore **potentially significant.**

Mitigation Measures

Implement *Mitigation Measure GEO-1*.

Mitigation Measure GEO-1: *Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for unique paleontological/geological resources shall be conducted. The following procedures shall be followed:*

If unique paleontological/geological resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that unique paleontological/geological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate

vicinity of the find and a qualified paleontologist shall be consulted to determine whether the resource requires further study. The qualified paleontologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to, excavation of the finds and evaluation of the finds. If the resources are determined to be significant, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any paleontological/geological resources recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

If unique paleontological/geological resources are found during the field survey or literature review, the resources shall be inventoried and evaluated for significance. If the resources are found to be significant, mitigation measures shall be identified by the qualified paleontologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include a paleontological monitor. The monitoring period shall be determined by the qualified paleontologist. If additional paleontological/geological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.

Significance After Mitigation

Mitigation Measure GEO-1 establishes a comprehensive protocol to identify, evaluate, and mitigate previously unknown paleontological or geologic resources. If resources are discovered, these protocols ensure their protection or scientific recovery in compliance with CEQA Guidelines *Section 15064.5*. By applying these procedures, potential resource impacts are effectively minimized through early identification and active management. Monitoring ensures that any significant paleontological resources are documented and preserved or recovered before they can be destroyed, thus reducing the impact from potentially significant to **less than significant with mitigation incorporated**.

Impact 4-4.7. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to geology and soils.

Cumulative impacts related to geology and soils are generally localized rather than regional in nature because geologic conditions vary from site to site and the risks associated with soil stability, liquefaction potential, expansive soils, erosion, seismic ground shaking, and related hazards are evaluated and addressed on an individual project basis. Other existing and foreseeable development within the City of Atwater and surrounding areas may result in project-specific geotechnical risks or temporary increases in erosion during grading and construction activities. However, these effects do not typically combine to create a larger cumulative condition because they are independently managed and mitigated at each development site.

Regionally, seismic ground shaking is a hazard that applies broadly across California, however, each development project is required to comply with applicable seismic safety standards established by the California Building Code (CBC) and enforced through the City's building permit review and inspection process. These standards are specifically intended to ensure structures are designed to withstand anticipated seismic forces, thereby reducing regional seismic risk on a project-by-project basis.

Similarly, cumulative erosion or soil loss is addressed through statewide construction stormwater permitting requirements, including preparation and implementation of SWPPPs and associated BMPs. These measures are required for individual development projects to minimize sediment transport, stabilize disturbed soils, and prevent off-site erosion. In addition, the City of Atwater General Plan policies and Municipal Code requirements establish consistent standards for geotechnical investigation, grading, and erosion control for development within the City.

Because geology and soils conditions are inherently site-specific and because an established regulatory framework requires each project to implement appropriate geotechnical design standards and erosion control measures, regional cumulative effects related to geology and soils are not anticipated to be significant. The proposed Project will comply with all applicable CBC requirements, City development standards, and stormwater regulations, ensuring its geologic and soils-related impacts remain less than significant. Therefore, the Project would not make a cumulatively considerable contribution to any significant cumulative impact related to geology and soils.

Ground-disturbing projects throughout the region could encounter previously undiscovered paleontological resources, representing a potentially significant cumulative impact if such resources were damaged or destroyed. The proposed Project, like other regional development, involves excavation that could expose unknown resources. This would contribute to a **significant cumulative impact**.

Mitigation Measures

Implement *Mitigation Measure GEO-1*.

Significance After Mitigation

Mitigation Measure GEO-1 requires identification, evaluation, and monitoring procedures for paleontological resources during construction. Implementation of *Mitigation Measure GEO-1* ensures that any significant paleontological resources are preserved or scientifically recovered. Because this mitigation is effective and enforceable, the Project's incremental contribution to cumulative paleontological resource impacts would be considered **less than cumulatively considerable**.

4.4 Hydrology and Water Quality

4.4.1 Environmental Setting

Surface Water and Drainage

Regional Drainage

The City of Atwater is in Merced County within California's San Joaquin Valley, where regional surface drainage ultimately flows toward the Sacramento–San Joaquin Delta through the San Joaquin River system. The San Joaquin River originates in the eastern Sierra Nevada, flows southwest to the San Joaquin Valley floor, then turns northwest to its confluence with the Sacramento River in the Delta. In the northern San Joaquin Valley, drainage toward the Delta occurs through the San Joaquin River and tributaries that include the Fresno, Merced, Tuolumne, and Stanislaus Rivers.

The Project site overlies the Merced Subbasin, which falls within the larger San Joaquin Valley Groundwater Basin. The San Joaquin River Hydrologic Region contains 11 distinct subbasins, where the Merced Subbasin (Bulletin 118 Basin Number 5-022.04) is bordered to the north by the Turlock Subbasin (Bulletin 118 Basin Number 5-022.03), to the south by the Chowchilla Subbasin (Bulletin 118 Basin Number 5-022.05), and to the west by the Delta-

Mendota Subbasin (Bulletin 118 Basin Number 5-022.07). [5] Merced Subbasin includes lands south of the Merced River between the San Joaquin River on the west and the Sierra Nevada foothills/crystalline basement rocks on the east. The Merced Subbasin's southern boundary generally follows the Madera–Merced County line associated with the Chowchilla River before continuing westward to the San Joaquin River. Average annual precipitation in the Merced Subbasin is approximately 11–13 inches and generally increases to the east. [6]

The primary surface water bodies within the boundaries of the Subbasin include the San Joaquin and Merced Rivers, which are the largest rivers in the region. The Chowchilla River is also a significant water course. While the San Joaquin River flows northwest toward the Sacramento-San Joaquin Delta, the regional drainage pattern generally consists of water courses flowing from the uplands in the northeast toward the San Joaquin River in the southwest. These surface water flows originate from a mixture of snowpack and rainfall. In addition to the major rivers, numerous smaller streams traverse the Merced Subbasin, including Bear Creek, Black Rascal Creek, Burns Creek, Canal Creek, Cottonwood Creek, Deadman Creek, Dutchman Creek, Fahrens Creek, Little Dutchman Creek, Mariposa Creek, and Owens Creek. Nearly all of these streams are utilized for the conveyance of irrigation water.

Local Drainage

Local drainage within the City of Atwater is influenced by very low-relief valley-floor topography, such that stormwater is primarily managed through a combination of engineered collection features (e.g., inlets, storm drains) and localized detention/retention facilities designed to attenuate peak flows and promote on-site infiltration where feasible. Stormwater runoff is collected through storm drains and inlets, then directed to these retention basins where it gradually percolates into the Subbasin's groundwater. The City of Public Works Department is responsible for maintaining the streets, storm drains, and sidewalks associated with this stormwater system. In the event of heavy rainfall that exceeds the capacity of the retention basins, excess water is released, ultimately discharging into the San Joaquin River via tributaries and irrigation canals.

Groundwater

Groundwater Supply and Usage

The City of Atwater Public Works Department Water Division manages and operates the City of Atwater's water supply system. Groundwater is the sole source of water supply through nine (9) wells (eight active and one drilled but not equipped) that pump from the Merced Subbasin of the San Joaquin Valley Groundwater Basin directly into the City's distribution system. The distribution system consists of pipeline sizes ranging from 4 to 14 inches in diameter, and an elevated storage tank with a capacity of 1 million gallons (MG).

Groundwater Recharge

Groundwater recharge is a hydrologic process where water moves downward from surface water to groundwater. Recharge occurs both naturally, by precipitation and percolation from surface water bodies, and anthropologically, where rainwater and reclaimed water is directly routed to the subsurface. In the Merced Subbasin, recharge occurs through both natural and anthropogenic mechanisms. Natural recharge is primarily driven by the percolation of precipitation and seepage from surface water bodies, particularly along unlined

[5] Merced SGMA. 2025. Merced Groundwater Subbasin Groundwater Sustainability Plan. Accessed December 29, 2025, https://mercedsgma.org/assets/pdf/gsp-sections/Merced-Subbasin-GSP-2025_FINAL.pdf
[6] California Department of Water Resources. 2004. Bulletin 118: San Joaquin Valley Groundwater Basin Merced Subbasin. Accessed December 29, 2025, https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_04_MercedSubbasin.pdf

waterways and creeks such as Bear Creek, Mariposa Creek, and portions of the Merced River system where groundwater levels are lower than the stream stage.

Anthropogenic recharge, which results from human activity, is a significant component of the local water recharge. This includes the deep percolation of applied irrigation water from agricultural and landscape, seepage from unlined irrigation canals, such as those managed by the Merced Irrigation District, and intentional managed aquifer recharge (MAR) projects. Within the City of Atwater and its vicinity, stormwater retention basins also function as localized recharge facilities, capturing runoff from impervious surfaces and allowing it to infiltrate the underlying sediments.

Groundwater Quality

Groundwater quality in the Merced Subbasin is often sufficient for municipal and agricultural uses, though it is variable and locally impaired by both naturally occurring and anthropogenic constituents. According to the 2025 Groundwater Sustainability Plan (GSP) for the Merced Subbasin, the primary naturally-occurring water quality constituents of concern are arsenic and uranium. There are also aesthetic issues related to iron and manganese. The primary water quality constituents of concern related to human activity include salinity, nitrate, hexavalent chromium, petroleum hydrocarbons (such as benzene and MTBE), pesticides (such as DBCP, EDB, 1,2,3 TCP), solvents (such as PCE, TCE), and emerging contaminants (such as PFOA, PFOS).

Nitrate contamination is a most widespread issue with direct impact on public health, particularly in the northwestern areas and regions with shallow groundwater tables (less than 70 feet deep). Elevated nitrate levels are strongly correlated with historical land use practices, including fertilizer application for deciduous fruit, nut, and citrus crops, as well as dairy operations. Domestic wells in these agricultural areas frequently exceed water quality standards for nitrate.

Salinity is also a widespread issue with difficult management due to increase from urban and agricultural use. Salinity, measured as Total Dissolved Solids (TDS), typically ranges from 100 to 1,200 mg/L across the region. Higher TDS concentrations are most prevalent in the western portion of the Subbasin and in areas with poorly drained soils near the San Joaquin River valley trough. These elevated levels are often associated with agricultural irrigation return flows and the concentration of salts in shallow groundwater.

With the exception of City Well 21, all active municipal supply wells within the City's portfolio have historically exhibited 1,2,3-Trichloropropane (1,2,3-TCP) concentrations exceeding the Maximum Contaminant Level (MCL). To address this, the City has installed wellhead treatment infrastructure to ensure distributed water fully complies with California State Water Resources Control Board quality standards. Historical monitoring data for City wells also indicates past detections of other legacy soil fumigants, including 1,2-Dibromo-3-chloropropane (DBCP) and ethylene dibromide (EDB).

Flood Control

Flood Zones

The FEMA Flood Map Service Center is the official public source of these flood hazard products used for floodplain management and permitting. According to the FEMA Flood Map Service Center, the flood map for the Project site is 06047C0400G and 06047C0415G, effective on December 2, 2008. The Project site is within Zone A. Zone A are areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage.

Dam Inundation

The California Department of Water Resources (DWR) Division of Safety of Dams (DSOD) provides oversight to the design, construction, and maintenance of over 1,200 jurisdictional sized dams in the State. The DSOD publishes maps that indicate risk hazards associated with dam breach inundation. Hazards are classified as low, significant, high, and extremely high. The assessment of risks is based on the U.S. Army Corps of Engineer's National Inventory of dams' condition assessment rating definitions (updated in 2021). According to the Dam Breach Inundation Map Web Publisher, there are two (2) dams with inundation in Madera County that have an extremely high downstream hazard risk: Castle and Lake Yosemite. [7] The nearest dam with inundation to the Project site is Castle, which is approximately 10 miles northeast of the site.

Seiche

According to the National Ocean Service, National Oceanic and Atmospheric Administration (NOAA), a seiche is a standing wave oscillating in a body of water. Seiches are typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm front may also cause seiches along ocean shelves and ocean harbors. There is no large body of water within or near the City of Atwater capable of generating a seiche.

Tsunami

According to the National Ocean Service, NOAA, a tsunami is a series of waves caused by earthquakes or undersea volcanic eruptions. The speed of tsunami waves depends on ocean depth rather than the distance from the source of the wave. According to the Department of Conservation Tsunami Hazard Area Map, Merced County, is not within a tsunami hazard area. [8]

Mudflow

According to FEMA, mudflow is a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water. Other earth movements, such as landslides, slope failure or a saturated soil mass moving by liquidity down a slope, are not mudflows. The topography of the Project area is gently sloping, with no abrupt or highly variable changes in grade. Ground elevations are approximately 119 feet above mean sea level at the northwest corner of the WWTP site and gradually decline to roughly 114 feet near the southern Bear Creek connection. At the Applegate Road/Oak Avenue intersection, where Alternative 3 would connect to the Deckert Lateral, the elevation is approximately 123 feet above mean sea level, reflecting the natural fall of the land toward the nearby creek corridors.

4.4.2 Regulatory Context

Federal Regulations

Clean Water Act

[7] California Department of Water Resources Division of Safety Dams. (2025). California Dam Breach Inundation Maps. Accessed December 29, 2025, https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2
[8] California Department of Conservation, California Geological Survey. (2025). Tsunami Hazard Area Map. Accessed December 30, 2025, https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/#data_s=id%3AdataSource_3-1918f9f263a-layer-15%3A32

The Clean Water Act (CWA) of 1977 establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The CWA authorizes the U.S. Environmental Protection Agency (U.S. EPA) to implement water quality regulations.

Section 402(p) of the CWA establishes the National Pollutant Discharge Elimination System (NPDES). NPDES helps address water pollution by regulating point sources that discharge pollutants to waters of the U.S. EPA authorizes the NPDES permit program to state, tribal, and territorial governments, enabling them to perform many of the permitting, administrative, and enforcement aspect of the program. California has an approved state NPDES Program, which is implemented by the State Water Resource Control Board and nine (9) Regional Water Quality Control Boards.

Section 303(d) of the CWA authorizes EPA to assist states, territories and authorized tribes in listing impaired waters and developing Total Maximum Daily Loads (TMDLs) for these waterbodies. A TMDL establishes the maximum amount of pollutants allowed in a waterbody and serves as the starting point or planning tool for restoring water quality.

National Flood Insurance Program

The U.S Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is administered by the Federal Emergency Management Agency (FEMA) and enables property owners in participating communities to purchase insurance as protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.

In California, approximately 99 percent of California communities participate in the NFIP. Of the participating communities, approximately 18 percent participate in the Community Rating System (CRS) Program, which encourages communities to go above and beyond minimum NFIP requirements.

The California Department of Water Resources (DWR), on behalf of FEMA, conducts Community Assistance Visits (CAVs) and Community Assistance Contacts (CACs) to each of the NFIP communities to provide individual technical assistance. DWR provides statewide NFIP workshops that are designed to interpret and explain the NFIP regulations and to give an overview of the need for community-based floodplain management.

A Flood insurance Rate Map (FIRM) is the official map of a community on which FEMA has delineated the Special Flood Hazard Areas (SFHAs), the Base Flood Elevations (BFEs), and the risk premium zones applicable to the community.

State Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act contained in California Water Code Section 13000 et seq. is the law that governs water quality regulation in California. It was established to protect the beneficial uses of water and water quality, including surface water bodies, groundwater, and wetlands.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) has jurisdiction throughout California. Created by the State Legislature in 1967, the SWRCB protects water quality by setting statewide policy, coordinating, and supporting the Regional Water Board efforts, and reviewing petitions that contest Regional Board actions. There are nine (9) regional water quality control boards that exercise rulemaking and regulatory activities by basins. This organization is a result of the landmark Porter-Cologne Act. The City of Atwater, inclusive of the Project site, is

under the jurisdiction of Region 5, CRWQCB. Region 5 includes three (3) basins, Sacramento River, San Joaquin Valley, and Tulare Lake. The Basin Plan for the San Joaquin Valley was updated in 2019.

Statewide General Construction Permit

General Construction Permit Order No. 2022-0057-DWQ requires construction projects of one (1) acre or more to file Permit Registration Documents (PRDs) with the SWRCB prior to the start of construction. To obtain coverage under this General Permit, dischargers shall electronically certify and submit the PRDs, which includes a Notice of Intent, Stormwater Pollution Prevention Plan (SWPPP), and other compliance related documents required by this General Permit and submit the appropriate permit fee to the State Water Board. The RWQCBs may issue general permits or individual permits containing more specific provisions as the stormwater program develops and if this occurs, this General Permit will no longer regulate those dischargers.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) (SB 1168, AB 1739, and SB 1319) was passed in 2014. The purpose is to establish new measures for groundwater management and regulation statewide by providing sustainable local control of groundwater resources. Under SGMA, local agencies are required to govern their subbasin by forming Groundwater Sustainable Agencies (GSAs). GSAs have the authority to develop, adopt, and implement a Groundwater Sustainability Plan (GSP) for the subbasin and are required to define and monitor groundwater conditions in the subbasin and set and achieve sustainable groundwater management within 20 years of adopting the GSP.

To consider long-term sustainability, a groundwater sustainability plan (GSP) was adopted for the Merced Subbasin in 2022 (subsequently revised and readopted in 2025) by the Merced Subbasin Groundwater Sustainability Agency of which the City of Atwater is a member. The GSP was prepared in response to the California Department of Water Resources (DWR) identifying the Merced Subbasin as a critically over drafted basin. The intent of the GSP is to identify groundwater conditions, evaluate the overdraft conditions, establish sustainability goals, and determine programs and management actions to achieve sustainable groundwater management by 2040.

As a member agency of the Merced Subbasin GSAs, the City of Atwater's land-use decisions must comply with the GSP by decreasing water demand and managing groundwater resources. The City's Water Division, Water Conservation Program oversees enforcement of water conservation regulations as outlined in the Atwater Municipal Code *Chapter 13.13 – Water Conservation Program*.

Local Regulations

MS4 Permit / Stormwater Program

The City of Atwater is regulated by and complies with the Phase II Small MS4 General Permit (General Permit) (Order 2013-0001-DWQ). The Permit requires the City to have a stormwater program that controls the discharge of pollutants into the City's storm drainage system and waterways. The City's Stormwater Program is multi-faceted and includes the following components in accordance with NPDES:

- Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction

- Pollution Prevention and Housekeeping
- Post Construction
- Program Effectiveness and Assessment

Merced Integrated Regional Water Management Plan

The Merced Integrated Regional Water Management (IRWM) Plan is a collaborative, stakeholder-driven roadmap that guides long-term, integrated management of surface water, groundwater, wastewater, flood control, and related natural resources within the Merced Region. Developed by a Regional Water Management Group and comprised of the City of Merced, County of Merced, and Merced Irrigation District, the Plan identifies regional water management issues, establishes objectives, and prioritizes multi-benefit projects to enhance water supply reliability, water quality, ecosystem health, and recreation opportunities. The Plan is designed to comply with California Department of Water Resources IRWM guidelines, thereby positioning the region to compete for state funding while promoting coordination among local agencies, community organizations, and stakeholders to address current and future water challenges.

Merced Irrigation District

The Merced Irrigation District (MID) is a public agency in eastern Merced County that delivers surface water to local agriculture, generates renewable hydroelectric power on the Merced River, and helps manage regional groundwater and flood control. MID encompasses approximately 164,000 acres, inclusive of the City of Atwater and the Project site. The mission of the MID is to obtain and manage affordable surface water and groundwater supplies in a manner which will ensure the long-term viability of irrigated agriculture in the district.

City of Atwater Urban Water Management Plan

The California Water Code requires urban water suppliers within the state to prepare and adopt Urban Water Management Plans (UWMPs) for submission to the California Department of Water Resources (DWR). The UWMPs, which must be filed every five (5) years, must satisfy the requirements of the Urban Water Management Planning Act (UWMPA) of 1983 including amendments that have been made to the Act and other applicable regulations. The UWMPA requires urban water suppliers servicing 3,000 or more connections or supplying more than 3,000 acre-feet (AF) of water annually to prepare an UWMP.

The purpose of the UWMP is to maintain efficient use of urban water supplies, continue to promote conservation programs and policies, ensure that sufficient water supplies are available for future beneficial use, and provide a mechanism for response during water drought conditions.

The City of Atwater 2020 Urban Water Management Plan (UWMP) was prepared in compliance with the California Water Code, as set forth in the 2020 Urban Water Management Plan Guidebook for Urban Water Suppliers (UWMP Guidebook) established by the DWR.

City of Atwater General Plan

4.4.3 Environmental Impacts and Mitigation Measures

Methodology

The assessment of hydrology and water quality is based on the city's Urban Water Management Plan, General Plan policies and information, and qualitative information about the Plan Area.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a hydrology and water quality impact would be significant if implementation of the Project would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i. result in substantial erosion or siltation on- or offsite;

   ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

   iii. 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; or

   iv. impede or redirect flood flows?

d) In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Assessment

Impact 4.4-1. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The Project proposes the installation of a pump station and underground pipeline to transport treated effluent from the wastewater treatment plant (WWTP) to either Black Rascal Creek or Bear Creek. The three (3) alternatives (i.e., Alternative 1 - Bert Crane Road Alignment, Alternative 2 - South WWTP Alignment, and Alternative 3 - Deckert Lateral Alignment) all involve similar construction and operational activities with respect to ground water quality.

Construction

Construction activities such as clearing, grading, trenching, and excavation could temporarily increase erosion and sediment transport and create the potential for accidental release of fuels, oils, and other hazardous materials to stormwater. These effects could degrade downstream surface water quality if not controlled. Compliance with state and local requirements would reduce these risks to a less than significant level.

As noted in Impact 4.3-2, the Project will obtain a NPDES Type 1 LUPs and a standard SWPPP. The SWPPP must include appropriate BMPs for erosion and sediment control (e.g., silt fences, fiber rolls, sediment basins, stabilized construction entrances) and for good housekeeping and spill prevention/response related to construction materials and equipment. Implementation of these BMPs, together with required inspections, monitoring, and corrective actions, would ensure compliance with water quality standards enforced by the CRWQCB.

In addition, the Project would be required to comply with the City of Atwater's municipal code and stormwater ordinances, which regulate grading, drainage, illicit discharges, and construction-site runoff. These local requirements would ensure that erosion and sediment controls are properly designed and maintained, that hazardous materials are stored and handled appropriately, and that construction-site runoff is managed so as not to substantially degrade surface or groundwater quality. With mandatory implementation and enforcement of these regulatory requirements, construction-related impacts on water quality would be **less than significant**.

Operations

During operation, the Project would continue to discharge tertiary-treated effluent from the Bert Crane Regional Wastewater Treatment Plant that meets the effluent limitations, water quality objectives, and receive water limitations established by the CRWQCB in applicable Waste Discharge Requirements and/or NPDES permits. The proposed improvements would change the location and routing of treated effluent but would not alter the treatment processes, design capacity, or permitted effluent quality of the WWTP. As a result, the quality of effluent discharged under any of the alignment alternatives would be required to remain within existing and any revised permit limits that are designed to protect the beneficial uses of Bear Creek, Black Rascal Creek, downstream MID facilities, and underlying groundwater.

Because the Project would not introduce new sources of pollutants, would not reduce the level of treatment provided at the WWTP, and would remain subject to enforceable state and regional regulatory requirements, operation of any of the alignment alternatives would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. **Impacts would be less than significant.**

Mitigation Measures

None required.

Impact 4.4-2. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Groundwater Supplies

The City of Atwater relies entirely on groundwater extracted from the Merced Subbasin of the San Joaquin groundwater basin, directly supplying the municipal distribution system. The long-term management and sustainability of this vital resource are comprehensively addressed in the Merced Subbasin Groundwater Sustainability Plan (GSP), the City's 2020 Urban Water Management Plan (UWMP), and the City's Water Master Plan. As part of the initiative to meet the groundwater recharge requirements set forth by Sustainable Groundwater Management Act (SGMA), the City of Atwater intends to discharge its treated effluent to MID via Rascal Creek or Bear Creek. An agreement between the City and MID would be required to define the terms for discharge into either Rascal Creek or Bear Creek. [9]

The Project proposes improvements to reroute treated effluent of the WWTP via new conveyance, pump station, and outfall structures. These improvements are strictly for effluent management and do not include new groundwater wells, nor do they support new development that would permanently increase potable water

[9] Blackwater Consulting Engineers. (2024). City of Atwater Bert Crane Regional Wastewater Treatment Plant Discharge Project, Discharge Study. (See Appendix D)

demand. While construction activities would require temporary, minimal amounts of water for dust control and soil compaction, this short-term use would not result in a perceptible depletion of groundwater supplies. Therefore, the Project would not substantially decrease groundwater supplies. **Impacts would be less than significant.**

Groundwater Recharge

Regarding groundwater recharge, the Project would involve the construction of a new pump station; however, the resulting increase in impervious surface area would be de minimis relative to the recharge area of the Merced Subbasin and would not impede the aquifer's natural recharge capabilities.

The City of Atwater submitted a Report of Waste Discharge to the Central Valley Regional Water Quality Control Board (Water Board) on June 29, 2016, to discharge tertiary-treated domestic wastewater from the WWTP to the Peck/Atwater Drain. [10] The Water Board also received a Notice of Intent from the WWTP on January 12, 2018, requesting enrollment under the General Order R45-2017-0085 for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water (Municipal General Order). The Water Board determined that the WWTP is eligible for coverage under the Municipal General Order. Discharge of tertiary effluent from the WWTP is authorized under the Municipal General Order R5-2017-0085-001 and National Pollutant Discharge Elimination System Permit No. CAG585001.

The Project's fundamental purpose is to redirect tertiary-treated effluent to MID via Black Rascal Creek or Bear Creek in order to support groundwater recharge objectives under SGMA, which is inherently a recharge-enhancing instead of a recharge-reducing action when compared to conditions that would otherwise rely more heavily on groundwater pumping to meet basin demands. In addition, because the proposed SCADA-integrated valves would allow the City to redirect effluent flows to the existing Gallo Ranch discharge location, to the creeks, or to both, the Project provides operational flexibility that avoids eliminating existing reuse pathways while enabling additional recharge-oriented routing when needed for SGMA implementation. Because the Project facilitates active groundwater replenishment consistent with the GSP, it would not interfere substantially with groundwater recharge. **Impacts would be less than significant.**

Mitigation Measures

None required.

Impact 4.4-3. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in a substantial erosion or siltation on- or off-site?

Erosion is the process by which soil and rock are worn away and transported by natural forces. Siltation is the deposition of sediment in water bodies. Soil erosion and siltation could occur due to both natural processes (wind, water) and human activities, such as construction and development. Future development of the Project site would involve typical site preparation activities like grading and trenching, which have the potential to cause short-term

[10] Blackwater Consulting Engineers. (2024). City of Atwater Bert Crane Regional Wastewater Treatment Plant Discharge Project, Discharge Study. (See Appendix D)

soil disturbance, erosion, and siltation during construction. Water use during construction could also contribute to this potential.

Construction

Construction of the proposed pipelines, pump station, and outfall structures would involve clearing, grading, trenching, and excavation. These activities would temporarily expose soils to wind and water, potentially resulting in erosion and siltation if left uncontrolled. Because the Project would disturb more than one (1) acre of soil, the City must obtain coverage under the State Water Resources Control Board's NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2022-0057-DWQ).

As previously noted, compliance with the General Permit requires the preparation and implementation of a linear and standard SWPPP developed by a QSD. The SWPPP would include a detailed assessment of potential erosion and siltation risks associated with construction activities and would specify a range of BMPs required to control erosion and sediment runoff. BMPs would be required to be implemented throughout the construction process to minimize erosion and siltation.

Specific to the outfall structures proposed for Bear Creek (Alternative 1) or Black Rascal Creek (Alternatives 2 and 3), construction would occur within or immediately adjacent to the stream bank. As noted in Impact 4.1-2, work in these sensitive areas would be conducted in accordance with the SWPPP and would require multiple agency approvals: a CDFW LSA, Agreement for work impacting the bed, channel, or bank of Bear Creek, Black Rascal Creek, or Deckert Lateral; a CVFPB Encroachment Permit for work within 100 feet of non-leveed regulated streams (Bear Creek, Black Rascal Creek); SWRCB/CVRWQCB CWA Section 401 Water Quality Certification in conjunction with a USACE Section 404 permit for outfall construction and streambed impacts; and a U.S. Army Corps of Engineers (USACE) CWA Section 404 Permit for discharge of dredged or fill material into Waters of the U.S. at creek outfalls. . With mandatory adherence to these regulatory requirements and BMPs and *Mitigation Measure BIO-6*, construction-related erosion **impacts would be less than significant with mitigation incorporated**.

Operations

Operationally, the Project includes the discharge of treated effluent into Bear Creek or Black Rascal Creek through a new outfall structure installed on the creek embankment. Introducing a new point source of discharge could alter local flow dynamics and potentially cause downstream erosion of the creek bed or banks if the discharge velocity is too high. As part of the Project design, the outfall would be positioned above the high-water level, which would reduce the likelihood that the outfall would mobilize sediment or create bank disturbance during routine operations. The outfall would also be equipped with a flap valve to prevent backflow and reduce the potential for creek water to enter the effluent conveyance facilities during high-flow conditions.

Although any discharge point can create localized scour or bank erosion if velocities are not appropriately managed, the Project's final outfall design would incorporate site-appropriate bank protection and erosion-control features consistent with standard engineering practice for protecting channel banks and embankments. In addition, a project-specific geotechnical investigation would be completed to characterize subsurface conditions, including soil and rock properties, groundwater levels, and potential geohazards, and to provide recommendations for foundation design and construction methods that reduce risks of erosion, slope instability, or settlement that could undermine outfall stability over time. With these design measures, operation of the outfall would not substantially alter drainage patterns in a manner that would result in substantial erosion or siltation on- or off-site. **Impacts would be less than significant.**

Mitigation Measures

Implement *Mitigation Measure BIO-9*.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Construction

See Impact 4.3-2. Construction activities, including trenching and excavation, could temporarily disturb soils and create localized ponding or minor, short-term changes in surface runoff if storm events occur during active ground disturbance. These effects could incrementally increase runoff rates at the immediate work area if construction staging or open trenches obstruct existing drainage features such as, roadside swales, ditches, or natural overland flow paths, potentially contributing to localized on-site flooding under certain conditions.

The SWPPPs would require BMPs that, in addition to protecting water quality, would help manage runoff at active work areas by stabilizing disturbed soils and controlling sediment-laden discharges. In addition, the Project would be constructed to maintain existing drainage conveyance during construction through temporary diversion measures, trench plating where needed, and restoring disturbed areas promptly, such that construction would not substantially increase runoff rates or volumes in a manner that would result in flooding on- or off-site. **Impacts would be less than significant.**

Operations

Operation of the Project would not substantially increase the rate or amount of surface runoff because the new aboveground footprint is limited primarily to the pump station, while the pipeline would be buried and disturbed areas would be backfilled and restored. The incremental increase in impervious surface associated with the pump station would be minimal relative to the surrounding agricultural landscape and would not be expected to measurably change watershed hydrology or create drainage capacity exceedances that could cause on- or off-site flooding. **Impacts would be less than significant.**

Mitigation Measures

None required.

iii) 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?

Construction

See Impact 4.3-2. Construction activities would temporarily disturb vegetation and soil, potentially altering the site's natural hydrology and increasing the volume and velocity of surface runoff. This increased runoff could, if unmanaged, contribute to exceeding the capacity of existing or planned stormwater drainage systems and potentially carry sediment and other pollutants from the disturbed areas. The Project would be constructed pursuant to an approved grading and drainage plan and standard construction practices that maintain existing drainage conveyance (e.g., avoiding blockage of ditches/swales, providing temporary drainage diversions where necessary, and restoring disturbed areas), such that the Project would not create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems.

The City would be required to obtain an approved SWPPP that would require implementation of erosion and sediment controls and other BMPs designed to minimize the discharge of sediment and construction-related

pollutants in stormwater runoff. With compliance with the approved grading/drainage plan and SWPPP requirements, construction would not create or contribute runoff that exceeds drainage capacity or provide substantial additional sources of polluted runoff. **Impacts would be less than significant.**

Operations

Operation of the Project would not substantially increase runoff because permanent aboveground improvements are limited primarily to the pump station, while the pipeline would be buried and disturbed areas would be backfilled and restored. The small incremental increase in impervious area would not be expected to measurably change watershed hydrology or exceed the capacity of existing or planned stormwater drainage systems, and the Project would not introduce substantial new sources of polluted runoff beyond typical minor facility maintenance activities. **Impacts would be less than significant.**

Mitigation Measures

None required.

iv) Impede or redirect flood flows?

Construction

Construction activities have the potential to temporarily alter the existing topography and drainage patterns of the Project site through grading, excavation, and the placement of temporary structures and stockpiled materials. These activities could inadvertently impede or redirect existing flood flows, particularly during significant precipitation events. However, the Project would be required to adhere to an approved grading and drainage plan that is designed to minimize disruption to existing drainage patterns and control stormwater runoff. Furthermore, the implementation of BMPs as outlined in the SWPPP would include measures to manage temporary changes in topography and ensure that construction activities do not create significant barriers to potential flood flows. These measures would be implemented and maintained throughout the construction period. Compliance with the engineered grading and drainage plan reviewed and approved by the City of Atwater would further ensure that grading and construction activities are conducted in a manner that does not substantially impede or redirect flood flows. Therefore, the potential for construction activities to impede or redirect flood flows is considered less than significant due to adherence to regulatory requirements and the implementation of appropriate management practices. **Impacts would be less than significant.**

Operations

Operation of the Project would not substantially increase runoff because permanent aboveground improvements are limited primarily to the pump station, while the pipeline would be buried and disturbed areas would be backfilled and restored. The small incremental increase in impervious area would not be expected to measurably change watershed hydrology or exceed the capacity of existing or planned stormwater drainage systems, and the Project would not impede or redirect flood flows. **Impacts would be less than significant.**

Impact 4.4-4. Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

Flood Hazard

According to the FEMA Flood Map Service Center, the Project is within a Special Flood Hazard Area, Zone A, which is subject to inundation (i.e., covered by floodwater) by the 1-percent-annual-chance flood event and is generally mapped using approximate methods without published Base Flood Elevations.

Because the Project includes construction and operation of a pump station, inundation during a major flood could, absent appropriate controls, create a pathway for release of pollutants such as oils or lubricants associated with equipment, debris, and contaminated sediments, to surrounding land or nearby waterways. The Project would be designed and operated in accordance with applicable floodplain development requirements to raise floor levels at least 1 foot above freeboard, and standard utility facility practices to minimize pollutant release during inundation events. This includes limiting on-site storage of hazardous materials, providing secure/covered storage for maintenance materials, and designing facility components to withstand flood conditions. With these design features and regulatory compliance, the Project would not substantially increase the risk of pollutant release due to inundation, and **impacts would be less than significant**.

Tsunami Zone

According to the Department of Conservation Tsunami Hazard Area Map, Merced County is not within a tsunami hazard area. Therefore, tsunami-related inundation would not pose a risk of pollutant release. **No Impact.**

Seiche Zone

There is no large enclosed body of water within or near the site capable of generating a seiche. **No Impact.**

Mitigation Measures

None required.

Impact 4.4-5. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

See Impact 4.4-2. The Plan area is located within the jurisdiction of the Merced Subbasin and is therefore subject to the Merced GSP. The GSP was prepared in response to the CA DWR identifying the Merced Subbasin as a critically over-drafted basin and is adopted pursuant to SGMA. The City of Atwater participates in SGMA implementation through the Merced Subbasin GSA, and the GSP establishes sustainability goals and management actions intended to achieve long-term groundwater sustainability. As part of the initiative to meet the groundwater recharge requirements set forth by Sustainable Groundwater Management Act (SGMA), the City of Atwater intends to discharge its treated effluent to MID via Rascal Creek or Bear Creek. An agreement between the City and MID would be required to define the terms for discharge into either Rascal Creek or Bear Creek. The Project proposes improvements to reroute treated effluent of the WWTP via new conveyance, pump station, and outfall structures. These improvements are strictly for effluent management and do not include new groundwater wells, nor do they support new development that would permanently increase potable water demand.

The Project would not conflict with or obstruct implementation of the GSP because it does not increase groundwater pumping demand and is intended to redirect tertiary-treated effluent to MID via Bear Creek or Black Rascal Creek to support recharge-related objectives and adaptive water management under SGMA. In addition, the Project would not conflict with a water quality control plan because construction and operation would be subject to applicable Central Valley Water Board requirements, ensuring discharges are regulated to protect beneficial uses and water quality objectives. As such, the Project would not conflict with or obstruct implementation of a water quality control plan or the Merced Subbasin GSP. **Impacts would be less than significant.**

Mitigation Measures

None required.

Impact 4.4-6. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to hydrology and water quality.

The cumulative hydrology and water quality condition in the Merced Subbasin is influenced by long-term groundwater overdraft and ongoing land uses, and cumulative surface-water quality is regulated through Basin Plan implementation and stormwater permitting programs. Based on the analysis presented, the proposed Project is not anticipated to result in cumulatively considerable impacts on hydrology and water quality within the Merced Subbasin.

As discussed under prior impact analyses and related hydrology thresholds, construction-related erosion and sediment discharges are short-term and are controlled through mandatory coverage under the WQ 2022-0057-DWQ including preparation and implementation of a linear and standard SWPPP and BMPs. Because these requirements are enforceable and apply to the project regardless of other concurrent development, the Project construction's contribution to cumulative polluted runoff or drainage exceedances would be minor and temporary.

As discussed for operational impacts, the Project would reroute tertiary-treated effluent and would remain subject to existing or amended waste discharge requirements and/or NPDES permit conditions that implement Basin Plan water quality objectives and protect beneficial uses, thereby limiting the potential for cumulative water quality degradation from permitted discharges. In addition, the Project's intended purpose, which is to support groundwater recharge objectives under SGMA and GSP implementation, would not impede sustainable groundwater management and would not add a new groundwater pumping demand that could increase basin overdraft.

Overall, the Project's construction impacts are temporary and regulated through the Construction General Permit/SWPPP, and its operational impacts are regulated through water quality permitting and are recharge-supportive rather than demand-increasing, so the incremental contribution would not be cumulatively considerable. As such, the proposed Project, in combination with past, present, and reasonably foreseeable projects, would not contribute to a significant cumulative impact with respect to hydrology and water quality. **Impacts would be less than cumulatively considerable.**

4.5 Tribal Cultural Resources

4.5.1 Environmental Setting

See Chapter 4.2, Cultural Resources.

4.5.2 Regulatory Setting

See Chapter 4.2, Cultural Resources.

4.5.3 Environmental Impacts and Mitigation Measures

Methodology

The assessment of cultural resources is based on the environmental setting background, CHRIS Record Search, Sacred Lands File (SLF) check, Tribal Consultation, General Plan policies and information, and qualitative information about the Project site.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, an impact on tribal cultural resources would be significant if implementation of the Project would:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

   i. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or

   ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Assessment

Impact 4.5-1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is

i) Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

See also Impacts 4.2-1 through 4.2-3.

Public Resources Code Section 21074 defines a "tribal cultural resource" as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources or listed in a local register of historical resources. Public Resources Code (PRC) *Section 5020.1(k)* further clarifies that a local register of historical resources is a list of properties officially designated as historically significant by a city or county through a local ordinance or resolution.

The CCIC CHRIS Record Search for the Project site and surrounding area (0.50-mile radius) dated May 9, 2025 (CCIC File Number 13350I) revealed no formally recorded prehistoric or historic archaeological resources or historic buildings or structures within the Project site. The project area lies within the overall boundary of the Merced Irrigation District, but the district has been determined ineligible for the National Register and has not been evaluated for the California Register or local listing, and the water conveyance features present in the area are not listed or determined eligible as historical resources under CEQA.

A consultation list of tribes with traditional lands or cultural places located within Merced County was requested and received from the California Native American Heritage Commission (NAHC) on May 12, 2025. The City of

Atwater sent formal tribal notices pursuant to AB 52 on June 2, 2025, to the tribes included in the NAHC correspondence: Amah Mutsun Tribal Band, Northern Valley Yokut/ Ohlone Tribe, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Wuksachi Indian Tribe/ Eshom Valley Band. Consultation ended on July 2, 2025. No tribe requested consultation or provided information identifying any historical resources or tribal cultural resources within the Project area.

In addition, the NAHC Sacred Lands File (SLF) check dated May 12, 2025, was negative. A negative SLF check means that the NAHC did not find any records of Native American cultural resources, such as sacred sites, traditional cultural properties, or burial grounds, within the area requested for the search.

Public Resources Code (PRC) *Section 5024.1* outlines criteria for determining the historical significance of a resource. While the Project site has not been formally designated as a historical resource by the City of Atwater under this section, undiscovered tribal cultural resources, potentially meeting the criteria of PRC 5024.1, could be encountered during ground-disturbing activities. Impacts would be **potentially significant**.

Mitigation Measures

Implement *Mitigation Measure CUL-1* and *Mitigation Measure CUL-2*.

Significance After Mitigation

Mitigation Measure CUL-1 and *Mitigation Measure CUL-2* will reduce the potentially significant impact to previously unknown tribal cultural resources and human remains to less than significant by establishing protocols for the discovery and treatment of both tribal cultural resources and human remains.

Mitigation Measure CUL-1 addresses the potential discovery of previously unknown tribal cultural resources during ground disturbing activities. If a potential tribal cultural resource is encountered, work in the immediate vicinity must cease, the City and a qualified archaeologist must be notified, and, where the discovery appears to be of Native American origin, the Native American Heritage Commission and any AB 52 tribes must be given an opportunity to consult on the resource's significance and appropriate treatment. Through this process, avoidance, preservation in place, protective buffering, or data recovery measures can be implemented before work resumes, ensuring that any inadvertently discovered tribal cultural resources are properly evaluated and protected. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure CUL-2 specifically addresses the discovery of human remains. If human remains are found, work will stop, and the Merced County Coroner will be notified to determine jurisdiction. If the remains are determined to be Native American, the Native American Heritage Commission will be contacted and the procedures in Public Resources Code Section 5097.98 will be followed, including notification of most likely descendants and implementation of their recommendations for treatment and disposition. This measure ensures that any discovered Native American human remains are treated with respect and in accordance with California law. Impacts would be less than significant with mitigation incorporated.

By implementing these measures, the Project establishes a process for addressing the potential discovery of tribal cultural resources, ensuring evaluation, protection, and treatment, thus reducing the potentially significant impact to a less than significant level. Impacts would be **less than significant with mitigation incorporated**.

Impact 4.5-2. The proposed project, in combination with past, present, and reasonably foreseeable projects, would contribute to a significant cumulative impact with respect to tribal cultural resources.

While past surveys and assessments did not reveal known tribal cultural resources within the Project site, the potential for encountering undiscovered resources during construction exists. Ground disturbance could damage or destroy these unknown resources. Impacts would be **potentially significant**.

Mitigation Measures

Implement *Mitigation Measure CUL-1* and *Mitigation Measure CUL-2*.

Significance After Mitigation

Mitigation Measure CUL-1 and *Mitigation Measure CUL-2* will reduce the potentially significant impact to previously unknown tribal cultural resources and human remains to less than significant by establishing protocols for the discovery and treatment of both tribal cultural resources and human remains. Appropriate protection measures, including avoidance, preservation, consultation, or further study, would be implemented as needed. This approach ensures that the Project's impact on tribal cultural resources would be less than significant, and implementation of the proposed Project would not make a cumulatively considerable contribution to any significant impact related to tribal cultural resources. Impacts would be **less than cumulatively considerable**.

4.6 Effects Not Found to Be Significant

Pursuant to CEQA Guidelines *Section 15128*, this section briefly describes the environmental topics evaluated in the Initial Study (attached to the Notice of Preparation, see Appendix B) and determined to have no potential for significant impacts from the Project. These topics are scoped out of detailed analysis in this EIR, as the Initial Study found no substantial evidence that the Project would have a significant effect on them, consistent with CEQA Guidelines *Sections 15063 and 15143*.

The Initial Study, prepared under CEQA Guidelines *Section 15063*, analyzed each environmental topic listed below and concluded that the Project would have no impact or less-than-significant impacts without mitigation. Supporting technical studies, site-specific data, regulatory compliance, and project characteristics provide the evidentiary basis for these determinations, which are incorporated herein by reference.

Environmental Topic	Initial Study Finding	Rationale Summary
Aesthetics	No Impact / Less than Significant	There are no scenic vista, scenic resources, or state scenic highways within vicinity of the Project site. The proposed underground pipelines have no visual effects and the pump station would produce minimal lighting for safety and security. Lighting design would be compliant with the Atwater Municipal Code.
Agriculture and Forestry Resources	No Impact / Less than Significant	The Project would not convert farmland to non-agricultural uses because the underground pipeline would be installed within existing dirt road corridors and trenches would be backfilled to restore pre-project conditions. The Project is considered a public utility use that is generally compatible with the existing agricultural zoning and it is not located on land under Williamson Act contracts. The site does not contain forest land or timberland.
Air Quality	Less than Significant	Modeled construction and operational emissions using CalEEMod for the most intensive alternative would remain below San Joaquin Valley Air Pollution Control District (SJVAPCD) significance thresholds, thus the Project would not obstruct applicable air quality plans, result in cumulatively considerable net increase in any criteria pollutant, or expose

		substantial pollutant concentrations to sensitive receptors. The proposed underground pipelines, pump station, and outfall structure would carry treated effluent, which would not result in other emissions such as odors.
Energy	Less than Significant	There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities. The Project would be designed and constructed consistent with applicable energy-related standards and regulations.
Greenhouse Gas Emissions	Less than Significant	SJVAPCD does not recommend assessing GHG emissions associated with construction since they are temporary. Operational emissions are under the significance thresholds of the South Coast Air Quality Management District (SCAQMD) and Bay Area Air Quality Management District (BAAQMD) SJVAPCD does not have an established threshold for operational GHG emissions. The Project is consistent with the 2022 Climate Change Scoping Plan and MCAP, MCAG RTP/SCS, SJVAPCD CCAP, and applicable goals in the Atwater General Plan.
Hazards and Hazardous Materials	No Impact / Less than Significant	Construction would involve typical use of fuels, lubricants, and equipment-related hazardous materials, but compliance with applicable regulations for storage/handling and standard BMPs would avoid substantial hazard impacts. Operations would involve minor maintenance materials, which are minimal and would not pose a significant risk. There are no existing or proposed schools within one-quarter mile of the site. The site is not included on the hazard materials sites list complied pursuant Government Code Section 65962.5. The site is not located within an airport land use plan or within two (2) miles of an airport. The site does not impair implementation or interfere with an adopted emergency response plan or emergency evacuation plan. The site is not situated in a wildland or a CalFire-designated Fire Hazard Severity Zone (FHSZ).
Land Use Planning	Less than Significant	The underground pipeline and small pump station would not physically divide an established community because facilities would be primarily subsurface and located within or adjacent to existing utility or roadways. The Project would not conflict with applicable land use plans or policies adopted to avoid or mitigate environmental effects, and any physical impact topics (e.g., biology, water) are addressed in their respective sections.
Mineral Resources	No Impact	There are no identified mineral deposits of significance or active mine operations within the Project site. The Project site is not delineated in the General Plan, a Specific Plan, or other land use plans as a locally important mineral resource recovery site.
Noise	No Impact / Less than Significant	Construction noise and vibration would be temporary and would be subject to local noise regulations, and operational noise would mainly be associated with the pump station located on existing WWTP property where similar equipment already exists. Traffic noise associated with occasional maintenance trips would be minimal. The Project is not within an airport influence area.
Population and Housing	No Impact	The Project would not induce population growth because it is a wastewater discharge improvement project with no housing component, nor does it

		expand/extend the provision of infrastructure. There are no existing people or housing on the site, so no displacement would occur.
Public Services	No Impact / Less than Significant	The Project would be served by the existing fire department and sheriff's office and would not require new or expanded public facilities because it is not growth-inducing development (i.e., residential).
Recreation	No Impact	The Project would not result in new residents that would increase use of parks or other recreational facilities and would not include features that would require construction or expansion of recreational facilities.
Transportation	No Impact / Less than Significant	Construction would require temporary traffic control and potential lane closures along roadway segments depending on the alignment, but access would be maintained through standard traffic control measures. Because the Project is not a land use development that adds substantial trips and is primarily an underground utility improvement, transportation impacts are less than significant.
Utilities and Service Systems	No Impact / Less than Significant	The Project would require electrical service to the pump station, but demand would be minimal and would be served by existing overhead power distribution lines without requiring major new utility expansion. The Project would not create potable water demand for operations, would not generate new wastewater flows, and would generate only small amounts of solid waste from construction debris and minor operational waste, which would be handled under existing regulations.
Wildfire	No Impact	The site is not situated in a wildland or a CalFire-designated Fire Hazard Severity Zone (FHSZ).

Chapter 5 OTHER CEQA-REQUIRED TOPICS

5.1 Significant Unavoidable Impacts

CEQA Guidelines § 15126.2(b) requires an EIR to describe any significant impacts that cannot be avoided, including impacts that remain significant even after implementation of feasible mitigation measures. Chapter 4. Evaluation of Environmental Impacts details the environmental impacts of the proposed Project and recommended mitigation measures, which are summarized in Chapter 1. Executive Summary. The following issues were determined to have less than significant impacts or can be reduced to that level with mitigation:

- Biological Resources (with mitigation)
- Cultural Resources (with mitigation)
- Geology and Soils (with mitigation)
- Hydrology and Water Quality
- Tribal Cultural Resources (with mitigation)

The EIR concludes that the proposed Project would not result in any significant and unavoidable environmental impacts. Because no significant and unavoidable impacts are identified, approval of the Project would not require adoption of a Statement of Overriding Considerations under CEQA Guidelines Section 15093.

5.2 Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(e) requires an EIR to discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.

As described in Section 4.14 Population and Housing, of Appendix C, Initial Study, the Project consists of construction of a pump station and installation of underground pipeline improvements to convey already-treated effluent from the existing Bert Crane WWTP for discharge to the Merced Irrigation District via Black Rascal Creek or Bear Creek. The Project would not increase the capacity of the existing WWTP and therefore would not induce population growth directly or indirectly (i.e., the Project does not remove a wastewater-capacity constraint on development). Because the Project does not include residential or commercial development and does not extend growth-serving infrastructure that increases treatment capacity, the Project's potential contribution to population growth is limited and would not induce substantial unplanned population growth. **Impacts would be less than significant.**

5.3 Energy Impacts

CEQA Guidelines Section 15126.2(b) requires analysis of whether a project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption of energy resources, including transportation-related energy, during construction and operation.

As described in Section 4.6. Energy, of Appendix C, Initial Study, the Project's energy use would be typical for installation of underground pipelines and construction/operation of a pump station, and there are no unusual project characteristics or construction processes requiring more energy-intensive equipment than comparable activities. Construction equipment would conform to current emissions standards and related fuel efficiencies, and the Project would comply with applicable regulations including Title 24 building energy standards and the California Green Building Standards Code (CALGreen). The Project would not conflict with or obstruct state or local energy efficiency/renewable energy plans and is consistent with the City's energy conservation policy framework, including compliance-based consistency with General Plan energy conservation policies. Therefore, as the Project's energy use is projected to be typical and compliant with efficiency standards, no significant environmental effects related to wasteful energy consumption are anticipated, and thus, no mitigation measures beyond code compliance are required under CEQA Guidelines Section 15126.2(b). **Impacts would be less than significant.**

5.4 Significant Irreversible Changes

CEQA Guidelines Section 15126.2(d) requires an EIR to discuss significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

The proposed Project would require non-renewable resources like diesel, gasoline, asphalt, and steel for its construction, representing commitment of these resources. However, these demands would be temporary and typical for construction of this type. Project operations would include minimal diesel/gasoline use by maintenance vehicles. Therefore, the Project's consumption of non-renewable resources is not deemed to have a significant adverse environmental impact. **Impacts would be less than significant.**

The Project does not represent an irreversible commitment of land to a single, unchangeable use because the primary improvements are underground pipelines largely within existing disturbed corridors and a pump station component associated with an existing WWTP facility. Therefore, the Project does not represent an irreversible commitment of the land to a single, unchangeable type of use for future generations. **Impacts would be less than significant.**

The proposed Project would not result in the conversion of farmland to non-agricultural use because the underground pipeline would be installed within existing dirt road corridors and trenches would be backfilled to restore pre-project conditions. The Project is considered a public utility use that is generally compatible with the existing agricultural zoning and it is not located on land under Williamson Act contracts. The proposed Project would not result in conversion of forest land/timberland since the site is not planned or zoned for forest land/timberland and contains no forest land. **Impacts would be less than significant.**

Construction of the Project site would involve some risk of environmental accidents, such as spills or soil contamination. However, these risks are anticipated to be managed to a less than significant level through adherence to City, State, and federal regulations, as well as professional industry safety standards. Furthermore, the proposed use (pipeline, pump station, outfall structure) is not inherently prone to causing significant environmental accidents like industrial spills. Therefore, the Project is not expected to pose a substantial risk of environmental accidents. **Impacts would be less than significant.**

Chapter 6 PROJECT ALTERNATIVES

CEQA Guidelines Section 15126.6 requires an analysis of reasonable alternatives to the proposed project. This analysis must consider alternatives that could feasibly achieve most of the project's objectives while reducing significant environmental impacts. The range of alternatives should be guided by a "rule of reason," focusing on potentially feasible options that avoid or lessen significant effects.

Key considerations for evaluating alternatives include:

- **Feasibility:** Factors such as site suitability, economic viability, infrastructure availability, and plan consistency are important in determining feasibility.
- **Objectives:** Alternatives should be evaluated based on their ability to meet the project's objectives.
- **Impacts:** The analysis should focus on alternatives that reduce significant environmental impacts.
- **No Project Alternative:** A "no project" alternative must be included to compare the impacts of project approval versus no project approval.

The lead agency's decision-making body (in this case, the City Council) determines the feasibility of alternatives, considering economic, social, technological, and other factors. This ensures that the final decision is well-informed and considers a range of options for achieving the project's objectives while minimizing environmental impacts.

6.1 Project Objectives

The objectives of the proposed Project are to:

- **Comply with SGMA recharge requirements:** Redirect treated effluent from Atwater/Peck Drain to MID-managed creeks (Black Rascal Creek or Bear Creek) to support sustainable groundwater management in the Merced Subbasin.
- **Enhance effluent discharge flexibility:** Install infrastructure allowing SCADA-controlled diversion of WWTP flows between Gallo Ranch, MID creeks, or both, ensuring operational reliability during varying wastewater volumes and water demands.
- **Minimize environmental impacts:** Construct improvements using standard engineering practices (e.g., open-trench pipeline, pump station) that avoid sensitive habitats where feasible while meeting U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) permitting standards.

6.2 Alternatives Selected

The following alternatives are evaluated in this Draft EIR.

- **Alternative 1: No Project Alternative.** The No Project Alternative assumes that the proposed Project would not be constructed. No modifications to the site, access, or infrastructure would occur. Treated

effluent from the WWTP will continue to be released via an effluent pump station and a 42-inch force main into the Atwater/Peck Drain, which flows through Joseph Gallo Farms (Gallo Ranch), where a significant portion is diverted for agricultural and wetland use.

- **Alternative 2: Reduced-Impact Discharge Alternative.** The Reduced-Impact Discharge Alternative assumes a scaled-down version of the proposed Project that retains the ability to redirect tertiary-treated effluent to the selected MID-managed creek while reducing construction and operational effects to the extent feasible. This alternative would include a smaller-capacity pump station equipped with variable frequency drives to modulate flow and reduce operational noise and energy demand, thereby reducing the pump station footprint and associated excavation. To further reduce impacts, this alternative would modify the outfall design to reduce creek-bank disturbance (e.g., locating the structure above high-water levels and minimizing grading), while maintaining compliance with applicable permitting requirements.
- **Alternative 3: Local Recharge Alternative.** The Local Recharge Alternative assumes that the City would construct one or more recharge basins near the Bert Crane WWTP and convey treated effluent from the WWTP to those basins via a shorter pipeline and pumping/valving controls. Treated effluent would infiltrate to groundwater locally rather than being routed to creeks.

6.2.1 Alternatives Considered and Rejected

In addition to the alternatives evaluated in detail, the City considered other potential alternatives but rejected them from further analysis because they were infeasible, would not meet all Project objectives, and/or would not avoid or substantially lessen the Project's significant environmental effects. Concepts considered and screened out included: (1) a gravity-flow conveyance in lieu of pumping, which was determined to be infeasible due to topographic constraints and the need for substantially deeper excavation and associated construction effects; (2) expanded storage/seasonal holding or continued routing solely through the existing discharge pathway, which would not provide the desired operational flexibility or accomplish redirection to MID-managed creeks; and (3) a broader regional recycled-water distribution program in lieu of the proposed improvements, which was determined to be infeasible at this time due to increased infrastructure requirements, right-of-way needs, operational constraints, and additional regulatory/permitting complexity. Consistent with CEQA Guidelines, the EIR therefore focuses on a reasonable range of feasible alternatives that can be meaningfully compared and that could feasibly attain most project objectives while avoiding or substantially lessening significant effects.

6.3 Environmental Impacts

This section presents an evaluation of Project alternatives, comparing their potential impacts to those of the proposed Project. Each alternative is described in detail, followed by a comparative analysis of its impacts. To facilitate this comparison, the following terms are used to indicate the relative level of impact:

- **Less:** The alternative reduces the Project's significant impact.
- **Similar:** The alternative results in impacts comparable to those of the Project.
- **Greater:** The alternative exacerbates the Project's significant impact.

6.3.1 Alternative 1: No Project Alternative

Alternative Description

The No Project Alternative assumes that the proposed Project would not be constructed. No modifications to the site, access, or infrastructure would occur. Treated effluent from the WWTP will continue to be released via an

effluent pump station and a 42-inch force main into the Atwater/Peck Drain, which flows through Joseph Gallo Farms (Gallo Ranch), where a significant portion is diverted for agricultural and wetland use.

Environmental Analysis

Biological Resources

Under the No Project Alternative, the site would remain in its current state, preserving the existing landscape and avoiding interference with the habitat of special-status wildlife species. Construction activities would not occur and would have zero potential to disturb the special-status species. Consequently, any potential for a significant adverse effect on biological resources and their habitats would not occur, and the existing biological conditions of the site would remain. Therefore, impacts are **less** than the proposed Project.

Cultural Resources

Under the No Project Alternative, the site would remain undisturbed, and the potential for encountering previously undiscovered subsurface archaeological resources or human remains would not be realized. The current lack of recorded resources within the Project area, as indicated by archaeological surveys, record searches, tribal consultation, and a negative Sacred Lands File check, would remain. Consequently, the potential for significant impacts to these resources or the inadvertent discovery of archaeological resources or human remains during ground-disturbing activities would not occur, and the existing conditions regarding cultural resources on the site would remain. Therefore, impacts are **less** than the proposed Project.

Geology and Soils

Under the No Project Alternative, the site would remain in its current undeveloped state, and the geological and soil conditions would remain unchanged. The negligible risks of fault rupture and landslides due to the absence of known faults and the flat topography would remain. The site would not have any new structures subject to the California Building Code (CBC) or General Plan policies for seismic safety. The low potential for seismic-related ground failure, including liquefaction, due to soil types and low relief would also remain. The primarily non-expansive nature of the site's soil would continue to pose minimal risks of instability. No impacts related to septic tanks would remain. The unknown potential for paleontological resources would remain unaddressed, and there would be no construction activities to potentially disturb them. Finally, the existing conditions would continue to be subject to natural soil erosion, but the increased potential for soil erosion associated with construction activities would not occur. Therefore, impacts are **less** than the proposed Project.

Hydrology and Water Quality

Under the No Project Alternative, the existing hydrologic setting and water quality conditions in the project area would generally continue because the proposed conveyance, pump station, and new outfall improvements would not be constructed, and therefore there would be no project-related ground disturbance that could cause short-term erosion, sedimentation, or construction-site polluted runoff. Because no new facilities would be installed, the No Project Alternative would avoid the incremental impervious surface and any localized drainage modifications associated with construction of the pump station and outfall appurtenances, and existing drainage patterns and recharge conditions would remain as they occur today. Accordingly, impacts are **less** than the proposed Project.

Tribal Cultural Resources

Under the No Project Alternative, the site would remain undisturbed, and the potential for encountering previously undiscovered subsurface tribal cultural resources or human remains would not be realized. The current lack of recorded resources within the Project area, as indicated by archaeological surveys, record searches, tribal consultation, and a negative Sacred Lands File check, would remain. Consequently, the potential for significant impacts to these resources or the inadvertent discovery of tribal cultural resources or human remains during ground-disturbing activities would not occur, and the existing conditions regarding cultural resources on the site would remain. Therefore, impacts are **less** than the proposed Project.

Comparison to Project Objectives

The No Project Alternative would not achieve any of the stated objectives of the proposed Project. The alternative would not achieve the proposed Project's objectives to redirect tertiary-treated effluent to MID-managed creeks to support SGMA/GSP recharge goals, nor would it provide enhanced operational flexibility to route flows between the Gallo Ranch, MID creeks, or both. The No Project Alternative would, however, inherently avoid the construction activity and associated federal/state permitting actions contemplated by the Project, but this avoidance reflects the absence of improvements rather than attainment of the Project's water management and operational reliability objectives. This alternative would not make progress toward achieving the intended goals of the Project.

6.3.2 Alternative 2: Reduced-Impact Discharge Alternative

Alternative Description

The Reduced-Impact Discharge Alternative assumes a scaled-down version of the proposed Project that retains the ability to redirect tertiary-treated effluent to the selected MID-managed creek while reducing construction and operational effects to the extent feasible. This alternative would include a smaller-capacity pump station equipped with variable frequency drives to modulate flow and reduce operational noise and energy demand, thereby reducing the pump station footprint and associated excavation. To further reduce impacts, this alternative would modify the outfall design to reduce creek-bank disturbance (e.g., locating the structure above high-water levels and minimizing grading), while maintaining compliance with applicable permitting requirements.

Environmental Analysis

Biological Resources

Under the Reduced-Impact Discharge Alternative, construction would still occur, but the reduced pump station footprint, shallower/less extensive excavation, and refined outfall configuration would reduce the area of temporary disturbance compared to the proposed Project. As such, this alternative would reduce the intensity of direct effects on riparian or aquatic-associated habitat features relative to the proposed Project.

Because equipment mobilization, trenching, and construction staging would still be required, the alternative would retain some potential to disturb special-status wildlife if such species are present in the vicinity. However, with a smaller disturbance envelope and implementation of the same avoidance and minimization measures applicable to the proposed Project, impacts would be reduced compared to the proposed Project and would be expected to remain less than significant. Therefore, impacts are **less** than the proposed Project.

Cultural Resources

Under the Reduced-Impact Discharge Alternative, ground disturbance would still occur, but the reduced excavation volume and smaller pump station footprint would reduce the potential to encounter previously

unknown subsurface archaeological resources or human remains compared to the proposed Project. Additionally, design modifications that minimize creek-bank disturbance would further reduce the intensity of grading and the likelihood of affecting any buried deposits that could be associated with landforms adjacent to drainage features.

The alternative would not eliminate the possibility of inadvertent discoveries during ground-disturbing activities. Mitigation measures similar to those proposed for the Project would still be necessary in the event of a discovery. Impacts would be **similar** to the proposed Project.

Geology and Soils

Under the Reduced-Impact Discharge Alternative, the site's underlying geologic setting would remain unchanged, and the reduced facility footprint would lessen the extent of grading and excavation compared to the proposed Project. Because fewer earth-moving activities would be required, the potential for construction-related erosion, soil disturbance, and localized instability would be reduced, particularly in areas near the outfall where bank disturbance would be minimized by design.

Seismicity, liquefaction susceptibility, and other regional geologic hazards would remain similar to the proposed Project because the alternative still includes construction of a pump station subject to applicable California Building Code requirements. Nevertheless, reduced excavation and surface disturbance would proportionally reduce construction soil impacts compared to the proposed Project, and standard erosion-control measures would remain applicable. In addition, the alternative would not eliminate the possibility of inadvertent discovery paleontological/geological resources during ground-disturbing activities. Mitigation measures similar to those proposed for the Project would still be necessary in the event of a discovery. Overall, impacts are **less** than the proposed Project.

Hydrology and Water Quality

Under the Reduced-Impact Discharge Alternative, construction would still introduce a temporary potential for erosion, sedimentation, and construction-site runoff, but the smaller pump station footprint and reduced creek-bank grading would reduce the magnitude of those risks compared to the proposed Project.

Operationally, the alternative would continue to redirect tertiary-treated effluent to a MID-managed creek; however, the variable frequency drive configuration and reduced-capacity pumping would moderate flow variability and could reduce the potential for abrupt discharge changes compared to the proposed Project, depending on final operating criteria. Because the alternative would still require discharge/outfall improvements and associated regulatory compliance, impacts related to hydrology and water quality would be reduced but not eliminated compared to the proposed Project. Overall, impacts are **less** than the proposed Project.

Tribal Cultural Resources

Under the Reduced-Impact Discharge Alternative, ground disturbance would still occur, but the reduced excavation volume and smaller pump station footprint would reduce the potential to encounter previously unknown subsurface tribal cultural resources or human remains compared to the proposed Project. Additionally, design modifications that minimize creek-bank disturbance would further reduce the intensity of grading and the likelihood of affecting any buried deposits that could be associated with landforms adjacent to drainage features.

The alternative would not eliminate the possibility of inadvertent discoveries during ground-disturbing activities. Mitigation measures similar to those proposed for the Project would still be necessary in the event of a discovery. Impacts would be **similar** to the proposed Project.

Comparison to Project Objectives

The Reduced-Impact Discharge Alternative would partially achieve the proposed Project's objectives, while reducing the intensity of construction and creek-bank disturbance compared to the proposed Project.

Regarding compliance with SGMA recharge requirements, this alternative would continue to redirect treated effluent to a MID-managed creek (Black Rascal Creek or Bear Creek), thereby supporting sustainable groundwater management actions in the Merced Subbasin. However, because this alternative assumes a reduced-capacity pump station, the maximum diversion rate and the overall volume available for conveyance during higher-flow conditions could be less than under the proposed Project, which could reduce the extent to which recharge goals are supported during certain operational scenarios.

Regarding enhanced effluent discharge flexibility, the alternative would install infrastructure that enables SCADA-controlled routing of WWTP effluent to the MID-managed creek and could continue to allow diversion between Gallo Ranch, MID creeks, or both. While the alternative would improve operational reliability compared to existing conditions by adding a controlled diversion capability, reduced pumping capacity and a scaled-down facility footprint could limit the range of operational responses available during periods of varying wastewater volumes and receiving water demands, relative to the proposed Project.

Regarding minimization of environmental impacts, this alternative would advance the objective more than the proposed Project by reducing the pump station footprint and excavation and modifying the outfall design to minimize creek-bank disturbance to the extent feasible while maintaining compliance with applicable permitting standards. In conclusion, this alternative would meet most of the Project's purpose and key objectives, but at a potentially reduced operational capacity compared to the proposed Project.

6.3.3 Alternative 3: Local Recharge Alternative

Alternative Description

The Local Recharge Alternative assumes that the City would construct one (1) or more recharge basins near the Bert Crane WWTP and convey treated effluent from the WWTP to those basins via a shorter pipeline and pumping/valving controls. Treated effluent would infiltrate to groundwater locally rather than being routed to creeks.

Environmental Analysis

Biological Resources

Under the Local Recharge Alternative, construction would include grading and excavation for one (1) or more recharge basins, construction of berms and inlet/outlet structures, and installation of a shorter pipeline connection from the WWTP. Because recharge basins typically require a larger contiguous construction footprint than the proposed Project's outfall improvements, this alternative could disturb a greater area of ruderal vegetation, pasture/grassland, and agricultural edge habitats and could result in a greater level of direct habitat disturbance and wildlife displacement compared to the proposed Project.

Although these land cover types are generally disturbed and of lower habitat value than riparian or aquatic-associated habitats, they may still provide nesting and foraging opportunities for wildlife, including special-status species that use open grassland/agricultural landscapes. Therefore, this alternative would retain the potential to affect special-status wildlife (if present) through vegetation removal, ground disturbance, and construction

activity, and would require implementation of avoidance and minimization measures similar to those applicable to the proposed Project.

Overall, because the Local Recharge Alternative could require a larger area of disturbance, biological resource impacts could be **similar to or greater than** the proposed Project, even though the alternative could reduce or avoid effects associated with creek-bank/riparian settings.

Cultural Resources

Under the Local Recharge Alternative, ground disturbance would occur over the basin footprint(s) and along the shorter pipeline alignment, which would create potential to encounter previously undiscovered subsurface archaeological resources or human remains. Compared to the proposed Project, this alternative could reduce the length of trenching and linear ground disturbance, but it could increase the depth and extent of excavation and grading where basins are constructed, depending on final design and site conditions.

The alternative would not eliminate the possibility of inadvertent discoveries during construction. Mitigation measures similar to those proposed for the Project would still be necessary in the event of a discovery to ensure impacts remain less than significant. Impacts would be **similar to or greater than** to the proposed Project.

Geology and Soils

Under the Local Recharge Alternative, the regional geologic setting would remain unchanged, but construction of infiltration basins would require grading, excavation, and earthwork that could disturb a larger surface area than the proposed Project's outfall improvements. As a result, the potential for construction-related erosion, soil disturbance, and dust-generating activities could be greater than the proposed Project depending on basin size, soil export needs, and whether soils require conditioning to meet infiltration performance.

Because the alternative relies on percolation, it could require soil scarification, removal of low-permeability layers, or ongoing basin maintenance to address clogging, which could incrementally increase soil disturbance over time relative to a discharge outfall. The alternative would also not eliminate the possibility of inadvertent discovery of paleontological/geologic resources during ground-disturbing activities, and mitigation measures similar to those proposed for the Project would still be necessary in the event of a discovery. Overall, the types of geological and soil impacts would be **similar to or greater** than the proposed Project.

Hydrology and Water Quality

Under the Local Recharge Alternative, construction could generate temporary erosion and sedimentation risks at and around the basin excavation area and along the shorter conveyance alignment. Compared to the proposed Project, this alternative would generally reduce the potential for direct in-channel or bank-related sedimentation effects because it would avoid construction of a creek outfall and associated bank modifications.

Operationally, infiltrating tertiary-treated effluent would change the mechanism of discharge from surface conveyance to subsurface recharge, which could beneficially increase local groundwater recharge. At the same time, localized recharge could increase the potential for groundwater mounding, altered shallow groundwater gradients, and water quality considerations (e.g., salts/nutrients/constituents of emerging concern) depending on effluent characteristics, background groundwater quality, soil attenuation capacity, and monitoring/management practices. Accordingly, while this alternative would reduce surface-water and creek-related water quality risks relative to the proposed Project, it could introduce or intensify localized groundwater-related considerations that would require compliance with applicable regulatory requirements and performance monitoring. Overall, impacts

could be reduced in some respects but not eliminated, and may be similar to the proposed Project depending on design and management.

Tribal Cultural Resources

Under the Local Recharge Alternative, ground disturbance would occur over the basin footprint(s) and along the shorter pipeline alignment, which would create potential to encounter previously undiscovered subsurface tribal cultural resources or human remains. Compared to the proposed Project, this alternative could reduce the length of trenching and linear ground disturbance, but it could increase the depth and areal extent of excavation and grading where basins are constructed, depending on final design and site conditions.

The alternative would not eliminate the possibility of inadvertent discoveries during construction. Mitigation measures similar to those proposed for the Project would still be necessary in the event of a discovery to ensure impacts remain less than significant. Impacts would be Similar/Greater to the proposed Project.

Comparison to Project Objectives

The Local Recharge Alternative would partially achieve the proposed Project's objectives but would do so through a different recharge strategy than the proposed Project, which is focused on redirecting effluent to MID-managed creeks.

Regarding compliance with SGMA recharge requirements, this alternative would support sustainable groundwater management by infiltrating treated effluent locally within the Merced Subbasin rather than routing it to Black Rascal Creek or Bear Creek. While this approach could advance the underlying intent of increasing recharge, it would not meet the objective as stated, which is redirecting treated effluent from the Atwater/Peck Drain to MID-managed creeks to support recharge in those managed conveyances.

Regarding enhanced effluent discharge flexibility, the alternative would provide an additional managed disposition pathway (i.e., local recharge basins) and could incorporate pumping/valving controls that improve operational reliability compared to existing conditions. However, because the alternative does not construct infrastructure to discharge to MID-managed creeks, it would not achieve the stated objective of SCADA-controlled diversion between Gallo Ranch and MID creeks (or both), and its operational flexibility would be constrained to basin operation versus existing discharge routing.

Regarding minimization of environmental impacts, the Local Recharge Alternative would avoid construction of a creek outfall and would thereby reduce or eliminate direct creek-bank disturbance and certain permit triggers associated with work in or adjacent to jurisdictional drainages, which could reduce some aquatic- and riparian-related effects relative to the proposed Project. On the other hand, because recharge basins typically require a comparatively larger grading footprint, this alternative could increase disturbance of ruderal/pasture/grassland and agricultural edge areas, and it would introduce ongoing maintenance disturbance, such as sediment removal, that could result in biological effects that are similar to or greater than the proposed Project depending on final basin acreage and siting.

Overall, while the Local Recharge Alternative could reduce specific creek-corridor impact pathways, it would not fully meet the project's creek-redirection and MID-creek operational flexibility objectives and may not reduce overall biological impacts given the larger disturbance footprint.

6.4 Summary of Potential Impacts

A summary of potential impacts is provided in Table 6-1. As shown, several impact reductions could be expected under the No Project Alternative, Reduced-Impact Discharge Alternative, and Local Recharge Alternative.

Table 6-1: Summary of Potential Impacts, Project vs. Alternatives

Environmental Issue	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced-Impact Discharge	Alternative 3: Local Recharge
Biological Resources	Less than Significant	Less	Less	Similar/Greater
Cultural Resources	Less than Significant	Less	Similar	Similar/Greater
Geology and Soils	Less than Significant	Less	Less	Similar/Greater
Hydrology and Water Quality	Less than Significant	Less	Less	Similar
Tribal Cultural Resources	Less than Significant	Less	Similar	Similar/Greater

6.5 Environmentally Superior Alternative

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project. Based on the alternatives analysis, the No Project Alternative would have the fewest impacts. Per CEQA, if the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)).

As shown in Table 6-1, the Reduced-Impact Discharge Alternative would be the environmentally superior alternative because it would generally reduce the intensity and extent of construction effects compared to the proposed Project through a smaller-capacity pump station, a reduced construction footprint, and an outfall design that minimizes creek-bank disturbance. Relative to the proposed Project, the Reduced-Impact Discharge Alternative would decrease or slightly decrease impacts to biological resources (reduced disturbance footprint), geology/soils (reduced grading/excavation and erosion potential), and hydrology/water quality (reduced creek-bank disturbance and construction-related runoff potential), while maintaining similar cultural resource and tribal cultural resource considerations because ground disturbance would still occur and inadvertent discovery protocols would remain necessary.

Therefore, although the No Project Alternative would have the fewest impacts overall, the Reduced-Impact Discharge Alternative is identified as the environmentally superior alternative among the other alternatives.

Chapter 7 REPORT PREPARATION

7.1 Report Preparers

Lead Agency	
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Precision Civil Engineering 1234 O Street Fresno, CA 93721	Bonique Emerson, AICP, VP of Planning Division Shin Tu, AICP, Senior Planner Isaiah Medina, Associate Planner
Biological Resource Fieldwork and Assessment	
Argonaut Ecological Consulting, Inc. 2377 Gold Meadow Way #100 Rancho Cordova, CA 95670	Kathy Kinsland, Owner/Sr. Scientist

7.2 References

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APPENDIX A

Biological Resource Assessment

IPaC Resources List

GONAUT
OLOGICAL
NSULTING, INC.

TECHNICAL MEMORANDUM

DATE: July 21, 2026

TO: Isaiah Medina, Precision Civil Engineering

FROM: Kathy Kinsland, Argonaut Ecological, Inc.

RE: Technical Memorandum – City of Atwater, Bert Crane Waste Water Treatment Plant (WWTP) Biological Review of Proposed and Alternative Discharge Pipeline and Outfalls

Overview and Background

Argonaut Ecological Consulting, Inc., was tasked with conducting a biological review associated with the City of Atwater's Bert Crane Waste Water Treatment Plant's (WWTP) proposed improvements. The City is proposing to upgrade facilities within the WWTP and construct a new outfall into Bear Creek/Black Rascal Creek. The WWTP has an existing outfall into Black Rascal Creek, up stream of the confluence with Bear Creek. The City is evaluating upgrading/replacing that outfall or constructing a new pipeline/outfall at that, or three alternative locations along Bear Creek. This biological assessment provides a baseline of information for the City to use to evaluate the potential biological impacts associated with each alignment/outfall. Eventually, the City will select one of the three proposed alignments and one of the four proposed outfall location.

Methods

Each pipeline alignment and outfall location was walked and all habitat characteristics were noted. The habitat within the active WWTP was not included in our evaluation given the property is fully developed and devoid of vegetation. Photographs were taken, the alignments were walked, and the location of the proposed outfalls into Bear Creek were evaluated. Figure 1 shows the location of each alternative alignment/outfall. The following discussion describes, characterizes, and evaluates each alternative.

Land Use, Topography, and Drainage Overview

The Bert Crane WWTP and all alternatives are located within a highly agricultural area south, southwest of the City of Atwater. The surrounding land uses row crops, orchards, rural residential homes, dairies, and public roadways. The lands have been in agricultural production for many decades. The site of the Bert Crane WWTP and associated solar panel farm was fallow

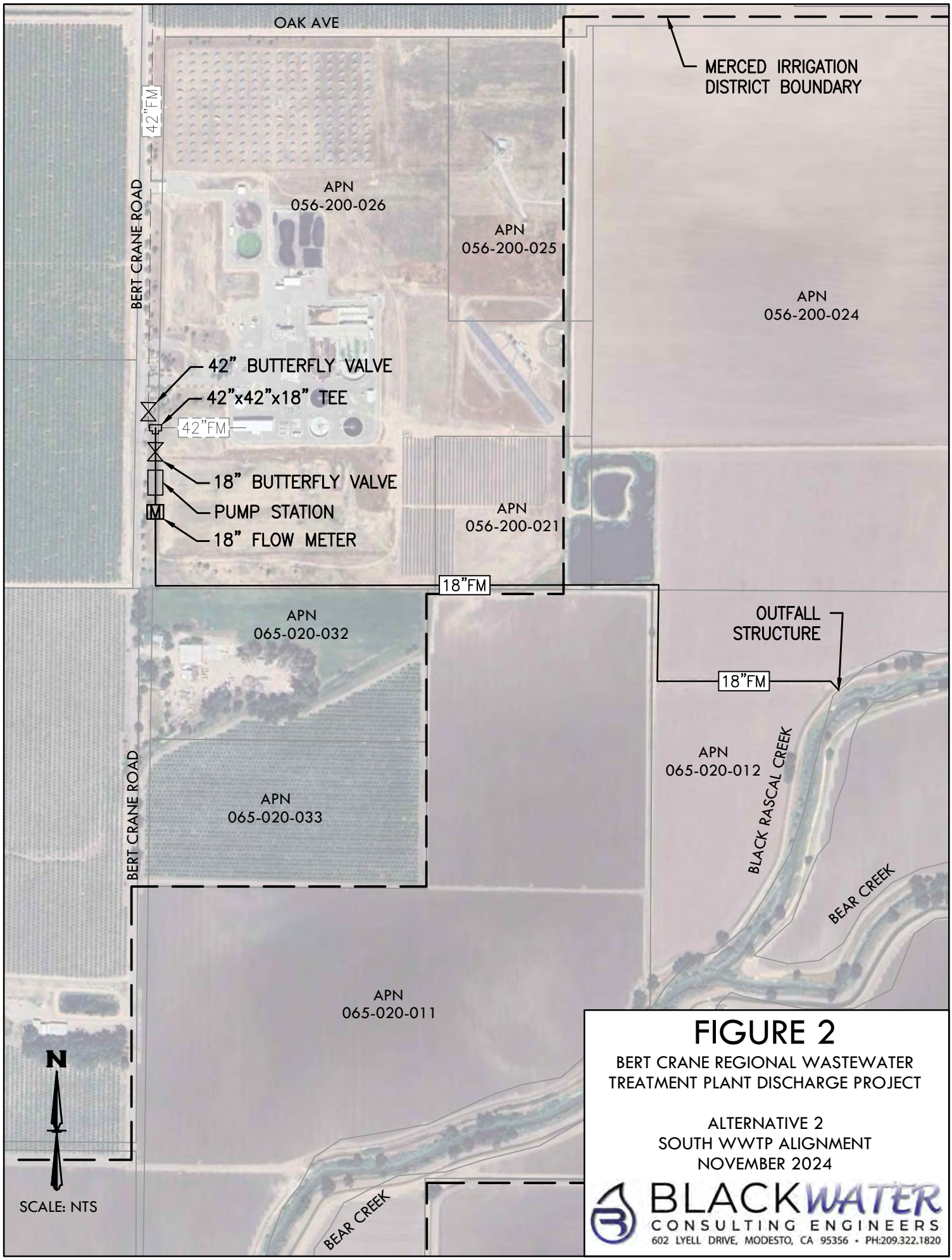


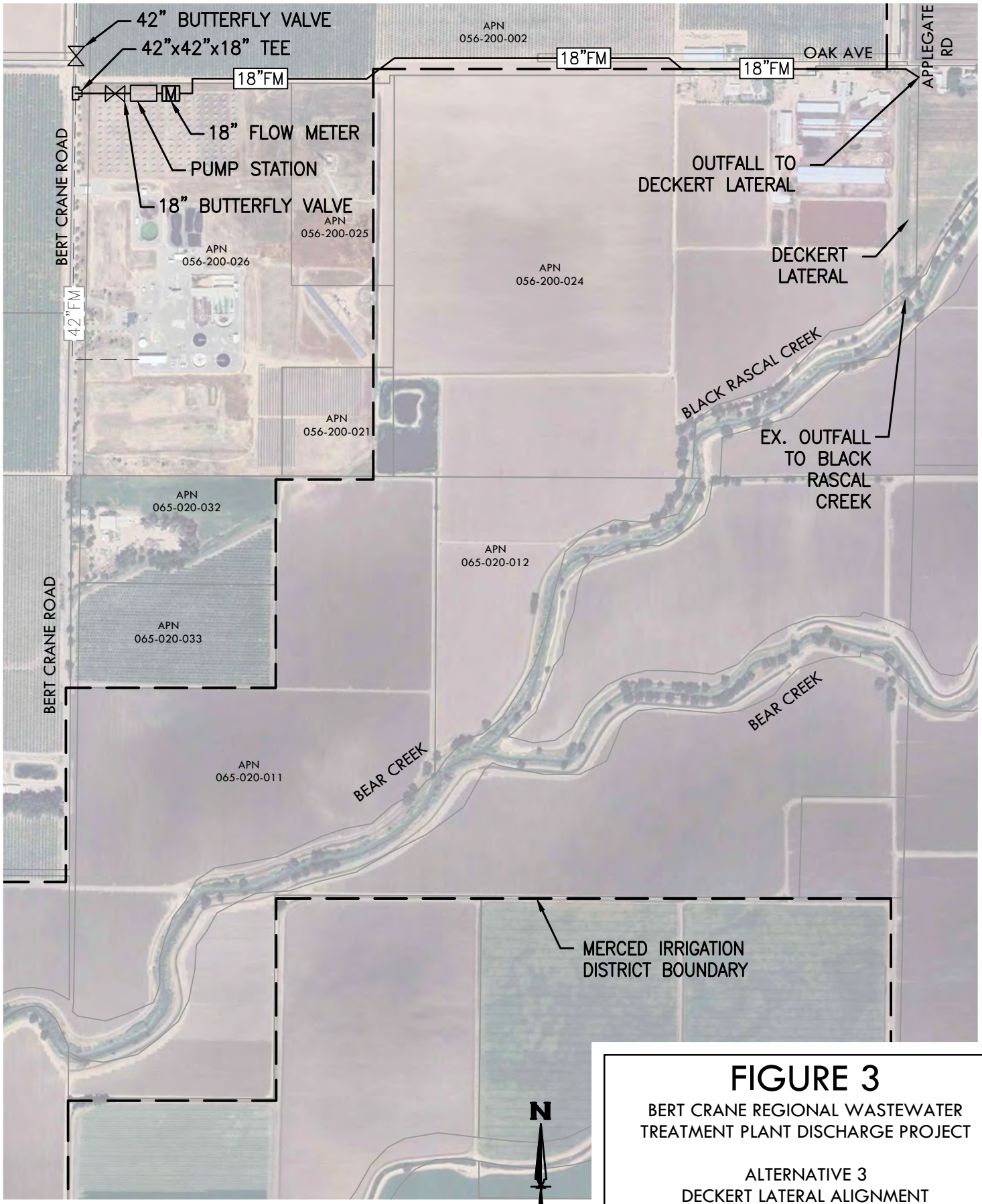
FIGURE 2

BERT CRANE REGIONAL WASTEWATER TREATMENT PLANT DISCHARGE PROJECT

ALTERNATIVE 2
SOUTH WWTP ALIGNMENT
NOVEMBER 2024

BLACKWATER CONSULTING ENGINEERS
602 LYELL DRIVE, MODESTO, CA 95356 • PH:209.322.1820

I:\24472 ATWATER ON-CALL ENGINEERING\CAD\TASK-01 (PROJECT DESC)\REPORTS\FIGURES\FIGURE 4-2 - ATWATER DISCHARGE ALTERNATIVE 2.DWG PLOT: 11/5/2024 10:47:41 AM BY ANGEL MARISCAL



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FIGURE 3

BERT CRANE REGIONAL WASTEWATER TREATMENT PLANT DISCHARGE PROJECT

ALTERNATIVE 3
DECKERT LATERAL ALIGNMENT
NOVEMBER 2024

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CONSULTING ENGINEERS
602 LYELL DRIVE, MODESTO, CA 95356 • PH:209.322.1820

I:\J24472 ATWATER ON-CALL ENGINEERING\CAD\TASK-01 (PROJECT DESC)\REPORTS\FIGURES\FIGURE 4-3 - ATWATER DISCHARGE ALTERNATIVE 3.DWG PLOT: 11/5/2024 10:48:17 AM BY ANGEL MARISCAL

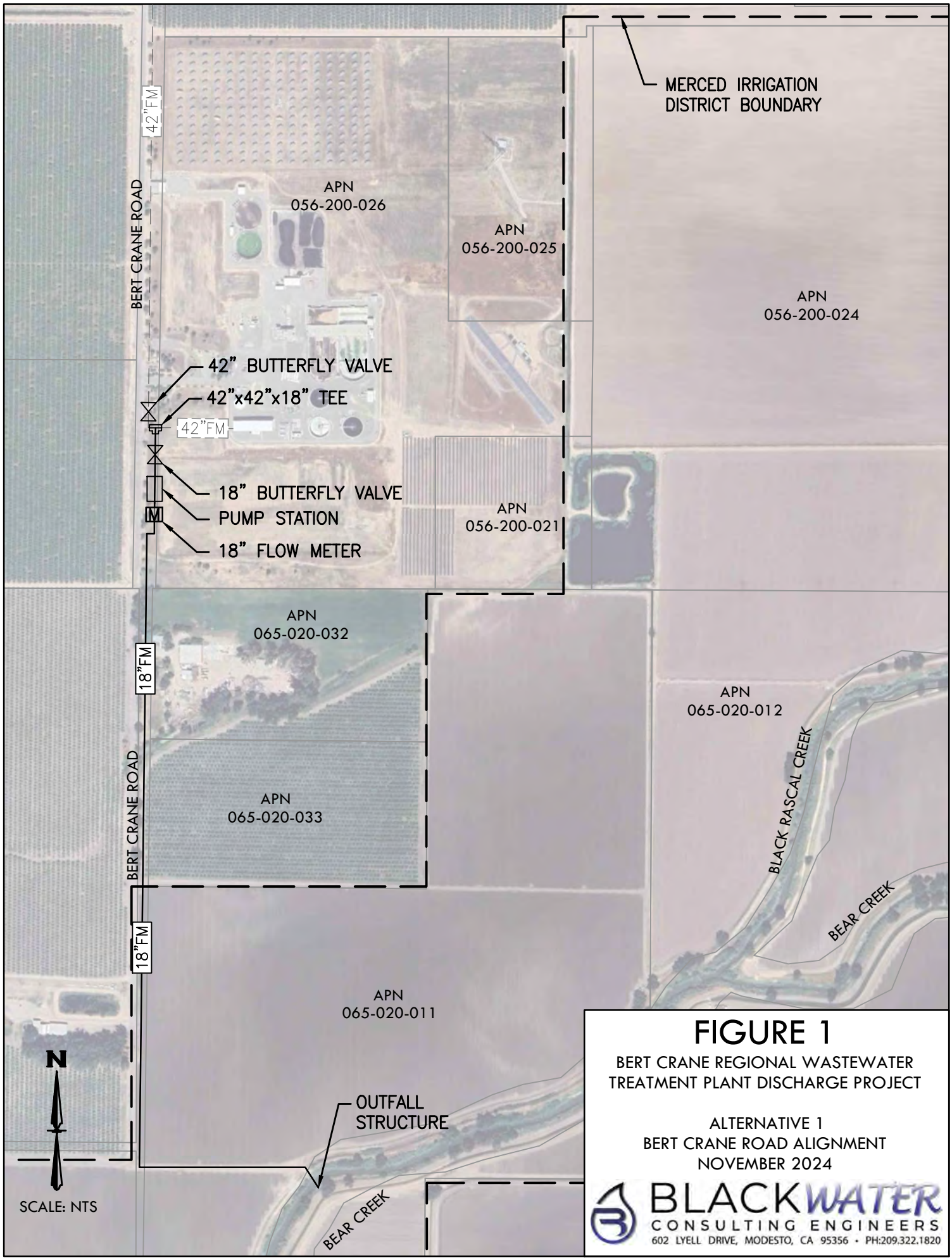


FIGURE 1

BERT CRANE REGIONAL WASTEWATER TREATMENT PLANT DISCHARGE PROJECT

ALTERNATIVE 1
BERT CRANE ROAD ALIGNMENT
NOVEMBER 2024

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602 LYELL DRIVE, MODESTO, CA 95356 • PH:209.322.1820

I:\24472 ATWATER ON-CALL ENGINEERING\CAD\TASK-01 (PROJECT DESC)\REPORTS\FIGURES\FIGURE 4-1 - ATWATER DISCHARGE ALTERNATIVE 1.DWG PLOT: 11/5/2024 3:39:11 PM BY ANGEL MARISCAL

habitat until 2010 when the treatment plant construction began. It took about three years for the plant construction to be completed. There was an existing radio control club (Merced County Radio Control Club) was existing on the east side of the WWTP property and that facility remains in use.

The WWTP occurs at an elevation of roughly 110 ft. (mean sea level). The elevation along the alternatives ranges from 105-118 feet on the levees along Black Rascal Creek/Bear Creek.

The existing WWTP is located roughly ½ mi northwest of confluence of Black Rascal Creek into Bear Creek. Bear Creek flows west into the San Luis National Wildlife Refuge and the San Joaquin River. Therefore, drainage is to the south, then west.

Potential Waters/Wetlands and Habitat Impacts

The National Wetland Inventory Map (NWI) was used to identify any known mapped wetlands. The NWI mapping is based on a combination of arial photography and other sources and is not always reliable, nor can be used to determine legal or regulatory boundaries of waters/wetland features.

The predominant waters/wetland features in the region are Black Rascal Creek and Bear Creek. These are nearly perennial waterways that appear as blue-line stream on U.S. Geographic Survey (USGS) topographic maps since at least 1914. It should be noted that in 1914, Black Rascal Creek was labeled as Black Rascal Slough, but on more recent topographic maps, it is labeled as Hinds Lateral. For purposes of this report, we rely on the naming convention used in the NWI mapping, which places the Hinds Lateral running along the north side of Bear Creek and Black Rascal Creek flows into Bear Creek from the northeast along the 1914 alignment of Black Rascal Slough.

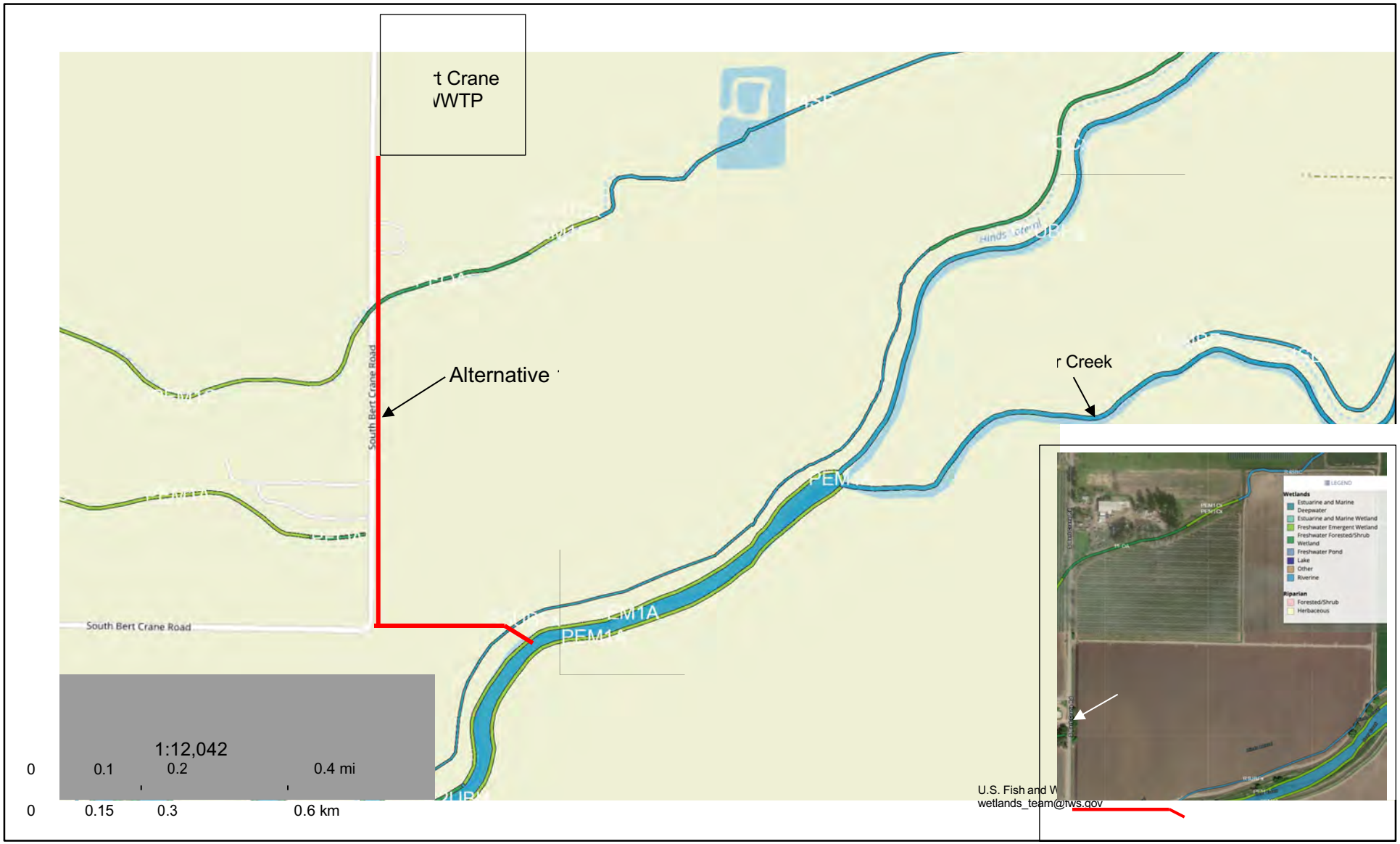
In addition to these near perennial waters, the NWI mapping also shows other water features to include: agricultural laterals and a stormwater pond.

Table 1 details the mapped waters/wetlands shown on the NWI maps within the Study Area. Figures 2-4 provide the mapped features shown on the NWI maps for each alternative.

Table 1 – National Wetland Inventory Mapping Water/Wetland Features Bert Crane WWTP Discharge and Outfall Alternatives		
Water/Wetland Feature	**Cowardin Code & Description**	**Associated with Alternative**
Black Rascal Creek	R2UBH: Riverine, lower perennial, unconsolidated bottom, permanently flooded	Alternative 1 & 2
	PEM1A: Palustrine, emergent, persistent, temporarily flooded	Alternative 1& 2
Bear Creek	R2UBH: Riverine, lower perennial, unconsolidated bottom, permanently flooded	Alternative 3
	PEM1a: Palustrine, emergent, persistent, temporarily flooded,	Alternative 3
Hinds lateral	R5UBFx: Riverine, unknown perennial, unconsolidated bottom, semi permanently flooded, excavated	Alternative 1, 2, 3
	PFOCx: Palustrine, forested, seasonally flooded, excavated	Alternative 1
Unnamed Drainage #1 (Deckert Lateral)	R4SBc: Riverine, intermittent, streambed, seasonally flooded	Alternative 1 & 2
	PFOA: Palustrine, forested, temporarily flooded	Alternative 1
Unnamed Drainage #2	R5UBFx: Riverine, unknown perennial, unconsolidated bottom, semi permanently flooded, excavated	

FIGURE 4: Bert Crane WWTP: Alt 1

National Wetlands Inventory



January 6, 2026

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

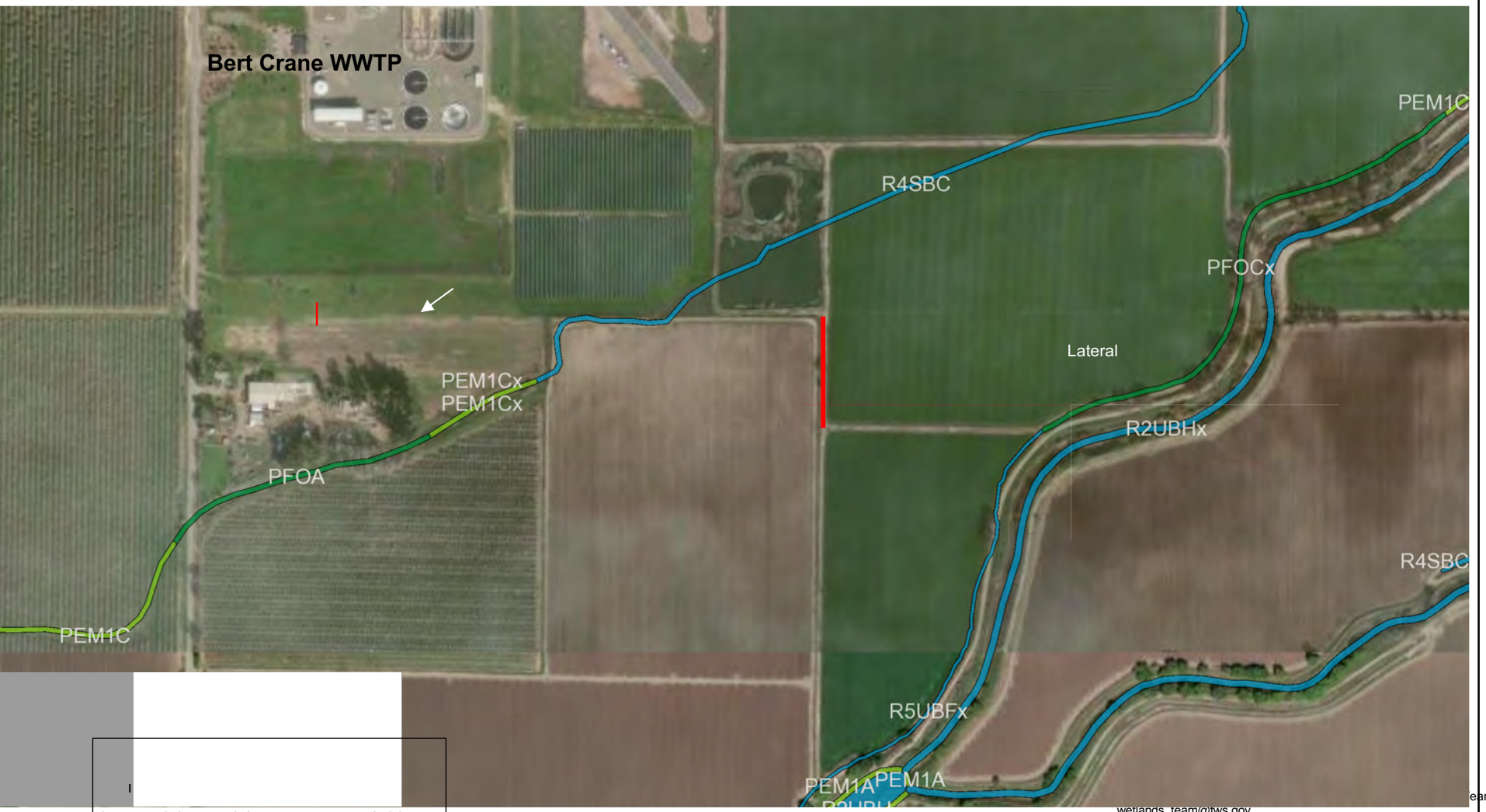
Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

National Wetlands Inventory

FIGURE 5: Bert Crane WWTP: Alt 2



wetlands_team@fws.gov

January 8, 2026

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

FIGURE 6: Bert Crane WWTP: Alt 3

National Wetlands Inventory



January 8, 2026

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Alternative 1: Alternative 1 extends from the WWTP and runs along the east side of S. Bert Crane Road south to just north of Bear Creek (See Attachment A for photograph). The alignment crosses through the easement along a residential/rural ranch property just south of the WWTP but otherwise runs through agricultural land. At a hair-pin turn at the south end of Burt Crane Road, the alignment turns left and follows a farm access road to the north levee of Bear Creek (just downstream of the confluence of Black Rascal Creek with Bear Creek).

The habitat immediately south of the WWTP along Bert Crane Road includes pasture, ruderal and riparian/waters. At the northern end of the alignment, the habitat along the road is pasture land/fallow. Moving south, the road is lined with trees (approximately 18 individual trees including Valley oak (*Quercus lobata*, Western sycamore (*Plantanus racemose*), gum (*Coriymbia sp*), and willow (*Salix sp*.). It is assumed some of these trees may be impacted by project, unless the alignment can be moved outside the dripline to the east.

The alignment south of the of the rural ranch crosses an unnamed, but mapped, drainage. The drainage appears to be an extension or remanent of the "Deckert Lateral" (See Figure 4). The drainage is approximately 50 feet in width and roughly 2 -3 feet lower in elevation than the surrounding ground. There is a narrow fringe of riparian habitat (mostly cottonwood), some invasive plants (giant reed) along the edges and some willow. It is likely this drainage would be considered, at a minimum, a waters of the state and potentially a waters of the U.S.

South of the unnamed drainage and along the alignment extending to the north levee of Bear Creek there is no vegetation or trees (agricultural fields).

At the proposed outfall, there is an existing access ramp from the adjoining field onto the top of levee. The access road crosses over the Hinds Lateral (via a culvert) and there is no woody vegetation at the top of bank. There is sparse vegetation at the top of bank made up of weedy species. On the inside bank slope (creek side), the vegetation is dominated by grasses and herbs (wild mustard, Johnson grass, and willow saplings). No trees would be impacted by construction of an outfall structure at this location.

The top of bank (north bank) is estimated to be at elevation 114 msl. The Ordinary High Water Mark, OHWM, estimated by observing field indicators along both the north and south channel banks, is at elevation 111 feet (msl). The bottom of the channel is estimated at 105 feet msl.[1]

Table 2, below, provides an estimate of the impact of this alternative on habitats present.

[1] These elevations would need to be confirmed for purposes of preparing regulatory permit applications and are only provided as a estimate to determine potential impacts to waters of the US.

Table 2 –Alternative 1 Habitat Impact			
Habitat Type	**Location**	**Length**	**Impact***
Non-native grassland	East of WWTP property (APN 056-200-021)	740 lf	0.17 acres
Pasture	South of WWRP along Bert Crane Rd	250	0.06
Agricultural	Along Bern Crane and along farm access road	2050 lf	0.47 acres
Ruderal	Along Bert Crane Rd and top of levee	500	0.12 acres
Riparian/waters	Unnamed drainage and Bear Creek[2]	70 lf	0.01 acres
Totals		**3,610 lf**	**0.83 acres**

Alternative 2: Alternative 2 extends from the southern end of the WWTP and follows the southern boundary of the WWTP property through habitat characterized as pasture/fallow land (Figure 5 and Attachment A). The alignment passes south of an existing ponding basin (off site) through non-native grassland habitat. The ponding basin is not identified on the NWI mapping. This basin appears to be an off-channel storage basin for water from the Deckert Lateral. The alignment would need to cross the Deckert Lateral within the non-native grassland habitat. The lateral is roughly 8 feet in width.

From the southeast corner of the basin parcel, the alignment turns south for a short distance along a farm access road, then east along another farm access road and up the Bear Creek levee embankment, crossing over the Hinds Lateral via a culvert. There is no woody vegetation at the top of bank where the proposed outfall is located. The vegetation along the top of bank and down slope is made up of non-native grasses, giant canary reed, and some willow saplings.

The top of bank elevation is estimated at 127 feet (msl). The channel bottom is estimated at 115 feet. The Ordinary High Water Mark was estimated in the field at approximately elevation 121 msl.

Habitat along the alignment is summarized in Table 3, on the following page.

[2] This is an estimate of potential impacts to waters/wetlands based on a preliminary design and should not be relied upon for regulatory permitting. The actual impact would be based on the engineering design that would detail the location, scale, and quantity of potential fill materials (fill, rip rap, excavation, etc.).

Table 3 – Alternative 2 Habitat Impact			
Habitat Type	**Location**	**Length**	**Impact***
Pasture	Along southern property line of WWTP	1078 lf	0.24 acres
Non-native grassland	East of WWTP property (APN 056-200-021)	740 lf	0.17 acres
Agricultural	South of ponding basin and along fields.	1626 lf	0.37 acres
Ruderal	Top of levee bank	45 lf	0.01 acres
Riparian or potential waters	Pipeline alignment and Outfall (top of bank and inside bank)[3]	35 lf	0.01 acres
	Totals	**3,509 lf**	**0.8 acres**

Alternative 3: Alternative 3 begin at the northern end of the WWTP property near the solar field and follows a farm access road south of an existing orchard to the north, and continues along farm access roads until the alignment turns south and connects with the existing Deckert Lateral (Figure 6 and Attachment A). There is no vegetation community along Alternative 3 (other than orchards and row crops). The land use along the existing Deckert Lateral is row crops south of an existing dairy. The existing outfall is located on the water side of the the existing Black Rascal Creek levee.

There are mature trees along the Black Rascal Creek in the location of the existing and proposed outfall. The trees are located on the outside and inside banks of the levee (as opposed to the top of bank). The remainder of the vegetation is made up of forbs and weeds. There is some emergent/streamside vegetation at the lower reach of the interior bank.

The top of bank elevation is estimated at 125 feet (msl). The channel bottom is estimated at 112 feet. The Ordinary High Water Mark was estimated in the field at approximately elevation 118 msl.

[3] This is an estimate of potential impacts to waters/wetlands based on a preliminary design and should not be relied upon for regulatory permitting. The actual impact would be based on the engineering design that would detail the location, scale, and quantity of potential fill materials (fill, rip rap, excavation, etc.).

Table 4 – Alternative 3 Habitat Impact			
Habitat Type	**Location**	**Length**	**Impact***
Agricultural	Farm field/farm access roads	3115 lf	0.72 acres
Ruderal	Top of levee bank	30 lf	0.01 acres
Riparian or potential waters	Outfall (top of bank and inside bank)[4]	25 lf	0.001 acres
	Totals	3,170 lf	0.8 acres

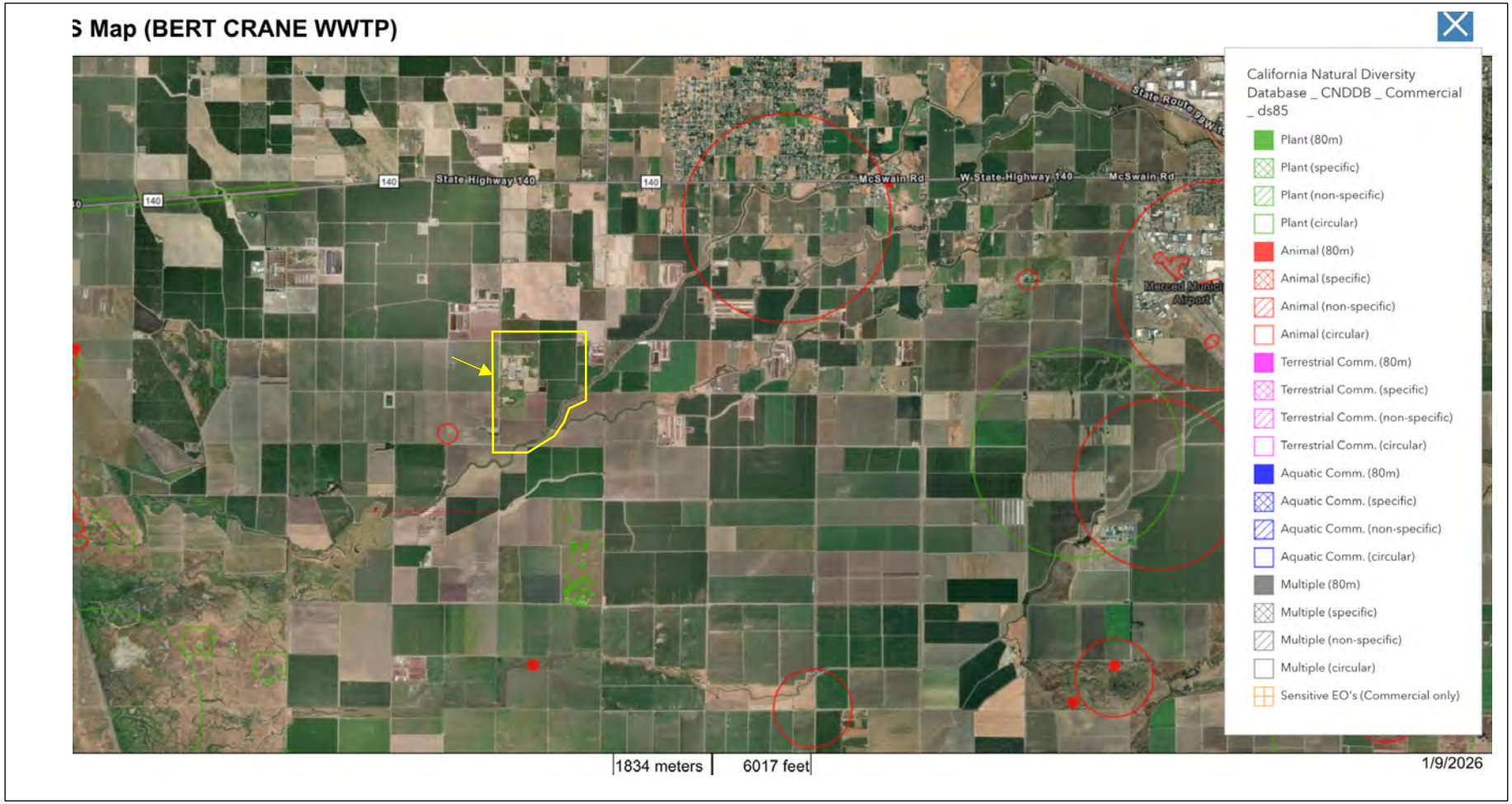
Special Status Species

A review of the California Natural Diversity Database (CNDDB) was performed within the Atwater quadrangle. A larger search area to include quadrangles outside of the Stud Area (Arvin quad) is not warranted given the size and location of the Study Areas. The query indicates the potential presence of several species within region of the Study Areas. However, there are no known records of special status species within or near the Study Areas. The field review indicates a low potential for any special status species to be present based on location and habitat conditions, but some species could not be ruled out. Those species are described below. Figure 7 provides the results of the CNDDB mapping query.

Burrowing owl (*Athena cunicularia*): Burrowing owl is a ground nesting owl that prefers grassland or pasture habitat with existing ground burrows (made by ground squirrels or other ground burrowing mammals). The owl will also use any structure (dry cistern, old pipes, etc.) for nesting. The species is a year-round resident in most areas of the Central Valley. The pasture habitat just south of the WWTP facilities and the grassland habitat near the ponding basin (near Deckert Lateral) supports a dense ground squirrel population. No evidence of owl occupation was found but individuals could occupy the area in the future.

American badger (*Taxidea taxu*): American badger is a ground nesting mammal found in open area with suitable prey base. No evidence of occupation was found, but presence cannot be ruled out without further field surveys.

[4] This is an estimate of potential impacts to waters/wetlands based on a preliminary design and should not be relied upon for regulatory permitting. The actual impact would be based on the engineering design that would detail the location, scale, and quantity of potential fill materials (fill, rip rap, excavation, etc.).


S Map (BERT CRANE WWTP)
State Highway 140
McSwain Rd
W State Highway 140
McSwain Rd
140
California Natural Diversity Database _ CNDDB _ Commercial _ ds85
Plant (80m)
Plant (specific)
Plant (non-specific)
Plant (circular)
Animal (80m)
Animal (specific)
Animal (non-specific)
Animal (circular)
Terrestrial Comm. (80m)
Terrestrial Comm. (specific)
Terrestrial Comm. (non-specific)
Terrestrial Comm. (circular)
Aquatic Comm. (80m)
Aquatic Comm. (specific)
Aquatic Comm. (non-specific)
Aquatic Comm. (circular)
Multiple (80m)
Multiple (specific)
Multiple (non-specific)
Multiple (circular)
Sensitive EO's (Commercial only)
1834 meters
6017 feet
1/9/2026

Western red bat (*Lasiurus frantzii*): A tree dwelling bat that occurs in low-elevation riparian forests. Associated with cottonwoods, sycamores, valley oaks, etc. There are no records within or near the Study Area, but there is some suitable habitat along Bear Creek/Black Rascal Creek and presence cannot be ruled out without additional field surveys prior to construction.

Swainson's hawk (*Buteo swainsoni):* Medium size hawk that nests in mature trees and hunts in agricultural area. No raptor nests were found but future nesting along Bear Creek/Black Rascal Creek cannot be ruled out without additional field surveys prior to construction.

Tricolored Blackbird (*Agelaius tricolor)*: Nests in dense emergent vegetation along slow moving streams/creeks. Nominal habitat is present within the Study Area, but presence is unlikely.

Ferruginous hawk (*Buteo regalis)*: Medium sized hawk that nests primarily in mature trees but will nest on the ground if no tree nesting habitat is available. Unlikely to be present within the Study Area because of the minor amount of suitable habitat.

Northwest pond turtle (*Actinemys marmorata)*: Medium sized semi-aquatic turtle that prefers slow moving streams and creeks. For nesting, overwintering, or aestivating during the hot, dry summer, this turtle needs adjacent open, dry, and relatively undisturbed terrain within 500 m of the water's edge. Both Black Rascal Creek and Bear Creek may provide suitable habitat for this species. The pond located east of the WWTP could provide suitable habitat, but no impacts to the pond are proposed.

California tiger salamander (*Ambystoma californiense):* Breeds in seasonal wetlands/vernal pools or stock ponds without a predator population. No suitable breeding habitat is present within the Study Area, but potential suitable habitat occur roughly 0.3 miles northeast of the Study Area. The small amount of non-native grassland at the south end of the WWTP could provide upland aestivation habitat (associated with Alternative 2). There agricultural fields and access roads throughout the remainder of the Study Area does not provide suitable aestivation habitat.

Sanford's arrowhead *(Sagittaria sanfordii):* Aquatic plant that grows in slow moving streams and sloughs. Bloom in late summer. Suitable habitat present within Black Rascal Creek/Bear Creek,

.

Table 5
Summary of Special Status Species, Potential Occurrence, and Impact

Common Name	Scientific Name	Status[1]	Effects[2]	Occurrence in the Study Area[3]
Birds				
Swainson's hawk	*Buteo swainsoni*	--/CT	ME	**Likely Absent.** Nests in mature trees. Limited suitable nesting habitat along pipeline alignments but may nest within ½ radius of proposed outfalls.
Tricolored blackbird	*Agelaius tricolor*	--/CT	NE	**Potentially Present.** Species nest in emergent wetland habitat (tule), etc. Could potentially be present within creeks zones, but no suitable nesting habitat within outfall locations.
Burrowing owl	*Athena cunicularia*	--/CE	ME	**Potentially Present.** Nests within grassland habitat with suitable prey base. May also nest in agricultural land within old pipe or structures. Suitable habitat present within pasture land that supports ground burrowing mammal population (ground squirrels) or in non-native grassland habitat.
Ferruginous hawk	*Buteo regalis*	--/--	ME	**Likely Absent.** Prefers open grassland habitats with suitable prey base. Small amount of suitable habitat present.
Mammals				
American badger	*Taxidea taxu*	--/--	ME	**Potentially Present.** Occurs in open areas with suitable prey base. Burrows underground.
San Joaquin kit fox	*Vulpes macrotis mutica*	FE/CT	NE	**Likely absent.** Forages throughout the San Joaquin Valley but avoids populated areas. Unlikely that any suitable denning habitat is present but could occur within or use habitat within the Study Area for foraging. No potential denning habitat observed.
Western red bat	*Lasiurus frantzii*		ME	**Potentially Present.** Tree dwelling bat (broad-leafed deciduous trees) and strong associated with mature stands of cottonwoods, sycramore, valley oaks, etc. Potential suitable nest sites along Hinds Laterals and other waterways.
Amphibians, Reptiles & Invertebrates				
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT/--	NE	**Absent.** Occurs in seasonal wetlands/vernal pools. No suitable habitat present.

California tiger salamander	*Ambystoma californiense pop.1*	FT/CT	ME	**Potentially Present.** Some potential upland habitat located along western edge of Alternative 2 (non-native grassland) and south end of WWTP.
Northern California legless lizard	*Anniella pulchra*	--/--	NE	**Absent.** Occurs in moist, warm loose soils with plant cover. Moisture is essential. No suitable habitat present within or near Study Area.
Northwest pond turtle	*Actinemys marmorata*	PFT/--	ME	**Potentially Present.** Occupies slow moving waterways and is semi aquatic. Could occur within Black Rascal Creek or Bear Creek or in basin east of the WWTP. No
Western spadefoot	*Spea hammondii*	--/--	NE	**Absent.** Species requires seasonal wetlands or intermittent streams for breeding habitat. No suitable breeding habitat within or near the Study Area and no records near the Study Area.
California lineriella	*Linderiella occidentalis*	--/--	NE	**Absent.** No suitable habitat (vernal pools or seasonal wetlands present within Study Area).
Crotch's bumble bee	*Bombus crotchii*	--/-- SSC	ME	**Likely Absent.** The Study Area habitat is dominated by highly managed agricultural field with little marginal suitable habitat for this species. According to the bumble bee watch observations, the nearest record is over 5 miles to the west near the San Luis National Wildlife Refuge. Additional field work may be needed in limited areas of potential suitable habitat.
Hardhead	*Mylopharodon conocephalus*	--/-- SSC	NE	**Likely Absent.** Large minor that are found in clear, deep, slow-moving pools in mid-to-low elevation streams and rivers. They do not tolerate low-oxygen environments and highly unlikely to be present within Bear Creek/Black Rascal or Hinds lateral.
Plants				
Sanford's arrowhead	*Sagittaria sanfordii*	--/--	ME	**Potentially Present.** Species prefers slow moving slough and streams. Could be present within Study Area including Black Rascal Creek, Bear Creek, or Hinds lateral. Unlikely present in Deckert lateral or unnamed drainage because of intermittent and seasonal flows.

Plant species for which there is no suitable habitat:

Vernal pool smallscale (*Atriplex peristens*)
Colusa grass (*Neostapfia colusana*)

1 **Status= Listing of special status species, unless otherwise indicated**

CE: California listed as Endangered

CT: California listed as Threatened

SSC: California Species of Special Concern

FE: Federally listed as Endangered

FT: Federally listed as Threatened

PFT: Proposed for Federally Listed as Threatened

1B.1, 1B.2, 2B.2, 2B.3: California Native Plant Society Ranking

2 **Effects = Effect determination**

NE: No Effect

ME: May Effect, not likely to adversely effect

3 **Definition of Occurrence Indicators**: **Present/Potentially Present**: Species recorded in the area and some habitat elements in the Study Area similar to known occurrences. **Absent/Likely Absent**: Species not recorded in the Study Area and/or suitable habitat or critical habitat components not present.

4 The CNDDB search radius is limited to the location quadrangle and other locations suitable for a alternatives analysis.

CONCLUSIONS AND IMPACTS

The Study Area includes a mixture of habitat including, agricultural land, pasture, non-native grassland, ruderal, residential/ranch, and riparian and potential waters.

Habitat Impacts: All three alternatives would temporarily impact roughly 0.8 acres of habitat. All impacts would be temporary with the exception of any permanent habitat loss required for construction of an outfall structure along Black Rascal Creek or Bear Creek.

- **Alternative 1** would require crossing an unnamed drainage along Bert Crane Road.
- **Alternative 2** would also require crossing a portion of the Deckert Lateral.
- **Alternative 3** would not require crossing any unnamed drainage or lateral, but would require tying into the Deckert Lateral.

Special Status Species Impacts: All three alternatives could potentially impact special status species, but the likelihood of impacts is low. Avoidance of any impacts would be possible with pre-construction surveys prior to construction. The following is the recommend surveys that should be implemented for the alternatives:

Alternative 1, 2, and 3:

- Pre-construction survey for nesting raptors (including burrowing owl) and American badger within 30 days prior to construction. The raptor survey should include habitat within 500 feet of the pipeline alignment and outfalls.
    - If any active Swainson's hawk nests are identified within 500' of the alignment(s) cannot be avoided, consultation with CDFW is recommended for guidance to minimization, minimization, and mitigation. If take cannot be avoided, take authorization is necessary, the application should obtain an Incidental Take Permit (ITP).
    - If burrowing owl nesting or individual are detected, the applicate should prepare an avoidance plan and coordinate with CDFW to avoid potential impacts or identify mitigation is avoidance is not possible.

- Pre-construction survey for Sanford's arrowhead should be performed during the bloom period for the plant within Black Rascal Creek and/or Bear Creek.

- Pre-construction survey for northwest pond turtle and tricolored blackbird within 500 feet of any outfall structure and near the basin east of the WWTP.

- Pre-construction survey along the riparian habitat (within 100-foot radius of disturbance area) for potential special status bat habitat (pallid bat, western mastiff, and western red bat) to identify any potential roosting habitat using established survey methodology (visual, ultra sonic detectors, dusk and dawn emergency). If bats are found to occupy, minimization

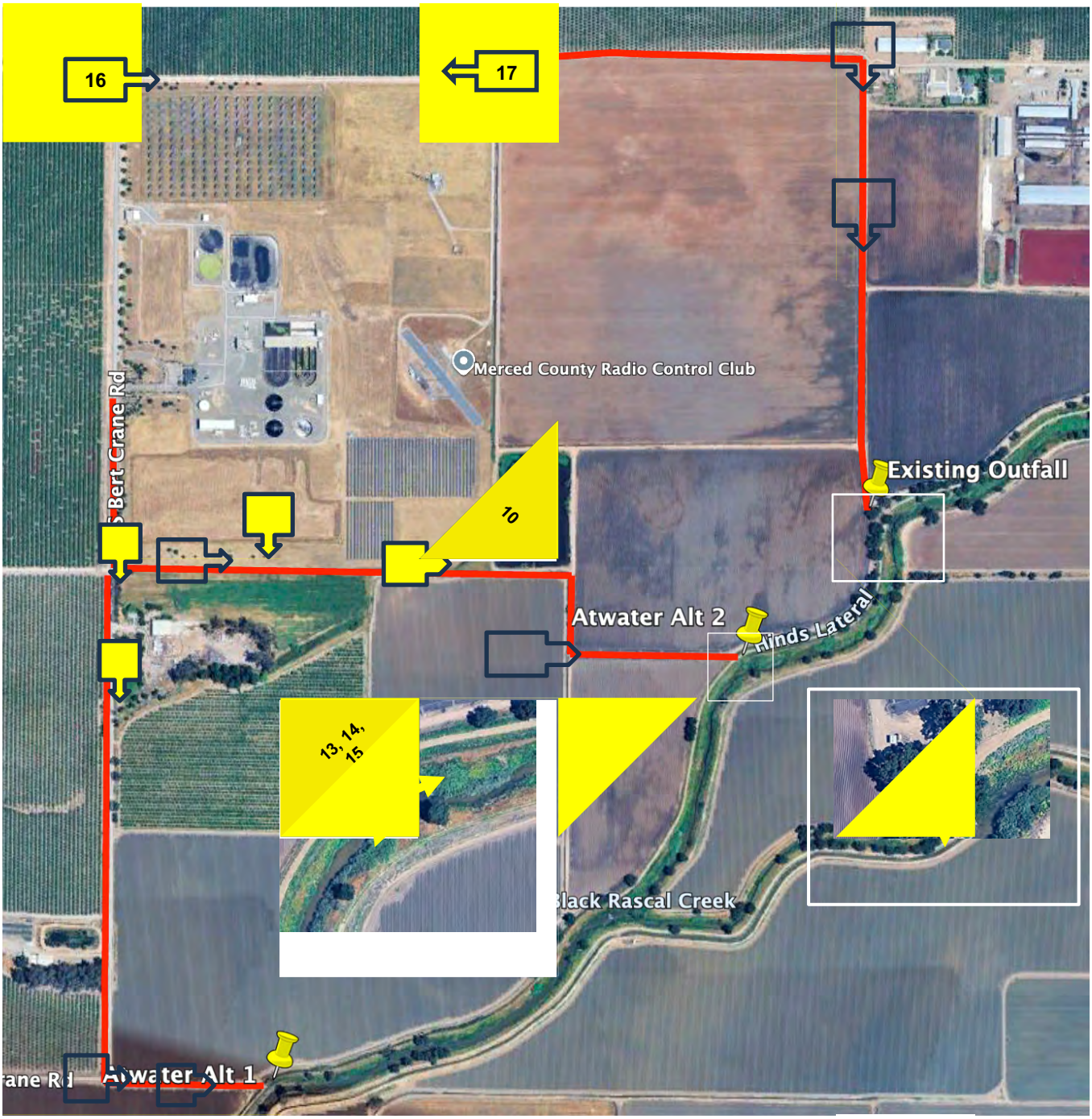
and mitigation measures should include a 100-foot no-disturbance buffer around the roost site and a new roost site should be installed prior to initiation of the work activities to allow enough time for bats to relocate.

- For Alternative 2 conduct a pre-construction to mark any upland burrow refugia that could support California tiger salamander and establish a minimum 50-foot no disturbance buffer. If burrow avoidance is not available, consult with CDFW to determine if the Project can avoid take.



Kathy R. Kinsland,
Senior Biologist

Attachment A: Photographs



Attachment A: Photograph Key

Project: Burt Crane Wastewater Treatment Plant Outfall Alternatives

ECOLOGICAL CONSULTING, INC.

November 2025



Photograph 1: Alternative 1 - View of eastern edge of S. Bert Crane Road along proposed alignment, looking south.



Photograph 2: Alternative 1 - View of unnamed drainage channel along proposed alignment along S. Bert Crane Road, looking east.



Photograph 3: Alternative 1- View of proposed alignment along farm access road, looking east toward Bear Creek.



Photograph 4: Alternative 1- View f proposed outfall location at Bear Creek, oking southeast. Large trees on south de of creek.

ECOLOGICAL CONSULTING, INC.



Photograph 5: Alternative 1- View of proposed crossing location, looking upstream along Bear Creek.



Photograph 6: Alternative 1- View of condition of creek banks at outfall location, looking south at south bank. Redline denotes observed Ordinary High Water Mark level.



Photograph 7: Alternative 2- View looking east along proposed alignment, just east of Bern Crane Road.



View of ground squirrel burrows along alignment within pasture habitat.



Photograph 9: Alternative 2 - View looking east along alignment within non-native grassland habitat. Blue line denotes centerline of Deckert Lateral. The redline shows the assumed alignment for the pipeline.



Photograph 10: Alternative 2 - View southeast along Deckert Lateral. Blue line denotes center of lateral. Redline denotes approximately location of pipeline crossing.



Photograph 11: Alternative 2 - View looking north at the corner where alignment turns south. A ponding basin is in the



Photograph 12: Alternative 2 - View looking east toward Black Rascal Creek level in background.



Photograph 13: Alternative 2 - View looking south toward Black Rascal Creek at proposed outfall location.



Photograph 14: Alternative 2 - View of Proposed Outfall, looking upstream.



Photograph 15: Alternative 2 - View at outfall, looking downstream along levee.



View looking east at western end of Alternative 3 alignment. Solar field associated with the WWTP is on the right side. View is of an existing farm access road on property just north of solar field.



Photograph 17: Alternative 3 - View looking west along northern alignment of pipeline.



- View of assumed connection point with existing Deckert Lateral, looking south toward Black Rascal Creek. Dairy on left.



hotograph 19: Alternative
- Existing Deckert Lateral,
oking south toward Black
ascal Creek.



existing outfall location.



Photograph 21: Alternative 3 - View at riparian habitat along north bank of Black Rascal Creek, looking downstream. The redline shows the approximate OHWM.



Photograph 22: Alternative 3 - View of north bank of Black Rascal Creek, looking upstream in location of proposed new outfall alternative. The redline shows the approximately OHWM

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Merced County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Joaquin kit fox Vulpes macrotis mutica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Reptiles

NAME	STATUS
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened
Western spadefoot Spea hammondii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

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Insects

NAME	STATUS
Monarch butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Valley elderberry longhorn beetle Desmocerus californicus dimorphus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Conservancy fairy shrimp Branchinecta conservatio Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal pool fairy shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal pool tadpole shrimp Lepidurus packardi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Colusa grass Neostapfia colusana Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5690	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Additional information can be found using the following links:

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- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

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Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Mountain Plover Charadrius montanus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3638	Breeds elsewhere
Northern Harrier Circus hudsonius This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Nuttall's Woodpecker Dryobates nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Santa Barbara Song Sparrow Melospiza melodia graminea This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5513	Breeds Mar 1 to Sep 5

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Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe Aechmophorus occidentalis — Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

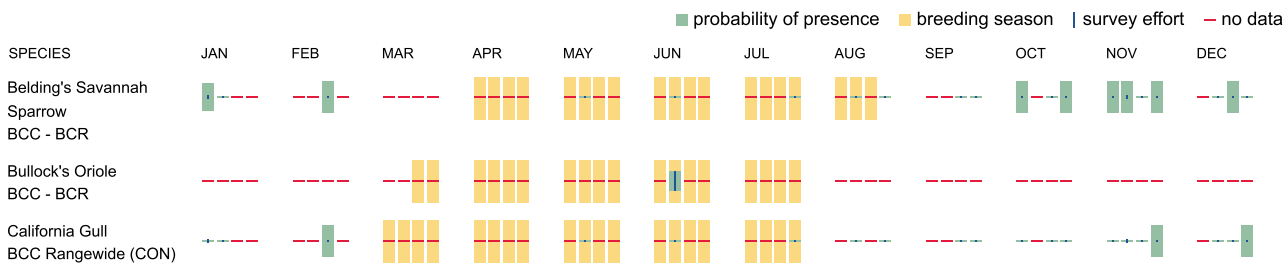
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

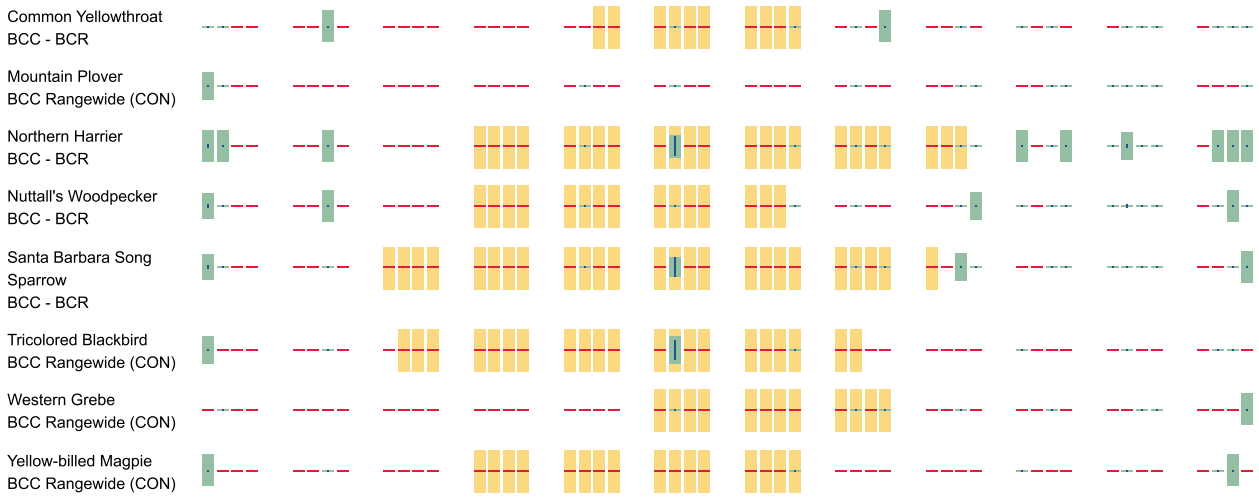
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



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Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

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3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

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Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND
- PEM1Kx
- PEM1A
- PEM1Cx

FRESHWATER FORESTED/SHRUB WETLAND
- PFOCx
- PFOA

RIVERINE
- R4SBCx
- R5UBFx
- R4SBC
- R5UBF

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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APPENDIX B

Notice of Preparation and Comment Letters

City of Atwater

PLANNING DEPARTMENT
1350 BROADWAY
ATWATER, CA 95301
(209) 357-6367

NOTICE OF PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING FOR BERT CRANE WASTEWATER TREATMENT PLANT DISCHARGE IMPROVEMENTS PROJECT

Date:	January 9, 2026
To:	Responsible or Trustee Agencies and interested members of the public.
Subject:	Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting for the Bert Crane Wastewater Treatment Plant Discharge Improvements Project
Comment Period:	January 9, 2026, to February 8, 2026
Scoping Meeting:	Thursday, January 22, 2026, from 5:30 to 6:30 pm (Virtual)
Project Title:	Bert Crane Wastewater Treatment Plant Discharge Improvements Project
Project Proponent:	City of Atwater

Purpose of Notice

The City of Atwater ("City") is proposing to undertake the Bert Crane Wastewater Treatment Plant Discharge Improvements Project ("Project"). In its capacity as Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (Title 14, California Code of Regulations, Section 15000 et seq.), the City has determined that preparation of an Environmental Impact Report (EIR) is required to evaluate the potential environmental effects of the Project. This Notice of Preparation (NOP) has been prepared in accordance with CEQA Guidelines Sections 15082(a) and 15375.

Public Review Period

The City requests that responsible or trustee agencies and interested members of the public respond to this NOP within the 30-day review period, from **January 9, 2026, to February 8, 2026, at 5 pm**. Comments should be provided in writing to:

Justin Vinson, Public Works Director
City of Atwater
1350 Broadway, Atwater, CA 95301
jvinson@atwater.org

In accordance with CEQA Guidelines Section 15082, responses must provide specific details about the scope and content of the environmental information related to the responsible or trustee agency's area of statutory responsibility. At a minimum, identify the significant environmental issues and reasonable alternatives and mitigation measures that the responsible or trustee agency will need to have explored in the Draft EIR, and whether the agency will be a responsible or trustee agency for the project.

Scoping Meeting

The City will hold a Scoping Meeting in accordance with CEQA Guidelines Section 15082 to present information regarding the Project and the CEQA process, and to receive public comments regarding the scope and content of the Draft EIR. The date, time, and location of the Scoping Meeting are:

Thursday, January 22, 2026

5:30 pm to 6:30 pm

Virtual by Zoom:

- URL: https://us06web.zoom.us/j/86525871107
- Meeting ID: 865 2587 1107
- Call In: +1 (669) 444-9171

Verbal and written comments regarding the scope of the Draft EIR will be accepted at the Scoping Meeting.

Should you require special accommodations at the Scoping Meeting, please contact Justin Vinson at jvinson@atwater.org or (209) 777-0273 no later than January 14, 2026.

Project Location

The Project site is generally located north of Bear Creek, south of Applegate Road, and east of South Bert Crane Road, in Atwater, CA 95301. The Project site includes portions of six (6) parcels, totaling approximately 7.67 acres, and identified by the Merced County Assessor as Assessor's Parcel Numbers (APNs) 056-200-026, 056-200-011, 056-200-021, 056-200-024, 065-020-012, and 056-200-002. The site also includes approximately 3,390 feet of South Bert Crane Road right-of-way (ROW).

Project Description

In order to meet Sustainable Groundwater Management Act (SGMA) groundwater recharge requirements, the City of Atwater intends to construct improvements to discharge its treated effluent to the Merced Irrigation District (MID) via Black Rascal Creek or Bear Creek. These improvements would connect into the existing force main with a tee fitting and automatic actuated butterfly valves integrated into the City's SCADA system. The improvements would allow the City to redirect effluent flows to the Gallo Ranch, the creeks, or both.

A Discharge Study was prepared to evaluate three (3) alternatives for future improvements for discharge into either Black Rascal Creek or Bear Creek: Alternative 1 – Bert Crane Road Alignment, Alternative 2 – South WWTP Alignment, and Alternative 3 – Deckert Lateral Alignment. The Environmental Impact Report will evaluate the potential environmental impacts of all three (3) proposed alternatives.

- Alternative 1 would include construction of 4,400 linear feet of 18-inch pipeline, traffic control, and flow diversion and dewatering. A new outfall structure into Bear Creek would be constructed.
- Alternative 2 would include construction of 4,300 linear feet of 18-inch pipeline and flow diversion and dewatering. A new outfall structure into Black Rascal Creek would be constructed
- Alternative 3 would include connection to the existing Deckert Lateral culvert, construction of 5,400 linear feet of 18-inch pipeline, increases to MIDs Deckert Lateral capacity, replacing the existing MID outfall structure to Black Rascal Creek, and traffic control.

Potential Environmental Impacts

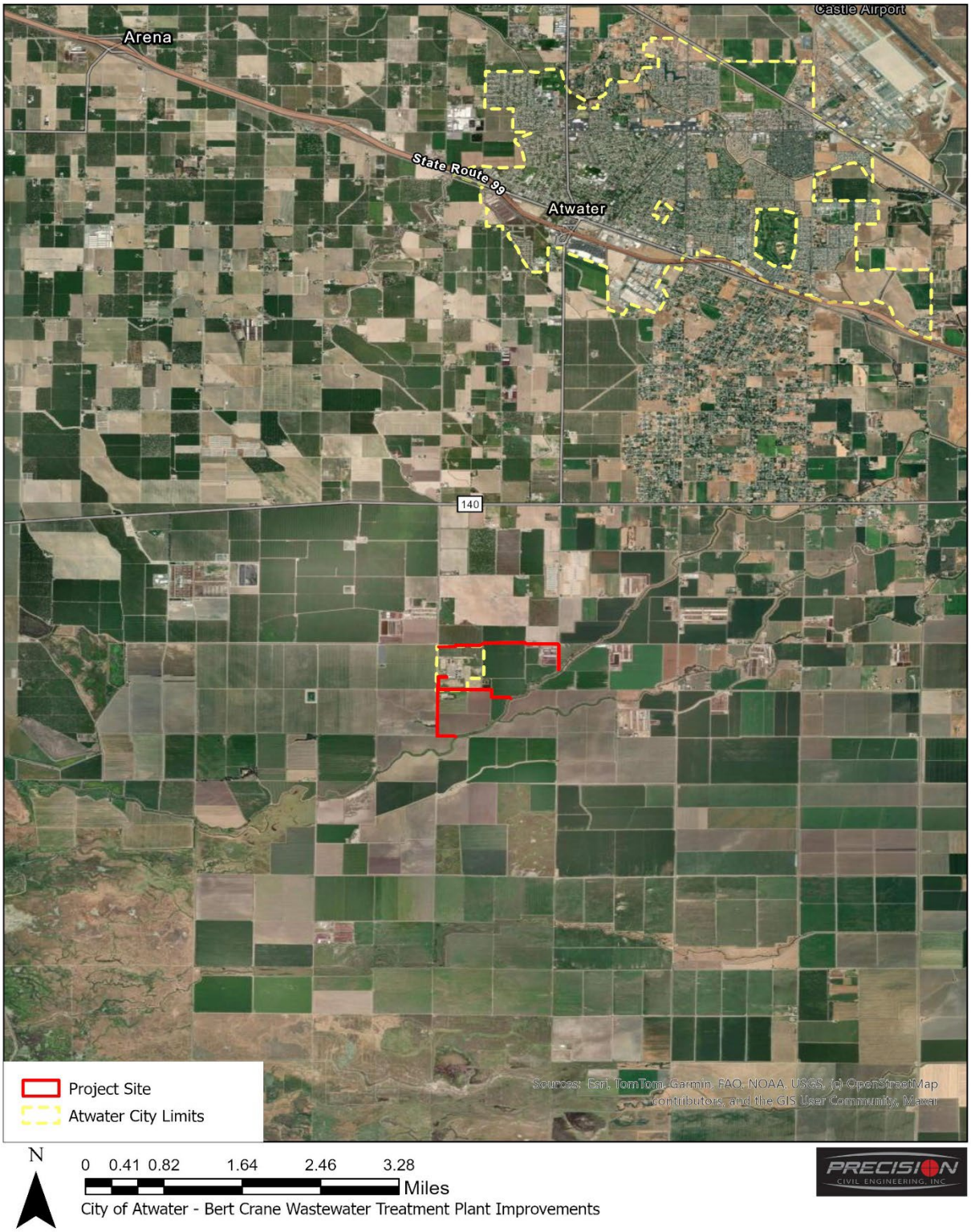
Pursuant to Section 15063 of CEQA Guidelines, an Initial Study was prepared for preliminary review of the project to determine significant effects on the environment. Through the Initial Study, it was determined that the following impact areas would not have the potential to result in a significant impact:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems
- Tribal Cultural Resources
- Wildfire

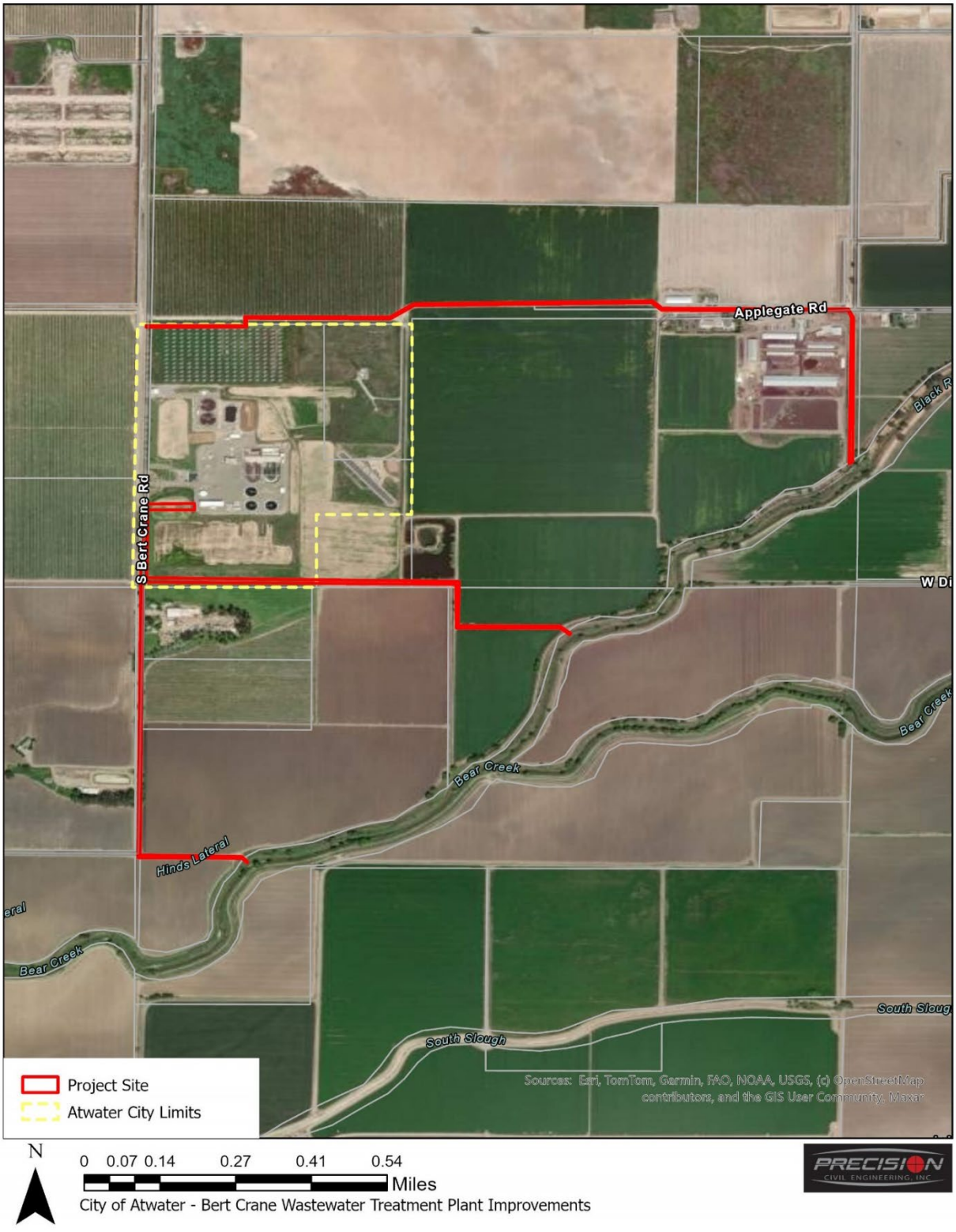
As Lead Agency, the City has concluded there is substantial evidence that the Project may result in significant impacts to Biological Resources, Cultural Resources, Geology and Soils, and Hydrology and Water Quality, necessitating preparation of an Environmental Impact Report (EIR).

The Initial Study, which provides the supporting analysis for these determinations, is available upon request. Responsible agencies and the public are invited to comment on the proposed EIR scope, including any additional issues that should be addressed.

Attachment A. Project Location



Attachment B. Project Vicinity



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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
VALERIE TERMINI, Acting Director

February 9, 2026

Justin Vinson
Public Works Director
City of Atwater
1350 Broadway
Atwater, California 95301
jvinson@atwater.org

Subject: Bert Crane Wastewater Treatment Plant Discharge Improvements Project (Project)
Notice of Preparation (NOP)
State Clearinghouse No. 2026010223

Dear Justin Vinson:

The California Department of Fish and Wildlife (CDFW) received a NOP for an Environmental Impact Report (EIR) from the City of Atwater (City) as Lead Agency for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs, and nests include section 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), section 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and section 3513 (regarding unlawful take of any migratory nongame bird).

Other Special-Status Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened on any State or federal list pursuant to CESA and/or the federal Endangered Species Act (ESA) to be considered Endangered, Rare, or Threatened under CEQA. If a species can be shown to meet the criteria specified in the CEQA Guidelines (Cal. Code Regs., tit. 14, Chapter 3, § 15380), it should be fully considered in the environmental analysis for the Project.

Water Rights: Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater, the City as owner of the wastewater treatment plant shall obtain approval of the State Water Resources Control Board (SWRCB) pursuant to Water Code Section 1211. The City as petitioner must provide a copy of the complete petition and request consultation with CDFW regarding the potential effects of the proposed change(s) on water quality, fish, wildlife, and other instream beneficial uses (Cal. Code Regs., tit. 23, § 794).

As Trustee Agency, CDFW is consulted by the SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Given the potential for impacts to special-status species and their habitats, it is advised that details be disclosed during the CEQA process and that required consultation with CDFW occur well in advance of any SWRCB water right application process.

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PROJECT DESCRIPTION SUMMARY

Proponent: City of Atwater

Description and Objective: In order to meet Sustainable Groundwater Management Act (SGMA) groundwater recharge requirements, the City intends to construct improvements to discharge its treated effluent to the Merced Irrigation District (MeID) via Black Rascal Creek or Bear Creek. The improvements would allow the City to redirect effluent flows to the Gallo Ranch, the creeks, or both.

Alternative 1 would include construction of 4,400 linear feet of 18-inch pipeline and flow diversion and dewatering. A new outfall structure into Bear Creek would be constructed.

Alternative 2 would include construction of 4,300 linear feet of 18-inch pipeline and flow diversion and dewatering. A new outfall structure into Black Rascal Creek would be constructed.

Alternative 3 would include connection to the existing Deckert Lateral culvert, construction of 5,400 linear feet of 18-inch pipeline, increases to MeID's Deckert Lateral capacity, replacing the existing MeID outfall structure to Black Rascal Creek.

Timeframe: Unspecified

Location: The Project site is generally located north of Bear Creek, south of Applegate Road, and east of South Bert Crane Road in the City of Atwater. The Project site includes portions of six parcels, totaling approximately 7.67 acres, and identified by the Merced County Assessor as Assessor's Parcel Numbers (APNs) 056-200-026, 056-200-011, 056-200-021, 056-200-024, 065-020-012, and 056-200-002. The site also includes approximately 3,390 feet of South Bert Crane Road right-of-way (ROW).

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant or potentially significant direct and indirect impacts on fish and wildlife (biological) resources. Based on a review of aerial imagery, the Project description, and a review of California Natural Diversity Database (CNDDB) records, several special-status species and habitat types could potentially be impacted by Project activities. Project-related construction, diversion, and re-diversion for related groundwater recharge projects could impact the following special-status plant and wildlife species and habitats known to occur: the State and federally threatened California tiger salamander – central California Distinct Population Segment (DPS) (*Ambystoma californiense* pop. 1); the State threatened tricolored blackbird (*Agelaius tricolor*) and Swainson's hawk (*Buteo swainsoni*); the State

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candidate for listing western burrowing owl (*Athene cunicularia hypugaea*) and Crotch's bumble bee (*Bombus crotchii*); the State species of special concern (SSC) and federally threatened steelhead – Central Valley DPS (*Oncorhynchus mykiss irideus* pop. 11); the SSC and federally proposed threatened western spadefoot (*Spea hammondii*) and northwestern pond turtle (*Actinemys marmorata*); the SSC chinook salmon – Central Valley fall / late-fall run Evolutionary Significant Unit (ESU) (*Oncorhynchus tshawytscha* pop 13), American badger (*Taxidea taxus*), western red bat (*Lasiurus frantzii*), *Northern* California legless lizard (*Anniella pulchra*), and hardhead (*Mylopharodon conocephalus*).

Vegetation communities and habitats in the Project vicinity include irrigated row and field crops, ruderal disturbed areas, and barren unvegetated areas including levee roads. Aquatic features in and near the Project site include the South Slough, Bear and Black Rascal Creeks, other ephemeral streams and channels, and associated riparian and fresh emergent wetlands, agricultural ditches and canals, and ponding basins.

Comment 1: California Tiger Salamander (CTS)
CTS breed and develop in vernal and seasonal pools and stock ponds in grassland, woodland, and scrub habitat types. They require upland refuges (i.e., small mammal burrows) when not breeding. CDFW recommends that a qualified wildlife biologist assess the Project site and vicinity (i.e., up to 1.3 miles, observed CTS dispersal distance) that contains potentially suitable habitat, to evaluate potential for CTS in support of the EIR. CDFW recommends site assessments follow the United States Fish and Wildlife Service's (USFWS) *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (2003). CDFW recommends the qualified biologist determine the impacts of Project-related activities to all CTS upland and breeding habitat within and/or adjacent to the construction footprint. Because both upland burrow refugia and breeding wetland habitat features suitable for use by CTS are likely present within and/or adjacent to the Project construction footprint, CDFW advises avoidance for CTS include a minimum 50-foot no-disturbance buffer be delineated around all small mammal burrows. If burrow avoidance is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization through the acquisition of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA. In addition, CDFW recommends that the CEQA document quantify and describe the direct and indirect potential impacts to CTS habitat and outline specific proposed mitigation measures to reduce impacts to less than significant.

Comment 2: Tricolored Blackbird (TRBL)
The Project site is within the known geographic range of TRBL, and occurrence was documented within 1.0 mile from the Project site (CDFW 2026). TRBL breed within the vicinity of fresh water, primarily in marshy areas. Important sites for nesting colonies include heavy growths of cattails, tules, thistles, willows, blackberries, and tall herbs

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(Grinnell and Miller 1944). TRBL are also known to breed and forage in low agricultural crop fields, and these fields are becoming an increasingly important nesting habitat type (Beedy et al. 2023). Based on aerial imagery, the Project site may provide suitable habitat for TRBL nesting and foraging, particularly if the agricultural irrigation ponds, canals, sloughs, creeks, or other aquatic features provide sufficient emergent vegetation.

As TRBL have the potential to use the Project site and have been documented within close proximity to the Project, CDFW recommends that a qualified biologist conduct a habitat assessment as part of the biological technical studies conducted in support of the EIR. If potentially suitable habitat is identified, consultation with CDFW is recommended for guidance on focused survey methods and mitigation measures such as avoidance, take authorization, and mitigation. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Comment 3: Swainson's Hawk (SWHA)
The Project site is within the known geographic range of Swainson's hawk (SWHA) and occurrences are documented within three and five miles of the Project site (CDFW 2026). SWHA are known to breed within the Central Valley of California and prefer to nest near and forage in alfalfa, fallow fields, field crops, and grassland habitats with a sufficient source of small mammals (CDFG 1994). Based on aerial imagery, the Project appears to have suitable perching and nesting trees along Bear and Black Rascal Creeks and nearby roadways, and the Project site is near suitable habitat for SWHA foraging. Therefore, CDFW recommends that a qualified biologist conduct surveys for nesting SWHA following the entire survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) as part of the biological technical studies conducted in support of the DEIR. If surveys indicate the presence or potential presence of SWHA within ½ mile of the Project site and SWHA cannot be avoided during the nesting season, or SWHA presence is assumed, consultation with the CDFW is recommended for guidance on the development of mitigation measures for the DEIR, such as take avoidance, minimization, and mitigation. If take cannot be avoided, take authorization is necessary to comply with CESA through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

Comment 4: Western Burrowing Owl (BUOW)
The California Fish and Game Commission (Commission) approved BUOW as a candidate for potential listing as a protected species under CESA on October 10, 2024, and published these findings in the California Regulatory Notice Register on October 25, 2024. As such, burrowing owl is now a candidate under CESA and receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085).

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Due to the change in the status of the species, CDFW recommends the EIR incorporate mitigation measures to reflect the candidacy. BUOW have been documented to occur near the Project site (CDFW 2026). BUOW inhabit open grassland or adjacent canal banks, rights-of-way, vacant lots, and other landscape features containing small mammal burrows, a requisite habitat feature for nesting and cover. BUOW rely on burrow habitat year-round for their survival and reproduction. Based on aerial photography, potential habitat occurs both within and bordering the Project site.

CDFW recommends that a qualified biologist conduct a habitat assessment for BUOW, for a biological study report to be included with the EIR. In areas of suitable habitat, CDFW recommends that the EIR require surveys for BUOW by a qualified biologist following the *Burrowing Owl Survey Protocol and Mitigation Guidelines* and CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). If BUOW are detected, or if the Project-proponent chooses to assume presence during Project implementation, consultation with CDFW is recommended for guidance on the development of mitigation measures such as avoidance, take authorization, minimization, and mitigation. If take cannot be avoided, take authorization through the acquisition of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081, subdivision (b) is necessary to comply with CESA.

Comment 5: Crotch's Bumble Bee (CBB)
CBB has been documented within the vicinity of the Project site (CDFW 2026). The species is known to inhabit areas of grasslands and scrub that contain requisite habitat elements for nesting, such as small mammal burrows and bunch or thatched grasses. Based on aerial imagery, the Project appears to contain habitat suitable to support CBB.

CDFW recommends that a qualified biologist conduct a habitat assessment for CBB for a biological study report to be included with the EIR. Foraging resources and potential nesting sites, which include all small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs are advised to be documented as part of the assessment. In areas of suitable habitat, CDFW recommends that the EIR require a qualified biologist to conduct a bumble bee survey according to the CDFW (2023) *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species*, to identify bumble bees and potential nesting sites during the vegetation blooming period prior to activities at Project sites. If any CBB or a nest are detected, it is recommended that the EIR require consultation with CDFW occur to develop adequate take avoidance measures, including protection for underground overwintering queens if a nest is observed at any time. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081, subdivision (b), is necessary to comply with CESA.

Comment 6: Northwestern Pond Turtle (NWPT)
NWPT occurs within the vicinity of the Project site (CDFW 2026) and a review of aerial imagery of the area shows habitats that NWPT can utilize for nesting, overwintering,

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dispersal, and basking, including streams, ponded areas, irrigation canals, and riparian and upland habitats. NWPT are known to nest in the spring or early summer within 100 meters of a water body, although nest sites as far away as 500 meters have also been reported (Thomson et al. 2016). Noise, vegetation removal, movement of workers, construction and ground disturbance as a result of Project activities have the potential to significantly impact NWPT populations. Without appropriate avoidance and minimization measures for NWPT, potentially significant impacts associated with Project activities could include nest reduction, inadvertent entrapment, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality.

CDFW recommends that a qualified biologist conduct a habitat assessment for NWPT for a biological report to be included in the EIR. CDFW also recommends that the EIR require a qualified biologist to conduct focused surveys in suitable habitat for NWPT within 10 days prior to Project activity, and that focused surveys for nests occur during the egg-laying season of March through August.

CDFW recommends that the EIR require that any NWPT nests that are discovered remain undisturbed with a no-disturbance buffer maintained around the nest until the eggs have hatched and neonates are no longer in the nest or Project site. If western pond turtle individuals, including neonates at the nest, are discovered at the site during surveys or Project activities, CDFW recommends that they be allowed to move out of the area of their own volition without disturbance.

Comment 7: Western Spadefoot (WESP)
WESP is known to occur within the vicinity of the Project site (CDFW 2026), using ephemerally ponded water associated with seasonal flooding and rainfall to breed, as well as the associated upland habitats outside of the breeding season. WESP inhabit grassland habitats, breed in seasonal wetlands, and seek refuge in upland habitat where they occupy burrows outside of the breeding season (Thomson et al. 2016). Any depressional features in the Project site footprint may support breeding WESP and the adjacent areas may provide upland refugia. CDFW recommends that a qualified biologist conduct a habitat assessment for spadefoot for a biological study report to be included with the EIR. In areas of suitable habitat, CDFW recommends that the EIR require a qualified biologist to conduct focused surveys for WESP and their requisite habitat features prior to Project construction.

If burrows, cracks, loose soil areas or other refugia are found to be used by WESP during focused surveys, CDFW recommends avoidance whenever possible via delineation and observance of a 50-foot no-disturbance buffer around these resources, including all potential breeding habitat, which can include agricultural sumps and irrigation ditches in addition to any areas that pool water for only a few weeks. CDFW also recommends avoidance of potential breeding habitat even when dry, since post-metamorphic WESP juveniles have a unique adaptation to the drying of their temporary breeding pools; they utilize the dried pond bottom as a refuge, burying themselves in

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the dessication cracks and damp soil beneath the surface crust (Baumberger et al., 2020). If any lifestage of WESP are observed on the Project site, Project activities in their immediate vicinity should cease, allowing individuals to leave the Project site on their own accord.

On September 24, 2025, the Commission received a petition to list the northern population of WESP as threatened species and the southern population of WESP as an endangered species under CESA. If the Commission takes action and WESP becomes listed as a Candidate for listing pursuant to CESA (possible in 2026), or ultimately becomes listed as threatened or endangered pursuant to CESA, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081, subdivision (b), is necessary to comply with CESA if full avoidance of WESP could not be achieved. Please note that implementation of the above recommended measures would help minimize impacts to WESP as required by CEQA, but would not fully avoid impacts and thus take; additional measures would need to be implemented to avoid take of WESP. In the event that WESP becomes protected under CESA, CDFW recommends early consultation to help identify if avoidance is feasible or if not, to initiate discussions regarding the need for ITP acquisition.

Comment 8: Status Bat Species
Special status bat species including, but not limited to, the pallid bat, western mastiff, and western red bat are known to occur in the vicinity of the Project site. Known roosting habitats include mines, caves, rocky outcrops, bridges, trees, and buildings that provide the required localized climatic conditions and surrounding foraging opportunities needed. In some cases, multiple bat species can co-occur in roosts, and they may have similar life histories, although it is important to note that in many instances bat species do not have the same habitat requirements and life histories. For instance, migratory patterns and winter roosts can vary significantly from species to species.

To minimize potential Project-related impacts to special status bat species, CDFW recommends that if any of the above listed roosting habitat elements are located within the Project site that a reconnaissance survey be conducted by a qualified wildlife biologist to determine if bats are currently or could utilize the potential roosting habitat onsite. If a potential roosting site is confirmed to support bat species within 100 feet of ground disturbing activities, CDFW recommends the project proponent conduct focused surveys to establish species usage and seasonal usage. Focused survey methodology is advised to include visual surveys of bats (observation of presence of bats during foraging period), inspection for suitable habitat or bat sign (guano), and use of ultrasonic detectors (Anabat, Sonobat, etc.) during all dusk emergence and pre-dawn re-entry. To maximize detectability, each survey needs to be conducted within one 24-hour period.

If bats are found to occupy the Project site, CDFW recommends the Project proponent implement general bat avoidance, minimization and mitigation measures, including but are not limited to, establishing a 100-foot no-disturbance buffer around roost sites and

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installing new roost sites to be in place prior to the initiation of Project related activities to allow enough time for bats to relocate.

Comment 9: American Badger and Northern Legless Lizard
The Project site is within the known geographic range of American badger and Northern legless lizard and suitable habitat may be present (CDFW 2026). CDFW recommends that a qualified biologist conduct a habitat assessment for these species, for a biological study report to include with the EIR. If potential habitat is present, CDFW recommends that the EIR direct a qualified biologist to conduct focused surveys for the species and its requisite habitat features to evaluate potential Project impacts, and describe avoidance, minimization, and mitigation as warranted to address potentially significant impacts.

Comment 10: Wetland and Riparian Habitats
Riparian and wetland natural communities along Bear Creek, Black-Rascal Creek, and other aquatic features on the Project site provide many essential benefits to terrestrial, avian and aquatic species, including, but not limited to thermal protection, cool water refugia, cover, large woody debris, foraging areas, breeding and rearing sites, habitat and connectivity corridors, as well as buffers to sedimentation and runoff from adjacent land uses. Direct and indirect impacts into these habitat types can adversely impact sensitive species including but not limited to steelhead and chinook salmon, WESP, NWPT, TRBL, and CTS. CDFW recommends delineating and implementing an adequate avoidance buffer to protect wetlands, riparian vegetation, and associated wildlife, including State- and federally listed species. In addition, CDFW recommends identifying and analyzing impacts to all aquatic features, including those that have no riparian vegetation, in order to avoid impacts where feasible and to identify impacts to be mitigated.

CDFW recommends that the potential direct and indirect impacts to riparian and wetland habitat be analyzed according to each Project activity. Based on those potential impacts, CDFW recommends that the EIR include measures to avoid, minimize, and/or mitigate those impacts. CDFW recommends that impacts to riparian habitat (i.e., biotic and abiotic/nonvegetative features) take into account the effects to stream function and hydrology from riparian habitat loss or damage, as well as potential effects from the loss of riparian habitat to special-status species already identified herein.

EDITORIAL COMMENTS AND/OR SUGGESTIONS

Water Rights: The Project proposes discharges to MeID via Bear Creek or Black Rascal Creek for the purpose of meeting groundwater recharge requirements. CDFW recommends that the EIR discuss whether the Project will result in diversion of treated wastewater from creeks or streams for the purpose of groundwater recharge or other projects and include a detailed description of the water rights and water entitlements for points of diversion and re-diversion and places of use that pertain to the Project,

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including any applications or change petitions that may be filed to transfer or re-divert treated wastewater.

If new water allocation would occur, including transfer or re-diversion to groundwater recharge, CDFW recommends the EIR include analysis of the impacts of diverting currently unallocated flows, including such details for the point(s) of diversion as a hydrologic study, water availability analysis, and other information that identifies and analyzes the impacts to aquatic ecosystems and fish and wildlife resources.

Regarding the diversion of treated wastewater into Bear or Black Rascal Creeks, CDFW recommends that the EIR address whether the City will be filing a change petition or a new application for these diversions. As stated previously, CDFW, as Trustee Agency, is consulted by the SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Given the potential for impacts to sensitive species and their habitats, it is advised that required consultation with CDFW occur well in advance of the SWRCB water right application process.

Fisheries Impacts: CDFW staff have documented evidence of salmon migration and spawning activity in Bear Creek upstream of the Project site (Kollmar 2024). Given that the Project will result in year-round discharge that changes the downstream flow and considering the proximity to the confluence of Bear Creek with the San Joaquin River, the Project may produce a false-attraction cue for salmon resulting in straying into potentially unsuitable habitat, depending on how far downstream flows will be impacted. CDFW recommends the EIR include a detailed analysis of impact to downstream flows and resulting impact to fisheries, including salmonids.

Sustainable Groundwater Management Act (SGMA) and Groundwater Dependent Ecosystems: A Groundwater Sustainability Plan was prepared by the Merced Subbasin Groundwater Sustainability Agency (GSA), Merced Irrigation-Urban GSA, and Turner Island Water District GSA for the Merced Subbasin (Subbasin No. 5-022.04 of the San Joaquin Valley Groundwater Basin) which is designated a high priority Subbasin by the Department of Water Resources (DWR). The Groundwater Sustainability Plan for the Merced Subbasin was approved by DWR on August 4, 2023. The SGMA defines sustainable groundwater management as, "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results (Water Code, § 10721 (v))." Significant and undesirable results that may result from Project related activities include chronic lowering of groundwater levels, reduction of groundwater storage, degraded water quality, land subsidence, depletions of interconnected surface water that have an adverse impact on beneficial uses of surface water. Any of these undesirable results may have adverse impacts to groundwater dependent ecosystems. CDFW recommends that the EIR include an analysis of Project-related activities in relation to

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the Merced Subbasin Groundwater Sustainability Plan, including analysis of potential undesirable results and adverse impacts to groundwater dependent ecosystems including the biological resources listed above.

Cumulative Impacts: Although the NOP noted that construction would result in localized disturbance to the streambed, banks, and associated riparian habitat, the NOP does not consider cumulative impacts from future diversions for groundwater recharge. Project-related diversions may impact riparian, wetland, fisheries, and terrestrial (i.e., upland) wildlife species and habitats downstream by reducing the amount of surface flow in the active stream channel at the discharge location and downstream, as well as reducing the amount of subsurface flow from percolation. Watershed and habitat protection are vital to CDFW's management of California's diverse fish, wildlife, and plant resources.

The Project could result in indirect, direct, and cumulative adverse impacts to these fish and wildlife and other public trust resources. CDFW recommends that the EIR include: 1) an analysis of the proposed acquisition of surface water and any potential direct, indirect, and cumulative biological impacts to fish and wildlife species and their habitats; and 2) a hydrologic study to determine if the production of the watershed is sufficient to reduce the discharge flows, as proposed, without having significant adverse impacts to riparian and aquatic resources of watershed downstream, including the establishment of invasive nonnative plant species and change in habitats.

In addition to cumulative impacts analysis for surface water diversion, CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those which impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining condition and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). CDFW recommends that cumulative impacts be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects specifically on biological resources. Development of an appropriate resource study area identified and utilized for this analysis is advised.

Lake and Streambed Alteration: CDFW recommends that the EIR include mapping of all stream and associated wetland resources within the Project site and surrounding area with a description of the methodology used in determining the extent of all streams within this area. Activities that are subject to CDFW's authority pursuant to Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the

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removal of riparian vegetation): (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. “Any river, stream, or lake” includes those that are ephemeral, intermittent, or episodic, as well as those that are perennial, regardless of the duration, frequency, or volume of flow.

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement; therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for a Lake or Streambed Alteration Agreement issuance. For information on notification requirements, please refer to CDFW’s website (https://wildlife.ca.gov/Conservation/LSA) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593 or R4LSA@wildlife.ca.gov.

California Natural Diversity Database (CNDDB): Please note that the CNDDB is populated by and records voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDB, but where there is suitable habitat and features capable of supporting species. A lack of an occurrence record in the CNDDB does not mean that a species is not present. In order to adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified biologist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted in order to determine whether or not any special-status species are present.

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed or proposed listed species, including but not limited to WESP and NWPT. Take under the Endangered Species Act (ESA) is more broadly defined than CESA; take under the ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with the ESA is advised well in advance of any ground-disturbing activities.

Nesting birds: CDFW encourages that Project implementation occur outside the bird nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season of February through mid-September, the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced in this letter.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that

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surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e. nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database. The CNDDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

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CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the City in identifying and mitigating Project impacts to biological resources. More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/Survey-Protocols). If you have any questions, please contact Annette Tenneboe, Senior Environmental Scientist (Specialist), at (559) 580-3202 or Annette.Tenneboe@wildlife.ca.gov.

Sincerely,

DocuSigned by:
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FA83F09FE08945A...

Julie A. Vance
Regional Manager

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January 12, 2026

Justin Vinson
City of Atwater
1350 Broadway
Atwater CA 95301

Re: 2026010223 Bert Crane Wastewater Treatment Plant Discharge Improvements Project, Merced County

Dear Mr. Vinson:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

a. A brief description of the project.

b. The lead agency contact information.

c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).

d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

a. Alternatives to the project.

b. Recommended mitigation measures.

c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

a. Type of environmental review necessary.

b. Significance of the tribal cultural resources.

c. Significance of the project's impacts on tribal cultural resources.

d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Mathew.Lin@NAHC.ca.gov.

Sincerely,

Mathew Lin

Mathew Lin
Cultural Resources Analyst

cc: State Clearinghouse

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

January 16, 2026

Justin Vinson
City of Atwater
Public Works
1350 Broadway
Atwater, CA, 95301

Project: Notice of Preparation of a Draft Environmental Impact Report for the Bert Crane Wastewater Treatment Plant Discharge Improvements

District CEQA Reference No: 20260031

Dear Mr. Vinson:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the City of Atwater (City) for the Bert Crane Wastewater Treatment Plant Discharge Improvements project. Per the NOP, the project consists of improvements to discharge treated wastewater to the Merced Irrigation District by Black Rascal Creek or Bear Creek (Project). The improvements include the installation of a 42-inch × 42-inch × 18-inch tee, a 42-inch and an 18-inch automatic actuated butterfly valve, an air relief valve, and an 18-inch magnetic flow meter, as well as construction of a pump station, installation of a power source with connection to the City SCADA system, and construction of an outfall structure equipped with a flap valve. The Project is located north of Bear Creek, south of Applegate Road, and east of South Bert Crane Road, in Atwater, CA.

The District offers the following comments at this time regarding the Project:

1) Project Related Emissions

Based on information provided to the District, Project specific annual criteria pollutant emissions from construction and operation are not expected to exceed any of the significance thresholds as identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI): https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

Samir Sheikh
Executive Director/Air Pollution Control Officer

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1a) Construction Emissions

The District recommends, to reduce impacts from construction-related diesel exhaust emissions, the Project should utilize the cleanest available off-road construction equipment.

2) Health Risk Screening/Assessment

The City should evaluate the risk associated with the Project for sensitive receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) in the area and mitigate any potentially significant risk to help limit exposure of sensitive receptors to emissions.

To determine potential health impacts on surrounding receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) a Prioritization and/or a Health Risk Assessment (HRA) should be performed for the Project. These health risk determinations should quantify and characterize potential Toxic Air Contaminants (TACs) identified by the Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA/CARB) that pose a present or potential hazard to human health.

Health risk analyses should include all potential air emissions from the project, which include emissions from construction of the project, including multi-year construction, as well as ongoing operational activities of the project. Note, two common sources of TACs can be attributed to diesel exhaust emitted from heavy-duty off-road earth moving equipment during construction, and from ongoing operation of heavy-duty on-road trucks.

Prioritization (Screening Health Risk Assessment):
A “Prioritization” is the recommended method for a conservative screening-level health risk assessment. The Prioritization should be performed using the California Air Pollution Control Officers Association’s (CAPCOA) methodology. Please contact the District for assistance with performing a Prioritization analysis.

The District recommends that a more refined analysis, in the form of an HRA, be performed for any project resulting in a Prioritization score of 10 or greater. This is because the prioritization results are a conservative health risk representation, while the detailed HRA provides a more accurate health risk evaluation.

Health Risk Assessment:
Prior to performing an HRA, it is strongly recommended that land use agencies/ project proponents develop and submit for District review a health risk modeling protocol that outlines the sources and methodologies that will be used to perform the HRA.

A development project would be considered to have a potentially significant health risk if the HRA demonstrates that the health impacts would exceed the District's established risk thresholds, which can be found here: https://ww2.valleyair.org/permitting/ceqa/.

A project with a significant health risk would trigger all feasible mitigation measures. The District strongly recommends that development projects that result in a significant health risk not be approved by the land use agency.

The District is available to review HRA protocols and analyses. For HRA submittals please provide the following information electronically to the District for review:

- HRA (AERMOD) modeling files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodologies.

For assistance, please contact the District's Technical Services Department by:

- E-Mailing inquiries to: hramodeler@valleyair.org
- Calling (559) 230-5900

Recommended Measure: Development projects resulting in TAC emissions should be located an adequate distance from residential areas and other sensitive receptors to prevent the creation of a significant health risk in accordance to CARB's Air Quality and Land Use Handbook: A Community Health Perspective located at https://ww2.arb.ca.gov/our-work/programs/resource-center/strategy-development/land-use-resources.

3) Ambient Air Quality Analysis

An Ambient Air Quality Analysis (AAQA) uses air dispersion modeling to determine if emissions increases from a project will cause or contribute to a violation of State or National Ambient Air Quality Standards. The District recommends an AAQA be performed for the Project if emissions exceed 100 pounds per day of any pollutant.

An AAQA uses air dispersion modeling to determine if emission increase from a project will cause or contribute to a violation of State or National Ambien Air Quality Standards. An acceptable analysis would include emissions from both project-specific permitted and non-permitted equipment and activities. The District recommends consultation with District staff to determine the appropriate model and input data to use in the analysis.

Specific information for assessing significance, including screening tools and modeling guidance, is available online at the District's website: https://ww2.valleyair.org/permitting/ceqa/.

4) Vegetative Barriers and Urban Greening

There is a residential unit located south of the Project. The District suggests the City consider the feasibility of incorporating vegetative barriers and urban greening as a measure to further reduce air pollution exposure on sensitive receptors (e.g., residential units).

While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, vegetative barriers have been shown to be an additional measure to potentially reduce a population's exposure to air pollution through the interception of airborne particles and the update of gaseous pollutants. Examples of vegetative barriers include, but are not limited to the following: trees, bushes, shrubs, or a mix of these. Generally, a higher and thicker vegetative barrier with full coverage will result in greater reductions in downwind pollutant concentrations. In the same manner, urban greening is also a way to help improve air quality and public health in addition to enhancing the overall beautification of a community with drought tolerant, low-maintenance greenery.

5) Nuisance Odors

While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among the public and often resulting in citizen complaints.

The City should consider all available pertinent information to determine if the Project could have a significant impact related to nuisance odors. Nuisance odors may be assessed qualitatively taking into consideration the proposed business or industry type and its potential to create odors, as well as proximity to off-site receptors that potentially would be exposed to objectionable odors. The intensity of an odor source's operations and its proximity to receptors influences the potential significance of malodorous emissions. Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact.

According to the District Guidance for Assessing and Mitigating air Quality Impacts (GAMAQI), a significant odor impact is defined as more than one confirmed complaint per year averaged over a three-year period, or three unconfirmed complaints per year averaged over a three-year period. An unconfirmed complaint means that either the odor or air contaminant release could not be detected, or the source of the odor could not be determined.

The District is available to assist the City with information regarding specific facilities and categories of facilities, and associated odor complaint records.

6) District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (209) 557-6446.

6a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. Prior to construction, the Project proponent should submit to the District an application for an ATC. For further information or assistance, the project proponent may contact the District's SBA Office at (209) 557-6446.

6b) District Rule 9510 - Indirect Source Review (ISR)

The Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 9,000 square feet of space.

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The ISR Rule requires developers to mitigate their NOx and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

Per Section 5.0 of the ISR Rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency. As of the date of this letter, the District has not received an AIA application for this Project. Please immediately submit an AIA application to the District to comply with District Rule 9510 so that proper mitigation and clean air design under ISR can be incorporated into the Project's design. One AIA application should be submitted for the entire Project.

Information about how to comply with District Rule 9510 can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview

The AIA application form can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview/forms-and-applications/

District staff is available to provide assistance with determining if the Project OR future development projects will be subject to Rule 9510, and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

6c) District Rule 4002 (National Emissions Standards for Hazardous Air Pollutants)

In the event an existing building will be renovated, partially demolished or removed, the Project may be subject to District Rule 4002. This rule requires a thorough inspection for asbestos to be conducted before any regulated facility is demolished or renovated. Information on how to comply with District Rule 4002 can be found online at: https://ww2.valleyair.org/compliance/demolition-renovation/

6d) District Rule 4601 (Architectural Coatings)

The Project may be subject to District Rule 4601 since it may utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings.

In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at: https://ww2.valleyair.org/media/tkgjeusd/rule-4601.pdf

6e) District Regulation VIII (Fugitive PM10 Prohibitions)

The project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities.*

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950.

The application for both the Construction Notification and Dust Control Plan can be found online at: https://ww2.valleyair.org/media/fm3jrbsq/dcp-form.docx

Information about District Regulation VIII can be found online at: https://ww2.valleyair.org/dustcontrol

6f) Other District Rules and Regulations

The Project may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

7) District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent.

If you have any questions or require further information, please contact Eric McLaughlin by e-mail at eric.mclaughlin@valleyair.org or by phone at (559) 230-5808.

Sincerely,

Mark Montelongo
Director of Policy and Government Affairs



For: Daniel Martinez
Program Manager

APPENDIX C

Initial Study

City of Atwater

Bert Crane Wastewater Treatment Plant Discharge Improvements Project

INITIAL STUDY

December 2025

Prepared for

City of Atwater
1350 Broadway
Atwater, CA 95301

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1 INTRODUCTION

Precision Civil Engineering, Inc. (PCE) has prepared this Initial Study/ Mitigated Negative Declaration (IS/MND) on behalf of the City of Atwater (City) to address the environmental effects of the proposed Bert Crane Wastewater Treatment Plant Discharge Improvements (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code *Section 21000 et. seq*. The City of Atwater is the Lead Agency for this proposed Project. The site and the proposed Project are described in detail in SECTION 2 ENVIRONMENTAL CHECKLIST FORM.

1.1 Regulatory Information

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, et seq.), also known as the CEQA Guidelines, *Section 15064 (a)(1)* states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels.

A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines *Section 15070*, a ND or mitigated ND shall be prepared for a project subject to CEQA when either:

a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or

b. The IS identified potentially significant effects, but:

> *1. Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed Mitigated Negative Declaration and Initial Study is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and*
>
> *2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.*

1.2 Document Format

This IS/MND contains five (5) chapters plus appendices. SECTION 1 INTRODUCTION provides bases of the IS/ND's regulatory information and an overview of the Project. SECTION 2 ENVIRONMENTAL CHECKLIST FORM provides a detailed description of Project components. SECTION 3 DETERMINATION concludes that the Initial Study is a negative declaration, identifies the environmental factors potentially affected based on the analyses contained in this IS, and includes with the Lead Agency's determination based upon those analyses. SECTION 4 EVALUATION OF ENVIRONMENTAL IMPACTS presents the CEQA checklist and environmental analyses for all impact areas and the mandatory findings of significance. A brief discussion of the reasons why the Project impact is anticipated to be potentially significant, less than significant with mitigation incorporated, less than significant, or why no impacts are expected is included. SECTION 5 MITIGATION MONITORING AND REPORTING PROGRAM presents the mitigation

measures recommended in the IS/MND for the Project. The CalEEMod Results, CNDDB Occurrence Report, CHRIS Search Record, and NAHC SLF Results Letter are provided as Appendix A, Appendix B, Appendix C, and Appendix D respectively, at the end of this document.

2 ENVIRONMENTAL CHECKLIST FORM

This section describes the components of the proposed Project in more detail, including project location, project objectives, and required project approvals.

2.1 Project Title

Bert Crane Wastewater Treatment Plant Discharge Improvements

2.2 Lead Agency Name and Address

City of Atwater
1350 Broadway
Atwater, CA 95301

2.3 Contact Person and Phone Number

Lead Agency Contact
City of Atwater
Chris Hoem, City Manager
(209) 357-6300
choem@atwater.org

Applicant Information
City of Atwater
1350 Broadway
Atwater, CA 95301

2.4 Study Prepared By

Precision Civil Engineering
1234 O Street
Fresno, CA 93721
(559) 449-4500

2.5 Project Location

The Project site in the jurisdiction of the City of Atwater (portion) and County of Merced (portion), California. The Project site is generally located north of Bear Creek, south of Applegate Road, and east of South Bert Crane Road, in Atwater, CA 95301, as shown in Figure 2-1. The Project site includes portions of six (6) parcels, totaling approximately 7.67 acres, and identified by the Merced County Assessor as Assessor's Parcel Numbers (APNs) 056-200-026, 056-200-011, 056-200-021, 056-200-024, 065-020-012, and 056-200-002. The site also includes approximately 3,390 feet of South Bert Crane Road right-of-way (ROW). Figure 2-2 shows the aerial image of the Project site. The Project site is a portion of Section 35, Township 7 South, Range 12 East, and a portion of Section 02, Township 8 South, Range 12 East, Mount Diablo Base and Meridian.

2.6 Latitude and Longitude

The centroid of the Project Area is 37.2730714, -120.6243030.

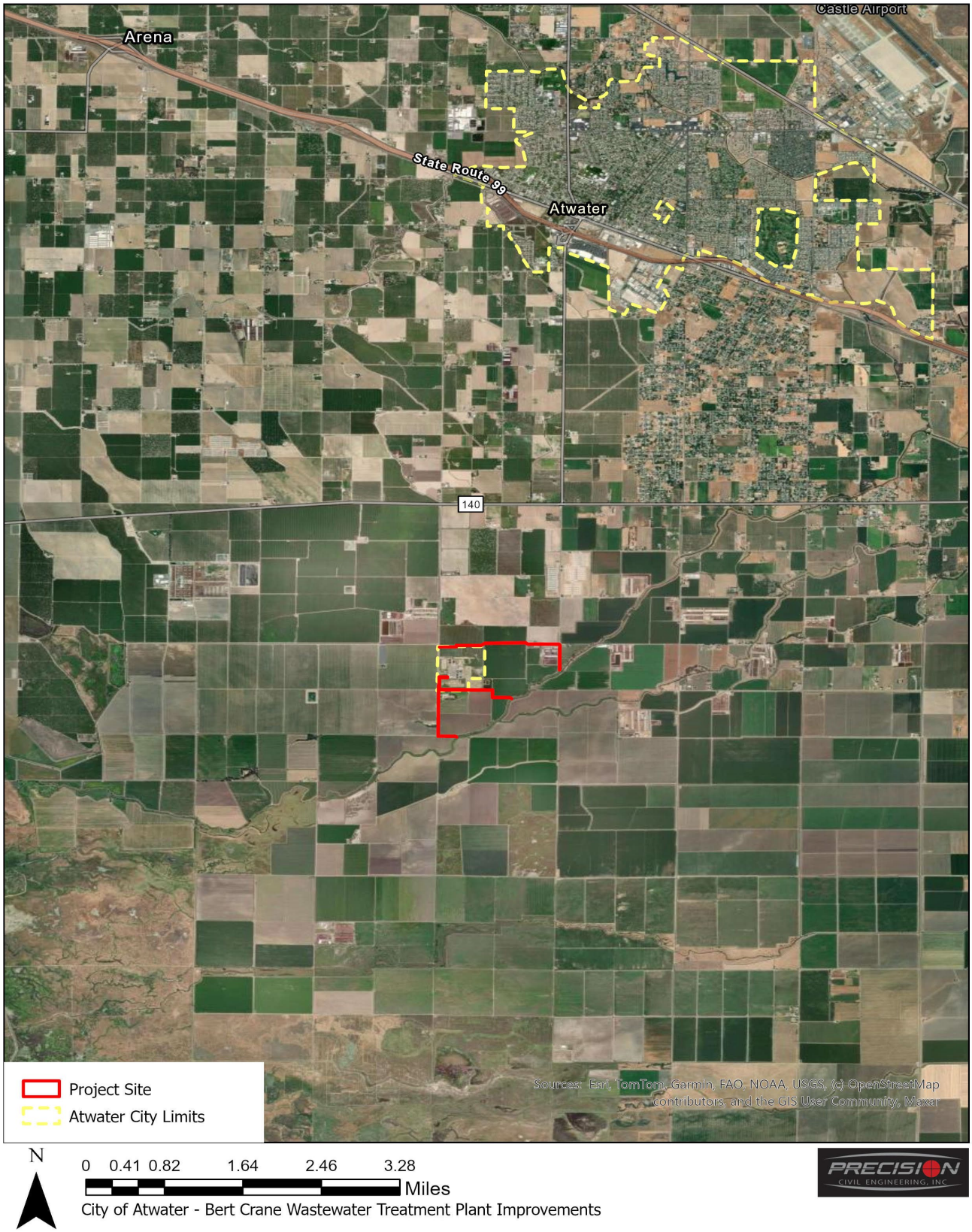


Figure 2-1 Project Location

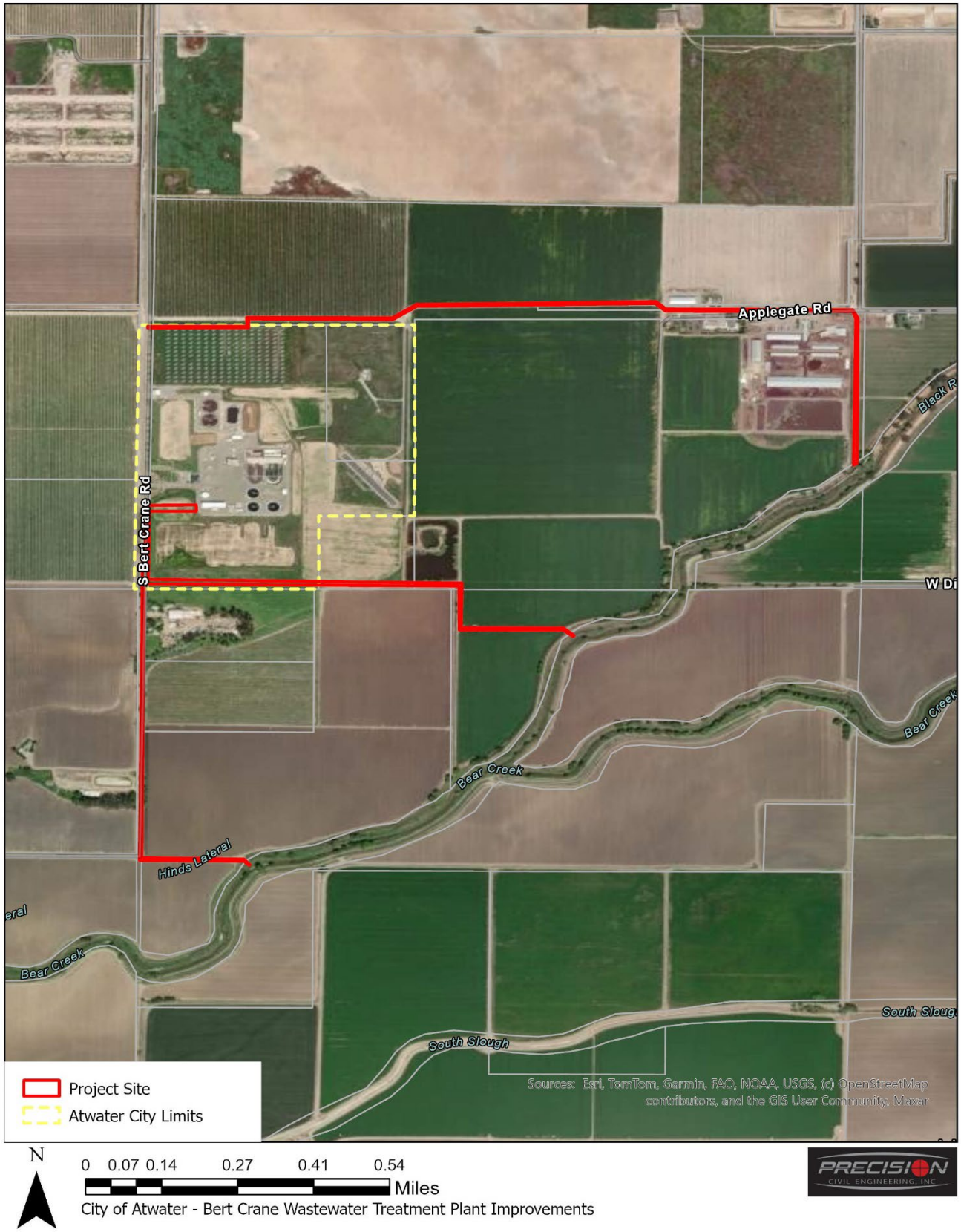


Figure 2-2 Project site Aerial Image

2.7 General Plan Designation

A portion of the Project site (APNs 056-200-025 and 056-200-026), located within the City of Atwater, has an "unclassified" General Plan land use designation, meaning there is no specific land use has been assigned. The rest of the site is within the jurisdiction of Merced County and has a land use designation of Agricultural (Figure 2-3).

2.8 Zoning

A portion of the Project site (APNs 056-200-025 and 056-200-026), located within the City of Atwater, is not zoned. The rest of the site is within the jurisdiction of Merced County and is zoned A-1 General Agricultural (Figure 2-4).

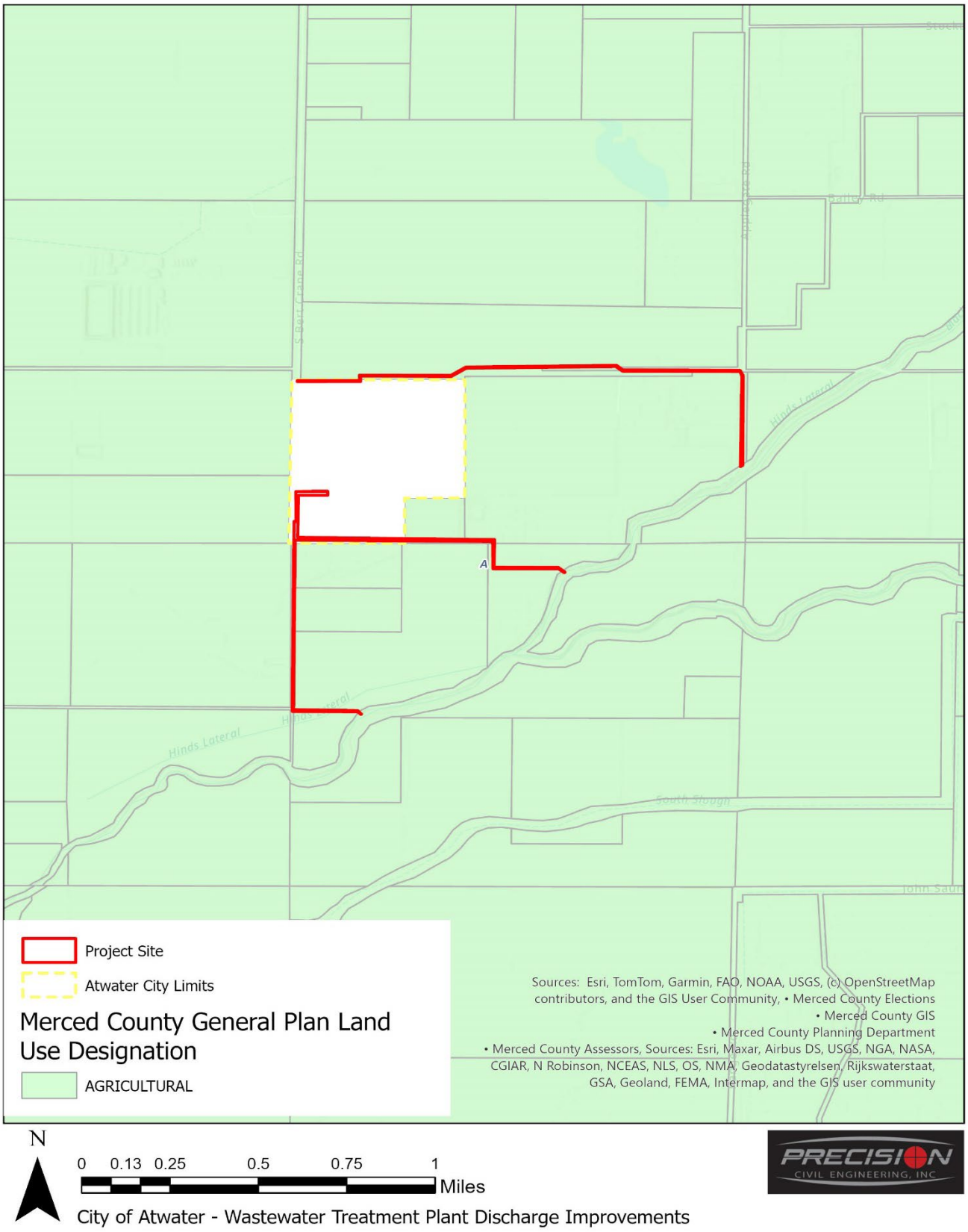


Figure 2-3 General Plan Land Use Designation (Existing)

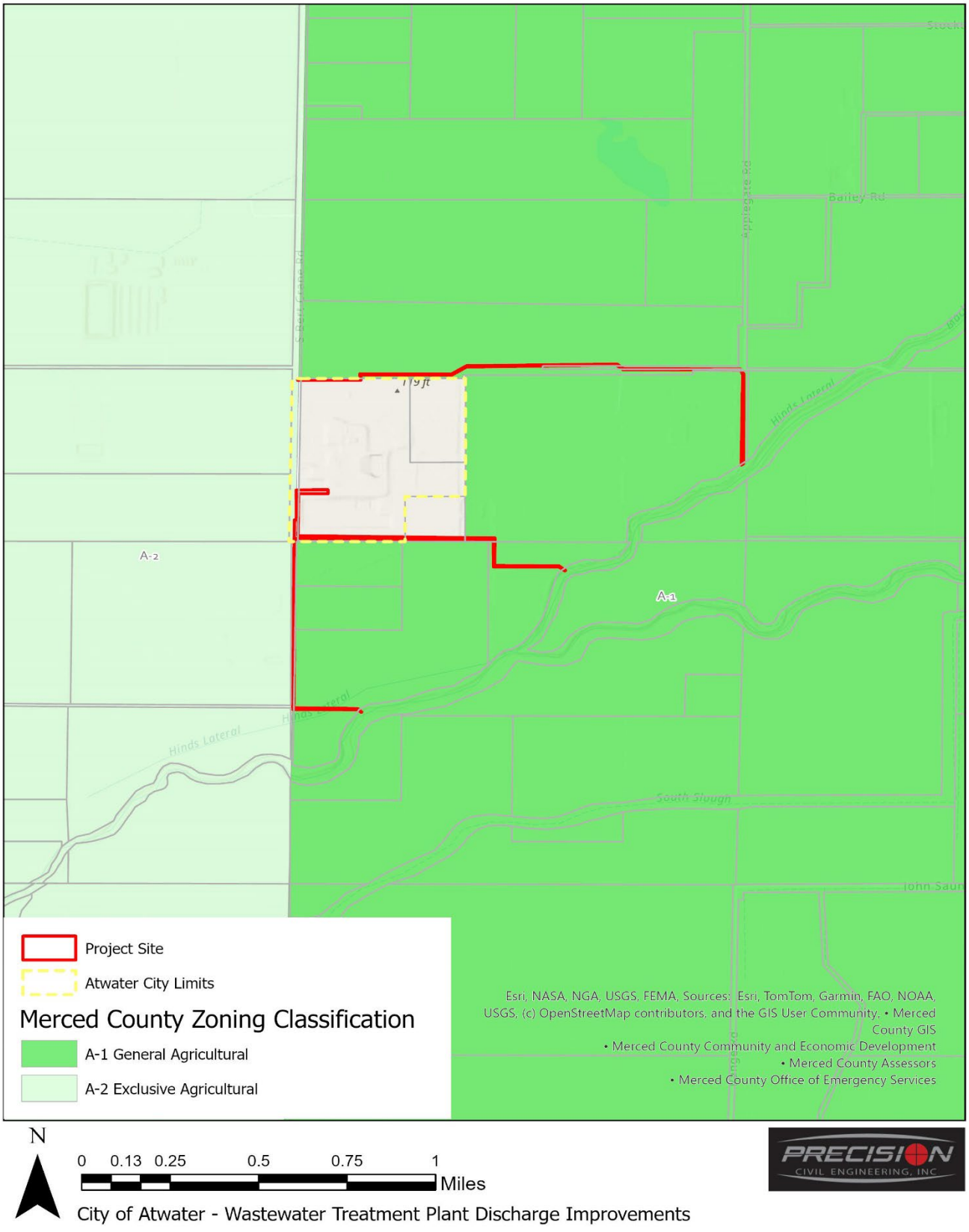


Figure 2-4 Zoning District (Existing)

2.9 Description of Project

The City of Atwater owns and operates the Bert Crane Regional Wastewater Treatment Plant (WWTP), located on the southeast corner of South Bert Crane Road and Oak Avenue Alignment (APN 056-200-026), which provides tertiary-level treatment for wastewater. Treated effluent from the WWTP is currently released via an effluent pump station and a 42-inch force main into the Atwater/Peck Drain, which flows through Joseph Gallo Farms (Gallo Ranch), where a significant portion is diverted for agricultural and wetland use.

In order to meet Sustainable Groundwater Management Act (SGMA) groundwater recharge requirements, the City of Atwater intends to construct improvements to discharge its treated effluent to the Merced Irrigation District (MID) via Black Rascal Creek or Bear Creek. These improvements would connect into the existing force main with a tee fitting and automatic actuated butterfly valves integrated into the City's SCADA system. The improvements would allow the City to redirect effluent flows to the Gallo Ranch, the creeks, or both.

A Discharge Study was prepared to evaluate three (3) alternatives for future improvements for discharge into either Black Rascal Creek or Bear Creek: Alternative 1 – Bert Crane Road Alignment, Alternative 2 – South WWTP Alignment, and Alternative 3 – Deckert Lateral Alignment (Figure 2-5).

All three (3) alternatives shared common infrastructure improvement recommendations, such as connecting to the existing force main from the WWTP, construction of a new pump station, and construction of an outfall structure. The following summarizes the recommended improvements that are applicable to each alternative:

- Installation of a 42-inch x 42-inch x 18-inch tee
- Installation of a 42-inch automatic actuated butterfly valve
- Installation of an 18-inch automatic actuated butterfly valve
- Installation of an air relief valve
- Installation of an 18-inch magnetic flow meter
- Construction of a pump station
- Installation of power source and connection to City SCADA system
- Construction of an outfall structure equipped with a flap valve.

The alternative specific improvements are as follows:

- Alternative 1 would include construction of 4,400 linear feet of 18-inch pipeline, traffic control, and flow diversion and dewatering. A new outfall structure into Bear Creek would be constructed.
- Alternative 2 would include construction of 4,300 linear feet of 18-inch pipeline and flow diversion and dewatering. A new outfall structure into Black Rascal Creek would be constructed
- Alternative 3 would include connection to the existing Deckert Lateral culvert, construction of 5,400 linear feet of 18-inch pipeline, increases to MIDs Deckert Lateral capacity, replacing the existing MID outfall structure to Black Rascal Creek, and traffic control.

This Initial Study evaluates the potential environmental impacts of all three (3) proposed alternatives—Alternative 1 (Bert Crane Road Alignment), Alternative 2 (South WWTP Alignment), and Alternative 3 (Deckert Lateral Alignment).

2.10 Project Setting and Surrounding Land Uses

Project Setting

The Project site for the pump station, which is proposed along the eastern boundary (Alternatives 1 and 2) or northern boundary (Alternative 3) of the Bert Crane Regional Wastewater Treatment Plant (WWTP) parcel (APN 056-200-026), is currently vacant with no improvements or structures. The Project site for underground pipelines includes dirt roads between agricultural operations and South Bert Crane Road, a paved two (2)-lane roadway with no improvements (i.e., curb, gutter, sidewalks). An aerial image of the Project site is shown in Figure 2-2. The site is generally flat and does not contain any geologic formations. The existing biotic conditions and resources of the pump station site can be defined primarily as ruderal and herbaceous vegetation with heavy alternation due to discing and grading. There are trees along South Bert Crane Road and Oak Avenue Alignment. Water features include Bear Creek, Black Rascal Creek, and Deckert Lateral, where outfall structures are proposed.

Surrounding Land Uses

The Project site is generally surrounded by agricultural uses. As referenced in Table 2-1, the surrounding properties are all planned and zoned for agricultural use within the County of Merced.

Table 2-1 Existing Uses, General Plan Designations, and Zone Districts of Surrounding Properties

Direction from the Project Site	Existing Land Use	Planned Land Use	Zone District
North	Agricultural	Agricultural	A-1 General Agricultural
South	Agricultural	Agricultural	A-1 General Agricultural
East	Agricultural	Agricultural	A-1 General Agricultural
West	Agricultural	Agricultural	A-2 Exclusive Agricultural

2.11 Site Preparation

Site preparation would include typical vegetation removal and grading activity for the excavation and trenching necessary to install the underground pipeline, pump station, and associated improvements. There are no existing improvements or structures on the site, so there would be no demolition required

2.12 Other Public Agencies Whose Approval is Required

The Project would require approval by the City of Atwater City Council. The Project is also expected to require:

- Lake and Streambed Alteration (LSA) permit from California Department of Fish and Wildlife
- Clean Water Act Section 404 Permit and 401 Water Quality Certification from the CA State Water Resources Control Board
- Stormwater Pollution Prevention Plan
- Encroachment permit from Merced County
- Encroachment permit from Merced Irrigation District
- Encroachment permit from the Central Valley Flood Protection Board

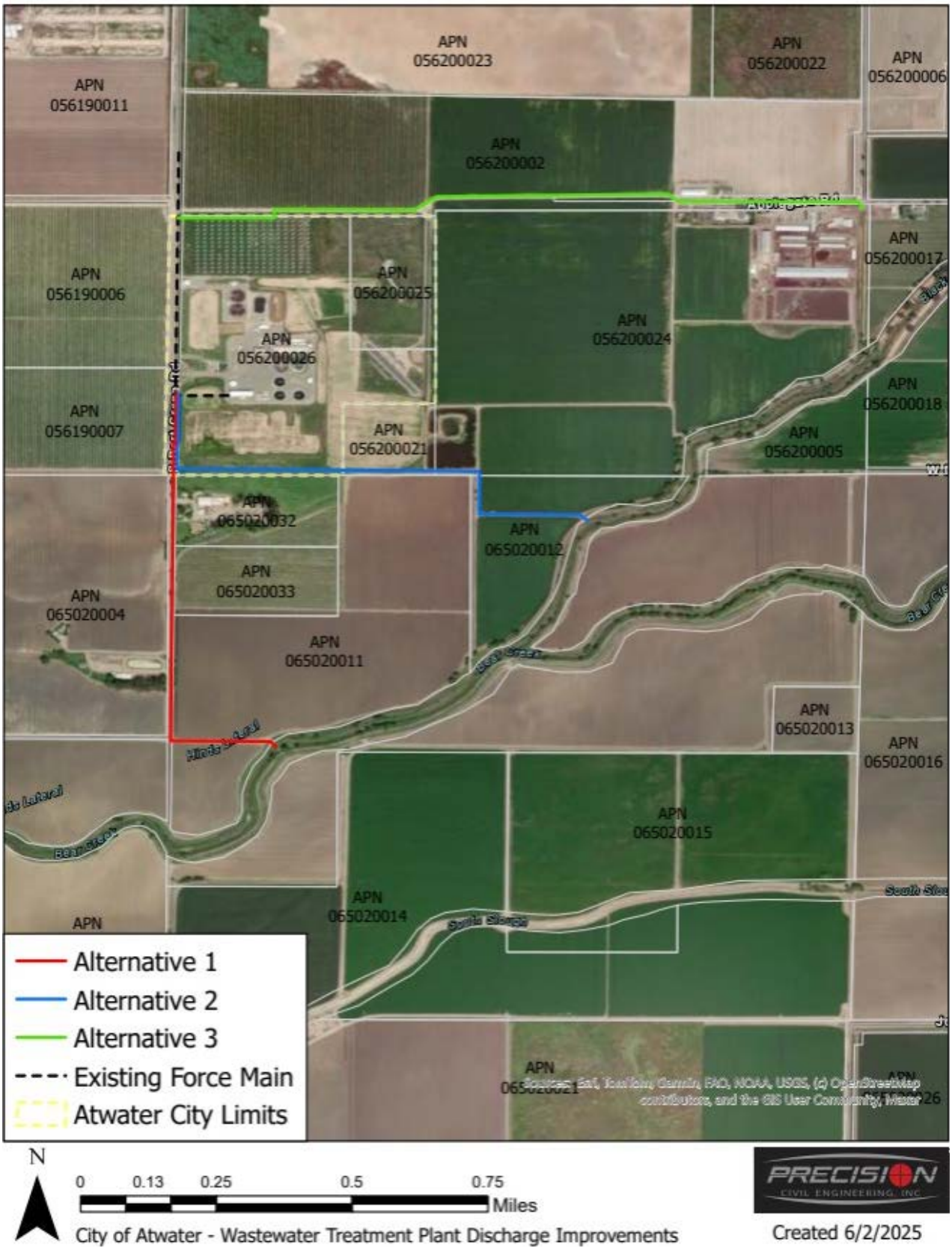


Figure 2-5 Proposed Alternative Alignments

2.13 Consultation with California Native American Tribes

The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the CEQA Guidelines. Pursuant to PRC *Section 21080.3.1*, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC *Section 21074(a)(1-2)*). According to the most recent census data, California is home to 109 currently recognized Indian tribes.

Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC *Section 21083.3.2*.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC *Section 21082.3(c)* contains provisions specific to confidentiality.

A consultation list of tribes with traditional lands or cultural places located within Merced County was requested and received from the California Native American Heritage Commission (NAHC) on May 12, 2025. The listed tribes include Amah Mutsun Tribal Band, Northern Valley Yokut / Ohlone Tribe, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Wuksachi Indian Tribe/Eshom Valley Band. The NAHC also conducted a Sacred Lands File (SFL) search which was negative.

The City of Atwater conducted formal tribal consultation pursuant to AB 52 (Chapter 532, Statutes 2014) on June 2, 2025, to the aforementioned tribes. Consultation for AB 52 ended on July 2, 2025. No responses were received.

3 DETERMINATION

3.1 Environmental Factors Potentially Affected

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

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☐ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☒ Geology and Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☒ Hydrology and Water Quality
- ☐ Land Use Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☐ Tribal and Cultural Resources
- ☐ Utilities and Service Systems
- ☐ Wildfire

For purposes of this Initial Study, the following answers have the corresponding meanings:

"No Impact" means the specific impact category does not apply to the project, or that the record sufficiently demonstrates that project specific factors or general standards applicable to the project will result in no impact for the threshold under consideration.

"Less Than Significant Impact" means there is an impact related to the threshold under consideration, but that impact is less than significant.

"Less Than Significant with Mitigation Incorporation" means there is a potentially significant impact related to the threshold under consideration, however, with the mitigation incorporated into the project, the impact is less than significant. For purposes of this Initial Study "mitigation incorporated into the project" means mitigation originally described in the GP PEIR and applied to an individual project, as well as mitigation developed specifically for an individual project.

"Potentially Significant Impact" means there is substantial evidence that an effect may be significant related to the threshold under consideration.

3.2 Determination

On the basis of this initial evaluation (to be completed by the Lead Agency):

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

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

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Approved By:

Chris Hoem, City Manager Date
City of Atwater

4 EVALUATION OF ENVIRONMENTAL IMPACTS

4.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, **would the project:**		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				X
b)	Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?				X
c)	In non-urbanized areas, substantially degrade the existing visual character or quality public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

4.1.1 Environmental Setting

Generally, aesthetics may include scenic vistas and scenic resources (e.g. trees, rock outcroppings, historic buildings, and highways). The City of Atwater's visual features predominately include urbanized and agricultural land uses. The Atwater General Plan (General Plan) recognizes the city's scenic resources to be "open space areas" (i.e., agricultural lands) in addition to several transportation routes or "scenic corridors". The General Plan does not identify or designate "scenic vistas." The identified scenic corridors include Atwater Boulevard, First Street, Bellevue Road, Shaffer Road, Winton Way, Broadway from Winton Way to First Street, Buhach Road, Third Street, Part of Grove Avenue, and all entrances to the city. A scenic corridor is the view from the road that may include a distant panorama and/or the immediate roadside area. A scenic corridor encompasses the outstanding natural features and landscapes that are considered scenic, including man-made or natural environments.

Although there are two (2) state-designated scenic highways in the County of Merced (SR 152 and Interstate 5), these highways are not within city limits and thus, the City does not designate them as scenic resources. Lastly, the

General Plan identifies places of contemporary historical significance in the city including the Bloss Manson, Bloss Library, and Castle Air Museum.

California Scenic Highway Program

The California Scenic Highway Program was established in 1963 with the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. There are no officially designated State Scenic Highways within or surrounding the Project site [1]

4.1.2 Impact Assessment

Except as provided in PRC Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact. The Project site and its surroundings are not part of a scenic corridor, scenic vista, or scenic resource identified in General Plan. Additionally, since the Project site consists of flat agricultural land, there are no viewpoints in the vicinity of the Project site that would provide a view of highly valued, natural or man-made landscape features for the benefit of the general public. Furthermore, the Project proposes the installation of underground pipeline, which would not be visible, and limited above-ground structures (i.e., a pump station), which would not obstruct views due to its small size. As a result, the Project would not adversely affect scenic vistas and no impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. According to the California State Scenic Highway Program, there are no officially designated State Scenic Highways within or surrounding the Project site. As such, the proposed Project would not damage scenic resources, including trees, rock out-croppings, and historic buildings within a state scenic highway and no impact would occur as a result of the Project.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The Project is located in a rural, non-urbanized area characterized by flat agricultural land and scattered structures. The Project proposes the installation of underground pipeline, which would not be visible, and limited above-ground structures (i.e., a pump station), which would cause a minor visual change in an area with existing structures, fences, and utility poles due to its small size. As such, less than significant impact would occur because of the Project.

[1] Caltrans. California State Scenic Highway System Map. Accessed on September 10, 2025 https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Generally, lighting impacts are associated with artificial lighting in evening hours either through interior lighting from windows or exterior lighting (e.g., street lighting, parking lot lighting, landscape lighting, cars, and trucks). While the undergrounded pipelines will not produce light or glare, the pump station will install minimal lighting for safety and security. However, the proposed pump station are located within Atwater city limits, therefore, lighting design would be required to comply with the Atwater Municipal Code (AMC), which contains specific, enforceable requirements and/or restrictions intended to prevent light and glare impacts (pursuant to *Section 8.32.030*, the City does not allow lights, lighted signs, or other devices that direct or reflect glare onto public right-of-way or neighboring properties). The lighting design guide covers outdoor spaces including regulations for mounted luminaires (i.e., high efficacy, motion sensor control, time clocks, energy management control systems, etc.). As such, conditions imposed on the Project by the City would reduce light and glare impacts. Therefore, the proposed Project would not introduce sources of substantial light or glare which could adversely affect day or nighttime views in the area and a less than significant impact would occur.

4.1.3 Mitigation Measures

None required.

4.2 AGRICULTURE AND FORESTRY RESOURCES

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farm-land), as shown on the maps prepared pursuant to the Farmland Mapping and Monito-ring 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)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				X
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

4.2.1 Environmental Setting

The Project site in the jurisdiction of the City of Atwater (portion) and County of Merced (portion), California. A portion of the Project site (APNs 056-200-025 and 056-200-026), located within the City of Atwater, is not zoned. The rest of the site is within the jurisdiction of Merced County and is zoned A-1 General Agricultural.

The Project site for the pump station, which is proposed along the eastern boundary (Alternatives 1 and 2) or northern boundary (Alternative 3) of the Bert Crane Regional Wastewater Treatment Plant (WWTP) parcel (APN 056-200-026), is currently vacant with no improvements or structures. The Project site for underground pipelines includes dirt roads between agricultural operations and South Bert Crane Road, a paved two (2)-lane roadway with no improvements (i.e., curb, gutter, sidewalks). The existing biotic conditions and resources of the pump station site can be defined primarily as ruderal and herbaceous vegetation with heavy alternation due to discing and

grading. There are trees along South Bert Crane Road and Oak Avenue Alignment. Water features include Bear Creek, Black Rascal Creek, and Deckert Lateral, where outfall structures are proposed.

Farmland Monitoring and Mapping Program

The California Department of Conservation manages the Farmland Mapping and Monitoring Program (FMMP) that provides maps and data for analyzing land use impacts on farmland. The FMMP produces the Important Farmland Finder as a resource map that shows quality (soils) and land use information. Agricultural land is rated according to soil quality and irrigation status, in addition to many other physical and chemical characteristics. The highest quality land is called "Prime Farmland" which is defined by the FMMP as *"farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.* [2] Maps are updated every two years.

California Land Conservation Act

The California Land Conservation Act of 1965 (i.e., the Williamson Act) allows local governments to enter contracts with private landowners to restrict parcels of land agricultural or open space uses. In return, property tax assessments of the restricted parcels are lower than full market value. The minimum length of a Williamson Act contract is 10 years and automatically renews upon its anniversary date; as such, the contract length is essentially indefinite.

[2] California Department of Conservation. Important Farmland Categories. Accessed on April 21, 2025 https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx

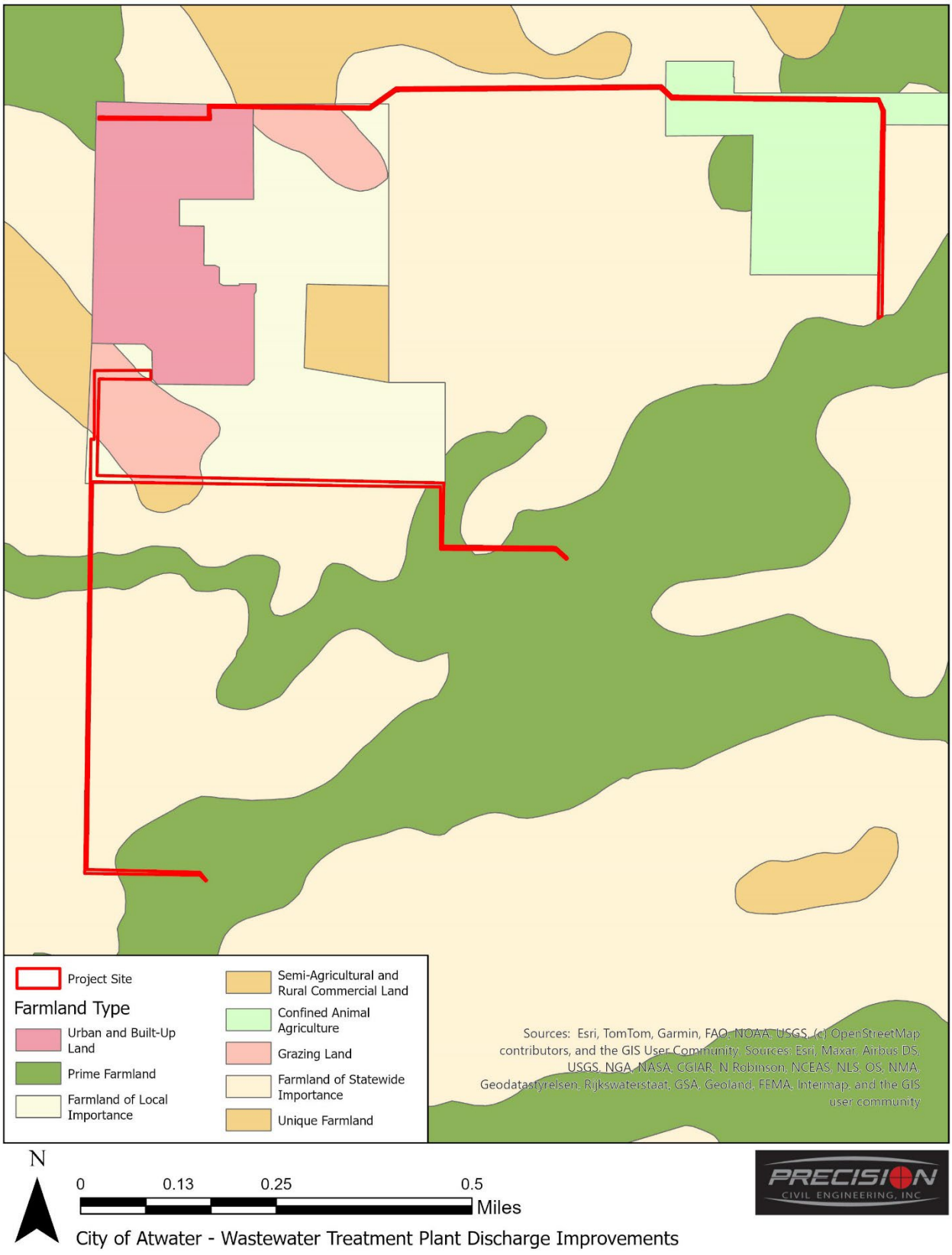


Figure 4-1 Farmland Type

4.2.2 Impact Assessment

Would the project:

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural* use?

Less than Significant Impact. According to the FMMP, the Project site includes land that are designated as "Urban and Built-Up Land", "Grazing Land", "Confined Animal Agriculture", "Semi-Agricultural and Rural Commercial Land", "Farmland of Local Importance", "Farmland of Statewide Importance", and "Prime Farmland". [3] Figure 4-1 shows the farmland map of the Project site.

The Project proposes the installation of a pump station and underground pipeline to transport treated effluent from the wastewater treatment plant (WWTP) to either Black Rascal Creek or Bear Creek. As shown in Figure 4-1, Alternatives 1 and 2 propose a pump station on area mapped as "Grazing Land" and Alternative 3 proposes a pump station on area mapped as "Urban and Built-Up Land". Thus, although the proposed pump station would permanently affect the above-ground conditions, it would not convert farmland to non-agricultural use.

The construction of the underground pipelines would involve soil trenching, installation of the pipeline in the trench, and then backfilling soils on top of the pipeline. Backfilling the trenches with the same soils initially removed would generally return the land to pre-project conditions. In addition, the underground pipelines are proposed within existing dirt roadways where agricultural activity does not occur. Because the Project does not involve a change in land use and the majority of the work is temporary and underground, it would not result in the conversion of Farmland to a non-agricultural use. Therefore, impacts would be less than significant.

b) *Conflict* with existing zoning for agricultural use or a Williamson Act contract?

Less than Significant Impact. The Project is considered a public utility and is generally permitted on land zoned for agricultural use according to the Merced County Zoning Ordinance. The construction of an underground pipeline and a small pump station is typically viewed as a compatible use with agricultural zoning. As discussed in criteria a), the Project's purpose is to provide a public service and it will not prevent the land from being used for agricultural purposes after construction is completed. The pipeline is located underground, and the pump station's footprint is not located on farmland, so the land can continue to be farmed.

In addition, the Project is not located on lands under a Willaimson Act contract. Because the Project is a compatible use and will not prevent agricultural use, it will not conflict with zoning or any Williamson Act contract. Therefore, the impact is less than significant.

c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

[3] California Department of Conservation. (2022). California Important Farmland Finder. Accessed on April 21, 2025, https://maps.conservation.ca.gov/DLRP/CIFF/

No Impact. The Project site is not planned or zoned for forest land or timberland. Further, the Project would not cause the rezoning of forest land, timberland, or timberland zoned Timberland Production. As a result, the Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production and no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project site does not contain forest land and is not planned or zoned for forest land or forest uses. Development of the Project would therefore not result in the loss of forest land or conversion of forest land to non-forest use. As a result, no impact would occur.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant impact. As previously discussed in criteria a) through d), the Project would not involve changes in the existing environment which could lead to conversion of Farmland or forest land to non-agricultural or non-forest use.

4.2.3 Mitigation Measures

None required.

4.3 AIR QUALITY

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			X	
b)	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?			X	
c)	Expose sensitive receptors to substantial pollutant concentrations?			X	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

4.3.1 Environmental Setting

Atwater lies within the central portion of the San Joaquin Valley Air Basin that is bounded by the Sierra Nevada Mountain range to the east, Coastal Ranges to the west, and Tehachapi mountains to the south. The San Joaquin Valley Air Pollution Control District (SJVAPCD) regulates air quality in eight (8) counties including: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. The SJVAPCD oversees the SJVAB.

Impacts on air quality result from emissions generated during short-term activities (construction) and long-term activities (operations). Construction-related emissions consist mainly of exhaust emissions (NOx and PM) from construction equipment and other mobile sources, and fugitive dust (PM) emissions from earth moving activities. Operational emissions are source specific and consist of permitted equipment and activities and non-permitted equipment and activities.

Air pollution in the SJVAB can be attributed to both human-related (anthropogenic) and natural (non-anthropogenic) activities that produce emissions. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. Four main sources of air pollutant emissions in the SJVAB are motor vehicles, industrial plants, agricultural activities, and construction activities. All four (4) of the major pollutant sources affect ambient air quality throughout the SJVAB. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air. Air pollutants can remain in the atmosphere for long periods and can build to unhealthful levels when stagnant conditions that are common in the San Joaquin Valley occur. Pollutants are transported downwind from urban areas with many emission sources which are also recirculated back to the urban areas.

Further, the SJVAB is in non-attainment for ozone, PM_{10}, and $PM_{2.5}$, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. Air quality standards have been set to protect

public health, particularly the health of vulnerable people. Therefore, if the concentration of those contaminants exceeds the norm, some susceptible individuals in the population are likely to experience health effects. Concentration of the pollutant in the air, the length of time exposed and the individual's reaction are factors that affect the extent and nature of the health effects.

San Joaquin Valley Air Pollution Control District

The SJVAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions are maintained in the SJVAB, within which the Project is located. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA.

The SJVAPCD rules and regulations that may apply to projects that will occur during buildout of the project include but are not limited to the following:

> ***Rule 2010 – Permits Required.*** *The purpose of this rule is to require any person constructing, altering, replacing or operating any source operation which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate. This rule also explains the posting requirements for a Permit to Operate and the illegality of a person willfully altering, defacing, forging, counterfeiting or falsifying any Permit to Operate.*
>
> ***Rule 2201 – New and Modified Stationary Source Review Rule.*** *The purpose of this rule is to provide for the following:*
>
> *The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards; and*
>
> *No net increase in emissions above specified thresholds from new and modified Stationary Sources of all nonattainment pollutants and their precursors.*
>
> ***Rule 4001 – New Source Performance Standards.*** *This rule incorporates the New Source Performance Standards from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR).*
>
> ***Rule 4002 – National Emission Standards for Hazardous Air Pollutants.*** *This rule incorporates the National Emission Standards for Hazardous Air Pollutants from Part 61, Chapter I, Subchapter C, Title 40, Code of Federal Regulations (CFR) and the National Emission Standards for Hazardous Air Pollutants for Source Categories from Part 63, Chapter I, Subchapter C, Title 40, Code of Federal Regulations (CFR).*
>
> ***Rule 4102 – Nuisance.*** *The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.*
>
> ***Rule 4601 – Architectural Coatings.*** *The purpose of this rule is to limit VOC emissions from architectural coatings. This rule specifies architectural coatings storage, cleanup, and labeling requirements.*

Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. *The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.*

Regulation VIII – Fugitive PM10 Prohibitions. *The purpose of Regulation VIII (Fugitive PM10 Prohibitions) is to reduce ambient concentrations of fine particulate matter (PM10) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions.*

Rule 9510 – Indirect Source Review. *The purposes of this rule are to:*

1. Fulfill the District's emission reduction commitments in the PM10 and Ozone Attainment Plans.

2. Achieve emission reductions from the construction and use of development projects through design features and on-site measures.

3. Provide a mechanism for reducing emissions from the construction of and use of development projects through off-site measures.

Thresholds of Significance

To assist local jurisdictions in the evaluation of air quality impacts, the SJVAPCD has published the *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI). SJVAPCD recommends a three (3)-tiered approach to air quality analysis based on project size to allow quick screening for CEQA impacts:

1. Small Project Analysis Level (SPAL): based on the District's New Source Review, the District pre-quantified emissions and determined values as thresholds of significance for criteria pollutants. Residential, commercial, retail, industrial, educational, and recreational land uses are eligible to use this for screening. The SPAL was published on November 13, 2020, by the SJVAPCD to determine potential impacts in GAMAQI.[4] SPAL is based on a CalEEMod version 2016.3.2.
2. Cursory Analysis Level (CAL): CAL is used to determine significance on projects that exceed the SPAL criteria. Analysis includes using CalEEMod to estimate emissions and air pollutants.
3. Full Analysis Level (FAL): this level of analysis is usually required for an EIR. It requires a full air quality report that describes impacts on the public.

GAMAQI also includes recommended thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. Accordingly, the SJVAPCD-recommended thresholds of significance are used to determine whether implementation of the proposed Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact on human health and welfare. The thresholds of significance are summarized, as follows:

[4] San Joaquin Valley Air Pollution Control District. (2020). "Small Project Analysis Levels (SPAL)". Accessed on April 25, 2025, https://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI-SPAL.PDF

Criteria Air Pollutants

SJVAPCD adopted thresholds of significance for criteria air pollutants, as shown in Table 4-1. [5] The thresholds of significance are based on a calendar year basis. For construction emissions, the annual emissions are evaluated on a rolling 12-month period. The following summarizes these thresholds:

Short-Term Emissions of Particulate Matter (PM_{10}): Construction impacts associated with the proposed Project would be considered significant if the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented, or if project-generated emissions would exceed 15 tons per year (TPY).

Short-Term Emissions of Ozone Precursors (ROG and NOX): Construction impacts associated with the proposed Project would be considered significant if the project generates emissions of Reactive Organic Gases (ROG) or NO_X that exceeds 10 TPY.

Long-Term Emissions of Particulate Matter (PM_{10}): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of PM_{10} that exceed 15 TPY.

Long-Term Emissions of Ozone Precursors (ROG and NOX): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of ROG or NOX that exceeds 10 TPY.

Table 4-1 SJVAPCD Recommended Air Quality Thresholds of Significance.

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emission (tons/year)
CO	100	100
NO_X	10	10
ROG	10	10
SO_X	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

Conflict with or Obstruct Implementation of Applicable Air Quality Plan

Air Quality Plans (AQPs) are plans for reaching the attainment of air quality standards. The applicable AQP for the SJVAB is the GAMAQI. Due to the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}, if the Project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM_{10} would exceed the SJVAPCD's significance thresholds, then the Project would be considered to be conflicting with the AQP. In addition, if the Project would result in a change in land use and corresponding increases in vehicle miles traveled, the Project may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans. Vehicle Miles Traveled are analyzed in Section 4.17.

[5] SJVAPCD. (2015). Guidance for Assessing and Mitigating Air Quality Impacts. Accessed on May 30, 2025, https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF

Local Mobile-Source CO Concentrations

Local mobile source impacts associated with the proposed Project would be considered significant if the project contributes to CO concentrations at receptor locations in excess of the CAAQS (i.e., 9.0 ppm for 8 hours or 20 ppm for 1 hour).

Toxic Air Contaminants

Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than one (1).

As recommended by the SJVAPCD, the latest approved California Air Pollution Control Officer's Association (CAPCOA) methodology was utilized as the TAC screening methodology. According to the CAPCOA Guidance Document titled "Health Risk Assessments for Proposed Land Use Projects," there are two types of land use project that have the potential to cause long-term public health risk impacts. These project types are as follows:

- Type A: Land use projects with toxic emissions that impact receptors, and
- Type B: Land use project that will place receptors in the vicinity of existing toxics sources.

In this Guidance document, Type A projects examples are (project impacts receptors):

- combustion related power plants,
- gasoline dispensing facilities,
- asphalt batch plants,
- warehouse distribution centers,
- quarry operations, and
- other stationary sources that emit toxic substances.

Odor

The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Specific land uses that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. The SJVAPCD has identified these common types of facilities that have been known to produce odors in the SJVAB and has prepared screening levels for potential odor sources ranging from one to two miles of distance from the odor-producing facility to sensitive receptors. Odor impacts would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

Ambient Air Quality

The SJVAPCD applies the following guidance in determining whether an ambient air quality analysis should be performed: when assessing the significance of project-related impacts on air quality, it should be noted that the impacts may be significant when on-site emission increases from construction activities or operational activities exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures. Under such circumstances, the SJVAPCD recommends that an ambient air quality analysis be performed.

4.3.2 Impact Assessment

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The Project would not conflict with the applicable air quality plan if the Project does not exceed the adopted quantitative thresholds for criteria pollutant emissions that are established in the GAMAQI, as demonstrated in the Thresholds of Significance above. As stated above, the SJVAPCD recommends a three (3)-tiered approach to analyze projects for significant impacts on air quality. The following analysis estimates criteria pollutants for construction of Alternative 3, the most intensive proposed alternative with approximately 5,400 linear feet of underground pipeline installation (Alternatives 1 and 2 propose 4,400 and 4,300 linear feet, respectively), using CalEEMod™ (Version 2022.1.1.29) that was modeled on June 9, 2025. Output files are provided in Appendix A.

Construction Emissions

Construction activity associated with the Project includes site preparation, including vegetation removal and grading, followed by trenching/excavation for installation of the proposed pipeline, as well as construction of the proposed pump station and outfall structure. Table 4-2 provides the estimated construction criteria pollutant emissions for the proposed Project. All estimated emissions are below significance thresholds. As a result, it can be anticipated that constructions emissions as a result of implementation of the Project will be less than significant.

Table 4-2 Project Construction Emissions

Emissions Source (Tons per Year)	CO	NO_X	ROG	PM_{10}	$PM_{2.5}$
Construction Year 2026	0.88	0.69	0.08	0.23	0.12
Significance Threshold	100	10	10	15	15
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

***Source**: CalEEMod, Version 2022.1.1.29, ran on June 9, 2025. See Appendix A.*

Operational Emissions

Pollutants of concern include ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$. Table 4-3 provides the estimated operational criteria pollutant emissions for the proposed Project. As shown, all estimated emissions are below the significance thresholds. Therefore, the operational emissions as a result of the Project would be less than significant.

Table 4-3 Project Operational Emissions

Emissions Source (Tons per Year)	CO	NO_X	ROG	PM_{10}	$PM_{2.5}$
Mobile	0	0	0	0	0
Area	0	0	0	0	0
Energy	0	0	0	0	0
Significance Threshold	100	10	10	15	15
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

***Source**: CalEEMod, Version 2022.1.1.29, ran on June 9, 2025. See Appendix A.*

Overall, Alternative 3, the most intensive proposed alternative, would not exceed significance thresholds. Therefore, it can be assumed that Alternatives 1 and 2, which are less intensive and would result in fewer emissions,

would also not exceed significance thresholds. Therefore, the proposed Project would be consistent with the applicable air quality plan and no significant impact would occur.

b) 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?

Less than Significant Impact. The SJVAB is in non-attainment for ozone, PM_{10}, and $PM_{2.5}$, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. The requirements have been set to protect public health, particularly the health of vulnerable populations. Therefore, if the concentration of those contaminants exceeds the norm, some susceptible individuals in the population are likely to experience health effects. Concentration of the pollutant in the air, the length of time exposed and the individual's reaction are factors that affect the extent and nature of the health effects. As analyzed in criterion a) above, the Project would have a less than significant impact on air quality and are excluded from quantifying criteria pollutant emissions for CEQA purposes. Therefore, the Project would not result in significant cumulative health impacts because the emissions are not at a level that would be considered cumulatively significant. As such, the Project would have a less than significant impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptors include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The nearest sensitive receptors to the Project site are single-family residences approximately 0.25 miles south of the site (measured from the WWTP entrance to existing structures of the sensitive receptors). As stated under criterion a) above, emissions during construction or operation would not reach the significance thresholds and would not be anticipated to result in concentrations that reach or surpass ambient air quality requirements.

Although emissions would be emitted during construction of the site (i.e., through diesel fuel and exhaust from equipment), emissions would be temporary and last only during construction activities. In addition, construction activities would be required to comply with all rules and regulations administered by the SJVAPCD including, but not limited to, Regulation VIII (Fugitive PM_{10} Prohibitions), Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 4402 (Nuisance), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). Therefore, impacts would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. Specific uses and operations that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. The Project proposes a pipeline that would carry treated effluent from the treatment plant to be discharged via an outfall structure to Black Rascal Creek or Bear Creek. Currently, the treated effluent is carried to the Atwater/Peck Drain where a significant portion is diverted for agricultural and wetland use. The proposed pipeline would be installed below ground and would not create new sources of odor emissions during operation. The treated effluent would daylight at the proposed outfall structure, which is not located near any uses that would be sensitive to potential odors. Additionally, tertiary-level treated effluent is not expected to emit odors. Therefore, a less than significant impact would occur.

4.3.3 Mitigation Measures

None required.

4.4 BIOLOGICAL RESOURCES

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 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, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	X			
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	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 native 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 provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.				X

4.4.1 Environmental Setting

The Project site for the pump station, which is proposed along the eastern boundary (Alternatives 1 and 2) or northern boundary (Alternative 3) of the Bert Crane Regional Wastewater Treatment Plant (WWTP) parcel (APN 056-200-026), is currently vacant with no improvements or structures. The Project site for underground pipelines includes dirt roads between agricultural operations and South Bert Crane Road, a paved two (2)-lane roadway with no improvements (i.e., curb, gutter, sidewalks). The site is generally flat and does not contain any geologic formations. The existing biotic conditions and resources of the pump station site can be defined primarily as ruderal and herbaceous vegetation with heavy alternation due to discing and grading. There are trees along South Bert Crane Road and Oak Avenue Alignment.

Existing wastewater management practices have resulted in the periodic flooding of agricultural fields in the WWTP vicinity for land application of treated effluent. Although portions of these disposal areas exhibit seasonal inundation and wildlife use, these features are the result of wastewater management operations rather than naturally occurring hydrologic or biological processes. As such, the existing flooded fields represent an artificial aquatic condition that is not a mapped or regulated wetland and lacks sustained ecological function. These areas support opportunistic wetland vegetation and transient wildlife activity but do not provide the hydrologic permanence, soil conditions, or species assemblages typical of jurisdictional wetlands or sensitive natural communities.

Water features in the vicinity include Bear Creek, Black Rascal Creek, and Deckert Lateral, which are natural or modified waterways that ultimately convey flows to the larger San Joaquin River watershed. Proposed outfall structures would be located along Bear Creek or Black Rascal Creek depending on the selected project alternative. These features support riparian vegetation and intermittent aquatic habitat subject to regulation under the Clean Water Act, Porter-Cologne Water Quality Control Act, and California Fish and Game Code.

U.S. Fish and Wildlife – Special-Status Species Database

The U.S. Fish and Wildlife Service (USFWS) operates an "Information for Planning and Consultation" (IPaC) database, which is a project planning tool for the environmental review process that provides general information on the location of special-status species that are "known" or "expected" to occur (**note:** the database does not provide occurrences; refer to the California Department of Fish and Wildlife – Natural Diversity Database below). [6] Specifically, the IPaC database identifies ten (10) special-status species that are potentially affected by activities in the Project site including: San Joaquin Kit Fox (endangered), Northwestern Pond Turtle (proposed threatened), California Tiger Salamander (threatened), Western spadefoot (proposed threatened), Monarch Butterfly (candidate), Valley Elderberry Longhorn Beetle (threatened), conservancy fairy shrimp (endangered), vernal pool fairy shrimp (threatened), vernal pool tadpole shrimp (endangered), and Colusa grass (threatened).

U.S. Fish and Wildlife – Critical Habitat Report

Once a species is listed under the federal Endangered Species Act, NOAA Fisheries is required to determine whether there are areas that meet the definition of Critical Habitat. Per NOAA Fisheries, Critical Habitat is defined as:

[6] U.S. Fish and Wildlife Service. Information and Planning Consultation Online System. Accessed on May 15, 2025, https://ecos.fws.gov/ipac/

- Specific areas within the geographical area occupied by the species at the time of listing that contain physical or biological features essential to conservation of the species and that may require special management considerations or protection; and
- Specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. [7]

The process of Critical Habitat designation is complex and involves the consideration of scientific data, public and peer review, economic, national security, and other relevant impacts.

According to the Critical Habitat for Threatened & Endangered Species Report updated February 25, 2025, the Project site and its immediate vicinity (0.5-mile radius from the site) are not located within a federally designated Critical Habitat. [8] The closest federally designated Critical Habitat is located approximately 2.9 miles southwest of the Project site designated for conservancy fairy shrimp (Branchinecta conservatio), vernal pool fairy shrimp (Branchinecta lynchi), Colusa grass (Neostapfia colusana), Hoover's spurge (Chamaesyce hooveri), and vernal pool tadpole shrimp (lepidurus packardi).

U.S. Fish & Wildlife Service – National Wetlands Inventory

The USFWS provides a National Wetlands Inventory (NWI) with detailed information on the abundance, characteristics, and distribution of U.S. wetlands. A search of the NWI shows several water features within and adjacent to the Project site (Figure 4-2. [9] The major features within the Project site include Bear Creek, Black Rascal Creek, and the Deckert Lateral, which are intended to be discharged into under Alternatives 1, 2, and 3, respectively. The portion of Bear Creek that treated effluent will be discharged into under Alternative 1 is identified as an R2UBH riverine habitat. R2UBH indicates a Riverine System (R), with a lower perennial subsystem (2), an unconsolidated bottom (U), and is permanently flooded (H). The portion of Black Rascal Creek that will be discharged into under Alternative 2 is identified as an R2UBHx riverine habitat. R2UBHx indicates a riverine system (R), with a lower perennial subsystem (2), an unconsolidated bottom (U), that is permanently flooded (H) and was excavated by humans (x). The portion of the Deckert Lateral that effluent would be discharged into under Alternative 3 is identified as an R5UBFx riverine habitat. R5UBFx indicates a riverine system (R), with an unknown perennial (5), an unconsolidated bottom (U), that is semi permanently flooded (F) and was excavated by humans (x). In addition, the Project site contains riparian habitat, mostly along the Bear Creek and Black Rascal Creek water features.

Environmental Protection Agency – WATERS Geoviewer

The U.S. Environmental Protection Agency (EPA) WATERS GeoViewer provides a GeoPlatform based web mapping application of water features by location. According to the WATERS GeoViewer, there are two surface water

[7] National Oceanic and Atmospheric Administration (NOAA). Critical Habitat. Accessed on May 15, 2025, https://www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat#definition-of-critical-habitat

[8] U.S. Fish & Wildlife. (2025). ECOS Environmental Conservation Online System - USFWS Threatened & Endangered Species Active Critical Habitat Report (updated February 25, 2025). Accessed May 15, 2025, https://ecos.fws.gov/ecp/report/table/critical-habitat.html

[9] U.S. Fish & Wildlife Service. National Wetlands Inventory. Accessed May 15, 2025, https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

features (i.e., streams, canals, pipelines, waterbodies, catchments, hydrologic units) adjacent to the Project site. The two features are identified as Bear Creek and Black Rascal Creek. [10]

California Department of Fish and Wildlife – Natural Diversity Database

The California Department of Fish and Wildlife (CDFW) operates the California Natural Diversity Database (CNDDB), which is an inventory of the status and locations of rare plants and animals in California in addition to the reported occurrences of such species. [11] According to the CDFW CNDDB, there have been no reported occurrences of any special status species within the Project site. The Project site is located within the Atwater Quad, as designated by the United States Geological Survey (USGS). There are 11 special-status species with a total of 24 occurrences that have been observed and reported to CDFW in or near the Atwater Quad. Of the 11 species, there are five (5) federally or state-listed species: tricolored blackbird, vernal pool fairy shrimp, Swainson's hawk, Colusa grass, and San Joaquin kit fox. [12] Appendix B lists the CNDDB-identified animal and plant species within the Atwater Quad, including their habitat and occurrences.

[10] U.S. Environmental Protection Agency. WATERS GeoViewer. Accessed May 15, 2025, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=074cfede236341b6a1e03779c2bd0692
[11] California Department of Fish and Wildlife. California Natural Diversity Database. Accessed May 15, 2025, https://wildlife.ca.gov/Data/CNDDB
[12] California Department of Fish and Wildlife. Biogeographic Information and Observation System 6. Accessed May 15, 2025, https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx#

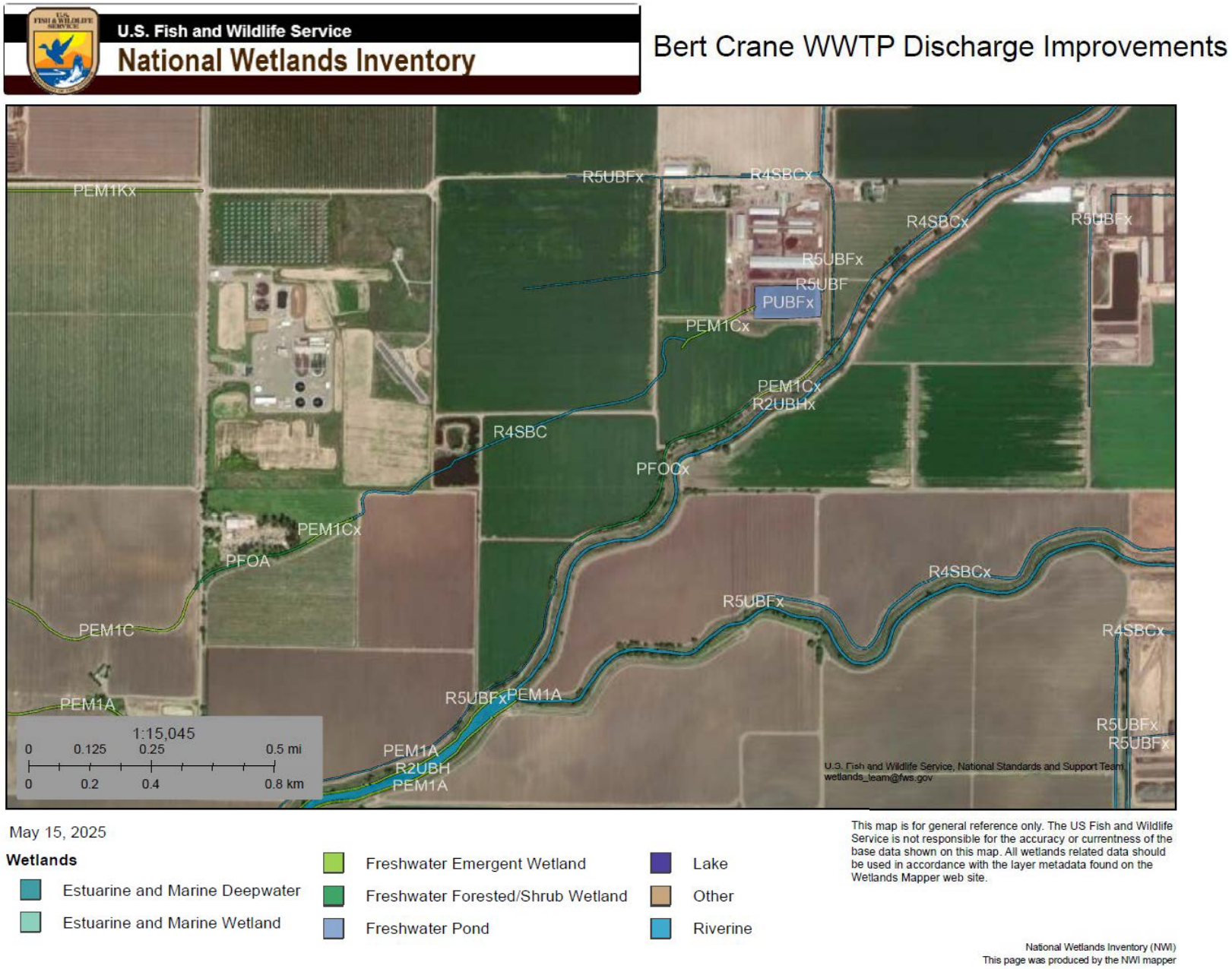


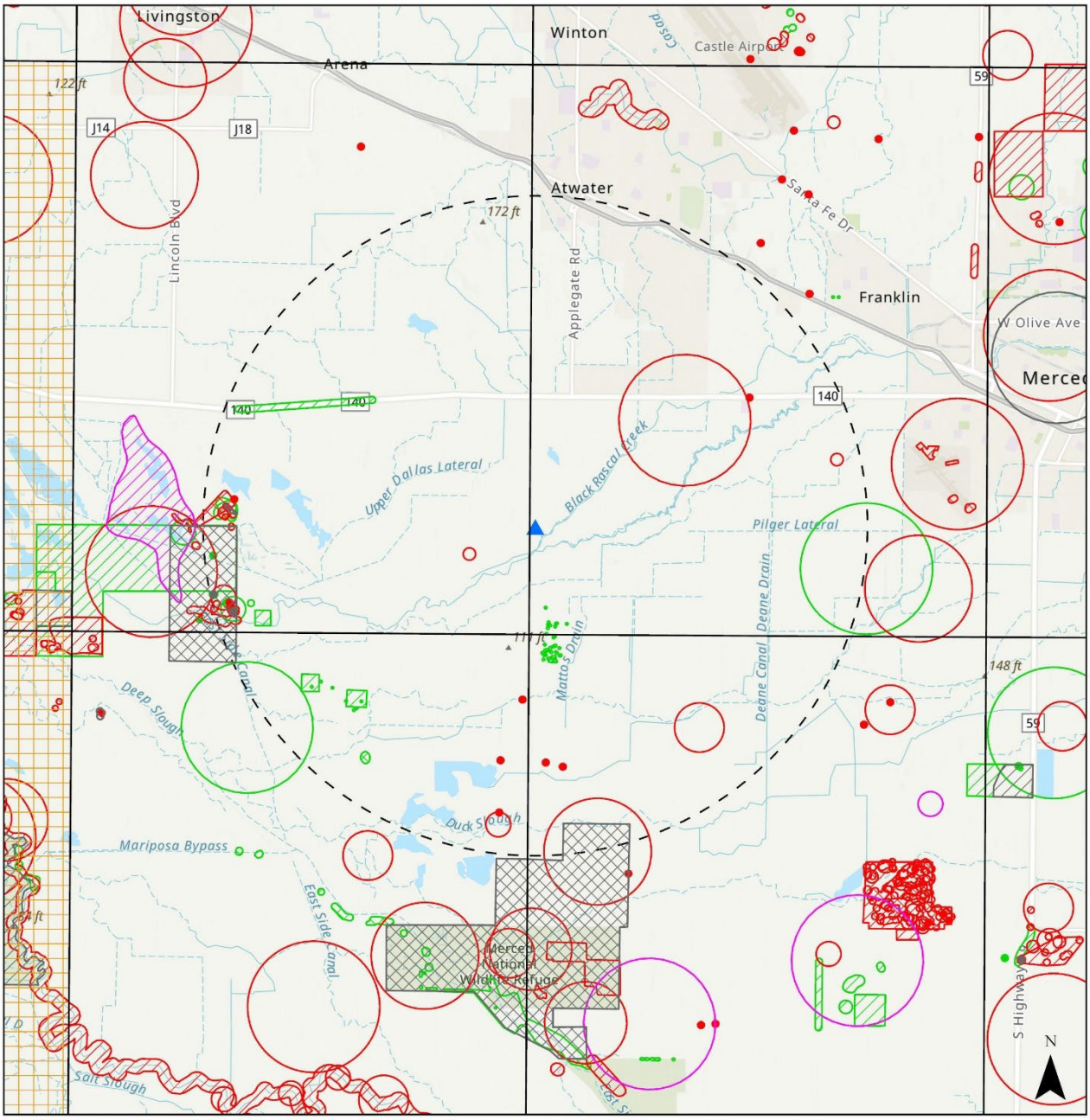
Figure 4-2 National Wetlands Inventory

The CNDDB also provides CNDDB-known occurrences within a set geographic radius. Figure 4-3 shows the CNDDB-identified occurrences of animal and plant species within the five (5)-mile radius of the Project site. The 5-mile radius extends into the adjacent Arena, Sandy Mush, and Turner Ranch Quads. There are 28 special-status species with a total of 50 occurrences that have been observed and reported to CDFW within the 5-mile radius. Table 4-4 lists all federally or state-listed special-status species CNDDB-known occurrences within the five (5)-mile radius of the Project site. As shown, the nearest occurrence is the tricolored blackbird occurrence that is approximately 0.9 miles southwest of the Project site, dated 2008. The CNNDB ranks occurrences by the condition of habitat and ability of the species to persist over time. As shown, the occurrences within the five (5)-mile radius of the Project site are ranked as fair, good, and excellent.

Table 4-4 Special-Status Species Occurrences within 5-mile radius of Project site

Species	Date	Rank	Distance to site
Tricolored blackbird	2008/04/25	Unknown	0.9 miles southwest
Colusa grass	2011/10/15	Fair	1.20 – 2.05 miles south
Tricolored blackbird	1971/05/09	Unknown	1.8 miles northeast
Tricolored blackbird	2003/03/06	Excellent	2.5 miles south
California tiger salamander	1999/04/01	Unknown	3.5 miles southwest
Swainson's hawk	1994/06/08	Unknown	3.5 miles southeast
Colusa grass	2001/09/06	Fair	3.5 miles southwest
Hoover's spurge	1987/05/29	Good	3.9 miles southwest
Tricolored blackbird	2011/04/16	Unknown	4.2 miles south
California tiger salamander	1994/03	Unknown	4.5 miles south
San Joaquin kit fox	1986/11/06	Unknown	4.5 miles south
California linderiella	1994/03/02	Unknown	4.5 miles west
Alkali milk-vetch	1994	Unknown	4.6 miles southwest
Swainson's hawk	2016/04/13	Unknown	4.6 miles east

Only federally or state-listed threatened/endangered species are listed in the table.
Extirpated or possible extirpated occurrences are not shown on the table.



Note: Data Accuracy
Accuracy represents spatial uncertainty in a relative way on a scale of one to ten (from most accurate to least accurate).

- Specific -specific bounded area (Level 1)
- Non-specific-non-specific bounded area (Level 3)
- 80m-specific bounded area with an 80-meter radius (Level 1)

Note: Extirpated or possible extirpated occurrences are not labeled in the figure.

Source: California Natural Diversity Database (CNDDB) Commercial (ds85)
Accessed Date: 5/15/2025

Figure 4-3 CNDDB Species Occurrences

California Fish and Game Code

Sections 3503, *3503.5*, and *3513* of the California Fish and Game Code specifically protect native birds and raptors. Mitigation for avoidance of impacts to nesting birds is typically necessary to comply with these Sections of the Fish and Game Code in CEQA. [13]

Section 3503: *It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.*

Section 3503.5: *It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.*

Section 3513: *It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.*

City of Atwater General Plan (2000)

The Atwater General Plan Open Space and Conservation Element identified 21 special-status species to have the potential to occur, and five (5) species have been observed in or near the Atwater Planning Area. It maps the location of special-status species in the city's Planning area, and none are located within or in the immediate vicinity of the Project site. The Atwater General Plan[14] outlined policies related to the conservation of biological resources:

GOAL CO-6. *Minimize impacts of development on wildlife and wildlife habitat, particularly special status species.*

> ***Policy CO-6.1.*** *Consider opportunities for habitat preservation and enhancement in conjunction with public facility projects, particularly parks and storm drainage facilities.*
>
> ***Policy CO-6.2.*** *Encourage the preservation of corridors between natural habitat areas to allow for the movement of wildlife and to prevent the creation of "biological islands."*
>
> ***Implementation Program CO-6.a.*** *When new development or redevelopment activities are proposed in locations with the potential for special status species to occur, require the project applicant to submit a report by a qualified biologist addressing the presence or absence of any special status species on the development site. The report shall include recommendations for avoiding or minimizing impacts on any special status species or habitat found to be present.*

4.4.2 Impact Assessment

Would the project:

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[13] The California Biologist's Handbook. California Fish and Game Code. Accessed on May 15, 2025, https://biologistshandbook.com/regulations/state-regulations/state-fish-and-game-code/#:~:text=Section%203503,any%20regulation%20made%20pursuant%20thereto.%E2%80%9D

[14] City of Atwater, California. (2000). City of Atwater 2000 General Plan Open Space and Conservation Element. Accessed on May 15, 2025, https://www.atwater.org/docs/generalplan/CHAPTER_4__OPEN_SPACE_AND_C.PDF

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Potentially Significant. Land within the Project site mostly consists of county road right-of-way and active agricultural fields. Construction of the proposed project, including installation of underground pipelines, construction of the pump station, and installation of outfall structures along Bear Creek or Black Rascal Creek, would temporarily disturb ruderal and agricultural lands and could result in impacts on common wildlife species during grading and trenching. In addition, under existing conditions, the City's tertiary-treated effluent is applied to agricultural fields for percolation and irrigation. This practice has resulted in periodic inundation of farmland, creating shallow ponded areas that support opportunistic wetland vegetation and transient wildlife use.

b) With implementation of these mitigation measures the project would not result in a substantial adverse effect on special-status species, riparian habitat, or sensitive natural communities. Impacts would therefore be less than significant with mitigation incorporated.Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Potentially Significant. According to the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) databases, there are no mapped sensitive natural communities within or immediately adjacent to the Project site. The nearest riparian habitat occurs along Black Rascal Creek and Bear Creek, both of which support intermittent aquatic and riparian vegetation along their banks.

The Project would construct or replace an outfall structure at one of these creeks: Black Rascal Creek under Alternative 1 or 3, or Bear Creek under Alternative 2. Construction would result in localized disturbance to the streambed, banks, and associated riparian vegetation. These features are subject to regulation under Fish and Game Code §1600 et seq. (Lake or Streambed Alteration Agreement) and Clean Water Act §§401 and 404.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Potentially Significant. Based on a review of the National Wetlands Inventory (NWI) and other available data, the Project area contains no mapped wetlands within the proposed pump station or pipeline alignment. The nearest wetlands occur along Black Rascal Creek and Bear Creek, both of which are natural or modified watercourses supporting intermittent riparian and aquatic vegetation. These features are considered waters of the U.S. and State subject to regulation under Clean Water Act Sections 401 and 404 and the Porter-Cologne Water Quality Control Act. Construction of the new or replacement outfall structure into Bear Creek or Black Rascal Creek may result in minor, localized disturbance to the streambed and adjacent riparian fringe.

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

Potentially Significant. Wildlife movement corridors are linear habitats that function to connect two (2) or more areas of significant wildlife habitat. These corridors may function on a local level as links between small habitat patches (e.g., streams in urban settings) or may provide critical connections between regionally significant habitats

(e.g., deer movement corridors). Wildlife corridors typically include vegetation and topography that facilitate the movements of wildlife from one area of suitable habitat to another, in order to fulfill foraging, breeding, and territorial needs. These corridors often provide cover and protection from predators that may be lacking in surrounding habitats. Wildlife corridors generally include riparian zones and similar linear expanses of contiguous habitat.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. The Atwater General Plan Open Space and Conservation Element outlines policies related to conservation of biological resources, as listed in the Environmental Setting above. In addition, *Chapter 12.32* of the Atwater Municipal Code (AMC) identifies the city's tree policies and *Section 12.32.080* addresses new construction. Planting, maintenance, and removal of existing trees on the Project site would be subject to compliance with these standards and regulations. However, there are no trees within the Project site. As such, the Project would have a less than significant impact.

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?

No Impact. The Project site is within the PG&E San Joaquin Valley Operation and Maintenance Habitat Conservation Plan (HCP). The HCP covers PG&E's routine operations and maintenance activities and minor new construction, on any PG&E gas and electrical transmission and distribution facilities, easements, private access routes, or lands owned by PG&E. The Project would not conflict or interfere with HCP. The Project is also located in the planning area of the Recovery Plan for Upland Species of the San Joaquin Valley, which addresses recovery goals for several species. The Project would not conflict with the plan since the site does not provide appropriate habitat for the species mentioned and would comply with applicable General Plan policies regarding habitat conservation. The City, County, and Regional Planning Agency do not have any other adopted or approved plans for habitat or natural community conservation. For these reasons, the Project would have no impact.

4.4.3 Mitigation Measures

None required.

4.5 CULTURAL RESOURCES

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				X
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	X			
c)	Disturb any human remains, including those interred outside of formal cemeteries?	X			

4.5.1 Environmental Setting

Generally, the term 'cultural resources' describes property types such as prehistoric and historical archaeological sites, buildings, bridges, roadways, and tribal cultural resources. As defined by CEQA, cultural resources are considered "historical resources" that meet criteria in *Section 15064.5(a)* of the CEQA Guidelines. If a Lead Agency determines that a project may have a significant effect on a historical resource, then the project is determined to have a significant impact on the environment. No further environmental review is required if a cultural resource is not found to be a historical resource.

California Historical Resource Information System Record Search

The Central California Information Center (CCIC) was requested to conduct a California Historical Resources Information System (CHRIS) Record Search for the Project site and surrounding "Project Area" (0.5-mile radius from perimeter of Project site). Results of the CHRIS Record Search were provided on May 9, 2025 (Record Search File Number 13350I). Full results are provided in Appendix C.

The CHRIS Record Searches generally review file information based on results of Class III pedestrian reconnaissance surveys of project sites conducted by qualified individuals or consultant firms which are required to be submitted, along with official state forms properly completed for each identified resource, to the Regional Archaeological Information Center. Guidelines for the format and content of all types of archaeological reports have been developed by the California Office of Historic Preservation, and reports will be reviewed by the regional information centers to determine whether they meet those requirements.

The results of the CCIC CHRIS Record Search indicate:

(1) There are no formally recorded prehistoric or historic archaeological resources or historic buildings or structures within the Project site.
(2) The Project site is within the overall boundary of the proposed "Merced Irrigation District" (P-24-001909), listed in the Office of Historic Preservation Built Environment Resource Directory (BERD) for Merced County

with a National Register of Historic Places rating of "6Y", determined ineligible for the National Register of Historic Places by consensus through the Section 106 process, not evaluated for the California Register of Historical Resources or for local listing.

(3) There are five (5) water conveyance features within the Project area, portions of which have been recorded elsewhere in Merced County. The following are contributing elements to the Merced Irrigation District:
   - Bear Creek Canal (P-24-002046)
   - Black Rascal Creek Canal (P-24-002047)
   - O'Donnell Lateral (P-24-001679)

   The following are not contributing elements:
   - Gurr Lateral (P-24-002011)
   - Hinds Lateral (P-24-002012)

(4) The General Land Office survey plat for T7S R12E (dated 1855) does not show any historic features in the south half of Section 35. The General Land Office survey plat for T8S R12E (dated 1856) shows the north half of Section 2 divided into parcels of various acreages.

(5) The 1918 edition of the Atwater USGS quadrangle shows two buildings within the NE ¼ of the NE ¼ of Section 2, T7S, R12E, and a building in the NE ¼ of the SE ¼ of Section 35, T7S R12E. The 1918 edition of the Area USGS quadrangle shows 2 buildings in the NW ¼ of Section 2. No further information is on file for these possible historic buildings.

(6) Prehistoric archaeological resources, including Native American burials, have been found elsewhere in Merced County beneath the plow zone within the environs of the Bear Creek and Black Rascal Creek drainage systems.

Further, the CCIC provided the following comments and recommendations:

(1) Since the project area has not been subject to previous investigations, there may be unidentified features involved in your project that are 45 years or older and considered as historical resources requiring further study and evaluation by a qualified professional of the appropriate discipline.

(2) If ground disturbance is considered a part of the current project, we recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources.

(3) If the proposed Project contains buildings or structures that are 45 years old or older, it is recommended that those resources be assessed by a professional familiar with architecture and history.

(4) Mitigate archaeological resources that could potentially be encountered during construction.

(5) If human remains are discovered, CA Health and Safety Code Section7050.5 requires the protection of the discovery and notification of the county coroner. If the remains are determined to be Native American, the coroner shall then notify the Native American Heritage Commission (NAHC).

4.5.2 Impact Assessment

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. According to the CHRIS Record Search conducted on May 9, 2025, there are no local, state, or federal designated historical resources within the Project site or vicinity. The Project site has been extensively disturbed by ongoing agricultural activities, which reduces the likelihood of undiscovered resources. The Project involves an underground pipeline and a pump station. Since no buildings or structures that would require demolition or modification are located in the construction area, there will be no direct impact on any potential historical buildings. As such, the Project would not cause a change to a historical resource pursuant to *Section 15064.5* and therefore, the Project would have no impact.

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

Potentially Significant Impact. The proposed project involves extensive ground-disturbing activities, including trench excavation for new pipelines, construction of a pump station, and installation of outfall structures near Bear Creek, Black Rascal Creek, and the Deckert Lateral. These areas contain Quaternary alluvial deposits with the potential to retain buried prehistoric or historic-era archaeological resources that are not visible at the surface. Because construction could uncover and damage previously unknown archaeological deposits, the project may cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines *Section 15064.5*. This impact is considered potentially significant and will be evaluated in detail in the EIR.

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

Potentially Significant Impact. Although no known cemeteries or formal burial sites occur within the project area, ground disturbance associated with pipeline installation and outfall construction could inadvertently uncover previously unknown human remains, particularly given the project's proximity to historic waterways traditionally used by Native American communities. Accidental discovery of human remains, including those outside of formal cemeteries, would be a potentially significant impact under CEQA. This issue will be further analyzed in the EIR, including identification of appropriate procedures and mitigation measures pursuant to Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

4.5.3 Mitigation Measures

None required.

4.6 ENERGY

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

4.6.1 Environmental Setting

Appendix F – Energy Conservation of the CEQA Guidelines requires consideration of energy implications in project decisions, including a discussion of the potential energy impacts with emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy resources (Public Resources Code *Section 21100(b)(3)*). Per Appendix F, a project would be considered inefficient, wasteful, and unnecessary if it violated existing energy standards, had a negative effect on local and regional energy supplies and requirements for additional capacity, had a negative effect on peak and base period demands for electricity and other energy forms, and affected energy resources.

The California Energy Commission updates the Building Energy Efficiency Standards (Title 24, Parts 6 and 11) every three years as part of the California Code of Regulations. The standards were established in 1978 in an effort to reduce the state's energy consumption. They apply to new construction of, and additions and alterations to, residential and nonresidential buildings and relate to various energy efficiencies including but not limited to ventilation, air conditioning, and lighting.[15] The California Green Building Standards Code (CALGreen), Part 11, Title 24, California Code of Regulations, was developed in 2007 to meet the state goals for reducing Greenhouse Gas emissions pursuant to AB32. CALGreen covers five (5) categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.[16] The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. Additionally, the California Air Resources Board (CARB) oversees air pollution control efforts, regulations, and programs that contribute to reduction of energy consumption. Compliance with these energy efficiency regulations and programs ensures that development will not result in wasteful, inefficient, or unnecessary consumption of energy sources. Lastly, the Energy Action Plan

[15] California Energy Commission. 2019 Building Energy Efficiency Standards. Accessed on May 16, 2025, https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

[16] California Department of General Services. (2020). 2019 California Green Building Standards Code. Accessed on May 16, 2025, https://codes.iccsafe.org/content/CGBC2019P3

(EAP) for California was approved in 2003 by the California Public Utilities Commission (PUC). The EAP established goals and next steps to integrate and coordinate energy efficiency demand and response programs and actions.[17]

4.6.2 Impact Assessment

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. The Project proposes the installation of a pump station and underground pipelines to carry treated effluent from the WWTP to Black Rascal Creek or Bear Creek. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities. All construction equipment shall conform to current emissions standards and related fuel efficiencies. In addition, through compliance with applicable CARB regulations (Airborne Toxic Control Measure), California Code of Regulations (Title 13, Motor Vehicles), and Title 24 standards, it can be determined that the proposed Project would not consume energy in a manner that is wasteful, inefficient, or unnecessary. For these reasons, the Project would result in a less than significant impact.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. As discussed under criterion a), the construction and operations of the Project would be subject to compliance with applicable energy efficiency regulations. Thus, applicable state and local regulations and programs would be implemented to reduce energy waste from construction and operations. Table 4-5 demonstrates that the Project does not conflict with or obstruct with the energy conservation/efficiency policies identified in the General Plan.

Table 4-5 Consistency with General Plan Energy Conservation Policies

General Plan Energy Conservation Policies	Consistency/Applicability Determination
Policy CO-7.1. *Encourage the incorporation of energy conservation features into new development, such as high-density development, bikeways and pedestrian paths, proper solar orientation, and transit routes and facilities.*	**Consistent.** The Project proposes a pump station and underground pipeline. The Project would be subject to compliance with Title 24 standards. As such, the Project incorporates energy conservation features.

Therefore, through compliance, the Project would not conflict with or obstruct any state or local plan for energy efficiency and a less than significant impact would occur because of the Project.

4.6.3 Mitigation Measures

None required.

[17] State of California. (2008). Energy Action Plan 2008 Update. Accessed on May 16, 2025, https://docs.cpuc.ca.gov/word_pdf/REPORT/28715.pdf

4.7 GEOLOGY AND SOILS

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				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 waste water?				X
f)	Directly or indirectly destroy a unique paleontological resource or site or	X			

unique geologic feature?				

4.7.1 Environmental Setting

Merced County is located within the San Joaquin Valley which is part of the Great Valley Geomorphic Providence that is bounded to the east by the Sierra Nevada Mountain range, to the west by the Coastal Range, and to the south by the Tehachapi mountains. The County has infrequent and low historic seismic activity. In addition, the county has no known active earthquake faults (i.e., faults showing activity within the last 11,000 years) and the Project site is not in any Alquist-Priolo Special Studies Zones. [18] [19]

The nearest faults are approximately 20 miles to the northeast in the Sierra Nevada Range (i.e., the Bear Mountain Fault) and approximately 30 miles to the southwest in the Diablo/Coastal Range (i.e., the San Joaquin, O'Neill, and Ortigalita Faults). The Ortigalita Fault is the nearest fault within the Alquist-Priolo earthquake fault zone; the fault has not been historically active. Earthquakes from nearby faults would most likely generate ground motion of shaking, but there is no history of this causing damage in the area. Compliance with the California Building Code (CBC) would be sufficient to prevent significant damage during seismic events.

Subsurface Soils

A search of the Web Soil Survey by the USDA Natural Resources Conservation Service (Figure 4-4) indicates that the following soils comprise the Project site: [20]

BgA: Burchell silt loam, 0-1 percent slopes. The depth to the water table is about 0 inches. Frequency of flooding is rare with no ponding. The BgA soils account for 7.8% of the Project site.

DdA: Delhi loamy sand, 0-3 percent slopes, MLRA 17. The depth to the water table is more than 80 inches, with no flooding or ponding. The DdA soils account for 2.4% of the Project site.

DpA: Dinuba sandy loam, 0-1 percent slopes. The depth to the water table is more than 80 inches with no flooding or ponding. The DpA soils account for 1.6% of the Project site.

FsA: Fresno loam, strongly saline-sodic, 0-1 percent slopes. The depth to the water table is more than 80 inches. Frequency of flooding is rare, with no ponding. The FsA soils account for 3.4% of the Project site.

HgA: Hilar loamy sand, 0-3 percent slopes. The depth to the water table is more than 80 inches, with no flooding or ponding. The HgA soils account for 35.2% of the Project site.

LeA: Landlow silty clay loam, 0-1 percent slopes. The depth to the water table is about 0 inches. Flooding is rare, with no ponding. The LeA soils account for 36.2% of the Project site.

[18] According to the California Department of Conservation, *"An active fault, for the purposes of the Alquist-Priolo Act, is one that has ruptured in the last 11,000 years."*
[19] California Department of Conservation. "CGS Seismic Hazard Program: Alquist-Priolo Fault Hazard Zones." Accessed on May 19, 2025, https://gis.data.ca.gov/datasets/daba2b7801454ab6a159aa7ad411d0f6_0/explore
[20] United States Department of Agriculture Natural Resources Conservation Service. "Web Soil Survey." Accessed on May 19, 2025, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

LmA: Lewis loam, moderately saline-alkani, 0-1 percent slopes. The depth to the water table is more than 80 inches. Flooding is rare, with no ponding. The LmA soils account for 4.7% of the Project site.

MfA: Marguerite silty clay loam, 0-1 percent slopes. The depth to the water table is more than 80 inches with no flooding or ponding. The MfA soils account for 6.6% of the Project site.

SnA: Snelling sandy loam, 0-3 percent slopes. The depth to the water table is more than 80 inches with no flooding or ponding. The SnA soils account for 1.9% of the Project site.

California Building Code

The California Code of Regulations (CCR) Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The California Building Code incorporates by reference the International Building Code with necessary California amendments. About one-third of the text within the California Building Standards Code has been tailored for California earthquake conditions. Construction within the City of Atwater is governed by the seismic safety standards of Chapter 16 of the Code. These standards are applicable to all new buildings and are required to provide the necessary safety from earthquake related effects emanating from fault activity.



Figure 4-4 USGS Web Soil Survey Map

4.7.2 Impact Assessment

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. There are no known active earthquake faults within the Project site, nor is the Project sitewithin an Alquist-Priolo earthquake fault zone as established by the Alquist-Priolo Fault Zoning Act. As such, development of the Project in an area void of earthquake faults would not cause rupture of a known earthquake fault. Therefore, no impact would occur as a result of the Project.

ii. Strong seismic ground shaking?

Less than Significant Impact. The Project site is in a region that is traditionally characterized by relatively low seismic activity. Additionally, development of the Project site would be required to comply with current seismic protection standards in the California Building Code (CBC), which would limit potential damage to structures and thereby reduce potential impacts including the risk of loss, injury, or death. Compliance with the CBC would ensure a less than significant impact.

iii. Seismic-related ground failure, including liquefaction?

No Impact. No liquefaction nor lateral spreading have been observed in the region from any historic earthquake. Liquefaction and lateral spreading potential are considered very low due to the nature of the underlying soils, relatively deep-water table, and history of low ground shaking potential. In addition, there are no geologic hazards or unstable soil conditions known to exist within the Project site. The Project site is relatively flat with stable soils and no apparent unique or significant landforms. As CEQA requires an analysis of a Project's impact on the environment rather than the environment's impacts on a Project, no impacts would occur. Therefore, because the Project does not have any aspect that could result in seismic-related ground failure, including liquefaction, the Project would have no impact.

iv. Landslides?

Less than Significant Impact. Landslides are not expected to occur as a result of the Project as the Project site is not located in a zone where landslides, subsidence, or liquefaction could possibly occur. The topography of the Project site is relatively flat with stable, native soils. While the Project would include work on the banks of Black Rascal Creek or Bear Creek, a Lake and Streambed Alteration Agreement would be required by CDFW that would ensure alterations to the banks would not have an adverse effect. Therefore, a less than significant impact would occur because of the Project.

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

Less than Significant Impact. Soil erosion and loss of topsoil can be caused by natural factors, such as wind and flowing water, and human activity. The Project site is relatively flat, which limits the potential for substantial soil erosion. Development of the Project would require typical site preparation activities such as grading and trenching which may result in the potential for short-term soil disturbance or erosion impacts. Soil disturbance during construction is largely caused by the use of water. Excessive soil erosion could cause damage to existing structures and roadways.

The likelihood of erosion occurring during construction would be reduced through site grading and surfacing, which would be subject to review and approval by the City and County for compliance with applicable standards. Development of the Project would be required to comply with AMC *Chapter 12.22 – Stormwater Management and Discharge Control Ordinance*, which requires that any person performing construction activities in the City shall prevent pollutants from entering the storm water conveyance system and comply with all applicable Federal, State, and local laws, ordinances or regulations, including but not limited to, the current California NPDES general permit for storm water discharges associated with construction activity (construction general permit). All construction projects, regardless of size, having soil disturbance or activities exposed to storm water must, at a minimum, implement best management practices (BMPs) for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures, and prohibited discharges. Implementation of the BMPs minimizes the potential for the Project to result in substantial erosion or loss of topsoil. In addition, the City's Public Works and Building Departments has prepared a standard set of conditions for proposed developments to the control of dust emissions during grading and other earth moving activities.

The likelihood of erosion would be further reduced through compliance with regulations set by the State Water Resources Control Board (SWRCB). Namely, the SWRCB requires sites larger than one (1) acre to comply with the General Permit for Discharges of Storm Water Associated with Construction Activity (i.e., General Permit Order No. 2009-0009-DWQ). The General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD). The SWPPP estimates the sediment risk associated with construction activities and includes best management practices (BMP) to control erosion. BMPs specific to erosion control cover erosion, sediment, tracking, and waste management controls. Implementation of the SWPPP minimizes the potential for the Project to result in substantial soil erosion or loss of topsoil. With these provisions in place, impacts on soil and topsoil by the Project would be considered less than significant.

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?

Less than Significant Impact. Ground subsidence is the settling or sinking of surface soil deposits with little or no horizontal motion. Soils with high silt or clay content are subject to subsidence. Subsidence typically occurs in areas with groundwater withdrawal or oil or natural gas extraction. The topography of the site is relatively flat with stable, native soils and no apparent unique or significant landforms. Future development of the Project would be required to comply with current seismic protection standards in the CBC which would significantly limit potential seismic-related hazards such as landslides, lateral spreading, subsidence, liquefaction, or collapse. Compliance with the CBC would ensure a less than significant impact.

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

No Impact. The Project site is relatively flat with native soils of predominately loam, sandy loam, loamy sand, which is not expansive. No impact would occur.

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?

No Impact. The Project would not generate wastewater that would require the use of septic tanks or an alternative wastewater disposal system. Therefore, no impact would occur.

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

Potentially Significant Impact. Project construction would require substantial ground disturbance, including trenching for installation of new pipelines, excavation for a pump station, and construction of outfall structures. These activities would occur within Quaternary alluvial deposits, which are known to contain vertebrate fossils and other scientifically important paleontological resources in the region. Because excavation could directly or indirectly destroy unique paleontological resources or unique geologic features that may be present below the disturbed surface soils, this impact is considered potentially significant under CEQA. A detailed evaluation of paleontological resource sensitivity, potential impacts, and mitigation measures will be provided in the EIR.

4.7.3 Mitigation Measures

None required.

4.8 GREENHOUSE GAS EMISSIONS

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

4.8.1 Environmental Setting

In assessing the significance of impacts from GHG emissions, *Section 15064.4(b)* of the CEQA Guidelines states that a lead agency may consider the following:

- The extent to which the project may increase or reduce GHG emissions as compared to the environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The California Air Resources Board (CARB) 2022 Climate Change Scoping Plan, guidance from the SJVAPCD, and City of Atwater General Plan are discussed below and are utilized as thresholds of significance.

2022 Climate Change Scoping Plan

The CARB 2022 Climate Change Scoping Plan is the adopted statewide plan for reduction and mitigation of GHGs to implement Assembly Bill (AB) 1279. AB 1279 was issued on August 12, 2022 to require California to achieve "net zero greenhouse gas emissions" as soon as possible and to further reduce anthropogenic GHG emissions thereafter. It sets a statewide goal to reduce emissions 85% below 1990 levels no later than 2045.

Consequently, the Scoping Plan involves several measures for cost-effective reduction of GHG emissions, including continuing existing programs such as Renewable Portfolio Standard, Advanced Clean Cars, Low Carbon Fuel Standard, etc., and achieving new mandates to decarbonize several sectors. Along with reducing emissions, environmental justice policies are included to address the ongoing air quality disparities.

Appendix D of the 2022 Scoping Plan include recommendations to build momentum for local government actions to align with State goals, including through CEQA review. The Appendix outlines the priority GHG reduction

strategies for local governments, including transportation electrification, VMT reduction, and building decarbonization. [21]

SJVAPCD CEQA Air Quality Guidelines

The SJVAPCD's Guidance for Valley Land Use Agencies in Addressing GHG Impacts for New Projects Under CEQA (2009) provides screening criteria for climate change analyses, as well as draft guidance for the determination of significance. [22,23] These criteria are used to evaluate whether a project would result in a significant climate change impact (see below). Projects that meet one of these criteria would have less than significant impact on the global climate.

- Does the project comply with an adopted statewide, regional, or local plan for reduction or mitigation of GHG emissions? If no, then:
- Does the project achieve 29% GHG reductions by using approved Best Performance Standards (BPS)? If no, then
- Does the project achieve AB 32 targeted 29% GHG emission reductions compared with Business As Usual (BAU)?

Assembly Bill (AB) 32 was enacted by the California State legislature in 2006 with the aim to reduce GHG emissions to levels of 1990 by 2020. Recommended actions to achieve these aims were adopted by the California Air Resources Board (CARB) in 2008 (i.e., the Climate Change Scoping Plan). However, the 29% GHG emission reductions compared to BAU threshold are outdated since it is aimed to meet AB 32's 2020 goals, thus this threshold would not be used for analysis.

The City of Atwater does not have an adopted Climate Action Plan or GHG Reduction Plan. Because BPS have not yet been adopted and identified for specific development projects, and because the City of Atwater has not yet adopted a plan for reduction of GHG with which the Project can demonstrate compliance, the California Air Resources Board (CARB) 2022 Climate Change Scoping Plan and guidance from the San Joaquin Valley Air Pollution Control District (SJVAPCD) will be used as the threshold of significance.

San Joaquin Valley Air Pollution Control District

SJVAPCD adopted *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* and the policy *District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency* in 2009. It recognized that project-specific emissions are cumulative and could be considered cumulatively considerable without mitigation. SJVAPCD suggested that the requirement to reduce GHG emissions for all projects is the best method to address this cumulative impact.

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[21] California Air Resources Board. (2022). 2022 Scoping Plan Appendix D. Accessed on May 19, 2025, https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf

[22] San Joaquin Valley Air Pollution Control District. (2009). Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. Accessed May 19, 2025, http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf.

[23] San Joaquin Valley Air Pollution Control District. (2000). Environmental Review Guidelines: Procedures for Implementing the California Environmental Quality Act. Accessed May 19, 2025, http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf

The SJVAPCD requires quantification of GHG emissions for all projects which the lead agency has determined that an EIR is required. Although an EIR is not required for the Project, the GHG emissions are quantified below. Short-term construction and long-term operational GHG emissions for project buildout were estimated using CalEEMod™ (v.2020.4.0). (See Appendix D). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e$), based on the global warming potential of the individual pollutants.

City of Atwater General Plan

At the local level, while the City of Atwater General Plan does not meet criteria of the CEQA Guidelines 15064.4(b)(3) for an appropriate GHG emissions reduction plan or program, the General Plan does have goals and policies relevant to climate change and minimizing GHG emissions and other pollutants, with an overall aim to reduce air quality impacts on the environment. These goals and policies are outlined in the Open Space and Conservation Element (CO), "Air Quality", and Safety Element (SF), "Wind Erosions and Dust Storms".

GOAL CO-3. *Strive to reduce air emissions and obtain goals set in local and regional air quality attainment plans.*

> ***Policy CO-3.1.*** *Cooperate with the San Joaquin Valley Unified Air Pollution Control District (APCD) in implementing air quality improvement plans prepared by the District.*
>
> ***Policy CO-3.2.*** *Encourage land use development projects that would result in fewer adverse air quality impacts, such as mixed use and pedestrian-oriented projects.*
>
> ***Policy CO-3.3.*** *Encourage the use of modes of transportation other than automobiles.*

GOAL SF-7. *Prevent activities that contribute to increased wind erosion.*

> ***Policy SF-7.1.*** *Require all projects that involve grading or other earth moving activities to implement dust control measures to reduce dust emissions.*

4.8.2 Impact Assessment

Would the project:

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

Less than Significant Impact. The 2025 CEQA Guidelines do not establish a quantitative threshold of significance for GHG impacts, leaving lead agencies the discretion to establish such thresholds for their respective jurisdictions. Since the SJVAPCD does not have established GHG significance emissions thresholds and the City of Atwater does not have an adopted CAP for CEQA tiering purposes, the following utilizes qualitative analysis for greenhouse gas emission impacts. Short-term construction and long-term operational GHG emissions for project buildout were estimated using CalEEMod™ (v. 2022.1.1.29). See Appendix A for output files.

Construction Emissions

In regard to construction, the SJVAPCD does not recommend assessing pollution associated with construction, as pollution-related construction will be temporary. These construction GHG emissions are a one-time release. As such, it can be anticipated that these construction emissions would not generate a significant contribution to global climate change over the lifetime of the Project.

Operational Emissions

Regarding the long-term operational related GHG emissions, the estimated operational emissions for buildout of the Project incorporate the potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation. The South Coast Air Quality Management District (SCAQMD) adopted a staff proposal for an interim GHG significance threshold of 10,000 MT CO_2e per year for GHG for construction and operational emissions. The BAAQMD also adopted a 10,000 MT CO_2e per year threshold. Utilizing this as the threshold, annual operational emissions below 10,000 $MTCO_2e$ would have a less than significant cumulative impact on GHGs. The annual operational GHG emissions associated with buildout of the Project is 23.4 MT CO_2e based on the CalEEMod run. This is less than the 10,000 $MTCO_2e$ threshold of the SCAQMD and BAAQMD.

Further, the Project would not exceed the thresholds of significance for construction or operational emissions as discussed in Section 4.3. Additionally, as discussed in more detail below, the Project would be generally consistent with the applicable goals and policies related to GHG reduction measures, including CARB's 2022 Scoping Plan and SJVAPCD guidelines, and the City of Atwater General Plan goals and policies that aim to reduce air emissions and improve air quality, which reduces GHG emissions as a result. Cumulatively, these emissions would not generate a significant contribution to global climate change over the lifetime of the proposed Project. As such, it can be determined that the Project would not occur at a scale or scope with potential to contribute substantially or cumulatively to the generation of GHG emissions and therefore the impact would be less than significant.

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

Less than Significant Impact. The compatibility of the Project with the 2022 Scoping Plan and MCAP, MCAG RTP/SCS, SJVAPCD CCAP, and applicable goals in the Atwater General Plan.

Consistency with the 2022 Climate Change Scoping Plan

Based on the evaluation shown in Table 4-6, the Project is consistent with the reduction measures identified in the 2022 Scoping Plan. The reduction measures are derived from the 2022 Scoping Plan Table 1 – Priority GHG Reduction Strategies, which provides 3 priority areas to assist jurisdictions with developing local climate action plans.

Table 4-6 Scoping Plan Priority GHG Reduction Strategies Consistency Analysis

Priority Areas	Priority GHG Reduction Strategies	Consistency/Applicability Determination
Transportation Electrification	Convert local government fleets to ZEVs and provide EV charging at public sites.	**Not Applicable.** The Project does not include usage of local government fleets.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes,	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.

	permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).	
VMT Reduction	Reduce or eliminate minimum parking standards.	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.	**Not Applicable.** No roadways are proposed as part of the Project.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.	**Not Applicable.** The Project proposes a pump station, underground pipeline and an outfall structure. The Project does not increase density of development due to the nature of the Project.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking.	**Not Applicable.** The Project is not intended for public access.
	Implement parking pricing or transportation demand management pricing strategies.	**Not Applicable.** The Project does not propose any parking nor is there to be any increased transportation demand as a result of the Project.
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood)	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)	**Consistent.** While installation of the pipeline would be done within "greenfield" land, the land would not be converted to urban uses as the pipeline would be located underground.
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers) .	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project. In addition, the Project does not include retrofits for existing buildings.
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project. In addition, the Project does not include retrofits for existing buildings.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing)	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in	**Not Applicable.** The Project does not include the construction of canopies or buildings. As such, no solar photovoltaic

	public parking lots, battery storage systems in municipal buildings)	systems or battery storage systems are proposed.

Consistency with the MCAG RTP/SCS

The Merced CAG's 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) includes a series of goals for the region that would reduce GHG emissions based on the land use consistency and the reduction of vehicle trips. Most goals and policies are implemented at the regional or city level. Since the proposed Project will be subject to local regulations, the Project would be consistent with goals and policies identified in the RTP/SCS.

Consistency with the Atwater General Plan

The Project complies with the General Plan goals and policies listed in the Environmental Settings since it is generally compliant with the SJVAPCD air quality attainment plans.

In conclusion, the Project contains features that would reduce GHG emissions in compliance with CARB 2022 Climate Change Scoping Plan, MCAG RTP/SCS, and the General Plan. As such, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and therefore the impact would be less than significant.

4.8.3 Mitigation Measures

None required.

4.9 HAZARDS AND HAZARDOUS MATERIAL

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 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
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)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

4.9.1 Environmental Setting

For the purposes of this section, the term “hazardous materials” refers to "injurious substances," which include flammable liquids and gases, poisons, corrosives, explosives, oxidizers, radioactive materials, and medical supplies and waste. These materials are either generated or used in various commercial and industrial activities. Hazardous

wastes are injurious substances that have been or will be disposed of. Potential hazards arise from the transport of hazardous materials, including leakage and accidents involving transporting vehicles. There also are hazards associated with the use and storage of these materials and waste. Hazardous materials are grouped into the following four categories based on their properties:

- Toxic: causes human health effect
- Ignitable: has the ability to burn
- Corrosive: causes severe burns or damage to materials
- Reactive: causes explosions or generates toxic gases

"Hazardous wastes" are defined in California Health and Safety Code *Section 25141(b)* as wastes that: "…because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause or significantly contribute to an increase in mortality or an increase in serious illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed." Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, *Sections 66261.20-24* contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous waste generators may include industries, businesses, public and private institutions, and households. Federal, state, and local agencies maintain comprehensive databases that identify the location of facilities using large quantities of hazardous materials, as well as facilities generating hazardous waste. Some of these facilities use certain classes of hazardous materials that require risk management plans to protect surrounding land uses. The release of hazardous materials would be subject to existing federal, state, and local regulations and is similar to the transport, use, and disposal of hazard materials.

Regulatory Setting

The California Environmental Protection Agency (CalEPA) was established in 1991 to protect the environment. CalEPA oversees the Unified Program through Certified Unified Program Agencies (CUPAs), which consolidates six (6) environmental programs to ensure the handling of hazardous waste and materials in California. The local CUPA in Merced County, Department of Public Health, Division of Environmental Health (MCDEH), is responsible for administering the following six (6) CUPA programs:

- Hazardous Materials Business Plan (HMBP)
- California Accidental Release Program (CalARP)
- Underground Storage Tank Program (UST)
- Aboveground Storage Tank Program (APSA)
- Hazardous Waste Generator Program
- Tiered Permitting Program

The Department of Toxic Substances Control (DTSC) is another agency in California that regulates hazardous waste, conducts inspections, provide emergency response for hazardous materials-related emergencies, protect water resources from contamination, removing wastes, etc. DTSC acts under the authority of Resource Conservation and Recovery Act (RCRA) and California Health and Safety Code. The DTSC implements the California Code of Regulations (CCR) Title 22 Division 4.5 to manage hazardous waste. Government Code *Section 65962.5* requires that DTSC shall compile and update at least annually a list of:

(1) All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code ("HSC").

(2) All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.

(3) All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposal on public land.

(4) All sites listed pursuant to Section 25356 of the Health and Safety Code.

(5) All sites included in the Abandoned Site Assessment Program.

This list of hazardous waste sites in California, referred to as the Cortese List, is then distributed to each city and county. According to the CCR Title 22, soil excavated from a site containing hazardous materials is considered hazardous waste, and remediation actions should be performed accordingly. Cleanup requirements are determined case-by-case by the jurisdiction.

Record Search

Pursuant to California Government Code *Section 65962.5*, the California Environmental Protection Agency (CalEPA) is required to compile, maintain, and update lists of hazardous material release on an annual basis. The California Department of Toxic Substances Control (DTSC) is responsible for maintaining the Hazardous Waste and Substances Site List (i.e., the Cortese List), which is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Hazardous material release sites are recorded in the DTSC EnviroStor and the State Water Board's GeoTracker databases. A review of the National Priorities List (NPL), EnviroStor database, and GeoTracker database was performed on September 9, 2025. [24] [25] [26] No hazardous sites are identified within or adjacent to the Project site.

4.9.2 Impact Assessment

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

[24] United States Environmental Protection Agency. 2024. Superfund: National Priorities List (NPL). Accessed September 9, 2025, https://www.epa.gov/superfund/superfund-national-priorities-list-npl
[25] Department of Toxic Substances Control. Your EnviroStor. Accessed September 9, 2025, https://dtsc.ca.gov/your-envirostor/
[26] State Water Resources Control Board. GeoTracker. Accessed September 9, 2025, https://geotracker.waterboards.ca.gov/

Less than Significant Impact. The Project proposes the installation of a pump station and underground pipeline to transport treated effluent from the wastewater treatment plant (WWTP) to either Black Rascal Creek or Bear Creek. The three (3) alternatives (i.e., Alternative 1 - Bert Crane Road Alignment, Alternative 2 - South WWTP Alignment, and Alternative 3 - Deckert Lateral Alignment) all involve similar construction and operational activities with respect to hazardous materials.

Construction

Construction activities would involve the use of fuels, lubricants, and other potentially hazardous materials associated with construction equipment. These potential impacts will be short-term and temporary and would be reduced through compliance with a comprehensive set of regulations, including EPA's oil spill prevention and preparedness regulations (e.g., Spill Prevention, Control, and Countermeasure plans), California Office of Emergency Services regulations related to hazardous materials accident prevention, California Department of Toxic Substances Control (DTSC) permitting and regulations for hazardous waste generation and handling, Merced County's environmental health regulations related to hazardous materials, and standard equipment operating practices and best management practices (BMPs) as specified in operator manuals and construction management plans. Compliance would ensure that future development does not expose the public or environment to hazardous materials through routine transport, use, or disposal. Therefore, construction impacts are considered less than significant.

Operations

During operations, the routine use of hazardous materials would be primarily associated with minor maintenance activities at the new pump station. These materials would include small quantities of lubricants, cleaning agents, and other chemicals necessary for equipment upkeep. The routine transport, use, and disposal of these materials would be minimal and would not pose a significant risk to the public or the environment.

For these reasons, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and a less than significant impact would occur.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. As described under criterion a), the Project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, a less than significant impact would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. There are no existing or proposed schools within one-quarter mile of the Project. Additionally, as described under criteria a) and b) above, the Project is not anticipated to emit hazard emissions or handle hazardous materials, substances, or water that would pose a risk or threat to the school or surrounding area. Therefore, no impact would occur.

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?

No Impact. According to NPL, EnviroStor, and GeoTracker, the Project site does not include a hazardous material release site. Since there are no active hazardous material release sites on the Project site pursuant to Government Code *Section 65962.5*, the Project would not create a significant hazard to the public of the environment and there would be no impact.

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?

No Impact. The nearest public airport or public use airport is the Merced Regional Airport located approximately six (6) miles east of the Project site. According to the Merced County Airport Land Use Compatibility Plan, the Project site is not within an Airport Influence Area (AIA). [27] Because the Project is not located within an airport land use plan or is within two (2) miles of an airport, there would not be a safety hazard for people residing or working in the Project site and no impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The Project would not involve any new or altered infrastructure associated with evacuation, emergency response, and emergency access routes within the City of Atwater or County of Merced. Construction may require lane closure; however, these activities would be short-term and access would be maintained through standard traffic control. Following construction, all roadways would continue to provide access as existing. Therefore, through compliance, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Less than Significant Impact. The Project site is not situated in a wildland or a CalFire-designated Fire Hazard Severity Zone (FHSZ). The Project site is within Local Responsibility Area (LRA), meaning the financial responsibility of preventing and suppressing wildfires is primarily the responsibility of Merced County (Unincoporated). [28] The flat terrain, lack of wildland vegetation, absence of prevailing winds that would exacerbate fire risk, and location outside a FHSZ reduces wildfire risk and the potential to expose people or structures to wildland fires. In addition, the Project consist of underground improvements and a pump station, neither of which involves activities that would significantly increase the risk of fire. While the risk is low, the Project would be constructed in compliance with the

[27] County of Merced. (2012). Merced County Airport Land Use Compatibility Plan. Accessed September 9, 2025, https://web2.co.merced.ca.us/pdfs/planning/aluc/alucp_july2012/2012_mer_alucp_entire_document.pdf
[28] Cal Fire. Fire Hazard Severity Zones. Accessed September 9, 2025, https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones

CBC and local fire safety regulations, including the California Fire Code, which include measures to minimize fire risk. As such, the Project would have a less than significant impact.

4.9.3 Mitigation Measures

None required.

4.10 HYDROLOGY AND WATER QUALITY

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	X			
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	X			
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:				
	i. Result in a substantial erosion or siltation on- or off-site;			X	
	ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:			X	
	iii. 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; or			X	
	iv. Impede or redirect flood flows?			X	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

4.10.1 Environmental Setting

The Project site is within city limits and would be connected to the city's water and stormwater services. The city's water and stormwater services are described as follows.

Water

The City provides water service for residences, commercial establishments, manufacturing plans, institutional facilities, and parks within the city limits. The City operates nine (9) wells to provide water to its customers. All wells are located within the City except for Well #21, which is located at the northeast corner of the Castle Airport facility adjacent to the U.S. Federal prison. [29] In 2016, the City produced an average of eight million gallons per day (mgd). The system has a capacity to pump 15,388 gallons per minute (gpm) and two (2) million gallons of storage. As of 2016, the system serves approximately 6,800 residential connections, 520 commercial connections, six (6) industrial connections, and 45 irrigation connections. [30] The water is distributed through a grid system of pipelines ranging from four (4) to 14 inches in diameter. The system supplies the City with drinking water and provides water for fire protection through fire hydrants.

The City has an overall Supervisory Control and Data Acquisition (SCADA) system that allows for remote monitoring and control of the water system via radio control. This system enhances quick response times to problem situations and fathers real-time, accurate data. The system can accurately determine water production quantities. To protect groundwater resources and minimize the future need to import water from other sources, the City and MID are engaged in efforts to reduce water consumption. New Atwater connections are metered, and per State law, un-metered connections will be metered in 2025. [31]

The city's water supply is obtained from the Merced Subbasin, which is part of the larger San Joaquin River Groundwater Basin and is regulated under the Sustainable Groundwater Management Act by the Merced Irrigation-Urban Groundwater Sustainability Agency GSA). The Merced Groundwater Subbasin Groundwater Sustainability Plan (GSP), adopted in December 2019, was developed to address the subbasin's critical overdraft and bring it into balance by 2040. The Subbasin is heavily reliant on groundwater. Of note, the City and MID are working to reduce water consumption. The City has met Assembly Bill No. 2572 requirements for water meter installation in all residences built in/after 1992; such requirements seek to reduce consumption. Implementation of the Merced Groundwater Subbasin GSP will ensure that groundwater supply is sustainability managed.

In an effort to ensure future growth on the eastern side of the City , in 2016 the City negotiated a settlement with the private Meadowbrook Water Company to relocate their "service area" from the area east of Buhach Road, north of State Highway 99 located within the City Sphere of Influence, to an area north of Santa Fe Drive and south of Cardella Road further to the northeast (the Meadowbrook Water Company was sold to Cal American Water Company in late 2016).

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[29] City of Atwater. (2018). Drinking Water Quality Report. Accessed January 14, 2025, https://www.atwater.org/wp-content/uploads/2019/12/2017-CCR.pdf
[30] City of Atwater; EMC Planning Group, Inc. (2017). 2014-2043 5th Cycle Housing Element Update. Accessed January 14, 2025, https://www.atwater.org/city-of-atwater-2014-2023-5th-cycle-housing-element/
[31] City of Atwater. (July 2018). Drinking Water Quality Report. Accessed January 14, 2025, https://www.atwater.org/wp-content/uploads/2019/12/2017-CCR.pdf

Atwater General Plan established goals and policies related to groundwater use that would potentially influence implementation of the GSP, as listed below. The GSP anticipates that implementation of the GSP will reinforce Atwater's General Plan goals in addition to the groundwater quality monitoring and remediation described therein.

GOAL CO-1. *Support efforts to monitor and remediate existing groundwater contamination within the planning area.*

> ***Policy CO-1.1.*** *Encourage responsible agencies to continue monitoring and remediation of contamination of the aquifer underneath the CAADC site.*
>
> ***Policy CO-1.2.*** *Encourage the County of Merced to pursue remediation of groundwater contamination in the unincorporated portions of the Planning Area.*

GOAL CO-2. *Prevent the creation of new groundwater contamination or the spread of existing contamination.*

> ***Policy CO-2.1.*** *Work with the Regional Water Quality Control Board (RWQCB) to protect, improve, and enhance groundwater quality in the region.*
>
> ***Policy CO-2.2.*** *Educate the public on the proper handling and disposal of hazardous materials and household hazardous waste.*

According to the Atwater General Plan, most of the city of Atwater lies outside the 100-year floodplain designated by the Federal Emergency Management Agency (FEMA). The Seismic and Public Safety Element addresses flood hazards and dam inundation areas through several goals and policies, as listed below.

GOAL SF-4. *Avoid damage to persons and property resulting from flooding.*

> ***Policy SF-4.1.*** *Restrict development within the 100-year floodplain in a manner that effectively prevents damage to persons and property.*

GOAL SF-5. *Reduce potential flood impacts resulting from dam failures.*

> ***Policy SF-5.1.*** *Ensure that the City's Emergency Plan is updated to include dam failure inundation as a potential emergency and procedures for the efficient and orderly notification and evacuation of potential dam inundation areas.*
>
> ***Policy SF-5.2.*** *Request that the U.S. Army Corps of Engineers provide information relative to the potential dam inundation area associated with Castle Reservoir.*

Stormwater

The City of Atwater fulfill the requirements set forth by the RWQCB General Permit. The City's storm drainage system generally consists of retention basins with a discharge to a natural drain or MID canal. There are 13 detention basins and 16 storm water lift stations in the city, with pumping capacities ranging from 75 gpm to 8,000 gpm. The City has an agreement with MID for storm water discharge that includes a fee for maintenance of the canal system. MID sets a maximum rate of discharge for each development. In some situations, where service is not available, the City requires private basins to be constructed on Project sites.

4.10.2 Impact Assessment

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Potentially Significant Impact. The Project proposes the installation of a pump station and underground pipeline to transport treated effluent from the wastewater treatment plant (WWTP) to either Black Rascal Creek or Bear Creek. The three (3) alternatives (i.e., Alternative 1 - Bert Crane Road Alignment, Alternative 2 - South WWTP Alignment, and Alternative 3 - Deckert Lateral Alignment) all involve similar construction and operational activities with respect to ground water quality. Redirecting tertiary effluent via new outfalls may alter receiving water conditions (e.g., flow, temperature, nutrients, pathogens) and require new or amended RWQCB WDRs/NPDES permits. Without additional analysis, this impact is potentially significant and will be assessed in the EIR.

Overall, construction and operational impacts on water quality and waste discharge would be less than significant levels.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Potentially Significant Impact. Rerouting effluent may change recharge volumes/locations relative to the Merced Subbasin GSP. This impact is potentially significant and will be assessed in the EIR.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. Erosion, the process of soil being moved by wind or water, is a concern because it can lead to siltation. Siltation is the settling of sediment to the bed of a stream or lake which increases the turbidity of water. Turbid water can have harmful effects on aquatic life by clogging fish gills, reducing spawning habitat, and suppressing aquatic vegetation growth. Soil erosion and loss of topsoil can be caused by natural factors, such as wind and flowing water, and human activity.

The Project site, located on agricultural land and dirt road, consists of bare soils that are more susceptible to erosion than developed urban areas. The Project's construction activities, including grading and trenching for the new pump station and pipeline, will disturb soil. This soil disturbance creates a potential for short-term erosion and siltation on- and off-site.

The likelihood of erosion occurring during construction would be reduced through grading and surfacing, which would be subject to review and approval by the City for compliance with applicable standards. Construction of the Project would be required to comply with the Project's SWPPP, construction-related erosion controls and BMPs would be implemented to reduce potential impacts related to erosion and siltation. These BMPs would include, but are not limited to, covering and/or binding soil surfaces to prevent soil from being detached and transported by water or wind, and the use of barriers such as straw bales and sandbags to control sediment. Together, the controls and BMPs are intended to limit soil transportation and erosion. As such, the likelihood of erosion would be further reduced through compliance with regulations including the General Construction Permit, BMPs, and approved grading and drainage plans as described under criterion a). With these provisions in place, the impact on soil and topsoil by the Project would be considered less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

Less than Significant Impact. During construction, the site's soil would be disturbed, thereby temporarily altering the natural hydrology of the site. In turn, this could increase the volume and velocity of stormwater runoff which could increase the potential for flooding on- or off-site. As previously discussed, construction would require compliance with the SWPPP, approved grading and drainage plan, and implementation of BMPs that would control runoff and manage drainage during the construction period

.Compliance would ensure that construction impacts related to the alteration of the site's natural hydrology and the potential increase in runoff that would result in flooding on- or off-site would be less than significant.

In addition, the Project would introduce only a small area of new impervious surface, limited to the concrete pad for the pump station and minor access-road improvements. This represents a negligible increase compared to the surrounding agricultural landscape. Stormwater runoff would continue to infiltrate through adjacent pervious areas, and the Project will comply with the City's approved grading and drainage standards. Therefore, the Project would have a less than significant impact.

iii. 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?

Less than Significant Impact. The Project would result in minimal increase in the impervious surface area (e.g., concrete pad for the pump station, access roads) which will not create a substantial amount of additional runoff that could overwhelm the existing drainage systems. The surrounding land is primarily flat agricultural fields, which can absorb any minor increases in runoff. In addition, compliance with the approved grading and drainage plans would reduce the potential for the Project to cause substantial runoff.

During construction, the Project is required to follow a SWPPP with BMPs to prevent pollutants like sediment, fuels, or other hazardous materials from entering waterways. After construction, the Project's would convey clean, treated wastewater effluent into rivers instead of creating polluted runoff. Therefore, the Project's minimal contribution to runoff and its strict pollution controls would result in a less than significant impact.

iv. Impede or redirect flood flows?

Less than Significant Impact. The Project is located in a rural, agricultural area, and while it's in a floodplain (i.e., Zone A), the proposed infrastructure won't substantially alter the hydrology of the area.

The increase of impervious surfaces, as discussed above, are minimal in size compared to the surrounding agricultural land. In addition, the Project would be required to maintain the existing drainage pattern through grading and drainage plans that would be reviewed and approved by the City.

Furthermore, pipelines proposed as part of the Project would be installed underground, which would not impede surface flows. While Alternative 3 would connect pipelines to the existing Deckert Lateral culvert, it also includes improvements to increase the capacity of Deckert Lateral, which would prevent overflow and thus any potential redirection of flood flows.

Proposed outfall construction in proximity to Bear Creek or Black Rascal Creek would be subject to a Central Valley Flood Protection Board (CVFPB) encroachment permit under Title 23 regulations. As part of the permit review,

CVFPB will evaluate hydraulic and channel effects, including potential increases to flood elevations, flow diversion, scour, or changes in flow velocity, and may impose conditions to avoid or reduce such impacts. Compliance with these permit conditions will ensure that the Project does not adversely affect floodplain function or increase base-flood elevations.Because the Project's design is required to maintain existing drainage patterns and the proposed infrastructure's footprint is minimal, it will not impede or redirect flood flows. Therefore, the impact is considered less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. The Project site is designated as Zone A on the most recent Flood Insurance Rate Map (FIRM) No. 06047C0400G, dated December 2, 2008. [32] Zone A is a flood hazard area with a 1 percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage. Zone A is generally located near rivers, lakes, and streams, and indicates a high-risk area for flooding.

While the site is located in a flood-prone area, the risks of pollutants being released due to project inundation is less than significant since the Project proposes underground pipelines and a pump station. The underground pipeline would carry treated effluent, which is non-hazardous and poses no significant pollution risk in the event of a flood. The pump station would contain materials such as fuels for backup power generation, lubricants, and electrical components; however, these materials would be stored in small quantities, within above-ground tanks or equipment structures designed with secondary containment and in compliance with applicable federal, state, and local regulations. In addition, standard design requirements for pump stations include anchoring, spill prevention, and containment measures that minimize the potential for pollutant release during flood events. As a result, the Project would have a less than significant impact as it relates to the risk release of pollutants due to project inundations.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Project site is located within the jurisdiction of the Merced Irrigation-Urban GSA and is therefore subject to the Merced Groundwater Subbasin GSP adopted in 2019 and revised in 2022. As described under criterion (b) above, the Project would not decrease groundwater supplies or interfere with groundwater recharge. Therefore, it can be determined that the Project would not conflict with or obstruct implementation of water quality control plans or sustainable groundwater management plans. For these reasons, a less than significant impact would occur because of the Project.

In summary, the Project represents an overall improvement to the City's hydrologic and water-quality management systems. By replacing an unregulated land-application system with a fully permitted and monitored surface-water discharge, the Project reduces potential impacts to both groundwater and surface-water resources, ensures compliance with multiple water-quality protection programs, and maintains existing drainage and flood-control capacity. With adherence to applicable NPDES, SWPPP, and floodplain requirements, all hydrology and water-quality impacts would remain less than significant.

[32] FEMA. FEMA Flood Map Service Center: Search by Address. Accessed September 10, 2025, https://msc.fema.gov/portal/search?AddressQuery=255%20E%20Bellevue%20Rd%20Atwater%2C%20CA%2095301#searchresultsanchor

4.10.3 Mitigation Measures

None required.

4.11 LAND USE PLANNING

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Physically divide an established community?			X	
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

4.11.1 Environmental Setting

The Project site in the jurisdiction of the City of Atwater (portion) and County of Merced (portion). A portion of the Project site (APNs 056-200-025 and 056-200-026), located within the City of Atwater, has an "unclassified" General Plan land use designation, meaning there is no specific land use has been assigned. The rest of the site is within the jurisdiction of Merced County and has a land use designation of Agricultural. A portion of the Project site (APNs 056-200-025 and 056-200-026), located within the City of Atwater, is not zoned. The rest of the site is within the jurisdiction of Merced County and is zoned A-1 General Agricultural.

The Project proposes a pump station, underground pipeline, and an outfall structure to carry treated effluent from the wastewater treatment plant (WWTP) and discharge it to the Madera Irrigation District (MID) via Bear Creek or Black Rascal Creek. This Initial Study analyzes three (3) alternative alignments for the underground pipeline and supporting infrastructure (pump station, outfall structure). Under all three (3) proposed alternatives, the pump station would be located on the wastewater treatment plant property. All pipelines would be located underground, daylighting at the outfall structure on the creek bank. Easements would be required for portions of the pipeline located on privately owned properties. Under Alternative 1, the outfall structure would discharge into Bear Creek. Under Alternatives 2 and 3, the outfall structure would be discharged into Black Rascal Creek.

4.11.2 Impact Assessment

Would the project:

a) Physically divide an established community?

Less than Significant Impact. Typically, physical division of an established community would occur if a Project introduced new incompatible uses inconsistent with the planned or existing land uses or created a physical barrier that impeded access within the community. Typical examples of physical barriers include the introduction of new, intersecting roadways, roadway closures, and construction of new major utility infrastructure (e.g., transmission lines, storm channels, etc.).

The Project site is located in a rural, non-urbanized setting characterized by large agricultural fields and scattered residences, which is not part of a planned or established residential community. In addition, the Project proposes underground pipelines, which would not be visible or impede movement. The small, above-ground pump station, which would be located on the current WWTP parcel. would have a minimal footprint and is not large enough to

function as a physical barrier. For these reasons, the Project would not result in the physical division of an established community and would thereby have a less than significant impact.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. The Project proposes to construct a pump station, underground pipeline, and an outfall structure to discharge treated effluent from the WWTP to Bear Creek or Black Rascal Creek. Generally, policy conflicts become environmental impacts when they result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. As such, associated physical environmental impacts are discussed in this document under specific topical sections, such as Biological Resources, Cultural Resources, and Tribal Cultural Resources. The Project would not conflict with any land use plan, policy, or regulation and impacts would be less than significant.

4.11.3 Mitigation Measures

None required.

4.12 MINERAL RESOURCES

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

4.12.1 Environmental Setting

For the purposes of CEQA, mineral resources are land areas or deposits deemed significant by the California Department of Conservation (DOC). Mineral resources include oil, natural gas, and metallic and nonmetallic deposits, including aggregate resources. The California Geological Survey (CGS) classifies and designates areas within California that contain or potentially contain significant mineral resources. Lands are classified into Aggregate and Mineral Resource Zones (MRZs), which identify known or inferred significant mineral resources. According to the California Department of Conservation, CGS's Surface Mining and Reclamation Act (SMARA) Mineral Lands Classification (MLC) data portal, the Project site is not within an aggregate resource area (ARA) nor are there aggregate mines in the City of Atwater. [33] In addition, the Project site is not within a CalGEM-recognized oilfield and there are no oil and gas wells on-site. [34]

4.12.2 Impact Assessment

Would the project:

a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

No Impact. There are no identified mineral deposits of significance or active mine operations within the Project site. Therefore, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, no impact would occur.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No Impact. There are no identified mineral deposits of significance or active mine operations within the Project site. As a result, the Project would not result in the loss of availability of a known mineral resource that would be of value

[33] California Department of Conservation. (2025). Mineral Lands Classification. Accessed on May 23, 2025, https://maps.conservation.ca.gov/cgs/minerals/?page=Mineral-Land-Classification

[34] California Department of Conservation. Well Finder. Accessed on May 23, 2025, https://maps.conservation.ca.gov/doggr/wellfinder/

to the region and the residents of the state. Further, the Project site is not delineated in the General Plan, a Specific Plan, or other land use plan as a locally important mineral resource recovery site, thus it would not result in the loss of availability of a locally important mineral resource. Therefore, no impact would occur.

4.12.3 Mitigation Measures

None required.

4.13 NOISE

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b)	Generation of excessive groundborne vibration or groundborne noise levels?			X	
c)	For a project located within the vicinity of a private airstrip or 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

4.13.1 Environmental Setting

In general, there are two (2) types of noise sources: 1) mobile source and 2) stationary sounds. Mobile source noises are typically associated with transportation including automobiles, trains, and aircraft. Stationary sounds are sources that do not move such as machinery or construction sites. Two (2) noise generating activities of the Project would include construction (short-term, temporary) and operational (long-term) noise.

Sensitive land uses include residential, schools, churches, nursing homes, hospitals, and open space/recreation areas. Commercial, farmland, and industrial areas are not considered noise sensitive and generally have higher tolerances for exterior and interior noise levels. The nearest sensitive land uses are the rural, single-family residences located on S Bert Crane Road, south of the WWTP and along the Oak Avenue alignment, east of the WWTP.

The Atwater General Plan Noise Element and Atwater Municipal Code *Chapter 8 – Health and Safety* outlines policies and regulations to mitigate health effects of noise in the community and prevent exposures to excessive noise levels. Specific to residential uses in the city of Atwater, 55-60 dB is an acceptable level of community noise exposure. Anything above 75 dB is considered to be generally unacceptable. [35]

[35] General Plan, Figure 13.1 Land Use Compatibility Guidelines for Development, 1990

The Merced County General Plan Health and Safety Element and Merced County Code *Chapter 10.60 – Noise Regulations* outlines policies and regulations to mitigate health effects of noise in the County and prevent exposures to excessive noise levels. Section 10.60.030(A) of the Merced County Code states that limitations to sound level within the County are as follows:

"No person shall cause, suffer, allow, or permit the operation of any sound source on private property in such a manner as to create a sound level that results in any of the following, when measured at or within the real property line of the receiving property:

1. Exceeds the background sound level by at least 10 dBA during daytime hours (seven a.m. to ten p.m.) and by at least five dBA during nighttime hours (ten p.m. to seven a.m.). The background sound level for purposes of this section shall be determined as set forth in Section 10.60.060; or

2. Exceeds 65 dBA Ldn on residential real property or 70 dBA Ldn on nonresidential real property; or

3. Exceeds 75 dBA Lmax on residential real property or 80 dBA Lmax on nonresidential real property."

Existing Ambient Noise Environment

The Project vicinity includes the Regional Bert Crane WWTP, agricultural fields, and rural residential residences. As such, the site's existing noise environment is generally low, consisting of the operations of the WWTP, agricultural operations, vehicular traffic, and natural sounds. Associated noise from the WWTP includes hydraulic pumps, fans, flowing water, and back-up generators. Associated noise from agricultural operations include heavy machinery (e.g., tractors), which are generally seasonal, and animals. The Project site is not located within the Airport Influence Area (AIA) of either Castle Airport or Merced Regional Airport, nor is it within either airport's CNEL noise contour.

Construction Noise Exposure

Construction phases would include site preparation, grading, and paving. Of all construction phases, it is anticipated that trenching and backfilling would produce the loudest noise. Short-term construction noises also include traffic noise generated from transporting construction equipment and materials and construction worker commuting. These activities would temporarily raise noise levels near the site. Ambient noise from construction activities would cease upon completion of construction.

4.13.2 Impact Assessment

Would the project:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less than Significant Impact. Noise generating activities of the Project would include traffic noise and stationery-source noise, such as operations and construction as described below. It is not anticipated that the Project would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards, given the type of development proposed (i.e., underground pipeline and pump station).

Traffic Noise Exposure

Mobile source noises are typically associated with transportation including automobiles, trains, and aircraft. Sensitive land uses include residential, schools, churches, nursing homes, hospitals, and open space-recreation areas. Commercial, farmland, and industrial areas are not considered noise sensitive and generally have higher tolerances for exterior and interior noise levels. The nearest sensitive land uses are rural, single-family residences. Alternatives 1 and 2 would run adjacent to a rural residence approximately 0.25 miles south of the WWTP. Alternative 3 would run adjacent to multiple rural residences along the Oak Avenue alignment, approximately 0.70 miles northeast of the WWTP.

The nearest roadways to/within the Project site are South Bert Crane Road to the west and the Oak Avenue alignment to the north. The primary source of on-going traffic noise from the proposed Project will be from vehicles occasionally travelling to the Project site for maintenance purposes. However, the relatively low number of vehicles and low frequency of trips is not likely to increase the ambient noise levels by a significant amount. As such, it is expected that the traffic noise levels will increase minimally and will not cause a significant impact.

Operational Noise Exposure

The only operational noise expected to be generated by the proposed Project would come from the pump station located on the WWTP property. The pump station would be located along the western boundary for Alternatives 1 and 2 and along the northern boundary for Alternative 3. Since the pump stations would be located on the existing WWTP property, which already contains similar pumping equipment, the proposed pump will not introduce a new significant source of noise that isn't already occurring in the area. Additionally, neither of the two potential pump locations would be located near sensitive land uses. As such, it is expected that the operational noise generated by the Project will be minimal and most likely not cause significant impact to existing uses.

Construction Noise Exposure

Construction noise will result from construction activities through the use of construction equipment for grading the site, digging and filling the trenches, and installing the pipeline. Construction phases would include site preparation, grading, trench digging, pipeline installation, trench backfilling, and outfall structure construction. Of all construction phases, it is anticipated that trenching would produce the loudest noise.

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) Version 1.0. For the purpose of this noise assessment, general construction equipment, including mixers, graders, pavers, paving equipment, rollers, dozers, and tractors, are included in the construction noise modeling. The nearest sensitive land uses to the Project site are the rural single-family residences located along the Oak Avenue alignment. The nearest single-family residence is approximately 50 feet from the Project site. According to existing land use within and around the Project site, the baseline and receptors that are analyzed in the RCNM are shown in Table 4-7.

Table 4-7 Receptors and Baseline Analyzed in the RCNM

Location	Land Use	Total dB L_{eq} *
50 feet to the north	Residential	79.8

** This number estimates noise when all equipment is used at the same time.*

Short-term construction noises include traffic noise generated from transporting construction equipment and materials and construction worker commuting. These activities would raise noise levels near the site. According to modeling of the FHWA RCNM Version 1.0, construction noise generated from the offroad equipment is estimated to be 79.8 dB L_{eq} at 50 feet, if all equipment was used at the same time. Ambient noise from construction activities

would cease upon completion of construction. Since the City of Atwater does not have a threshold for construction noise, the construction noise assessment is done for informational purposes.

Although the nearby residential uses would experience elevated noise levels from construction, these activities would be temporary and would generally take place in accordance with AMC *Section 8.44.050* which regulates permissible hours of construction between the hours of 7:00 am and 7:00 pm, Monday through Friday, and 9:00 am and 5:00 pm, Saturdays and Sundays.

Overall, Project construction is not expected to result in a significant impact because the noise would be regulated by the AMC. Noise would thereby be generated during daylight hours and not during evening or more noise-sensitive time periods; and the increase in noise would cease upon completion of the Project. For these reasons, a less than significant impact would occur.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. Ground borne vibration may result from operations and/or construction, depending on the use of equipment (e.g., pile drivers, bulldozers, jackhammers, etc.), distance to affected structures, and soil type. Depending on the method, equipment-generated vibrations could spread through the ground and affect nearby buildings. It is not anticipated that the Project would generate excessive ground borne vibration or ground borne noise levels, given the type of development. Further, construction or operation of the Project would not involve equipment that would generate substantial groundborne vibration of ground borne noise levels. As discussed under criterion a), project-generated stationary noise sources would be regulated by the AMC. Through compliance with the AMC, the Project would result in a less than significant impact.

c) 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?

No Impact. The nearest public airport to the Project site is Merced Regional Airport which is approximately six (6) miles east of the Project site. According to the Merced County Airport Land Use Compatibility Plan (2012), the Project site is located outside of the airport's Airport Influence Area (AIA) and noise contours and is therefore not subject to land use compatibility policies. [36] Therefore, the Project would have no impact.

4.13.3 Mitigation Measures

None required.

[36] County of Merced. (2012). Merced County Airport Land Use Compatibility Plan. Accessed on May 23, 2025, https://www.co.merced.ca.us/406/Airport-Land-Use-Commission

4.14 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

4.14.1 Environmental Setting

CEQA Guidelines *Section 15126.2(d)* requires that a CEQA document discusses the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The CEQA Guidelines provide an example of a major expansion of a wastewater treatment plant that may allow for more construction within the service area. The CEQA Guidelines also note that the evaluation of growth inducement should consider the characteristics of a project that may encourage or facilitate other activities that could significantly affect the environment. Direct and Indirect Growth Inducement consists of activities that directly facilitate population growth, such as construction of new dwelling units. A key consideration in evaluating growth inducement is whether the activity in question constitutes "planned growth."

4.14.2 Impact Assessment

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed Project includes construction of a pump station and installation of pipeline to carry treated effluent from the Bert Crane Regional Wastewater Treatment Plant (WWTP) to the Merced Irrigation District (MID) via Black Rascal Creek or Bear Creek. The Project would install new wastewater infrastructure; however, the Project would not increase capacity of the existing WWTP, and would therefore not induce population directly or indirectly. Instead, the Project would divert existing flows to the MID to assist in groundwater discharge. Therefore, no impact would occur as a result of the Project.

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

No Impact. There are no existing people or housing within the Project site. Therefore, the Project would not result in the physical displacement of existing people or housing and would not necessitate construction of replacement housing. No impact would occur because of the Project.

4.14.3 Mitigation Measures

None required.

4.15 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?			X	
ii. Police protection?			X	
iii. Schools?				X
iv. Parks?				X
v. Other public facilities?				X

4.15.1 Environmental Setting

Fire Protection Services

Fire protection services in the County of Merced are provided by the Merced County Fire Department (MCFD). MCFD operates 4 battalions with 19 total fire stations. Battalion 16 has 4 fire stations: Station 61 Atwater, Station 63 Winton, Station 64 Cressey, and Station 65 Snelling. Battalion 17 operates 5 stations: Station 71 Los Banos, Station 72 Santa Nella, Station 74 Gustine, Station 75 Dos Palos WYE, and Station 76 Dos Palos. Battalion 18 operates Station 81 Merced, Station 83 El Nido, Station 84 Le Grand, Station 85 Mckee, and Station 86 Planada.

Fire protection services in the City of Atwater are provided by Cal Fire; the City also has a mutual aid agreement with the City of Merced that was established in 1993. The City of Atwater operates two (2) fire stations: Station 41 at 699 Broadway Avenue and Station 42 at 2006 Avenue Two. In 2017, the City updated the Municipal Service Review and cited a response time of less than seven (7) minutes for 90 percent of responses. The Project would be reviewed by MCFD and is subject to regulations and standards such as the California Uniform Fire Code (UFC), which includes regulations on construction, maintenance, and building use.

Police Protection Services

Police protection services within the County are provided by Merced County Sheriff's Office. The Sheriff's Office operates out of the Merced Main Office/ Main Jail Facility located at 700 W 22nd Street, Merced, CA 95340. The Sheriff's Office

Police protection services within the city are provided by the Atwater Police Department. The Police Department currently operates from the main police station located at Bellevue Road. The Police Department divides the city into four (4) sectors. The Police Department reviews all projects to ensure that building and site designs consider utilization of crime prevention features and techniques.

Schools

Educational services within the City of Atwater are primarily served by Atwater Elementary School District and the Merced Union High School District. Funding for schools and school facilities impacts is outlined in Education Code Section 17620 and Government Code *Section 65995 et. Seq.*, which governs the amount of fees that can be levied against new development. These fees are used to construct new or expanded school facilities. Payment of fees authorized by the statute is deemed "full and complete mitigation."

Parks and Recreation

Park and Recreational facilities within the City of Atwater are overseen by the Public Works Department. According to the Atwater General Plan, the City's park standard is a minimum of 3.0 park acres per 1,000 population. To mitigate any impacts to park and recreational facilities, residential projects may be conditioned by the City to pay the Park and Recreation Facilities Tax in addition to any requirements of the Quimby Act.

The Atwater General Plan Land Use, Public Facilities and Community Infrastructure Element includes the following objectives and policies related to park and recreational facilities and services:

GOAL LU-23. *Develop a comprehensive strategy for parkland acquisition, construction, and maintenance which meets the community's adopted standards for recreation facilities.*

> ***Policy LU-23.1.*** *Strive to maintain or exceed a minimum standard of 3.0 acres of public park land per 1,000 population.*
>
> ***Policy LU-23.2.*** *Ensure that park and recreation facilities are distributed equitably throughout the community.*
>
> ***Policy LU-23.3.*** *Identify areas of the City that are deficient in park and recreational facilities and assign top priority for future park construction to these areas.*
>
> ***Policy LU-23.4.*** *Incorporate park and recreation facilities within the CAADC into the City's park system, as appropriate.*
>
> ***Policy LU-23.5.*** *Encourage private ownership and operation of park and recreation facilities located within the CAADC that are not incorporated into the City's system.*

4.15.2 Impact Assessment

Would the project:

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

   i. *Fire protection?*

Less than Significant Impact. The Project would be served by the Merced County Fire Department. Merced County Fire Station 61 is approximately 4.4 miles northeast of the Project site. The Project's proximity to the existing fire station would support adequate service ratios, response times, and other performance objectives for fire protection services. The Project involves installing an underground pipeline and a small, unmanned pump station. This type of infrastructure does not generate a demand for new fire services since the Project would not add new residents or increase the population of the area. The completed pump station would have a minimal fire risk, primarily limited to electrical components, which will be built to fire code standards to minimize risk. Therefore, a less than significant impact would occur.

ii. Police protection?

Less than Significant Impact. The Project will be served by the Merced County Sheriff's Office. The Project site is approximately 8.5 miles west of the Office's Main Office. The Project site is a small, public utility site that is not open to the public. It would be secured with fencing and would not generate a demand for police services beyond what is typical for any public utility. Therefore, it can be determined that the Project can be served by existing facilities and would not result in the need for new or altered facilities and as a result, a less than significant impact would occur.

iii. Schools?

No Impact. The Project is not a residential development that would induce growth to the area that would impact schools. Therefore, the Project would not result in the need for new expanded school facilities and as a result, there would be no impact.

iv. Parks?

No Impact. The Project is not a residential development that would induce growth to the area that would impact parks. As such, the Project would no result in the need for expanded park facilities and there would be no impact.

v. Other public facilities?

No Impact. Due to the nature of the Project, pump station and underground pipeline, the proposed Project will not result in an increase in population. Therefore, there would be no increased demand for other public services, such as courts, libraries, hospitals, etc., that would result in the need for new or expanded government facilities. Therefore, the Project would have no impact.

4.15.3 Mitigation Measures

None required.

4.16 RECREATION

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				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

4.16.1 Environmental Setting

See Section 4.15

4.16.2 Impact Assessment

Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The Project would include construction of a pump station and underground pipeline to carry treated effluent from the wastewater treatment plant to the Merced Irrigation District (MID) via Black Rascal Creek or Bear Creek. The Project would not result in new residents that would increase the utilization of existing parks or other recreational facilities. For these reasons, no impact would occur.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact. The Project does not include any recreational facilities; nor would it require the construction or expansion of recreational facilities. As such, the Project would have no impact.

4.16.3 Mitigation Measures

None required.

4.17 TRANSPORTATION

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b)	Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d)	Result in inadequate emergency access?			X	

4.17.1 Environmental Setting

The Project site for the pump station, which is proposed along the eastern boundary (Alternatives 1 and 2) or northern boundary (Alternative 3) of the Bert Crane Regional Wastewater Treatment Plant (WWTP) parcel (APN 056-200-026), is currently vacant with no improvements or structures. The Project site for underground pipelines includes dirt roads between agricultural operations and South Bert Crane Road, a paved two (2)-lane roadway with no improvements (i.e., curb, gutter, sidewalks).

CEQA Guidelines

Under Senate Bill 743 (SB743), traffic impacts are related to Vehicle Miles Traveled (VMT). The VMT metric became mandatory on July 1, 2020. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual automobile travel (additional miles driven) a proposed Project would create on California roads. If the project adds excessive automobile travel onto roads, then the project may cause a significant transportation impact. Therefore, LOS measures of impacts on traffic facilities are no longer relevant CEQA criteria for transportation impacts.

To implement SB 743, the CEQA Guidelines were amended by adding *Section 15064.3*. According to *Section 15064.3*, VMT measures the automobile travel generated from a proposed project (i.e., the additional miles driven). Here, 'automobile' refers to on-road passenger vehicles such as cars and light-duty trucks. If a proposed project adds excessive automobile travel on California roads thereby exceeding an applicable threshold of significance, then the project may cause a significant transportation impact.

Among its provisions, *Section 15064.3(b)* establishes criteria for analyzing transportation impacts. Specifically, *Section 15064.3(b) (1)* establishes a less than significant presumption for certain land use projects that are proposed

within ½-mile of an existing major transit stop or along a high-quality transit corridor. If this presumption does not apply to a land use project, then the VMT can be qualitatively or quantitatively analyzed.

In the case that quantitative models or methods are not available to the lead agency to estimate the VMT for the project being considered, provisions of CEQA Guidelines *Section 15064.3(b)(3)* permits the lead agency to conduct a qualitative analysis. The qualitative analysis may evaluate factors including but not limited to the availability of transit, proximity to other destinations, and construction traffic.

Lastly, *Section 15064.3(b)(4)* of the CEQA Guidelines states that *"[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."*

SB 743 Technical Advisory

In April 2018, the Governor's Office of Planning and Research (OPR) issued the Technical Advisory on Evaluating Transportation Impacts in CEQA ("Technical Advisory" or "TA") (revised December 2018) to provide technical recommendations regarding VMT, thresholds of significance, and mitigation measures for a variety of land use project types.

The Technical Advisory includes screening thresholds for agencies to use in order to identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study.

- *Screening Thresholds for Small Project.* Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact. This threshold is based on a CEQA categorical exemption for existing facilities, including additions to existing structures of up to 10,00 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area.
- *Map-Based Screening Threshold for Residential and Office Projects.* Residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are currently below threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.
- *Presumption of Less Than Significant Impact Near Transit Thresholds.* Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor will have a less-than-significant impact on VMT. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT.

- *Presumption of Less Than Significant Impact for Affordable Residential Development.* Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT.

According to the TA, lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types.

MCAG VMT Thresholds and Guidelines

In 2022, Merced County Association of Governments (MCAG) adopted VMT Thresholds and Implementation Guidelines for the seven (7) jurisdictions: City of Atwater, City of Dos Palos, City of Gustine, City of Livingston, City of Los Banos, City of Merced, and the County of Merced. The Guidelines include project screening criteria, methodologies for estimating project specific VMT, regional and local thresholds, and VMT mitigation strategies. [37] The project screening criteria listed in the Guidelines are similar to those identified in the TA, including:

- Project is within a Transit Priority Area/High Quality Transit Corridor: within 0.5 miles of a transit stop, consistent with RTP/SCS, FAR >0.75, limited parking, does not reduce the number of affordable housing units.
- Project is a Local-Serving Retail less than 50,000 sf.
- Project is a Low Trip Generator: less than 1,000 ADT for projects consistent with the General Plan and less than 500 ADT for projects inconsistent with the General Plan.
- Project is 100% Affordable Housing Units.
- Project is Institutional or Government and Public Service Uses.
- Project is located in Low VMT Zones.

If the project does not meet any of the screening criteria listed above, the project is subject to further analysis using the MCAG Travel Demand Model (TDM).

Atwater General Plan

The General Plan identifies the following goals and policies applicable to the project.

GOAL CIRC-1. *Maintain adopted Level of Service (LOS) for City streets and intersections.*

> ***Policy CIRC-1.1*** *Establish and maintain a minimum LOS of D for all arterial and collector streets within the City.*
>
> ***Policy CIRC-1.2.*** *Establish intersection LOS standards when more specific intersection traffic data becomes available.*
>
> ***Policy CIRC-1.3.*** *Design roadway improvements and evaluate development projects using established LOS standards.*

[37] Merced County Association of Governments. (2022). VMT Thresholds and Implementation Guidelines. Accessed May 23, 2025, https://www.mcagov.org/DocumentCenter/View/3872/MCAG-SB-743-VMT-Thresholds-and-Implementation-Guidelines_11-10-2022?bidId=

Policy CIRC-1.4. Develop the City's roadway system in conformance with the planned roadway system shown on the Circulation Plan and the City's adopted cross section standards.

Policy CIRC-1.5. Access for land uses adjacent to Castle Parkway will be provided by frontage roads which parallel the Parkway. Direct access to the Parkway will be limited to the primary east-west corridors in the area.

GOAL CIRC-5 Provide sufficient parking for all commercial, industrial, residential, and other uses, either off-street or on-street as appropriate.

Policy CIRC-5.1 Require that all new development provides sufficient on- or off-street parking to meet the standards of the City's Zoning Code or any other applicable planning document (such as the Downtown Specific Plan).

GOAL CIRC-8 Provide a safe and efficient pedestrian circulation system which connects residential areas, schools, and commercial areas with parking lots and public transportation.

Policy CIRC-8.1 Require new public and private development and infrastructure projects to include sidewalks or on-site pedestrian features.

4.17.2 Impact Assessment

Would the project:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. The proposed Project would be required to comply with all project-level requirements implemented by a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The Project would be reviewed by the City and County to ensure compliance with the applicable General Plan, Arvin Municipal Code, Merced County Code, and other policies regarding traffic. In addition, the proposed Project would not affect the current roadway system through the installation of the underground pipeline within the right-of-way. Given that the Project does not re-configure the city's circulation system, the Project would not conflict with any applicable plan (including the RTP), ordinance, or policies establishing measures of effectiveness for the performance of the circulation system. Impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant Impact. SB 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as VMT instead of LOS. MCAG VMT Thresholds and Guidelines (2022) adopted a screening criterion that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis. According to the Guidelines, the proposed Project screens out as a Government or Public Service use. Additionally, the proposed Project, by its nature, is not expected to generate additional trips or VMT. Therefore, the Project would not conflict with CEQA Guidelines *Section 15064.3(b)* and impacts would be less than significant.

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

No Impact. The Project design does not contain any geometric design features that would create hazards. Implementation of the Project would not require the improvement and expansion of the roadway network within the Project site. The proposed pipeline would be installed underground; thus, the Project would not physically interfere with the existing circulation system during operations. Furthermore, all public right-of-way and dirt roads affected during construction would be returned to pre-project conditions. As a result, implementation of the Project would have no impact related to hazards due to roadway design features or incompatible uses.

d) Result in inadequate emergency access?

Less than Significant Impact. The Project does not involve a change to any emergency response plan. In the case that Project construction requires lane closures, access through existing roadways would be maintained through standard traffic control and therefore, potential lane closures would not affect emergency evacuation plans. Thus, a less than significant impact would occur because of the Project.

4.17.3 Mitigation Measures

None required.

4.18 TRIBAL CULTURAL RESOURCES

Would the project: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or,			X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC section 5024.1. In applying the criteria set forth in subdivision (c) of PRC section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

4.18.1 Environmental Setting

See Section 4.5.

California Native American Heritage Commission (NAHC)

A consultation list of tribes with traditional lands or cultural places located within Merced County was requested and received from the California Native American Heritage Commission (NAHC) on May 12, 2025. The listed tribes include Amah Mutsun Tribal Band, Northern Valley Yokut/ Ohlone Tribe, Southern Sierra Miwuk Nation, Tule River Indian Tribe*, and Wuksachi Indian Tribe/ Eshom Valley Band. **Federally recognized tribe.* The NAHC also conducted a Sacred Lands File (SFL) check which received negative results. Correspondence is provided in Appendix D.

AB 52 Tribal Consultation

The City of Atwater conducted formal tribal consultation pursuant to AB 52 (Chapter 532, Statutes 2014) on June 2, 2025, to the aforementioned tribes. Consultation for AB 52 ended on July 2, 2025. No responses were received.

4.18.2 Impact Assessment

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is

geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

No Impact. In accordance with Assembly Bill (AB) 52 (Public Resources Code *Sections 21080.3.1–21080.3.2*), the City of Atwater notified all traditionally and culturally affiliated California Native American tribes of the Project and invited them to consult. No tribes requested consultation within the statutory 30-day response period.

A search of available records and background information indicates that no tribal cultural resources listed or eligible for listing in the California Register of Historical Resources or a local register have been identified within the Project site. The Project site is highly disturbed due to existing agricultural uses and roadway corridors.

Because no tribes requested consultation, and no listed or eligible tribal cultural resources have been identified within the Project site, the Project would not cause a substantial adverse change in the significance of a listed or eligible tribal cultural resource (TCR).

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant Impact. Although the Project site contains disturbed soils and no tribe requested consultation, CEQA requires the lead agency to consider whether the project could affect previously unknown tribal cultural resources that may qualify as significant under Public Resources Code *Section 5024.1(c)*. The Project involves trenching for new 18-inch pipelines, installation of valves and appurtenances, construction of a pump station, and construction of new outfall structures. These improvements would occur along previously disturbed roadways, agricultural lands, and canal corridors.

Given the absence of tribal consultation requests, and the lack of any identified TCRs, there is no substantial evidence that the Project site contains TCR that would meet the criteria of PRC *Section 5024.1(c)*. However, as with all ground-disturbing projects in the Central Valley, there remains low potential for the inadvertent discovery of previously unknown resources.

Standard conditions of approval applicable to all City of Atwater discretionary projects require that work pause and an evaluation occur if cultural resources are unexpectedly encountered during construction. Compliance with these requirements ensures that any previously unknown TCRs discovered during construction would be appropriately evaluated and treated in coordination with the City.

Because no tribes requested AB 52 consultation and no potential TCRs have been identified, and because standard City procedures ensure appropriate treatment of any inadvertent discoveries, the Project would not result in a substantial adverse change in the significance of a tribal cultural resource.

4.18.3 Mitigation Measures

None required.

4.19 UTILITIES AND SERVICE SYSTEMS

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effect?			X	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

4.19.1 Environmental Setting

The proposed Project includes a pump station and underground pipeline to carry treated effluent discharge from the wastewater treatment plant to the Madera Irrigation District (MID) via Black Rascal Creek or Bear Creek. The Project would connect into the existing 42" force main with a tee fitting with an 18" pipeline and carry the treated effluent to an outfall structure on the creek embankment.

Water

Water supply, usage, and services are described in Section 4.10.

Wastewater

The City provides sewage disposal and treatment using a pipeline system, pump stations, and a wastewater treatment plant (WWTP) facility. The new WWTP, constructed in 2012, is located west of State Route 99 on Bert

Crane Road and can handle an average flow up to six (6) million gallons per day (MGD). The wastewater treatment plant (WWTP) is owned by the City but operated by a private contractor, Veolia Water North America, West. The 2020 average daily flow was 3.3 mgd, which is approximately 54% of the current average daily permitted flow. The WWTP receives and treats wastewater from the City as well as the United States Penitentiary of Atwater, Winton Water and Sanitary District (WWSD) and Castle Airport. [38]

Solid Waste

Solid waste in the city is collected by a private contractor, Mid Valley Disposal, and then transported and disposed in one (1) of two (2) Merced County Landfills. The Merced County Association of Governments (MCAG) is responsible for managing and implementing regional solid waste disposal services, known as the Merced County Regional Waste Management Authority (RWA). The RWA owns and operates the two (2) regional landfills within Merced County and administers integrated waste management contracts and grants on behalf of member jurisdictions.

Stormwater

Stormwater services are described in Section 4.10.

Natural Gas and Electricity

Major electrical transmission lines run through the northern and southern portions of the city. Electrical service within the City is provided by the Merced Irrigation District and PG&E. PG&E also provides natural gas service within the City. State Route 99 contains a major natural gas main and crude oil pipeline. There is an offshoot pipeline that travels north through Atwater along Winton Way.

4.19.2 Impact Assessment

Would the project:

a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Less than Significant Impact. The Project proposes the installation of a pump station and underground pipeline to transport treated effluent from the existing Bert Crane Regional wastewater treatment plant (WWTP) to either Black Rascal Creek or Bear Creek. The purpose of the Project is to meet groundwater requirements recharge under SGMA. While the Project involves the construction of new wastewater facilities, its construction would not cause significant environmental effects. As discussed throughout this Initial Study, Project impacts (e.g., air quality, biological resources, etc.) are less than significant since only minor extensions are proposed.

The Project would not require the construction of water, storm water drainage, natural gas, or telecommunications facilities. The pump station would require electricity; however, electrical service would be provided from existing

[38] City of Atwater (2022). 2020 Urban Water Management Plan. Accessed June 2, 2025, https://www.atwater.org/wp-content/uploads/2022/04/Final-2020-Urban-Water-Management-Plan.pdf

overhead power distribution lines. Additionally, electricity demand would be minimal such that new and/or expanded infrastructure would not be required. Therefore, the Project would have a less than significant impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. The Project proposes the installation of a pump station and underground pipeline to transport treated effluent. There is no potable water demand for the Project's operation, as the system is designed to handle treated wastewater. Any minor water needs during construction (e.g., for dust control) would be temporary and would not substantially impact the City's overall water supply. Since the Project would not require the provision of water, there would be no impact on water supplies.

c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The Project proposes the installation of a pump station and underground pipeline to transport treated effluent, which would not create any wastewater during operations. Therefore, no impact would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. The Project proposes the installation of a pump station and underground pipeline to transport treated effluent. Construction will produce temporary solid waste from packaging and other debris. This waste will be handled and disposed of in accordance with all state and local regulations. Project operations include an unmanned facility (i.e., pump station) that would generate a small amount of solid waste, primarily from periodic maintenance activities. Due to the small volume of waste generated, the Project would have a less than significant impact.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. The Project would be required to comply with state and local law which include management and reduction statutes and regulations to ensure that solid waste is handled, transported, and disposed of accordingly. Through compliance with local and state law, it can be determined that the Project would also comply with federal, state, and local management and reduction statutes and regulations related to solid waste. As a result, a less than significant impact would occur because of the Project.

4.19.3 Mitigation Measures

None required.

4.20 WILDFIRE

If located in or near state responsibility or lands classified as very high fire hazard severity zones, **Would the project:**	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

4.20.1 Environmental Setting

The Project site is relatively flat and located within a rural area. According to the Atwater General Plan, grass and brush lands are the most likely places for wildland fires in Merced County; however, the Project site is surrounded by irrigated farmland, rural residences, and the WWTP. Further, the Project site is not identified by the California Department of Forestry and Fire Protection (Cal Fire) as a Fire Hazard Severity Zone (FHSZ); rather, the site is within a Local Responsibility Area (LRA) and is considered an area of low fire risk. [39]

4.20.2 Impact Assessment

If located in or near state responsibility or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

[39] California Department of Forestry and Fire Protection. Fire Hazard Severity Zone Viewer. Accessed on June 5, 2025, https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/

Less than Significant Impact. The Project would not impair access to the existing roadway network. Construction of the pipeline under Alternatives 1 and 2 may require temporary lane closure of South Bert Crane Road and Alternative 3 may require lane closure on the Oak Avenue Alignment; however, access along these roads would be maintained through standard traffic control. After construction, the pipeline would be located underground and would not impair access to roadways. Therefore, the Project would not substantially impair any emergency response plan or emergency evacuation plan, and a less than significant impact would occur.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than Significant Impact. The Project site is located on a relatively flat property with minimal slope and is not in an area that is subject to strong prevailing winds or other factors that would exacerbate wildfire risks. The area is highly disturbed and is not located within a wildland (i.e., wild, uncultivated, and uninhabited land), which precludes the risk of wildfire. Additionally, the Project would be routed along existing roads, public and private, to maximum extent feasible with minimal nearby flammable sources. The pipeline would be installed underground, and operation of the pipeline would not pose a risk of wildfire ignition. Construction activities could produce sparks that could ignite grass fires; however, construction equipment would include spark arrestors and guards as applicable. The proposed pump station would be designed and constructed in accordance with applicable Federal, state, and local standards and regulations related to protection against wildfire. Further, the Project site is within a LRA and is not identified by Cal Fire to be in a FHSZ. For these reasons, a less than significant impact would occur as a result of this Project.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The Project is located in a rural area with existing infrastructure, including roads and utilities, that are maintained accordingly. Additional electrical infrastructure would need to be constructed to provide power to the pump station. However, as previously discussed, all proposed project components would be located within the boundaries of the Project site and have been reviewed for compliance with applicable codes and regulations. Through compliance, such infrastructure would not exacerbate fire risk or result in temporary or ongoing impacts to the environment and no impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The Project site is not located in or near state responsibility or lands classified as fire hazard severity zones. The topography of the Project site is relatively flat with stable, native soils, and is not susceptible to landslides. Therefore, no impact would occur because of the Project.

4.20.3 Mitigation Measures

None required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

4.21.1 Impact Assessment

a) 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, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Potentially Significant Impact. As discussed above, the Project may have a substantial impact on the habitat of a fish or wildlife species identified in the Initial Study. As such, an EIR is being prepared that will focus on impact areas that have the potential to have significant impacts as identified in this Initial Study.

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

Potentially Significant Impact. CEQA Guidelines *Section 15064(i)* states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. As determined by the Initial Study, there may be potentially significant effects related to Biological Resources, Cultural Resources, Geology and Soils, and Hydrology and Watery Quality which will be addressed in the EIR.

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

Potentially Significant Impact. Based on the analysis included in the Initial Study, the Project may have potentially significant impacts on Biological Resources, and as a result may have direct or indirect adverse effects on human beings. As such, an EIR is being prepared with further analysis on Biological Resources, Cultural Resources, Geology and Soils, and Hydrology and Watery Quality and any potential adverse effects on human beings.

4.21.2 Mitigation Measures

None required.

5 MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM FOR BERT CRANE WWTP DISCHARGE IMPROVEMENTS PROJECT

This mitigation measure monitoring and reporting checklist was prepared pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15097 and Section 21081.6 of the Public Resources Code (PRC). The timing of implementing each mitigation measure is identified in in the checklist, as well as identifies the entity responsible for verifying that the mitigation measures applied to a Project are performed. Project applicants are responsible for providing evidence that mitigation measures are implemented. As lead agency, the City of Atwater is responsible for verifying that mitigation is performed/completed.

Mitigation Measures	Party Responsible for Implementing Mitigation	Timing of Verification	Responsible for Monitoring Verification	Verification of Completion	
				Date	Initials
Biological Resources					
Mitigation Measure BIO-1 (Pre-Construction Surveys for Nesting Birds, Special-Status Species, and Amphibians): Prior to any ground-disturbing activities (e.g., vegetation removal, grading, trenching, or equipment staging), the project applicant shall retain a qualified biologist to conduct pre-construction biological surveys within and adjacent (up to 100 feet, or as appropriate for the species) to all areas subject to disturbance. Surveys shall be conducted as follows: 1. **Timing of Surveys:** o Surveys shall be conducted no more than 14 days prior to the initiation of construction or vegetation removal. o If construction is delayed or suspended for more than 14 days following the survey, an updated survey shall be completed prior to re-initiating work. 2. **Nesting Birds:** o If construction occurs during the nesting bird season (generally February 1 through August 31), the qualified biologist shall	Project Applicant	Prior to construction	City of Atwater		

survey all suitable nesting habitat within and adjacent to work areas. o If active nests are found, the biologist shall establish species-appropriate exclusion buffers (typically 25 to 500 feet depending on species and activity level) around the nest. o Buffers shall remain in place until a qualified biologist confirms that the young have fledged and the nest is no longer active. 3. Special-Status Wildlife Species and Amphibians: o The biologist shall survey suitable habitat for special-status species and amphibians (e.g., western spadefoot, California tiger salamander, or other regionally occurring species) within the project area and adjacent habitats, including decommissioned discharge fields. o If individuals are detected within work areas, the biologist shall coordinate with the appropriate resource agencies (e.g., California Department of Fish and Wildlife [CDFW], U.S. Fish and Wildlife Service [USFWS]) to determine suitable avoidance, relocation, or exclusion measures prior to the start of construction. o Any relocation of individuals shall be conducted only under the appropriate state and/or federal permits. 4. Monitoring and Reporting: o The biologist shall prepare a survey report summarizing methods, results, and recommended protection measures, and submit it to the City of Atwater Public Works Department and CDFW prior to the start of construction. o Documentation of compliance (including survey dates, personnel qualifications, and any active nest or species observations) shall be included in the project's Mitigation Monitoring and Reporting Program (MMRP) record.					

Mitigation Measure BIO-2 (Permitting and Compensatory Mitigation for Jurisdictional Wetlands and Waters): If jurisdictional wetlands or other waters of the State or U.S. are present within the project's outfall or work areas, the project applicant shall obtain all necessary regulatory approvals prior to any ground-disturbing activity, including: • A Streambed Alteration Agreement (Fish and Game Code Section 1600 et seq.) from the California Department of Fish and Wildlife (CDFW); • A Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB); and, if applicable, • A Section 404 Permit from the U.S. Army Corps of Engineers (USACE). 1. Jurisdictional Delineation: A qualified wetland biologist shall delineate all potential jurisdictional features following the U.S. Army Corps of Engineers Wetlands Delineation Manual and applicable regional supplements. The delineation shall be verified by the relevant regulatory agencies prior to construction. 2. Avoidance and Minimization: To the extent feasible, project design and construction activities shall avoid jurisdictional waters and wetlands. If avoidance is not feasible, impacts shall be minimized through implementation of best management practices (BMPs) such as silt fencing, exclusion zones, and equipment setbacks. 3. Compensatory Mitigation and Restoration: For any unavoidable impacts, the applicant shall implement on-site restoration or off-site compensatory mitigation at a ratio approved by the permitting agencies (typically not less than 1:1 for acreage and functions lost). A Restoration and Monitoring Plan shall be prepared by a qualified restoration ecologist and approved by the relevant agencies prior to construction. 4. Reporting:	Project Applicant	Prior to construction	City of Atwater		

Copies of all permits, approvals, and mitigation monitoring reports shall be maintained by the City of Atwater Public Works Department for inclusion in the project record.					
Mitigation Measure BIO-3 (Creek Flow Management and Monitoring Plan): Prior to modification of discharge operations or implementation of new flow management practices, the project applicant shall prepare and implement a Creek Flow Management and Monitoring Plan (CFMMP) developed by a qualified hydrologist and aquatic biologist. 1. Plan Requirements: The CFMMP shall include, at minimum: • A description of existing baseline creek flow conditions and seasonal variations; • Identification of aquatic habitat and sensitive species potentially affected by discharge changes; • Flow targets or thresholds to maintain habitat suitability (e.g., minimum instream flow, temperature, dissolved oxygen, turbidity); • Monitoring protocols for flow, water quality, and habitat conditions; and • Adaptive management measures to address adverse trends or exceedances of water-quality objectives. 2. Implementation: The applicant shall implement all flow management and monitoring measures prior to discharge modification. Continuous or periodic monitoring (as specified in the Plan) shall be conducted by qualified personnel. If monitoring indicates that discharge operations are adversely affecting aquatic habitat or water quality, the applicant shall immediately implement corrective actions (e.g., adjust discharge timing, volume, or treatment). 3. Reporting: Monitoring results shall be summarized in annual reports prepared by the Public Works Department and RWQCB. Reports shall document flow measurements, water-quality data, and any adaptive management actions taken.	Project Applicant	Prior to construction	City of Atwater		

6 REPORT PREPARATION

Names of Persons Who Prepared or Participated in the Initial Study:

Lead Agency		
Lead Agency	City of Atwater 1350 Broadway Atwater, CA 95301 (209) 357-6201	Chris Hoem, City Manager
Initial Study Consultant		
Initial Study	Precision Civil Engineering 1234 O Street Fresno, CA 93721 (559) 449-4500	Bonique Emerson, AICP, VP of Planning Shin Tu, AICP, Senior Planner Isaiah Medina, Associate Planner

7 APPENDICES

7.1 Appendix A: CalEEMod Results

Prepared by Precision Civil Engineering, Inc., on June 9, 2025.

Bert Crane WWTP Improvements Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bert Crane WWTP Improvements
Construction Start Date	2/1/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	23.4
Location	37.27457932990977, -120.63235446158791
County	Merced
City	Atwater
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2310
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Other Non-Asphalt Surfaces	21.6	1000sqft	0.50	0.00	0.00	—	—	Maximum land disturbance area (5,400 linear feet by 4-foot-wide trench)

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.85	1.56	14.0	17.0	0.03	0.61	5.37	5.98	0.56	2.58	3.14	—	3,093	3,093	0.13	0.03	0.26	3,105
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.39	2.01	17.8	22.7	0.04	0.79	5.94	6.73	0.73	2.65	3.38	—	3,982	3,982	0.16	0.04	0.01	3,998
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.49	0.41	3.79	4.82	0.01	0.16	1.10	1.26	0.15	0.52	0.67	—	880	880	0.04	0.01	0.03	883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.09	0.08	0.69	0.88	< 0.005	0.03	0.20	0.23	0.03	0.09	0.12	—	146	146	0.01	< 0.005	< 0.005	146

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	140	140	0.02	< 0.005	—	141
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	140	140	0.02	< 0.005	0.00	141
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	140	140	0.02	< 0.005	—	141
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	140	140	0.02	< 0.005	0.00	141
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	140	140	0.02	< 0.005	—	141
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	140	140	0.02	< 0.005	0.00	141
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23.1	23.1	< 0.005	< 0.005	—	23.4

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.1	23.1	< 0.005	< 0.005	0.00	23.4

4. Operations Emissions Details

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	140	140	0.02	< 0.005	—	141
Total	—	—	—	—	—	—	—	—	—	—	—	—	140	140	0.02	< 0.005	—	141
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	140	140	0.02	< 0.005	—	141
Total	—	—	—	—	—	—	—	—	—	—	—	—	140	140	0.02	< 0.005	—	141
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	23.1	23.1	< 0.005	< 0.005	—	23.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	23.1	23.1	< 0.005	< 0.005	—	23.4

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Other Non-Asphalt Surfaces	250,000	204	0.0330	0.0040	0.00

7.2 Appendix B: CNDDB Occurrence Report

Downloaded from the California Natural Diversity Database dated October 2, 2025.

Query Criteria: Quad IS (Atwater (3712035))

Buteo swainsoni

Element Code: ABNKC19070

Swainson's hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	Threatened		**State:**	S4
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern			
Habitat:	**General:**	BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, AND AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.			
	Micro:	REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.			

Occurrence No.	1690	**Map Index:** 69604	**EO Index:** 70377	**Element Last Seen:**	2007-06-28
Occ. Rank:	Good		**Presence:** Presumed Extant	**Site Last Seen:**	2007-06-28
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2007-07-02

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.35010 / -120.55762	**Accuracy:**	80 meters
UTM:	Zone-10 N4136510 E716330	**Elevation (ft):**	170
PLSS:	T07S, R13E, Sec. 04, SW (M)	**Acres:**	0.0

Location: JUST SOUTH OF CANAL CREEK, WHERE IT INTERSECTS WITH SANTA FE ROAD, SOUTH OF CASTLE AIR FORCE BASE AND EAST OF ATWATER.

Detailed Location: NEST TREE IS FOUND WITHIN A GROVE OF MATURE EUCALYPTUS TREES, AT THE EASTERN END. COUNTY AVENUE TWO IS ABOUT 100 YARDS TO THE SOUTH OF THE NEST TREE.

Ecological: NEST TREE IS A EUCALYPTUS; SURROUNDED BY AN IRRIGATION CANAL, SANTA FE RAILROAD, AND SANTA FE DRIVE TO THE NORTH. FALLOW FIELDS TO THE SOUTH AND EAST.

General: SWHA PAIR ACTIVITY AROUND NEST FIRST OBSERVED IN MAY 2007; 1 FLEDGLING OBSERVED IN NEST ON 28 JUN 2007, WITH FEMALE PERCHED ON NEST EDGE AND MALE PERCHED 50' TO THE SW.

Owner/Manager: MERCED IRRIGATION DISTRICT

Occurrence No.	1759	**Map Index:** 83231	**EO Index:** 84236	**Element Last Seen:**	2008-05-14
Occ. Rank:	Fair		**Presence:** Presumed Extant	**Site Last Seen:**	2008-05-14
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2011-06-29

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.30219 / -120.56613	**Accuracy:**	80 meters
UTM:	Zone-10 N4131174 E715712	**Elevation (ft):**	145
PLSS:	T07S, R13E, Sec. 29, NE (M)	**Acres:**	0.0

Location: ALONG MCSWAIN ROAD (SR 140) ABOUT 0.3 MI EAST OF N GURR RD, AT MCSWAIN SCHOOL.

Detailed Location: IN EUCALYPTUS GROVE ABOUT 250 FEET EAST OF PERSIMMON WAY. BLACK RASCAL CREEK TO THE NORTH & BEAR CREEK TO THE SOUTH. MAPPED TO PROVIDED COORDINATES & MAPS.

Ecological: NEST IN TALLEST EUCALYPTUS TREE IN GROVE BORDERING ELEMENTARY SCHOOL. SURROUNDING LANDS ARE MOSAIC OF RESIDENTIAL, ROW CROP, SCHOOL, & PASTURE. VISIBLE DISTURBANCES INCLUDE TRAFFIC ON SR 140, AGRICULTURE ACTIVITIES & SCHOOL YARD CHILDREN.

General: ONE ADULT OBSERVED SITTING IN NEST WITH ONE ADULT SOARING CLOSE TO NEST TREE ON 14 MAY 2008. ASSUMED TO BE IN INCUBATION STAGE.

Owner/Manager: UNKNOWN

Occurrence No.	1760	**Map Index:**	83232	**EO Index:**	84238	**Element Last Seen:**	2008-05-14
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-05-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2011-06-29

Quad Summary:	Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.32504 / -120.54987	**Accuracy:**	80 meters
UTM:	Zone-10 N4133746 E717088	**Elevation (ft):**	155
PLSS:	T07S, R13E, Sec. 16 (M)	**Acres:**	0.0

Location:	JUST NORTH OF HWY 99, AT ASHBY RD & TRINIDADE RD INTERSECTION, JUST NW OF FERGUS, 4 MI NW OF MERCED POST OFFICE.
Detailed Location:	CENTER OF SECTION 16. MAPPED TO PROVIDED COORDINATES & MAPS.
Ecological:	NEST TREE IN ROW OF EUCALYPTUS TREES ALONG TRINIDADE ROAD. SURROUNDING LANDS ARE MOSAIC OF ROW CROP, RESIDENTIAL, INDUSTRIAL, ORCHARD, AND PASTURE. VISIBLE DISRBANCES: AGRICULTURE RELATED ACTIVITIES.
General:	1 LIGHT MORPH & 1 DARK MORPH ADULTS OBSERVED IN TREE EATING PREY THAT WAS CAUGHT IN FIELD DIRECTLY SOUTH OF HWY 99 ON 14 MAY 2009. NEST WAS IN INCUBATION STAGE AT TIME OF OBSERVATION.
Owner/Manager:	UNKNOWN

Occurrence No.	2683	**Map Index:**	A0387	**EO Index:**	101947	**Element Last Seen:**	2016-04-13
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-04-13
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-06-08

Quad Summary:	Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.28872 / -120.54212	**Accuracy:**	1/10 mile
UTM:	Zone-10 N4129734 E717881	**Elevation (ft):**	147
PLSS:	T07S, R13E, Sec. 28, SE (M)	**Acres:**	18.0

Location:	ALONG BAILEY AVE ABOUT 1 MILE EAST OF GURR RD, ABOUT 1.5 MILES W OF MERCED MUNICPAL AIRPORT, WEST OF THE CITY OF MERCED.
Detailed Location:	LOCATION GIVEN AS "TREES AT 3014 BAILEY AVE" AND APPEARS TO BE IN THE VICINITY OF THORNTON LATERAL AT BAILEY AVE.
Ecological:	RESIDENCE WITH "PINE AND EUCALYPTUS TREES AT END OF DRIVEWAY" SURROUNDED BY AGRICULTURE. PHOTOGRAPH SHOWS 2 SWHA PERCHED IN A REDWOOD/SEQUOIA. ADDITIONAL NEST TREES MAY BE ALONG SOUTH SLOUGH & BEAR CREEK. AG LIKELY USED FOR FORAGING.
General:	RESIDENT REPORTS 5 PAIRS SOARING ABOVE FIELDS & "NEST[ING] IN TREES ON PROPERTY" IN APR 2016. ALSO, JUVENILES SEEN WITH ADULTS IN SPRING OF 2015. THOUGH REPORT IS PLAUSIBLE, BIRD NUMBERS & SPECIFIC NEST INFORMATION IS QUESTIONABLE; NIMBY?
Owner/Manager:	PVT

Buteo regalis

Element Code: ABNKC19120

ferruginous hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S3S4
	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern			
Habitat:	**General:**	OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS AND FRINGES OF PINYON AND JUNIPER HABITATS.			
	Micro:	EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.			

Occurrence No.	60	**Map Index:** 67366	**EO Index:** 67534	**Element Last Seen:**	2006-10-04
Occ. Rank:	Fair		**Presence:** Presumed Extant	**Site Last Seen:**	2006-10-04
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2006-12-12

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.36272 / -120.54352	**Accuracy:**	1/10 mile
UTM:	Zone-10 N4137942 E717542	**Elevation (ft):**	175
PLSS:	T06S, R13E, Sec. 33, SE (M)	**Acres:**	0.0

Location: NORTH OF W BELLEVUE ROAD AND JUST EAST OF CANAL CREEK, EAST OF CASTLE AIR FORCE BASE.

Detailed Location: LOCATION MAPPED ACCORDING TO UTM COORDINATES AND MAP.

Ecological:

General: 1 ADULT OBSERVED FLYING/FORAGING OVER OPEN HAY FIELD ON 4 OCT 2006. CURRENT/SURROUNDING LAND: LOW DENSITY AGRICULTURAL PROPERTIES WITH HIGHLY DISTURBED LAND. VISIBLE DISTURBANCE: LONG TERM MANIPULATION OF LAND.

Owner/Manager: UNKNOWN

Athene cunicularia

Element Code: ABNSB10010

burrowing owl

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	Candidate Endangered		**State:**	S2
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.			
	Micro:	SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.			

Occurrence No.	812	**Map Index:**	64827	**EO Index:**	64906	**Element Last Seen:**	2006-05-25
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2006-05-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-06-07

Quad Summary:	Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.27390 / -120.50677	**Accuracy:**	specific area
UTM:	Zone-10 N4128172 E721057	**Elevation (ft):**	150
PLSS:	T07S, R13E, Sec. 35, SE (M)	**Acres:**	18.4

Location:	SE END OF MERCED MUNICIPAL AIRPORT, ON THE SW EDGE OF MERCED.
Detailed Location:	BURROWS ARE FOUND IN TWO DISTINCT AREAS, ABOUT 0.2 MILE APART. BOTH ARE LOCATED AT SOUTHERN END OF AIRPORT RUNWAY.
Ecological:	HABITAT CONSISTS OF DISTURBED (MOWED) NON-NATIVE GRASSLAND.
General:	6 ACTIVE BURROWS (WITH 6 ADULTS) OBSERVED ON 25 MAY 2006.
Owner/Manager:	CITY OF MERCED

Occurrence No.	876	**Map Index:**	67347	**EO Index:**	67514	**Element Last Seen:**	2006-10-06
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2006-10-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-12-11

Quad Summary:	Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.35908 / -120.53123	**Accuracy:**	80 meters
UTM:	Zone-10 N4137567 E718642	**Elevation (ft):**	175
PLSS:	T07S, R13E, Sec. 03, NE (M)	**Acres:**	0.0

Location:	0.1 MILE SOUTH OF BELLEVUE ROAD AND 0.5 MILE EAST OF FRANKLIN ROAD, EAST OF CASTLE AIR FORCE BASE.
Detailed Location:	
Ecological:	HABITAT CONSISTS OF LOW-DENSITY AGRICULTURAL PROPERTY CONTAINING NUMEROUS DETENTION BASINS; LAND IS HIGHLY DISTURBED/MAINPULATED.
General:	1 ADULT OBSERVED AT BURROW ON 6 OCT 2006 AND DURING TWO OTHER VISITS TO THE PROPERTY.
Owner/Manager:	UNKNOWN

Occurrence No.	877	**Map Index:**	67348	**EO Index:**	67516	**Element Last Seen:**	2006-10-24
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2006-10-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-12-11

Quad Summary:	Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.33611 / -120.56332	**Accuracy:**	80 meters
UTM:	Zone-10 N4134944 E715864	**Elevation (ft):**	160
PLSS:	T07S, R13E, Sec. 08, SE (M)	**Acres:**	0.0

Location:	0.25 MILE WEST OF GURR ROAD AND 0.4 MILE SOUTH OF AVENUE ONE, SE OF ATWATER.
Detailed Location:	
Ecological:	HABITAT CONSISTS OF LOW-DENSITY AGRICULTURAL PROPERTY AND RUDERAL FIELD.
General:	1 ADULT OBSERVED ON 24 OCT 2006 AND DURING ONE OTHER VISIT TO THE PROPERTY.
Owner/Manager:	UNKNOWN

Occurrence No.	988	**Map Index:**	70100	**EO Index:**	70964	**Element Last Seen:**	2007-07-16
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2007-07-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2007-10-03

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.29057 / -120.51700	**Accuracy:**	non-specific area
UTM:	Zone-10 N4129998 E720101	**Elevation (ft):**	154
PLSS:	T07S, R13E, Sec. 26 (M)	**Acres:**	28.0

Location: MERCED MUNICIPAL AIRPORT, SW OF MERCED.

Detailed Location:

Ecological: HABITAT SURROUNDING BURROW SITES CONSISTS OF DISTURBED ANNUAL GRASSLAND DOMINATED BY PERENNIAL RYEGRASS (LOLIUM PERENNE), YELLOW STAR THISTLE (CENTAUREA SOLSTITIALIS), CURLY DOCK (RUMEX CRISPUS), AND SPRING VETCH (VICIA SATIVA SSP. SATIVA).

General: 9 INDIVIDUALS OBSERVED ON 16 JUL 2007.

Owner/Manager: CITY OF MERCED

Agelaius tricolor

Element Code: ABPBXB0020

tricolored blackbird

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G1G2
	State:	Threatened		**State:**	S2
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY AND VICINITY. LARGELY ENDEMIC TO CALIFORNIA.			
	Micro:	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.			

Occurrence No.	65	**Map Index:**	13166	**EO Index:**	24755	**Element Last Seen:**	1971-05-09
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1971-05-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-01-27

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.29715 / -120.58380	**Accuracy:**	1 mile
UTM:	Zone-10 N4130574 E714161	**Elevation (ft):**	135
PLSS:	T07S, R13E, Sec. 30 (M)	**Acres:**	0.0

Location: ABOUT 1.8 MI ESE OF HWY 140 & APPLEGATE RD INTERSECTION, 2.6 MI S OF HWY 99 & BUHACH RD INTERSECTION, W OF MERCED.

Detailed Location: LOCATION DESCRIBED AS "SOUTH SIDE OF HIGHWAY 140; 4.5 MILES WEST OF MERCED." COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "SOUTH BUHACH ROAD AT HIGHWAY 140" & "WEST MERCED." EXACT LOCATION UNKNOWN.

Ecological: BLACKBERRIES IN IRRIGATED PASTURES. COLONY APPROXIMATELY 1/25 ACRE. DOMINANT SURROUNDING LAND USE WAS HALF ALFALFA AND HALF RESIDENTIAL, NO SUITABLE NESTING HABITAT IN 2014. 4.5 MILES MEASURED FROM HWY 99 & HWY 140 INTERSECTION.

General: ABOUT 1500 BIRDS OBSERVED ON 9 MAY 1971 BY DEHAVEN; PRESUMED NESTING, AREA TOO INACCESSIBLE TO REACH. 0 BIRDS OBSERVED ON 18 APR 2014; UNCLEAR IF THIS SURVEY WAS AT THE SAME LOCATION AS THE 1971 LOCATION.

Owner/Manager: UNKNOWN

Occurrence No.	633	**Map Index:**	97347	**EO Index:**	98620	**Element Last Seen:**	1933-04-26
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1933-04-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-27

Quad Summary:	Sandy Mush (3712025), Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.26050 / -120.51959	**Accuracy:**	4/5 mile
UTM:	Zone-10 N4126655 E719959	**Elevation (ft):**	150
PLSS:	T08S, R13E, Sec. 02 (M)	**Acres:**	0.0

Location:	ABOUT 2.6 MI SW OF HWY 59 & CHILDS AVE INTERSECTION, 5.4 MI NNW OF HWY 59 & SANDY MUSH RD, SW OF MERCED.
Detailed Location:	LOCATION DESCRIBED ONLY AS "THREE MILES SOUTHWEST OF MERCED." EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS TO AREA THAT APPEARED TO HISTORICALLY HAVE WATER (HARTLEY SLOUGH) BASED ON A 1918 USGS TOPO MAP FOR ATWATER QUAD.
Ecological:	HABITAT ONLY DESCRIBED AS CATTAIL MARSH. COLONY PRESUMED EXTIRPATED BY BEEDY (1991). FURTHER RESEARCH NEEDED TO DETERMINE STATUS OF COLONY.
General:	A BREEDING COLONY COMPOSED OF ABOUT 100 NESTS OBSERVED ON 26 APR 1933.
Owner/Manager:	UNKNOWN

Occurrence No.	634	**Map Index:**	97352	**EO Index:**	98624	**Element Last Seen:**	1933-05-19
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1933-05-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-27

Quad Summary:	Merced (3712034), Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.28790 / -120.50908	**Accuracy:**	1 mile
UTM:	Zone-10 N4129719 E720811	**Elevation (ft):**	150
PLSS:	T07S, R13E, Sec. 35 (M)	**Acres:**	0.0

Location:	ABOUT 2 MI NW OF HWY 59 & VASSAR AVE INTERSECTION, 2.9 MI W OF HWY 99 & CHILDS AVE INTERSECTION, SW EDGE OF MERCED.
Detailed Location:	MAPPED AS BEST GUESS TO CANALS JUST SW OF MERCED CITY PROPER. CANALS IDENTIFIED USING 1917 & 1947-48 USGS TOPO MAPS FOR MERCED & ATWATER QUADS. EL CAPITAN CANAL & MERCED LATERAL WERE POSSIBLE CANALS FOR COLONY LOCATION.
Ecological:	HABITAT DESCRIBED AS CATTAILS ALONG CANAL. COLONY PRESUMED EXTIRPATED BY BEEDY (1991). VERY LITTLE TO NO HABITAT VISIBLE IN AERIAL PHOTOS. COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "SOUTHWEST MERCED."
General:	A BREEDING COLONY COMPOSED OF ABOUT 1500 NESTS OBSERVED ON 19 MAY 1933 (NEFF 1937).
Owner/Manager:	UNKNOWN

Occurrence No.	635	**Map Index:**	97354	**EO Index:**	98627	**Element Last Seen:**	1933-04-27
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1933-04-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-27

Quad Summary:	Merced (3712034), Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.31620 / -120.48409	**Accuracy:**	1 mile
UTM:	Zone-10 N4132919 E722944	**Elevation (ft):**	175
PLSS:	T07S, R14E, Sec. 19 (M)	**Acres:**	0.0

Location:	ALONG BEAR CREEK, JUST E OF HWY 59 & SANTA FE AVE INTERSECTION, 2.4 MI NW OF HWY 140 & CHILDS AVE INTERSECTION, MERCED.
Detailed Location:	MAPPED AS BEST GUESS BY CNDDB TO PROVIDED LOCATION DESCRIPTION OF "NORTH OF MERCED." FEATURE MAPPED ALONG BEAR CREEK ALONG THE NORTHERN SIDE OF MERCED. CREEK HISTORICALLY BOUNDED THE N SIDE OF MERCED (USGS 1917 & 1948 TOPO, MERCED QUAD).
Ecological:	HABITAT DESCRIBED AS CATTAIL MARSH. COLONY PRESUMED EXTIRPATED BY BEEDY (1991). AREA APPEARS TO HAVE BEEN HEAVILY DEVELOPED SINCE TIME OF DETECTION BASED ON AERIAL IMAGERY. COLONY DATA STORED IN UC DAVIS TRBL PORTAL; SITE "NORTH MERCED."
General:	A BREEDING COLONY COMPOSED OF ABOUT 250 NESTS OBSERVED ON 27 APR 1933 (NEFF 1937).
Owner/Manager:	UNKNOWN

Occurrence No.	639	**Map Index:**	97371	**EO Index:**	98652	**Element Last Seen:**	2014-04-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-04-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-28

Quad Summary:	Merced (3712034), Atwater (3712035), Yosemite Lake (3712044), Winton (3712045)
County Summary:	Merced

Lat/Long:	37.37760 / -120.49598	**Accuracy:**	2/5 mile
UTM:	Zone-10 N4139704 E721709	**Elevation (ft):**	190
PLSS:	T06S, R13E, Sec. 25, SW (M)	**Acres:**	0.0

Location:	JUST E OF HWY 59 & NEVADA ST INTERSECTION, ABOUT 0.6 MI NNE OF BREEZE RD & UTAH ST INTERSECTION, N OF MERCED.
Detailed Location:	MAPPED ACCORDING TO PROVIDED LOCATION IN PORTAL. ENTRANCE TO MERCED HORSEMEN'S ARENA VISIBLE IN GOOGLE STREET VIEW. COLONY DATA STORED IN THE UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "MERCED HORSEMEN'S ARENA."
Ecological:	HABITAT WAS TRITICALE BEFORE BEING HARVESTED ON 22 APR 2014. DISTANCE TO STORED GRAINS WAS "100-500" METERS. DISTANCE TO WATER WAS OVER 100 METERS.
General:	ABOUT 2,000-2,500 BIRDS OBSERVED ON 19 APR 2014; BEHAVIOR CLASSIFIED AS SINGING, BREEDING, AND COLONY QUIET (INCUBATION INFERRED). COLONY WAS DESTROYED DUE TO HARVEST ON 22 APR 2014.
Owner/Manager:	UNKNOWN, PVT

Vulpes macrotis mutica **Element Code:** AMAJA03041

San Joaquin kit fox

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G4T2
	State:	Threatened		**State:**	S3
	Other:				
Habitat:	**General:**	ANNUAL GRASSLANDS OR GRASSY OPEN STAGES WITH SCATTERED SHRUBBY VEGETATION.			
	Micro:	NEED LOOSE-TEXTURED SANDY SOILS FOR BURROWING, AND SUITABLE PREY BASE.			

Occurrence No.	23 **Map Index:** 42082	**EO Index:**	42082	**Element Last Seen:**	1999-08-20
Occ. Rank:	Poor	**Presence:**	Presumed Extant	**Site Last Seen:**	1999-08-20
Occ. Type:	Natural/Native occurrence	**Trend:**	Unknown	**Record Last Updated:**	1999-12-27

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.36666 / -120.60137	**Accuracy:**	non-specific area
UTM:	Zone-10 N4138247 E712407	**Elevation (ft):**	160
PLSS:	T06S, R12E, Sec. 36 (M)	**Acres:**	286.7

Location: LIVINGSTON CANAL, FROM APROXIMATLY BELLEVUE ROAD TO WINTON WAY, ATWATER.

Detailed Location: ALONG CANAL AREA, MERCED COUNTY WATER DISTRICT.

Ecological: AREA IS FLAT WITH SANDY SOILS.

General: 1 OBSERVED IN BACKYARD, THEN TRAVELED WEST ALONG CANAL, 1999. 1 ADULT, 2 JUVENILES OBSERVED IN THE EARLY 1980'S, OVER A MONTH, FREQUENTING AN EXPOSED CONCRETE PIPE OPENING; AREA PREVIOUSLY BORDERED BY AG AND SOME RESIDENTIAL NOW HOUSING.

Owner/Manager: MER COUNTY

Actinemys marmorata

Element Code: ARAAD02031

northwestern pond turtle

Listing Status:	**Federal:**	Proposed Threatened	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	SNR
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive			
Habitat:	**General:**				
	Micro:				

Occurrence No.	721	**Map Index:** 67349	**EO Index:** 67517	**Element Last Seen:**	2006-10-13
Occ. Rank:	Fair		**Presence:** Presumed Extant	**Site Last Seen:**	2006-10-13
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2006-12-11

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.36083 / -120.55443	**Accuracy:**	80 meters
UTM:	Zone-10 N4137708 E716581	**Elevation (ft):**	175
PLSS:	T06S, R13E, Sec. 33, SW (M)	**Acres:**	0.0

Location: CANAL CREEK, 0.3 MILE WEST OF FOX ROAD AND 0.3 MILE NORTH OF BRADSHAW ROAD, CASTLE AIR FORCE BASE.

Detailed Location:

Ecological: HABITAT WITHIN CANAL CREEK CONSISTS OF HERBACEOUS VEGETATION. SURROUNDING LAND CONSISTS OF LOW-DENSITY AGRICULTURAL LAND, WHICH IS HIGHLY MANIPULATED FOR AGRICULTURE, DAIRY, AND CASTLE AFB.

General: 1 JUVENILE OBSERVED ON THE BANK OF CANAL CREEK ON 13 OCT 2006.

Owner/Manager: UNKNOWN

Branchinecta lynchi

Element Code: ICBRA03030

vernal pool fairy shrimp

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	IUCN_VU-Vulnerable			
Habitat:	**General:**	ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MOUNTAINS, AND SOUTH COAST MOUNTAINS, IN ASTATIC RAIN-FILLED POOLS.			
	Micro:	INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.			

Occurrence No.	181	**Map Index:** 36115	**EO Index:** 31112	**Element Last Seen:**	1997-02-13
Occ. Rank:	Fair		**Presence:** Presumed Extant	**Site Last Seen:**	1997-02-13
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2014-10-02

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.34685 / -120.55031	**Accuracy:**	80 meters
UTM:	Zone-10 N4136165 E716987	**Elevation (ft):**	165
PLSS:	T07S, R13E, Sec. 04, SW (M)	**Acres:**	0.0

Location: JUST NW OF THE INTERSECTION OF FOX ROAD AND CARDELLA ROAD, 2 MILES EAST OF ATWATER.

Detailed Location:

Ecological: HABITAT CONSISTED OF A ROADSIDE POOL, ADJACENT TO ATSF RAILROAD TRACKS, SURROUNDED BY AGRICULTURE.

General: 1 ADULT COLLECTED ON 13 FEB 1997 (CASIZ #111133).

Owner/Manager: PVT

Occurrence No.	305	**Map Index:**	46094	**EO Index:**	46094	**Element Last Seen:**	2002-01-28
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2002-01-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-10-10

Quad Summary:	Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.35203 / -120.50373	**Accuracy:**	non-specific area
UTM:	Zone-10 N4136848 E721098	**Elevation (ft):**	175
PLSS:	T07S, R13E, Sec. 01, SW (M)	**Acres:**	17.8

Location:	ABOUT 5 MILES EAST OF ATWATER, FROM INTERSECTION OF HIGHWAY 59 AND TAHOE STREET TO 0.2 MILE SOUTH ON HIGHWAY 59.
Detailed Location:	CALTRANS RIGHT-OF-WAY ADJACENT TO WEST SHOULDER OF HIGHWAY 59. SAMPLE POOLS 5A, 5B, & 5B1.
Ecological:	VERNAL POOLS IN OPEN GRASSLAND; SURROUNDING LAND USES WERE AGRICULTURE AND GRAZING AT TIME OF SURVEY.
General:	8 COLLECTED IN 2000 (CASIZ #154910). 2 POOLS, EACH WITH 100 ADULTS, AND 1 POOL WITH 10 ADULTS OBSERVED FEB 2001; 16 COLLECTED (CASIZ #154907, 154908). 13 COLLECTED ON 28 JAN 2002 (CASIZ #162474, 162487).
Owner/Manager:	CALTRANS

Occurrence No.	306	**Map Index:**	46095	**EO Index:**	46095	**Element Last Seen:**	2002-01-11
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2002-01-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-10-10

Quad Summary:	Atwater (3712035)
County Summary:	Merced

Lat/Long:	37.33240 / -120.50482	**Accuracy:**	non-specific area
UTM:	Zone-10 N4134668 E721059	**Elevation (ft):**	165
PLSS:	T07S, R13E, Sec. 11, SE (M)	**Acres:**	31.4

Location:	ABOUT 5 MI EAST OF ATWATER; ALONG HIGHWAY 59, FROM 0.2 TO 0.7 MI SOUTH OF THE INTERSECTION OF HWY 59 AND BELCHER AVE.
Detailed Location:	SURVEYED POOLS WERE IN THE CALTRANS RIGHT-OF-WAY ADJACENT TO THE WEST SHOULDER OF HIGHWAY 59.
Ecological:	VERNAL POOLS IN OPEN GRASSLAND SURROUNDED BY LAND USED FOR AGRICULTURE & GRAZING AT TIME OF 2000-01 SURVEYS. SPEA HAMMONDII, LINDERIELLA OCCIDENTALIS, & INDICATOR PLANTS ALSO FOUND. AIR PHOTOS SHOW DEVELOPMENT IN SE PORTION OF OCCURRENCE.
General:	THOUSANDS OF ADULTS IN 2 POOLS & 10 IN 1 POOL, NOV 2000; 24 COLLECTED (IN CAS). HUNDREDS OF ADULTS IN 2 POOLS, FEB 2001; UP TO 51 COLLECTED FEB & DEC 2001 (IN CAS). 7 COLLECTED ON 11 JAN 2002 (CASIZ #162476).
Owner/Manager:	CALTRANS

Linderiella occidentalis **Element Code:** ICBRA06010

California linderiella

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2G3
	State:	None		**State:**	S2S3
	Other:	IUCN_NT-Near Threatened			
Habitat:	**General:**	SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.			
	Micro:	WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TOTAL DISSOLVED SOLIDS.			

Occurrence No.	196	**Map Index:** 47479	**EO Index:** 47479	**Element Last Seen:**	2000-11-21
Occ. Rank:	Fair		**Presence:** Presumed Extant	**Site Last Seen:**	2000-11-21
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2002-03-25

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.35963 / -120.50374	**Accuracy:**	80 meters
UTM:	Zone-10 N4137692 E721075	**Elevation (ft):**	175
PLSS:	T07S, R13E, Sec. 02, NE (M)	**Acres:**	0.0

Location: 5 MILES EAST OF ATWATER, 0.1 MILE SOUTH OF INTERSECTION OF WEST BELLEVUE ROAD AND HIGHWAY 59.

Detailed Location: POOL ALONG CULVERT LOCATED ON WEST SHOULDER OF HIGHWAY 59.

Ecological: HABITAT CONSISTS OF A SWALE. SURROUNDING AREA IS RURAL / GRAZING LAND.

General: 21 NOV 2000: 500 ADULTS AND 500 JUVENILES OBSERVED IN SAMPLE POOL 6A.

Owner/Manager: CALTRANS

Atriplex persistens

Element Code: PDCHE042P0

vernal pool smallscale

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.2			
Habitat:	**General:**	VERNAL POOLS.			
	Micro:	ALKALINE VERNAL POOLS. 3-115 M.			

Occurrence No.	4	**Map Index:** 36774	**EO Index:** 31771	**Element Last Seen:**	2011-10-15
Occ. Rank:	Excellent		**Presence:** Presumed Extant	**Site Last Seen:**	2011-10-15
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2013-06-03

Quad Summary: Sandy Mush (3712025), Atwater (3712035)

County Summary: Merced

Lat/Long:	37.24727 / -120.62010	**Accuracy:**	specific area
UTM:	Zone-10 N4124958 E711081	**Elevation (ft):**	110
PLSS:	T08S, R12E, Sec. 11, E (M)	**Acres:**	18.0

Location: NORTHWEST OF WHERE VENTURA ROAD GOES FROM E-W TO N-S, 6 MILES SOUTHWEST OF MERCED.

Detailed Location: RANGE ROAD/VENTURA ROAD ALSO NAMED JOHN SANDERS ROAD. SEVERAL POLYGONS MAPPED ACCORDING TO 2013 WITHAM DIGITAL DATA.

Ecological: ALKALI GRASSLAND WITH SHALLOW VERNAL POOLS. ASSOCIATED WITH HORDEUM MARINUM SSP. GUSSONEANUM, NEOSTAPFIA COLUSANA, AMARANTHUS ALBUS, FRANKENIA GRANDIFOLIA, CRYPSIS SCHOENOIDES, CRESSA TRUXILLENSIS, ERYNGIUM VASEYI, AND DISTICHLIS SPICATA.

General: UNKNOWN NUMBER OF PLANTS SEEN IN 1987. 100'S OF PLANTS SEEN IN 2009. 100,000S OF PLANTS SEEN IN 2011. 1989 TAYLOR COLLECTION AND 1994 & 1995 STUTZ COLLECTIONS ALSO ATTRIBUTED HERE. ONE OF THE MOST OUTSTANDING ATPE OCCURRENCES.

Owner/Manager: PVT

Occurrence No.	7	**Map Index:** 36783	**EO Index:** 31780	**Element Last Seen:**	1926-06-18
Occ. Rank:	None		**Presence:** Possibly Extirpated	**Site Last Seen:**	1926-06-18
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1998-04-29

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.26480 / -120.53386	**Accuracy:**	1 mile
UTM:	Zone-10 N4127099 E718682	**Elevation (ft):**	140
PLSS:	T08S, R13E, Sec. 03 (M)	**Acres:**	0.0

Location: 3 MILES SOUTHWEST OF MERCED.

Detailed Location:

Ecological:

General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS 1926 COLLECTION BY HOWELL. OCCURRENCE EXTIRPATED ACCORDING TO D. TAYLOR.

Owner/Manager: UNKNOWN

Sagittaria sanfordii **Element Code:** PMALI040Q0

Sanford's arrowhead

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive			
Habitat:	**General:**	MARSHES AND SWAMPS.			
	Micro:	IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-605 M.			

Occurrence No.	75	**Map Index:** 83260	**EO Index:** 84280	**Element Last Seen:**	2010-05-25
Occ. Rank:	Good		**Presence:** Presumed Extant	**Site Last Seen:**	2010-05-25
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2011-06-30

Quad Summary: Atwater (3712035)

County Summary: Merced

Lat/Long:	37.32415 / -120.54171	**Accuracy:**	specific area
UTM:	Zone-10 N4133667 E717814	**Elevation (ft):**	150
PLSS:	T07S, R13E, Sec. 16, E (M)	**Acres:**	1.0

Location: CANAL WEST OF FRANKLIN ROAD ACROSS FROM LOBO AVE, ABOUT 0.2 MILE NORTH OF STATE ROUTE 99, MERCED.

Detailed Location: TWO COLONIES MAPPED ACCORDING TO 2010 COORDINATES PROVIDED BY GRAENING.

Ecological: AGRICULTURAL CANAL; OCCASIONAL INUNDATION. ASSOCIATED WITH POLYGONUM HYDROPIPEROIDES, SORGHUM HALEPENSE, JUNCUS BALTICUS, LYTHRUM HYSSOPIFOLIA, AVENA BARBATA, ERODIUM BOTRYS, PLANTAGO LANCEOLATA, ETC.

General: ABOUT 750 PLANTS OBSERVED IN EASTERN COLONY AND 96 PLANTS OBSERVED IN WESTERN COLONY IN 2010.

Owner/Manager: UNKNOWN

Neostapfia colusana **Element Code:** PMPOA4C010

Colusa grass

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.1			
Habitat:	**General:**	VERNAL POOLS.			
	Micro:	USUALLY IN THE BOTTOMS OF LARGE, OR DEEP VERNAL POOLS; ADOBE SOILS. 5-125 M.			

Occurrence No.	40	**Map Index:** 13099	**EO Index:**	6295	**Element Last Seen:** 2011-10-15
Occ. Rank:	Fair		**Presence:**	Presumed Extant	**Site Last Seen:** 2011-10-15
Occ. Type:	Natural/Native occurrence		**Trend:**	Decreasing	**Record Last Updated:** 2013-05-20

Quad Summary: Sandy Mush (3712025), Atwater (3712035)

County Summary: Merced

Lat/Long:	37.24933 / -120.61933	**Accuracy:**	specific area
UTM:	Zone-10 N4125188 E711145	**Elevation (ft):**	110
PLSS:	T08S, R12E, Sec. 11, E (M)	**Acres:**	19.0

Location: NORTHWEST OF JUNCTION OF RANGE ROAD AND VENTURA ROAD, 4.5 MILES NORTH OF THE MERCED NATIONAL WILDLIFE REFUGE.

Detailed Location: SEVERAL POLYGONS MAPPED ACCORDING TO A 1982 MAP WITH AERIAL PHOTO, A 1988 MAP BY BIOSYSTEMS ANALYSIS, AND 2013 WITHAM DIGITAL DATA.

Ecological: VERNAL POOLS APPARENTLY FORMED OVER LEWIS SALINE-ALKALINE SOILS. POOLS SURROUNDED BY VALLEY GRASSLAND. POOL ASSOCIATES INCLUDE AMARANTHUS ALBUS, POLYPOGON, CRYPSIS, ATRIPLEX, FRANKENIA, CRESSA, ERYNGIUM, DISTICHLIS, SIDA, NAVARRETIA, ETC.

General: >10,000 PLANTS IN 1982, 13,000+ IN 1986, 23,000 IN 1987, 1300 IN 1988, NONE IN 2009 & 2010, ~600 PLANTS IN 2011.

Owner/Manager: PVT

7.3 Appendix C: CHRIS Search Record

Prepared by Central California Information Center dated May 9, 2025.

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, Mono, San Joaquin, Stanislaus & Tuolumne Counties

Date: 5/9/2025

Records Search File #: 13350I
Project: Bert Crane Wastewater Treatment Plan Improvements

Isaiah Medina
Precision Civil Engineering, Inc.
1234 "O" Street
Fresno, CA 93721
559-449-4500 imedina@precisioneng.net

We have conducted a non-confidential extended records search as per your request for the above-referenced project area located on portions of the Arena & Atwater USGS 7.5-minute quadrangle maps in Merced County.

Search of our files includes review of our maps for the specific project area and the immediate vicinity of the project area, and review of the following:

National Register of Historic Places (NRHP)
California Register of Historical Resources (CRHR)
California Inventory of Historic Resources (1976)
California Historical Landmarks
California Points of Historical Interest listing
Office of Historic Preservation Built Environment Resource Directory (BERD) and the Archaeological Resources Directory (ARD)
Survey of Surveys (1989)
Caltrans State and Local Bridges Inventory
General Land Office Plats
Other pertinent historic data available at the CCaIC for each specific county

The following details the results of the records search:

Prehistoric or historic resources within the project area:

- There are no formally recorded prehistoric or historic archaeological resources or historic buildings within the project area.

- The project area (as depicted on the Project Site aerial view) is located within the overall boundary of the proposed Merced Irrigation District, recorded as P-24-001909 and referenced in the Office of Historic Preservation Built Environment Resource Directory (BERD) with a National Register of Historic Places evaluation of "6Y", determined

ineligible for the National Register through the Section 106 process, not evaluated for the California Register of Historical Resources or for local listing.

- In additional there are five water conveyance features within the project area, portions of which have been recorded elsewhere is Merced County, including three contributing elements to the Merced Irrigation District:

  Bear Creek Canal (P-24-002046)
  Black Rascal Creek Canal (P-24-002047)
  O'Donnell Lateral (P-24-001679)

  As well as the two features not listed as contributing elements to the district:

  Gurr Lateral (P-24-002011)
  Hinds Lateral (P-24-002012)

- The General Land Office survey plat for T7S R12E (dated 1855) does not show any historic features in the south 1/2 of Section 35. The General Land Office survey plat for T8S R12E (dated 1856) shows the north ½ of Section 2 divided into parcels of various acreages.

- The 1918 edition of the Atwater USGS quadrangle shows two buildings within the NE ¼ of the NE ¼ of Section 2, T8S R 12E, and a building in the NE ¼ of the SE ¼ of Section 35, T7S R12E. The 1918 edition of the Arena USGS quadrangle shows 2 buildings in the NW ¼ of Section 2. We have no further information on file regarding these possible historic buildings.

Prehistoric or historic resources within the immediate vicinity of the project area: We caution that prehistoric archaeological resources, including Native American burials, have been found elsewhere in Merced County beneath the plow zone within the environs of the Bear Creek and Black Rascal Creek drainage systems.

Resources that are known to have value to local cultural groups: None has been formally reported to the Information Center.

Previous investigations within the project area: No project-specific survey has been conducted. A report prepared in 1982 references survey along portions of Bear and Black Rascals creeks, cited as follows:

CCaIC Report No. ME-00672
Peak & Associates, Inc.
1982 Merced County Streams Project, California (Downstream Channel Improvements).

Recommendations/Comments:

Please be advised that a historical resource is defined as a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old. Since the area has not been subject to previous project-specific investigations, there may be unidentified features involved in your project that are 45 years or older and considered as historical resources requiring further study and evaluation by a qualified professional of the appropriate discipline.

If the current project does not include ground disturbance, further study for archaeological resources is not recommended at this time. If ground disturbance is considered a part of the current project, we recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources.

If the proposed project contains buildings or structures that meet the minimum age requirement (45 years in age or older) it is recommended that the resource/s be assessed by a professional familiar with architecture and history of the county. Review of the available historic building/structure data has included only those sources listed above and should not be considered comprehensive.

If at any time you might require the services of a qualified professional the Statewide Referral List for Historical Resources Consultants is posted for your use on the internet at http://chrisinfo.org

If archaeological resources are encountered during project-related activities**,** work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources.

If human remains are discovered, California Health and Safety Code Section 7050.5 requires you to protect the discovery and notify the county coroner, who will determine if the find is Native American. If the remains are recognized as Native American, the coroner shall then notify the Native American Heritage Commission (NAHC). California Public Resources Code Section 5097.98 authorizes the NAHC to appoint a Most Likely Descendant (MLD) who will make recommendations for the treatment of the discovery.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the State Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

We thank you for contacting this office regarding historical resource preservation. Please let us know when we can be of further service. Thank you for sending the completed **Access Agreement Short Form.**

Note: Billing will be transmitted separately via email from the Financial Services office ($150.00), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

https://commerce.cashnet.com/ANTHROPOLOGY

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: ARBilling@csustan.edu, CSU Stanislaus Financial Services

7.4 Appendix D: NAHC SLF Results Letter

Prepared by the Native American Heritage Commission dated May 12, 2025.

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

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COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

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Steven Quinn

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 12, 2025

Isaiah Medina
Precision Civil Engineering

Via Email to: imedina@precisioneng.net

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Bert Crane WWTP Improvements Project, Merced County

To whom it may concern:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

APPENDIX D

Discharge Study

City of Atwater

Bert Crane
Regional Wastewater Treatment Plant
Discharge Project

Discharge Study

FINAL

NOVEMBER 2024



Prepared for:
CITY OF ATWATER
750 Bellevue Road
Atwater, CA 95301
(209) 357-6370

Prepared by:
BLACK WATER CONSULTING ENGINEERS, INC.
602 Lyell Drive
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BLACKWATER
CONSULTING ENGINEERS

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APPENDICES

Appendix A – Notice of Applicability
Appendix B – Discharge Agreement between the City of Atwater and Gallo
Appendix C – Detailed Cost Estimates

1 Introduction

This Discharge Study (Study) was prepared by Black Water Consulting Engineers, Inc. (Black Water) for the City of Atwater (City) to evaluate alternatives for the sustainable use of existing water resources in compliance with the Sustainable Groundwater Management Act (SGMA). The Study aims to develop and assess feasible alternatives for discharging treated effluent from the Bert Crane Regional Wastewater Treatment Plant (WWTP) to the Merced Irrigation District (MID) via Black Rascal Creek (Rascal Creek) or Bear Creek.

1.1 Scope

The following tasks were completed as part of this Study:

1. Review information on the existing WWTP/effluent discharge system.
2. Review of the surrounding project location and potential discharge locations.
3. Kick-off meeting with City and site visit to the WWTP.
4. Review of the existing City discharge agreement.
5. Review of the Notice of Applicability (NOA) issued by the Central Valley Regional Quality Control Board.
6. Investigation of the permits and agency coordination required for project implementation.

1.2 Objectives

The objectives for this Study are as follows:

1. Describe the purpose and need of the Project.
2. Develop alternatives for treated effluent discharge to MID via a creek, including descriptions, schematics / conceptual design exhibits, and preliminary construction and project cost estimates.
3. Develop a matrix and weighting factors to evaluate alternatives.
4. Develop details for the recommended alternative.

2 Background

The City owns and operates the Bert Crane Regional Wastewater Treatment Plant, located approximately 4 miles south of Atwater and adjacent to the Merced County Radio Control Club. Wastewater enters the facility, undergoes tertiary-level treatment, and is released via an effluent pump station and 42-inch force main along Bert Crane Road into the Atwater/Peck Drain. The drain flows through Joseph Gallo Farms (Gallo Ranch), where a significant portion is diverted for agricultural and wetland use.

Bear Creek is approximately 4,000 feet south of the WWTP, which is under the Merced Irrigation District (MID) jurisdiction. The East Side Canal intercepts Bear Creek, which flows west towards the San Joaquin River.

Figure 2-1 provides an overview of the project location.

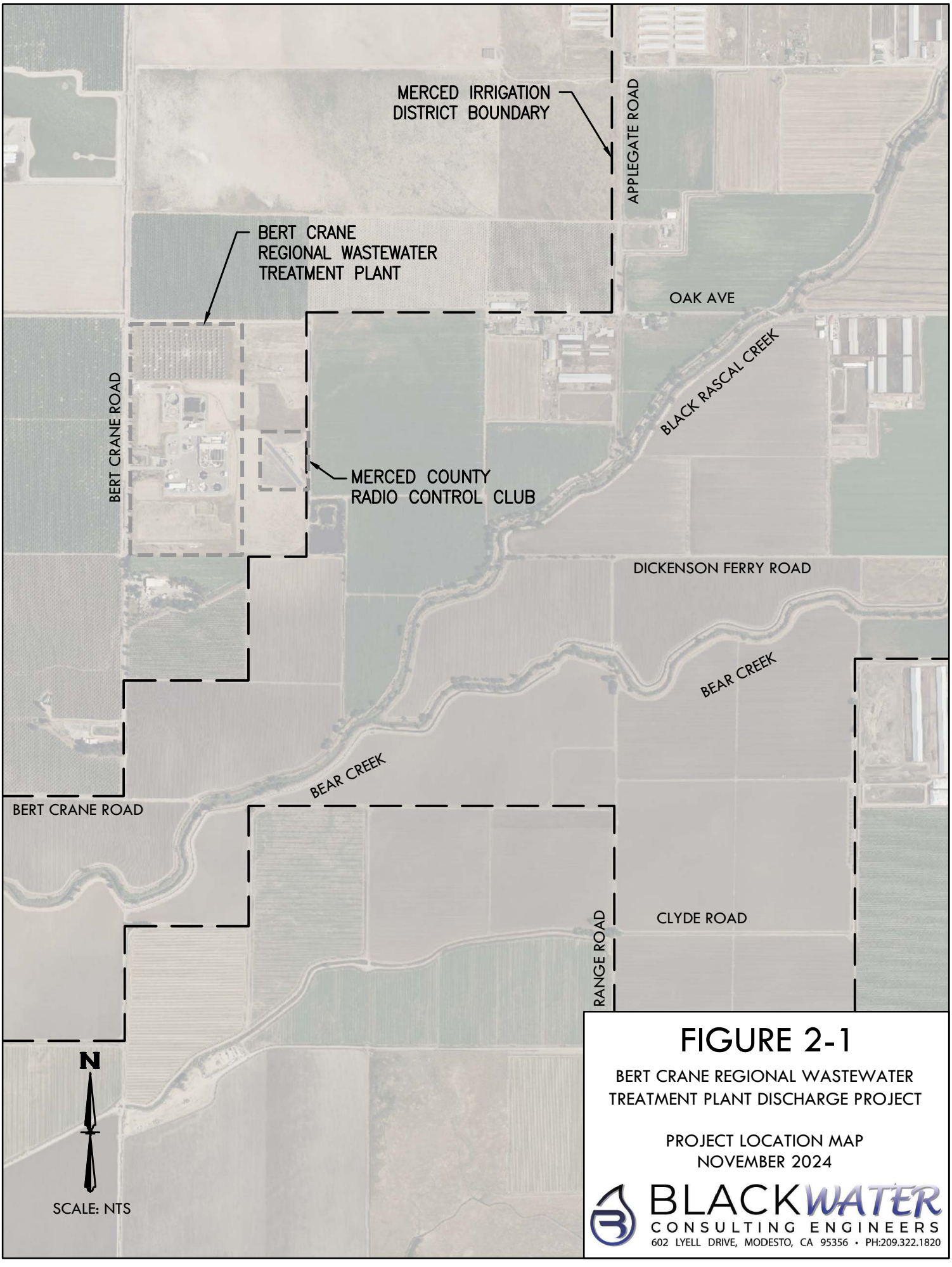


FIGURE 2-1

BERT CRANE REGIONAL WASTEWATER TREATMENT PLANT DISCHARGE PROJECT

PROJECT LOCATION MAP
NOVEMBER 2024

BLACKWATER CONSULTING ENGINEERS
602 LYELL DRIVE, MODESTO, CA 95356 • PH:209.322.1820

I:\24472 ATWATER ON-CALL ENGINEERING\CAD\TASK-01 (PROJECT DESC)\REPORTS\FIGURES\FIGURE 2-1 - ATWATER DISCHARGE VICINITY MAP.DWG PLOT: 11/5/2024 3:38:47 PM BY ANGEL MARISCAL

2.1 Central Valley Regional Water Quality Control Board Municipal General Order

The City of Atwater submitted a Report of Waste Discharge to the Central Valley Regional Water Quality Control Board (Water Board) on June 29, 2016, to discharge tertiary-treated domestic wastewater from the WWTP to the Peck/Atwater Drain. The Water Board also received a Notice of Intent from the WWTP on January 12, 2018, requesting enrollment under the General Order R45-2017-0085 for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water (Municipal General Order). The Water Board determined that the WWTP is eligible for coverage under the Municipal General Order. Discharge of tertiary effluent from the WWTP is authorized under the Municipal General Order R5-2017-0085-001 and National Pollutant Discharge Elimination System Permit No. CAG585001. Refer to **Appendix A** for the Notice of Applicability (NOA) issued by the Water Board.

2.2 Discharge Agreement

In 1978, the City entered into a Discharge Agreement with Michael Gallo, Joseph E. Gallo, and the Gallo Cattle Company, a limited partnership (Gallo), followed by an Agreement in 2007 and 2012, granting the right to discharge and deposit up to 12,000,000 gallons per day (gpd) of treated sewer effluent and stormwater on the Gallo property. Tertiary treated effluent from the WWTP is discharged via a 42-inch pipeline and into the Peck/Atwater Drain. Refer to **Appendix B** for the Discharge Agreement between the City of Atwater and Gallo.

3 Purpose of Project

In September 2014, Governor Brown signed the Sustainable Groundwater Management Act (SGMA) into law. This legislation provides a framework for local agencies to manage groundwater supplies and restricts state intervention unless necessary. The three legislative bills comprising the SGMA are AB 1739, SB 1319, and SB 1168. SGMA requires that high-priority basins develop groundwater sustainability agencies (GSAs), create groundwater sustainability plans (GSPs), and manage groundwater for long-term sustainability. The Merced Subbasin was classified as a high-priority and critically over-drafted basin in the SGMA 2019 Basin Prioritization, completed in December 2019.

Water management and land management agencies in the Merced Subbasin formed three GSAs: the Merced Irrigation-Urban GSA (MIUGSA), the Merced Subbasin GSA, and the Turner Island Water District GSA. These GSAs collaborated on a GSP for the entire Merced Subbasin. The City of Atwater is a member of the MIUGSA, which was formed by a Memorandum of Understanding (MOU) between the Merced Irrigation District (MID), City of Merced, City of Atwater, City of Livingston, Le Grand Community Services District, Planada Community Services District, and Winton Water and Sanitary District.

The MIUGSA adopted the Merced Subbasin GSP in December 2019. With the adoption of the Merced Subbasin GSP, the participating GSAs set a goal of achieving sustainable groundwater management on a long-term average basis by increasing recharge and/or reducing groundwater pumping while avoiding undesirable results. This goal will be achieved by allocating a portion of the estimated Merced Subbasin sustainable yield to each of the three participating GSAs and coordinating the implementation of programs and projects to increase both direct and in-lieu groundwater recharge, thereby increasing the groundwater and/or surface water available. Implementation of the GSP will be a substantial undertaking. The Merced Subbasin GSP implementation schedule for the initial five years (2020-2025) focuses on monitoring and reporting activities, developing initial GSA allocations, and establishing allocation

procedures and demand reduction efforts. Implementing the GSP will improve the City's long-term water supply reliability by providing estimates for sustainable groundwater quantities. The plan was further modified to meet the requirements of the California Department of Water Resources.

As part of the initiative to meet the groundwater recharge requirements set forth by SGMA, the City of Atwater intends to discharge its treated effluent to MID via Rascal Creek or Bear Creek. An agreement between the City and MID would be required to define the terms for discharge into either Rascal Creek or Bear Creek. This Study will evaluate alternatives for improvements to discharge treated effluent to MID facilities.

4 Alternatives Analysis

Project alternatives were developed to evaluate future improvements allowing for discharge to either Rascal Creek or Bear Creek. Currently, treated effluent is pumped from the WWTP via a 42-inch force main into the Atwater/Peck Drain, flowing through the Gallo Ranch. These alternatives propose connecting to the existing force main with a tee fitting and automatic actuated butterfly valves integrated into the City's SCADA system. This setup would enable the City to redirect flows to the Gallo Ranch, the creeks, or both as needed. Three alignment options were considered for this project:

- Alternative 1 – Bert Crane Road Alignment
- Alternative 2 – South WWTP Alignment
- Alternative 3 – Deckert Lateral Alignment

Each of the three alternatives shares common infrastructure improvement recommendations, notably connecting to the existing treated effluent force main from the wastewater treatment plant (WWTP), constructing a dedicated pump station, and constructing an outfall structure. Installing an outfall structure on the creek's embankment presents a unique challenge due to the need to protect the creek from potential pollutants. To mitigate this risk, the outfall structure will be positioned above the high water level, minimizing the need for extensive flow diversion and dewatering efforts and reducing the environmental impact on the creek.

The following summarizes recommended improvements that are applicable to each of the alternatives:

- Installation of a 42-inch x 42-inch x 18-inch tee.
- Installation of a 42-inch automatic actuated butterfly valve.
- Installation of an 18-inch automatic actuated butterfly valve.
- Installation of air relief valve.
- Installation of an 18-inch magnetic flow meter.
- Construction of a pump station.
- Installation of power source and connection to City SCADA system.
- Construction of an outfall structure equipped with a flap valve.

Potential key issues during the construction of these alternatives include crossing existing utilities and various irrigation lines along the alignment and/or the Hinds Lateral. An initial utility investigation has identified overhead and buried electrical lines along the alignment of each alternative. The locations of these utilities will need to be confirmed to avoid potential crossing conflicts and issues during construction.

Given the shared components across these alternatives, permitting requirements are anticipated to be similar for each. **Table 4-1** provides a breakdown of these permitting requirements.

Table 4-1 – Permitting Requirements

Agency	Description	Estimated Fee[1]
California Department of Fish and Wildlife (CDFW)	Lake and Streambed Alteration (LSA) is required for any change to a river's bed, channel, or bank. An LSA Notification Form shall be submitted to CDFW for evaluation for permit issuance.	$14,804.75
Merced County	An encroachment permit is required for construction within the County right-of-way.	$2,843.92 +(0.0058*Engineer's Estimate)
Merced Irrigation District (MID)	An encroachment permit is required for construction within MID facilities.	$2,300
Central Valley Flood Protection Board (CVFPB)	An encroachment permit is required for projects within a 100-feet proximity of a non-leveed regulated stream listed in California Code of Regulations Title 23, Waters, Division 1, Article 8, Table 8.1.	$2,500
California State Water Resources Control Board (SWRCB)	Construction of an outfall structure will require a permit for Clean Water Act (CWA) Section 404, which requires review from the United States Army Corp of Engineers (USACE). The permit will become valid by contacting the Central Valley Regional Water Control Board (CVRWCB) and getting a CWA 401 Water Quality Certification.	TBD

1. Fees were developed based on the current agency's fee schedule and are subject to change.

The Clean Environmental Quality Act (CEQA), Stormwater Pollution Prevention Plan (SWPPP), and a geotechnical investigation are project components applicable to all alternatives and are discussed in detail below.

To meet CEQA requirements for each alternative, an environmental study will be conducted to determine whether the project may significantly affect the environment. Based on preliminary discussions with an environmental consultant, it is anticipated that the project can be addressed with a Mitigated Negative Declaration (MND), which allows for a streamlined review process by identifying specific mitigation measures to address potential impacts. The level of environmental analysis and reporting will be confirmed through the environmental review. If necessary, additional studies may be conducted to assess environmental impacts, explore alternatives, and propose mitigation measures, after which a Notice of Intent (NOI) will be filed. The NOI will be circulated for review and public comment. Once it addresses any comments received during the public review period, the City, as the lead agency, will approve the document, and a Notice of Determination will be filed with the County and State Clearinghouse, beginning the 30-day statute of limitations for project opposition.

A SWPPP is required for construction projects that disturb one or more acres or have the potential to release pollutants into waterways, as mandated under the National Pollutant Discharge Elimination System (NPDES) General Permit. Due to the project's potential for discharge to Rascal Creek or Bear Creek, a SWPPP is anticipated to be required during construction. The SWPPP will outline the measures and controls that will be used to prevent stormwater pollution during construction activities.

A geotechnical investigation will be completed to provide data on subsurface conditions. This geotechnical investigation will identify soil and rock properties, groundwater levels, and potential geohazards that could impact the design and construction of the pipeline, pump station, and outfall structure. The geotechnical report will include information and recommendations for foundation requirements and construction methods to mitigate erosion, slope instability, or settlement risks that could affect the outfall structure's stability and safety.

The following sections provide a detailed discussion of each alignment alternative considered for discharge to either creek.

4.1 Alternative 1 – Bert Crane Road Alignment

Alternative 1 proposes connecting the existing 42-inch treated effluent pipeline with an 18-inch force main along Bert Crane Road and flowing into Bear Creek via an outfall structure. The following summarizes the specific improvements recommended for this alternative:

- Construction of 4,400 linear feet of 18-inch pipeline.
- Traffic Control.
- Flow Diversion and Dewatering.

Most of the pipeline alignment for this alternative is on the WWTP (APN 056-200-026) or the Bert Crane Road right-of-way. The pump station will be located within the WWTP property and will not require additional easements or land acquisition. An easement will be necessary for the improvements situated on parcel 065-020-011 towards Bear Creek.

The total estimated cost for Alternative 1 is $5,630,731. For the detailed cost estimate, refer to **Appendix C**. **Figure 4-1** shows the conceptual improvements for Alternative 1.

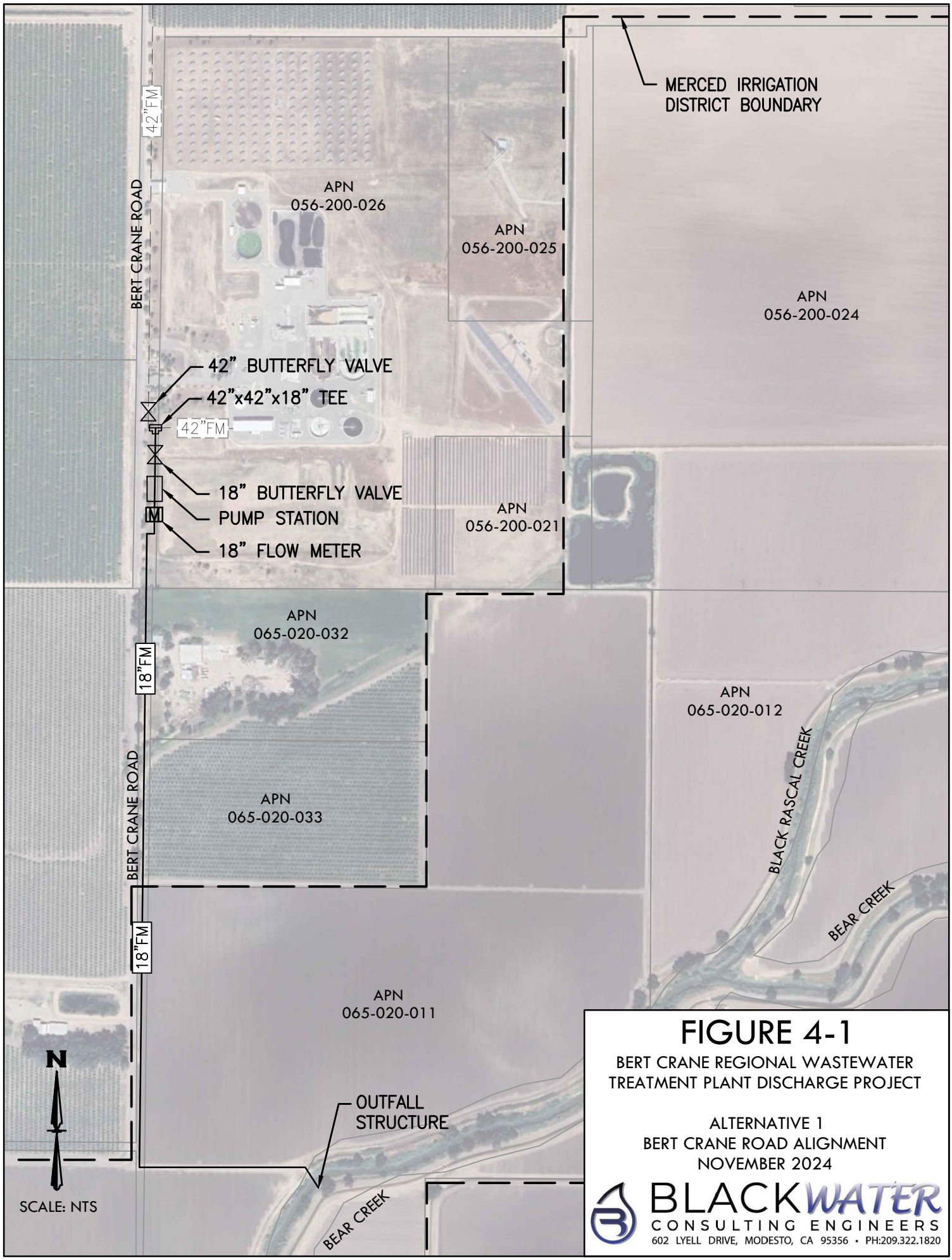


FIGURE 4-1

BERT CRANE REGIONAL WASTEWATER TREATMENT PLANT DISCHARGE PROJECT

ALTERNATIVE 1
BERT CRANE ROAD ALIGNMENT
NOVEMBER 2024

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I:\24472 ATWATER ON-CALL ENGINEERING\CAD\TASK-01 (PROJECT DESC)\REPORTS\FIGURES\FIGURES\FIGURE 4-1 - ATWATER DISCHARGE ALTERNATIVE 1.DWG PLOT: 11/5/2024 3:39:11 PM BY ANGEL MARISCAL

4.2 Alternative 2 – South WWTP Alignment

Alternative 2 proposes connecting the existing 42-inch treated effluent pipeline with an 18-inch force main south of the WWTP and flowing into Rascal Creek via an outfall structure. The following summarizes the specific improvements recommended for this alternative:

- Construction of 4,300 linear feet of 18-inch pipeline.
- Flow Diversion and Dewatering.

A portion of this alignment is on the WWTP (APN 056-200-026) and a City-owned parcel (APN 056-200-021). The pump station will be located on the WWTP property and will not require additional easements or land acquisition. An easement will be required for the pipe segment located within parcels 056-200-024 and 065-020-012.

The total estimated cost for Alternative 2 is $5,476,773. For the detailed cost estimate, refer to **Appendix C**. **Figure 4-2** shows the conceptual improvements for Alternative 2.

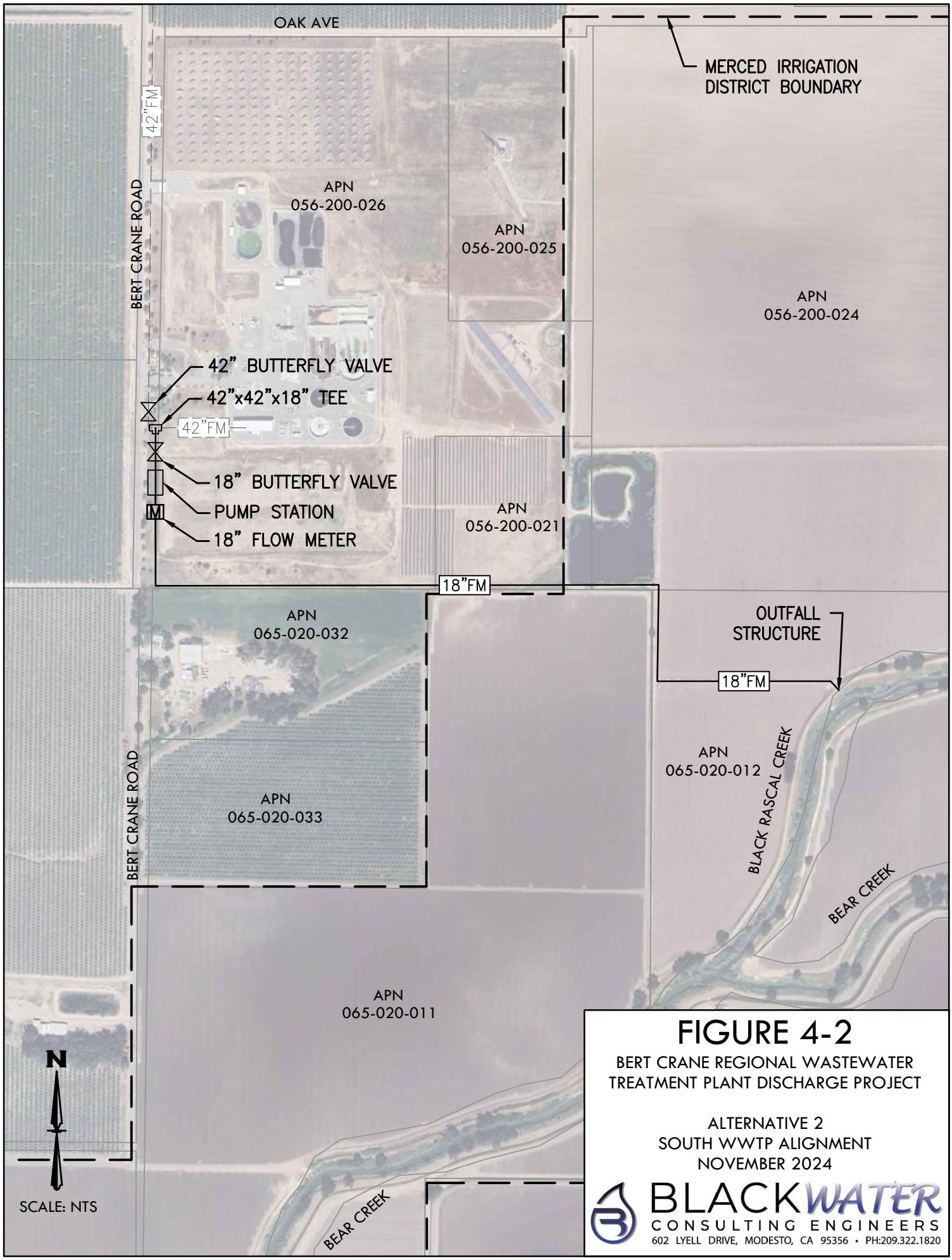


FIGURE 4-2

BERT CRANE REGIONAL WASTEWATER TREATMENT PLANT DISCHARGE PROJECT

ALTERNATIVE 2
SOUTH WWTP ALIGNMENT
NOVEMBER 2024

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I:\24472 ATWATER ON-CALL ENGINEERING\CAD\TASK-01 (PROJECT DESC)\REPORTS\FIGURES\FIGURES\FIGURE 4-2 - ATWATER DISCHARGE ALTERNATIVE 2.DWG PLOT: 11/5/2024 10:47:41 AM BY ANGEL MARISCAL

4.3 Alternative 3 – Deckert Lateral Alignment

Alternative 3 proposes connecting the existing 42-inch treated effluent pipeline with an 18-inch force main north of the WWTP, then east towards the intersection between Applegate Road and Oak Avenue, and discharge to the creek via the Deckert Lateral. The following summarizes the specific improvements and key components recommended for this alternative:

- Connection to the existing Deckert Lateral culvert.
- Construction of 5,400 linear feet of 18-inch pipeline.
- Increase MID's Deckert Lateral Capacity.
- Replace the existing MID outfall structure to Black Rascal Creek.
- Traffic Control.

This alternative proposes connecting to the existing Deckert Lateral culvert at the intersection of Oak Avenue and Applegate Road. This would allow discharge directly into the Deckert Lateral. MID has requested that the existing Deckert Lateral outfall be replaced and the Deckert Lateral capacity increased.

Most of the pipeline alignment for this alternative lies within the abandoned Oak Avenue right-of-way. The pipeline will begin at the WWTP northwest corner and continue to the Applegate Road and Oak Avenue intersection. The pump station will be located within the City's property and will not require additional easements or land acquisition. However, an easement will be required for the pipe segment along parcel 056-200-002 until it reaches Oak Avenue right-of-way.

The total estimated cost for Alternative 3 is $6,446,732. For a detailed cost estimate, refer to **Appendix C**. **Figure 4-3** shows the conceptual improvements for Alternative 3.

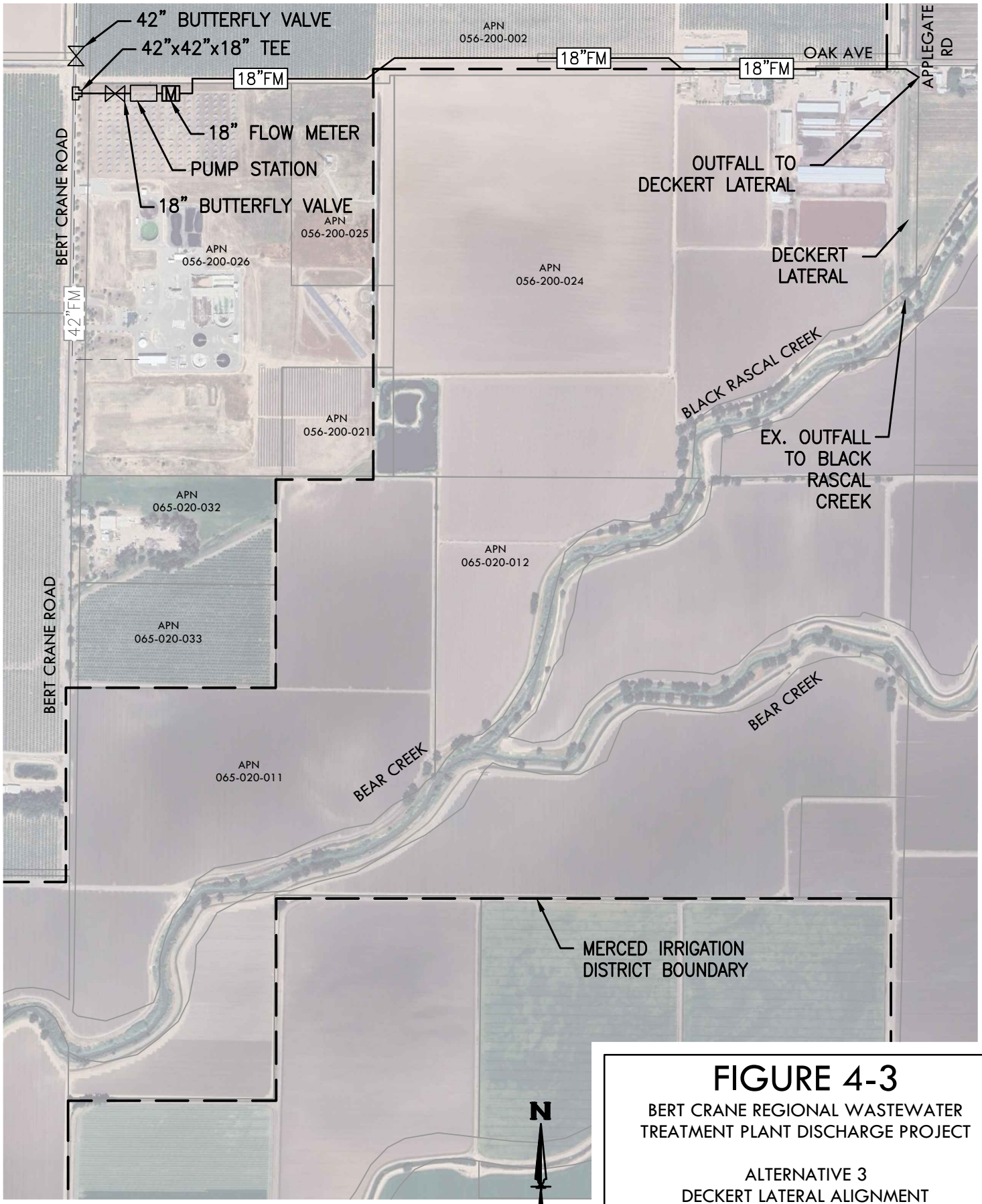


FIGURE 4-3

BERT CRANE REGIONAL WASTEWATER
TREATMENT PLANT DISCHARGE PROJECT

ALTERNATIVE 3
DECKERT LATERAL ALIGNMENT
NOVEMBER 2024

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602 LYELL DRIVE, MODESTO, CA 95356 • PH:209.322.1820

I:\224472 ATWATER ON-CALL ENGINEERING\CAD\TASK-01 (PROJECT DESC)\REPORTS\FIGURES\FIGURE 4-3 - ATWATER DISCHARGE ALTERNATIVE 3.DWG PLOT: 11/5/2024 10:48:17 AM BY ANGEL MARISCAL

4.4 Alternatives Evaluation

The three improvement alternatives evaluated by this Study were assigned scores based on financial and non-financial criteria, utilizing a weighted factor system. The evaluation criteria included considerations for project cost, land and easement acquisition, and construction complexity. Operation costs for each alternative are similar and are thus not considered for evaluation purposes. Each alternative was reviewed based on the evaluation criteria shown in **Table 4-2**. The weighting factors varied between 20-40 percent based on each criterion's relative importance. Criteria with higher weighting factors were considered more important in the evaluation. The total weighting factors for all the criteria total 100 percent.

Table 4-2 – Evaluation Criteria

#	Evaluation Criteria	Weight Factor, %
1	Project Cost	20
2	Land and Easement Acquisition	40
3	Construction Complexity	40

The three alternatives were scored from the most desirable (3) to least desirable (1) for each evaluation criterion. The evaluation criteria are summarized in the following section.

4.4.1 Project Cost

Capital costs for each alternative were developed based on the anticipated project components. The alternatives were scored in this category based on the estimated total project cost. The alternative with the lowest project cost received the highest score, while the one with the highest cost received the lowest score. **Table 4-3** summarizes the estimated costs.

Table 4-3 – Estimated Project Cost Scoring

Alternative	Project Cost	Score
Alternative 1 - Bert Crane Road Alignment	$ 5,630,731	2
Alternative 2 - South WWTP Alignment	$ 5,476,773	3
Alternative 3 - Deckert Lateral Alignment	$ 6,446,732	1

Alternative 2 received the highest score. Refer to **Appendix C** for detailed cost estimates on the alternatives.

4.4.2 Land and Easement Acquisition

Land and easement acquisition considers the land required to implement each alternative. Alternatives that require less land or easement acquisition received the highest score. **Table 4-4** presents the score of the three alternatives regarding land and easement acquisition, from the most desirable (3) to least desirable (1).

Table 4-4 – Land and Easement Acquisition Scoring

Score	Alternative and Description
3	Alternative 1 - Bert Crane Road Alignment
2	Alternative 2 - South WWTP Alignment
1	Alternative 3 - Deckert Lateral Alignment

Alternative 1 received the highest score because it requires the least land or easement acquisition. In contrast, Alternative 3 received the lowest score because it would require the most easement necessary for the pipeline installation.

4.4.3 Construction Complexity

Construction complexity is a critical factor in recommending an alternative due to the potential challenges that can arise during construction. These challenges include:

- Ground conditions
- Environmental conditions
- Existing infrastructure
- Topography
- Access and logistics
- Traffic control

Permitting and associated requirements for construction are similar for all three alternatives and are discussed previously in this Study.

Alternatives that are less complex to construct received a higher score. **Table 4-5** presents the scores for the three alternatives, from the most desirable (3) to least desirable (1), regarding construction complexity.

Table 4-5 – Construction Complexity Scoring

Score	Alternative
2	Alternative 1 - Bert Crane Road Alignment
3	Alternative 2 - South WWTP Alignment
1	Alternative 3 - Deckert Lateral Alignment

Alternative 2, the South WWTP Alignment, received the highest score as it will not require traffic control, contains a significant portion of construction within the City's property, and requires the least pipeline. Alternative 1, the Bert Crane Road Alignment, scored second as it offers easy access to the project site and confines most construction activities within the County right-of-way, but would require traffic control along Bert Crane Road. Alternative 3, the Deckert Lateral Alignment scored lowest as it would require reconstructing the outfall structure at Rascal Creek and providing Deckert Lateral with additional capacity per MID's request.

4.4.4 Summary

Table 4-6 summarizes each alternative's raw and weighted scores. Alternative 2 received the highest total weighted score of 2.6. The next section provides a more detailed description of the recommended alternative.

Table 4-6 – Raw and Weighted Scoring for Alternatives

			Alternative 1 Bert Crane Road Alignment		**Alternative 2** South WWTP Alignment		**Alternative 3** Deckert Lateral Alignment	
#	Evaluation Criteria	Weighting Factor	Raw Score	Weighted Score	Raw Score	Weighted Score	Raw Score	Weighted Score
1	Project Cost	0.2	2	0.4	3	0.6	1	0.2
2	Land and Easement Acquisition	0.4	3	1.2	2	0.8	1	0.4
3	Construction Complexity	0.4	2	0.8	3	1.2	1	0.4
	Total Weighted Score			2.4		2.6		1

5 Recommended Project Summary

Alternative 2, the South WWTP alignment, received the highest weighted score and is the recommended project. The following is a summary of the improvements required for this alternative:

- Installation of a 42-inch x 42-inch x 18-inch tee.
- Installation of a 42-inch butterfly valve.
- Installation of an 18-inch butterfly valve.
- Construction of 4,300 linear feet of 18-inch pipeline.
- Installation of air relief valve.
- Installation of an 18-inch magnetic flow meter.
- Construction of a pump station.
- Construction of an outfall structure equipped with a flap valve.
- Installation of power source and connection to City SCADA system.

This alternative will require an easement for the portion of the line along parcels 065-020-024, 065-020-012, and the outfall structure at Black Rascal Creek.

Primary challenges and considerations for this alternative:

- Outfall Structure on Creek Embankment:
  - Unique challenge due to the need to protect the creek from potential pollutants.
  - Outfall structure to be positioned above high water level to minimize the need for flow diversion and dewatering.
  - Reduced environmental impact on the creek.
- Construction Issues:
  - Potential conflicts with crossing private irrigation lines.
  - Navigating buried electrical lines along the alignment.
- Environmental Study:
  - Required to determine if the project may significantly affect the environment.
  - Based on preliminary discussions with an environmental consultant, it is anticipated that the project can be addressed with an MND.
- Geotechnical Investigation:
  - Necessary to identify soil and rock properties, groundwater levels, and potential geohazards.
  - Essential for informing the design and construction of the pipeline and outfall structure.
- SWPPP Requirements:
  - Due to disturbance of over one acre of land and potential pollutant release into waterways, a SWPPP will be implemented.

Section 6 shows a detailed cost estimate covering easements, permitting, geotechnical investigation, and SWPPP for the recommended alternative. Section 4 discusses permitting requirements associated with the recommended project. **Figure 4-2** provides an overview of the conceptual improvements for Alternative 2.

6 Detailed Cost Estimate for Recommended Project

The recommended project's total estimated cost is $5,476,773. **Table 6-1** summarizes the budget cost for the project.

Table 6-1 – Estimated Project Cost - Alternative 2

Item	Unit	Qty	Unit Cost, $	Total Unit Cost, $
Mobilization	LS	1	200,000	200,000
Connections to Existing Force Main	EA	1	5,000	5,000
42"x42"x18" Tee	EA	1	10,000	10,000
42" Butterfly Valve	EA	1	100,000	100,000
18" Butterfly Valve	EA	1	46,000	46,000
18" HDPE Piping	LF	4,300	250	1,075,000
Air Relief Valve	EA	4	10,000	40,000
Trenching	LF	4,300	40	172,000
Backfill and Compaction	LF	4,300	50	215,000
18" Magnetic Flow Meter	EA	1	20,000	20,000
Precast Vault with Access Door	EA	2	75,000	150,000
Outflow Structure	EA	1	100,000	100,000
18" Flap Valve	EA	1	5,000	5,000
Pump Station	EA	1	500,000	500,000
Geotechnical Investigation	LS	1	80,000	80,000
Storm Water Pollution Prevention Plan	LS	1	15,000	15,000
Flow Diversion and Dewatering	LS	1	50,000	50,000
Electrical Service	LS	1	250,000	250,000
			Subtotal	3,033,000
			30% construction contingency	909,900
			Total Construction Cost	3,942,900
			Easement Acquisition	75,000
			Administration (2%)	78,858
			Design (10%)	394,290
			Permitting, Regulatory Compliance, CEQA (10%)	394,290
			Construction Management and Engineering Services During Construction (15%)	591,435
			Estimated Project Cost	5,476,773

7 Project Schedule

The proposed schedule for the Recommended project is presented in **Table 7-1**. The project schedule design tasks include engineering and environmental work. The construction phase tasks include bidding, awarding the construction project, and project closeout.

Table 7-1 – Project Schedule

Task	Estimated Date of Completion
Design Phase	
Prepare Environmental Quality Act (CEQA) Documentation	Jan 2025
Field Investigation	Feb 2025
Prepare 50% Plans, Specs, and Estimate	Apr 2025
Prepare 90% Plans, Specs, and Estimate	Jul 2025
Prepare 100% Plans, Specs, and Estimate	Oct 2025
Advertise Project for Bidding	Nov 2025 - Jan 2026
Construction Phase	
Award Construction Contract	Feb 2026
Construction	Feb 2026 - Aug 2026
Project Closeout	Aug 2026

Appendix A

Notice of Applicability

30 May 2018

Lori Waterman, Interim City Manager
City of Atwater
750 Bellevue Road
Atwater, CA 95301

CERTIFIED MAIL
7018 0360 0000 1932 5993

NOTICE OF APPLICABILITY (NOA); MUNICIPAL GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2017-0085 (NPDES NO. CAG585001); CITY OF ATWATER, ATWATER REGIONAL WASTEWATER TREATMENT FACILITY, MERCED COUNTY

The Central Valley Regional Water Quality Control Board Report (Central Valley Water Board) received a Report of Waste Discharge (ROWD) for the Atwater Regional Wastewater Treatment Facility (Facility) on 29 June 2016 from the City of Atwater (hereinafter Discharger), for discharge of tertiary-treated domestic wastewater from the Facility to Peck/Atwater Drain. The Central Valley Water Board also received a Notice of Intent for the Facility on 12 January 2018 requesting enrollment under General Order R5-2017-0085 for *Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water* (Municipal General Order). Based on the application packet and subsequent information submitted by the Discharger, Central Valley Water Board staff has determined that the Facility is eligible for coverage under the Municipal General Order. This Facility's discharge is hereby authorized under the terms and conditions of the Municipal General Order and assigned Municipal General Order **R5-2017-0085-001** and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG585001. Please reference your Municipal General Order enrollee number, R5-2017-0085-001**,** in your correspondence and submitted documents.

This NOA, effective immediately, enrolls the Facility under the Municipal General Order and authorizes the discharge of tertiary-treated domestic wastewater from the Facility to Peck/Atwater Drain and to the onsite Storm Water Retention Pond/Emergency Storm Water Basin. The Facility's current individual order (Order R5-2011-0082; NPDES No. CA0085308) expired on 1 January 2017; however, the Central Valley Water Board Executive Officer administratively continued Order R5-2011-0082 in a letter dated 28 December 2016. The 28 December 2016 letter acknowledged the Facility was identified as a good candidate for enrollment under the, at the time proposed, Municipal General Order. As of the date of this NOA, Order R5-2011-0082 is no longer effective. Staff plans to have the Central Valley Water Board consider rescinding Order R5-2011-0082 at its 31 May/1 June 2018 Board Meeting.

The duration of this NOA is limited to two years 30 May 2020. The Discharger is required to conduct quarterly chronic toxicity monitoring using the dilution series specified in the Municipal General Order. By 31 March 2020, Central Valley Water Board staff will conduct a new reasonable potential analysis for chronic toxicity using the Facility's new chronic toxicity data. If the chronic toxicity data demonstrate reasonable potential, staff will either revise this NOA to include the chronic toxicity effluent limitation specified in the Municipal General Order or draft

individual waste discharge requirements for the Facility. If individual waste discharge requirements are deemed necessary, the Discharger will not be expected to submit a new ROWD.

The enclosed Municipal General Order may be viewed at:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2017-0085.pdf

You are urged to familiarize yourself with the contents of the entire document. The Municipal General Order prescribes mandatory discharge monitoring and reporting requirements.

Table 1. Facility Information

WDID	5B24NP00017
CIWQS Facility Place ID	747519
Discharger	City of Atwater
Name of Facility	Atwater Regional Wastewater Treatment Facility
Facility Address	530 South Bert Crane Road Atwater, California 95301 Merced County
Facility Contact, Title and Phone	Brian Shaw, Interim Public Works Director (209) 357-6372
Authorized Person to Sign and Submit Reports	Brian Shaw, Interim Public Works Director (209) 357-6372 Steven Pound, Chief Plant Operator (209) 357-3451
Mailing Address	470 Aviator Drive, Atwater, CA 95301
Billing Address	Same as mailing address
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	B
Pretreatment Program	Yes
Recycling Requirements	Not Applicable
Facility Permitted Flow	6.0 million gallons per day (MGD)(average dry weather daily discharge flow)
Facility Design Flow	6.0 MGD
Watershed	San Joaquin Valley Floor Hydrologic Unit, El Nido-Stevinson Hydrologic Area (No. 535.70)
Receiving Water	Peck/Atwater Drain
Receiving Water Type	Inland surface water

FACILITY DESCRIPTION

The Discharger is the owner of the Facility but currently contracts Veolia Water North America – West, LLC to operate and maintain the Facility. The Facility provides sewerage service for the City of Atwater (population of 29,022 based on 2014 estimate), the unincorporated community of Winton (population of 10,613 based on 2010 census), and both the Federal Bureau of Prisons – Atwater and the Castle Airport Aviation and Development Center (combined population of approximately 1,500). A Site Location Map is included in Attachment A.

The Facility provides full nitrification and denitrification for nitrogen removal and uses ultraviolet light (UV) for disinfection. A Liquid Flow Schematic is included in Attachment B and a Solids Flow Schematic is included in Attachment C. The components of the Facility include:

- A headworks with fine screening and grit removal;
- Two oxidation ditches providing nitrification and denitrification;
- Three secondary clarifiers;
- Three cloth-media tertiary filters;
- An UV disinfection system;
- Two aerobic digesters;
- A solids holding day tank;
- Three rotary presses;
- A biosolids storage/drying area; and
- An unlined emergency storage basin also used as a stormwater retention pond for onsite stormwater runoff.

The Facility has a design flow of 6.0 MGD. For the 2017 calendar year, the Facility received an annual average influent flow of 3.33 MGD. The Facility's UV system consists of three UV chambers each containing five banks. Sludge wasted from the secondary clarifiers is either returned to the oxidation ditches as returned activated sludge (RAS) or wasted to the aerobic digesters as waste activated sludge (WAS). According to the 2016 ROWD, biosolids are stored and dried at the Facility for a minimum of three months. In 2015, the Facility generated 324 dry metric tons of biosolids.

RECEIVING WATER BENEFICIAL USES

The Facility discharges disinfected tertiary-treated wastewater to Peck/Atwater Drain at Discharge Point 001 (37° 16' 49.3" N; 120° 38' 00.7" W). Peck/Atwater Drain is hydraulically connected to the San Joaquin River, a water of the United States, between Sack Dam and the mouth of the Merced River within the El Nido-Stevinson Hydrologic Area of the San Joaquin Valley Floor Hydrologic Unit (Hydrologic Area No. 535.70).

Peck Drain is a manmade, unlined channel constructed to convey water from Atwater Drain to Joseph Gallo Farms (Gallo Ranch). Atwater Drain empties into Peck Drain at the eastern boundary of the Gallo Ranch property just south of State Route 140 and along Bert Crane Road. The historic alignment of Atwater Drain is abandoned at this location. Peck Drain rejoins the original Atwater Drain alignment on the southwest side of Gallo Ranch.

Beyond Gallo Ranch, Atwater Drain borders a few large agricultural parcels and two managed wetland areas. Atwater Drain is also a man-made, unlined channel originally constructed by Merced Irrigation District to dispose of groundwater pumped to lower the groundwater table in agricultural lands. The Drain was later modified to also collect and disperse agricultural tail waters from surrounding properties, overflow from the adjacent irrigation supply channels, and storm water drainage from the City of Atwater. Gallo Ranch, as part of its agreement with the Discharger, has the right to all wastewater discharged to Peck Drain. Any water not extracted for use by Gallo Ranch flows into Atwater Drain. Atwater Drain terminates at the Arena Plains Unit of the Merced National Wildlife Refuge. Water in the Merced National Wildlife Refuge can flow into the San Joaquin River via the East Side Canal.

Starting in 2016, the United States Bureau of Reclamation has entered into one-year agreements to purchase up to 6,000 acre-feet per year of tertiary-treated wastewater from Gallo Farms. The treated wastewater is pumped out of Peck/Atwater Drain into Bear Creek. Bear Creek is used to convey the treated wastewater to the East Bear Creek Unit of the San Luis

National Wildlife Refuge complex. Water in Bear Creek, if not diverted, will flow into the San Joaquin River.

Beneficial uses applicable to Peck/Atwater Drain are carried over from Order R5-2011-0082. See Section I.A of Attachment D of this NOA for how surface water beneficial uses were established. The following beneficial uses are applicable to Peck/Atwater Drain:

- Municipal and domestic supply (MUN);
- Agricultural supply (AGR);
- Water contact recreation (REC-1);
- Warm freshwater habitat (WARM);
- Wildlife habitat (WILD); and
- Groundwater recharge (GWR).

Groundwater underlying the Facility is in the El Nido-Stevinson Detailed Analysis Unit (DAU) No. 212. The beneficial uses of groundwater for this DAU are designated in the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised July 2016 (Basin Plan) as follows:

- Municipal and domestic supply (MUN);
- Agricultural supply (AGR);
- Industrial service supply (IND); and
- Industrial process supply (PRO).

RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLs)

As specified in the Municipal General Order, section IV.D of Attachment F (Fact Sheet), and in accordance with section 303(d) of the Clean Water Act, U.S. EPA requires the Central Valley Water Board to develop TMDLs for each 303(d) listed pollutant and water body combination.

On 26 June 2015, U.S. EPA gave final approval to California's 2012 section 303(d) List of Water Quality Limited Segments (WQLSs). Peck/Atwater Drain is not listed as a WQLS in the 2012 303(d) List. However, the San Joaquin River and Bear Creek are both listed as WQLSs. Bear Creek (from Bear Valley to the San Joaquin River) is listed as a WQLS for E.coli and unknown toxicity. The San Joaquin River segments between Bear Creek and Mud Slough are listed as a WQLS for arsenic, boron, chlorpyrifos, DDT, diazinon, electrical conductivity, E. coli, Group A pesticides, mercury, selenium, and unknown toxicity. As specified in this NOA, the Municipal General Order includes monitoring for all these constituents, except E.coli. However, this NOA includes total coliform effluent limitations and monitoring requirements and requires the Discharger to provide treatment equivalent to Title 22 disinfected tertiary recycled water, which means the Facility is required to produce an essentially pathogen-free effluent by maintaining a 5-log virus removal/inactivation barrier through filtration and disinfection.

The Basin Plan includes waste load allocations for diazinon and chlorpyrifos applicable to all NPDES dischargers that discharge directly or indirectly to the lower San Joaquin River. The Municipal General Order, section V.A.1.c.ix. includes an average monthly and average weekly effluent limitation for chlorpyrifos and diazinon for discharges to the San Joaquin River and its tributaries downstream of the major dams and reservoirs. These chlorpyrifos and diazinon limitations are included in this NOA.

DISCHARGE PROHIBITIONS AND OTHER REQUIREMENTS

Discharge prohibitions applicable to the discharge are specified in section IV of the Municipal General Order. There are no additional site-specific prohibitions for this discharge.

EFFLUENT LIMITATIONS

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001. Only the following effluent limitations are applicable to Discharge Point 001. Unless otherwise specified, compliance shall be measured at Monitoring Location EFF-001, as described in the Monitoring and Reporting section of this NOA.

1. The Discharger shall maintain compliance with the effluent limitations specified in Table 2 below.

Table 2. Effluent Limitations

Parameter	Units	Effluent Limitations			Municipal General Order Section Reference
		Average Monthly	Average Weekly	Maximum Daily	
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	10	15	--	**V.A.1.a.ii.(a) (pg. 12)**
Total Suspended Solids	mg/L	10	15	--	**V.A.1.a.ii.(a) (pg. 12)**
Copper, Total Recoverable	µg/L	5.8	--	9.7	**V.A.1.b.iii. (pg. 20)**
Zinc, Total Recoverable	µg/L	57	--	86	**V.A.1.b.iii. (pg. 32)**
Ammonia Nitrogen, Total (as N)	mg/L	1.0	2.6	--	**V.A.1.c.v.(b) (pg. 50)**
	lbs/day	50	130	--	
Nitrate + Nitrite, Total (as N)	mg/L	10	22	--	**V.A.1.c.vi (pg. 70)**

2. **Percent Removal (Municipal General Order section V.A.1.a.ii.(b); pg. 13)**
   The average monthly percent removal of 5-day biochemical oxygen demand (BOD_5) and total suspended solids (TSS) shall not be less than 90 percent.

3. **Total Coliform Organisms (Municipal General Order section V.A.1.a.ii.(c); pg. 13)**
   Effluent total coliform organisms shall not exceed:

   i. 2.2 most probable number (MPN) per 100 mL, as a 7-day median;
   ii. 23 MPN/100 mL, more than once in any 30-day period; and
   iii. 240 MPN/100 mL, at any time.

4. **Flow (Municipal General Order section V.A.1.a.iii; pg. 13)**
   The average dry weather daily discharge flow shall not exceed 6.0 MGD.

5. **Whole Effluent Toxicity, Acute (Municipal General Order section V.A.1.c.i; pg. 49)**
   Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
   i. 70%, minimum for any one bioassay; and
   ii. 90%, median for any three consecutive bioassays.

6. **pH (Municipal General Order section V.A.1.c.iv.(a); pg. 49)**
   The pH shall at all times be within the range of 6.5 and 8.2.

7. **Diazinon and Chlorpyrifos (Municipal General Order section V.A.1.c.ix; pg. 73)** Effluent diazinon and chlorpyrifos concentrations shall not exceed the sum of one (1.0) as identified below:

   i. **Average Monthly Effluent Limitation**

   $$S_{AMEL} = \frac{C_{D\ M-avg}}{0.079} + \frac{C_{C\ M-avg}}{0.012} \leq 1.0$$

   $C_{D\ M\text{-}avg}$ = average monthly diazinon effluent concentration in µg/L.
   $C_{C\ M\text{-}avg}$ = average monthly chlorpyrifos effluent concentration in µg/L.

   ii. **Average Weekly Effluent Limitation**

   $$S_{AWEL} = \frac{C_{D\ W-avg}}{0.14} + \frac{C_{C\ W-avg}}{0.021} \leq 1.0$$

   $C_{D\ W\text{-}max}$ = average weekly diazinon effluent concentration in µg/L.
   $C_{C\ W\text{-}max}$ = average weekly chlorpyrifos effluent concentration in µg/L.

RECEIVING WATER LIMITATIONS

1. **Surface Water Limitations (Municipal General Order section VI.A).** The discharge shall not cause the following in Peck/Atwater Drain (Municipal General Order section given in brackets):
   - Bacteria (VI.A.2);
   - Biostimulatory Substances (VI.A.3);
   - Chemical Constituents (VI.A.4);
   - Color (VI.A.5);
   - Dissolved Oxygen (VI.A.6.a.i, ii, iii);
   - Floating Material (VI.A.7);
   - Oil and Grease (VI.A.8);
   - pH (VI.A.9.a);
   - Pesticides (VI.A.10);
   - Radioactivity (VI.A.11);
   - Suspended Sediments (VI.A.12);
   - Settleable Substances (VI.A.13);
   - Suspended Material (VI.A.14);
   - Taste and Odors (VI.A.15);
   - Temperature (VI.A.16.g);
   - Toxicity (VI.A.17); and
   - Turbidity (VI.A.18.a).
2. **Groundwater Limitations (Municipal General Order section VI.B).** Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not cause the underlying groundwater to contain waste constituents in concentrations greater than background water quality or water quality objectives, whichever is greater.

MONITORING AND REPORTING

Monitoring and reporting program requirements are contained in Attachment E of the Municipal General Order as applicable, and as specified in this NOA.

Monitoring Locations – The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements:

Table 3. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	A location where a representative sample of the Facility's influent can be obtained prior to any additives, treatment processes, and plant return flows.
001	EFF-001	A location where a representative sample of the effluent can be collected prior to discharging to Peck/Atwater Drain.
--	RSW-001	Peck/Atwater Drain approximately 500 feet upstream of Discharge Point 001
--	RSW-002	Peck/Atwater Drain approximately 250 feet downstream of Discharge Point 001
--	SLG-001	A location where a representative sample of the sludge can be obtained.
--	FIL-001	Influent to the tertiary treatment filters
--	FIL-002	Location after the tertiary treatment filters and prior to the ultraviolet light disinfection system
--	UVS-001	Ultraviolet light disinfection system
--	PND-001	Storm Water Retention Pond/Emergency Storage Basin

Influent Monitoring – The Discharger shall monitor the influent at Monitoring Location INF-001 as follows:

Table 4. Influent Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	--
Conventional Pollutants				
Biochemical Oxygen Demand (5-day @ 20ºC)	mg/L	24-hr Composite[1]	1/Week	[2]
Total Suspended Solids	mg/L	24-hr Composite[1]	1/Week	[2]

1 24-hour flow proportional composite.

2 Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; or by methods approved by the Central Valley Water Board or the State Water Resources Control Board (State Water Board).

Effluent Monitoring – The Discharger shall monitor the Facility's disinfected tertiary-treated effluent at Monitoring Location EFF-001 as follows:

Table 5. Effluent Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	--
Conventional Pollutants				
Biochemical Oxygen Demand (5-day @ 20° C)	mg/L	24-hr Composite[1]	1/Week	[2]
pH	standard units	Grab[3]	1/Day[4,5]	[2]

Parameter	Units	Sample Type	Sampling Frequency	Required Analytical Test Method
Total Suspended Solids	mg/L	24-hr Composite[1]	1/Week	[2]
Priority Pollutants				
Copper, Total Recoverable	µg/L	24-hr Composite[1]	1/Month	[2, 8]
Zinc, Total Recoverable	µg/L	24-hr Composite[1]	1/Month	[2, 8]
Non-Conventional Pollutants				
Ammonia Nitrogen, Total (as N)	mg/L	Grab[3]	1/Week[4]	[2]
	lbs/day	Calculate	1/Week	--
Nitrate Nitrogen, Total (as N)	mg/L	Grab[3]	1/Week	[2]
Nitrite Nitrogen, Total (as N)	mg/L	Grab[3]	1/Week	[2]
Nitrate plus Nitrite, Total (as N)	mg/L	Calculate	1/Week	--
Nitrogen, Total (as N)	mg/L	Grab[3]	1/Week	[2]
Chlorpyrifos	µg/L	Grab[3]	1/Year	[2,9]
Diazinon	µg/L	Grab[3]	1/Year	[2,9]
Dissolved Oxygen	mg/L	Grab[3]	3/Week[5]	[2]
Electrical Conductivity @ 25°C	µmhos/cm	24-hr Composite[1]	1/Week[5]	[2]
Hardness, Total (as $CaCO_3$)	mg/L	24-hr Composite[1]	1/Month[6]	[2]
Temperature	°C	Grab[3]	3/Week[4, 5]	[2]
Total Coliform Organisms	MPN/100 mL	Grab[3]	5/Week[7]	[2]
Total Dissolved Solids	mg/L	24-hr Composite[1]	1/Month	[2]

1 24-hour flow proportional composite.

2 Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

3 A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.

4 pH and temperature shall be recorded at the time of ammonia sample collection.

5 A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

6 Hardness samples shall be collected concurrently with metals samples.

7 Samples for total coliform organisms may be collected at any point following disinfection.

8 For priority pollutant constituents the reporting level shall be consistent with Sections 2.4.2 and 2.4.3 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (See Municipal General Order, Attachment E, section IX.F).

9 Chlorpyrifos and diazinon shall be sampled using U.S. EPA Method 625M, Method 8141, or equivalent GC/MS method.

Whole Effluent Toxicity Monitoring – The Discharger shall conduct acute and chronic toxicity testing to determine if the effluent is contributing toxicity to the receiving water. The Discharger shall meet the acute and chronic toxicity testing requirements contained in the Municipal

General Order, Monitoring and Reporting Program, Attachment E, section V, and as specified below:

Table 6. Whole Effluent Toxicity Monitoring

Parameter	Units	Sample Type	Monitoring Frequency	Required Analytical Test Method
Acute Toxicity[1]	% survival	24-hr Composite[3]	1/Year	[2]
Chronic Toxicity	TUc	24-hr Composite[4]	1/Quarter	[5]

1 Test species shall be fathead minnows (Pimephales promelas).

2 Acute toxicity samples shall be analyzed using EPA-821-R-02-012, Fifth Edition.

3 24-hour flow proportional composite.

4 Effluent samples shall be 24-hour flow proportional composite at Monitoring location EFF-001. Receiving water control shall be a grab sample obtained at Monitoring Location RSW-001. A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.

5 Chronic toxicity samples shall be estimated as specified in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition*, EPA/821-R-02-013, October 2002.

Receiving Water Monitoring – The Discharger shall monitor the receiving water at Monitoring Locations RSW-001 and RSW-002 for the constituents identified in Table 7 below. If there is no upstream flow in the receiving water during the designated monitoring period, monitoring is not required at RSW-001 during that period. Whenever monitoring is not required, the Discharger shall state so in the monthly SMR.

Table 7. Receiving Water Monitoring

Parameter	Units	Sample Type	Monitoring Frequency	Required Analytical Test Method
Conventional Pollutants				
pH	standard units	Grab[1,2]	1/Week	[3]
Non-Conventional Pollutants				
Dissolved Oxygen	mg/L	Grab[1,2]	1/Week	[3]
Electrical Conductivity @ 25°C	µmhos/cm	Grab[1,2]	1/Month	[3]
Hardness, Total (as $CaCO_3$)	mg/L	Grab[1]	1/Month	[3]
Temperature	°C	Grab[1,2]	1/Week	[3]
Turbidity	NTU	Grab[1,2]	1/Month	[3]

1 A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.

2 A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

3 Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001 and RSW-002. Attention shall be given to the presence or absence of:

a. Floating or suspended matter
b. Discoloration
c. Bottom deposits
d. Aquatic life
e. Visible films, sheens, or coatings
f. Fungi, slimes, or objectionable growths
g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

Pond Monitoring – The Discharger shall keep a log regarding the use of the Storm Water Retention Pond/Emergency Storm Water Basin (Monitoring Location PND-001). In particular, the Discharger shall record the following when any type of wastewater is directed to the basin:

i. The date(s) when the wastewater is directed to the basin;
ii. The type(s) of wastewater (e.g., untreated due to plant upset, tertiary treated, etc.) directed to the basin;
iii. The total volume of wastewater directed to the basin (volume may be estimated);
iv. The duration of time wastewater is collected in the basin prior to redirection back to the other units of the wastewater treatment plant; and
v. The daily freeboard in the basin.

When wastewater (treated or untreated) is stored in the Storm Water Retention Pond/Emergency Storm Water Basin, the Discharger shall monitor the basin at Monitoring Location PND-001 as follows:

Table 8. Pond Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Required Analytical Test Method
Conventional Pollutants				
pH	standard units	Grab[1,2]	1/Month	[3]
Non-Conventional Pollutants				
Dissolved Oxygen	mg/L	Grab[1,2]	1/Month	[3]
Odor	--	Observation	1/Month	--

1 A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.

2 A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

3 Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; or by methods approved by the Central Valley Water Board or the State Water Board.

Filtration System Monitoring – The Discharger shall monitor the influent to the tertiary treatment filters at Monitoring Location FIL-001 (only when not using coagulation) and the effluent of the tertiary treatment system filters at Monitoring Location FIL-002 as follows:

Table 9. Filtration System Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Required Analytical Test Method
Turbidity[3]	NTU	Meter	Continuous	[1,2]

1 For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results. For Dischargers that utilize UV disinfection, the Discharger shall not decrease power settings or reduce the number of UV lamp banks in operation while the continuous analyzers are out of service and water is being disinfected.

2 Report daily average and maximum turbidity.

3 The Discharger shall indicate in their monthly self-monitoring report which days coagulation was used.

Ultraviolet Light (UV) Disinfection System Monitoring – The Discharger shall monitor the UV disinfection system at Monitoring Location UVS-001 as follows:

Table 10. UV Disinfection System Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	[1]
Number of UV banks in operation[2]	Number	Observation	Continuous	[1]
UV Transmittance[3]	Percent (%)	Meter	Continuous	[1]
UV Dose[4]	mJ/cm^2	Calculated	Continuous	[1]

1 For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results. The Discharger shall not decrease power settings or reduce the number of UV lamp banks in operation while the continuous analyzers are out of service and water is being disinfected.

2 Report daily minimum and daily maximum number of UV banks in operation.

3 Report daily minimum hourly average UV transmittance and daily average transmittance. The minimum hourly average transmittance shall consist of lowest average transmittance recorded over an hour of a day when flow is being discharged. If the system does not operate for an entire hour interval on a given day or if effluent flow is not discharged for an entire hour, the transmittance will be averaged based on the actual operation time when discharges are occurring.

4 Report daily minimum hourly average UV dose and daily average UV dose. The minimum hourly average dose shall consist of lowest hourly average dose provided in any channel that had at least one bank of lamps operating during the hour interval. For channels that did not operate for the entire hour interval or when effluent flow is not discharged for the entire hour, the dose will be averaged based on the actual operation time when discharges occurred.

Effluent and Receiving Water Characterization Monitoring – The Discharger shall monitor the effluent and receiving water, at Monitoring Locations EFF-001 and RSW-001 respectively, as follows:

Table 11. Effluent and Receiving Water Characterization Monitoring

Parameter	Units	Sample Type	Sampling Frequency[1]	Required Analytical Test Method[2]
Constituents listed in the Municipal General Order, Attachment E, Table E-10[3,4]	Per Municipal General Order, Table E-10	Per Municipal General Order, Table E-10	1/Year at EFF-001; 2/Permit Term at RSW-001	Per Municipal General Order, Table E-10

1 Sampling at EFF-001 and RSW-001 shall be conducted concurrently.

2 The maximum reporting levels for cadmium, chromium (Total), copper, lead, and nickel are as follows:
- Cadmium 0.5 µg/L;
- Chromium (Total) 10 µg/L;
- Copper 0.5 µg/L;
- Lead 0.5 µg/L; and
- Nickel 5 µg/L.

3 The Discharger does not discharge within the legal boundaries of the Sacramento-San Joaquin Delta; therefore, the Discharger is not required to sample for the constituents labeled with footnote 7 in Table 10, Attachment E, of the Municipal General Order.

4 The Discharger is not required to sample the effluent for the following constituents per this section because regular effluent monitoring is already required per Table 5 above (Note: Receiving water monitoring is required for these constituents per this section):
- Ammonia;
- Copper;
- Nitrate;
- Nitrite;
- Total Dissolved Solids; and
- Zinc.

Monitoring Report Submittals – The Discharger shall comply with the Reporting Requirements contained in the Municipal General Order, Monitoring and Reporting Program, Attachment E, section X, and as specified in this NOA. Monitoring in accordance with the Municipal General Order and this NOA shall begin **1 June 2018**. Table 12 below, summarizes the monitoring report due dates.

Table 12. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	NOA effective date	All	Submit with monthly SMR
1/Day	NOA effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
1/Week	NOA effective date	Sunday through Saturday	Submit with monthly SMR
3/Week	NOA effective date	Sunday through Saturday	Submit with monthly SMR
1/Month	NOA effective date	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
1/Quarter	NOA effective date	1 January through 31 March 1 April through 30 June 1 July through 30 September 1 October through 31 December	1 May 1 August 1 November 1 February of following year
1/Year	NOA effective date	1 January through 31 December	1 February of following year
2/Permit Term	30 November 2019	30 November 2019 through 30 May 2022	First day of second calendar month following sampling

ANNUAL PRETREATMENT REPORTING REQUIREMENTS

As specified in this NOA, the Discharger is subject to the pretreatment requirements included in the Municipal General Order. Therefore, the Discharger shall submit an annual pretreatment report as prescribed in the Municipal General Order, Monitoring and Reporting Program, Attachment E, section X.D.5. The annual report shall be submitted by **28 February** and include all items listed in section X.D.5 of the Monitoring and Reporting Program. In accordance with Municipal General Order, Monitoring and Reporting Program, Attachment E, section X.D.5.a the Discharger shall sample the Facility's influent (INF-001), effluent (EFF-001), and sludge (SLG-001) at least **yearly**.

PROVISIONS

Provisions are contained in Municipal General Order, section VII. The following special provisions are applicable to this discharge and the operation of the Facility (Municipal General Order section given in brackets).

- **Toxicity Reduction Evaluation Requirements (VII.C.2)**
- **Salinity Evaluation and Minimization Plan (VII.C.3.c)**
- **Filtration System Operating Specifications (VII.C.4.a.i and iii.).**
- **UV Disinfection System Operating Specifications (VII.C.4.b.i.(a), VII.C.4.b.ii.(a), VII.C.4.b.iii. through VII.C.4.b.vi).**
- **Pond Operating Specifications (VII.C.4.c.i. through VII.C.4.c.x).**
- **Pretreatment Requirements (VII.C.5.a).** The Discharger shall continue to implement its pretreatment program that was approved by the Central Valley Water Board on 22 June 2007.
- **Sludge/Biosolids Treatment or Discharge Specifications (VII.C.5.b except VII.C.5.b.iii)**
- **Collection System (VII.C.5.c)**
- **Title 22, or Equivalent, Disinfection Requirements (VII.C.6.a)**

COMPLIANCE DETERMINATION

The following compliance determinations are applicable to this discharge (Municipal General Order section given in brackets, if applicable):

- BOD_5 and TSS Effluent Limitations (VIII.A);
- Average Dry Weather Flow Effluent Limitation (VIII.D);
- Total Coliform Organisms Effluent Limitations (VIII.E);
- Mass Effluent Limitations (VIII.G);
- Priority Pollutant Effluent Limitations (VIII.H);

- Dissolved Oxygen Receiving Water Limitation (VIII.I);
- Chlorpyrifos and Diazinon Effluent Limitations (VIII.K)
- Period Average, Calendar Month Average, and Annual Average (VIII.N);
- Turbidity Receiving Water Limitation (VIII.O);

ANTI-BACKSLIDING REQUIREMENTS

Anti-backsliding requirements are specified in the Municipal General Order, section V.D.3, of Attachment F (Fact Sheet). The removal or relaxation of the following effluent limitations is justified based on the anti-backsliding provisions contained in Clean Water Act (CWA) sections 402(o) or 303(d)(4), or, where applicable, 40 C.F.R. section 122.44(l):

- Chlorine;
- Copper;
- Electrical Conductivity;
- Lead; and
- Zinc.

A more detailed anti-backsliding analysis is provided in Attachment D to this NOA in section I.C, Satisfaction of Anti-Backsliding Requirements.

ANTIDEGRADATION REQUIREMENTS

Antidegradation requirements are specified in the Municipal General Order, section V.D.4, of Attachment F (Fact Sheet). This NOA does not allow an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not required. This NOA removes or relaxes the effluent limitations for the pollutants listed in the above section. The removal or relaxation of these effluent limitations is consistent with the antidegradation provisions of 40 C.F.R. 131.12 and State Water Board Resolution No. 68-16. A more detailed antidegradation discussion is provided in Attachment D to this NOA in section I.D, Antidegradation Policies.

RATIONALE FOR EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Additional rationale for effluent limitations and monitoring requirements is included in Attachment D of this NOA.

ENFORCEMENT

Failure to comply with the Municipal General Order may result in enforcement actions, which could include civil liability. Effluent limitation violations are subject to a Mandatory Minimum Penalty (MMP) of $3,000 per violation. In addition, late monitoring reports may be subject to MMPs or discretionary penalties of up to $1,000 per day late. If discharges do not occur during any report monitoring period, the Discharger must still submit the monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

COMMUNICATION

The Central Valley Water Board is implementing a Paperless Office system to reduce our paper use, increase efficiency, and provide a more effective way for our staff, the public, and interested parties to view documents in electronic form. Therefore, the Discharger is required to submit all self-monitoring, technical, and progress reports required by this NOA via California Integrated Water Quality System (CIWQS) submittal. In general, if any monitoring data for a monitoring location can be submitted using a computable document format (CDF) file upload, then it should be submitted as a CDF file upload, such as characterization monitoring data. However, certain parameters that cannot be uploaded to the CIWQS data tables, such as Annual Operations

Reports, should be uploaded as a Portable Document Format (PDF), Microsoft Word, or Microsoft Excel file attachment. Also, please upload or enter a cover letter summarizing the content of the report to the submittal tab of the CIWQS module for each submittal.

All other documents not required to be submitted via CIWQS shall be converted to a searchable PDF and submitted by email to centralvalleyfresno@waterboards.ca.gov. Please include the following information in the body of the email: Attention: NPDES Section; Discharger: City of Atwater; Facility: Atwater Regional Wastewater Treatment Facility; County: Merced; and CIWQS Place ID: 747519. Documents that are 50 megabytes or larger must be transferred to a DVD or flash drive, and mailed to our office.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

Any questions regarding the permitting aspects of the Municipal General Order, shall be directed, via the paperless office system, to the NPDES Permitting Unit, attention Matt Scroggins. Mr. Scroggins can also be reached at (559) 445-6042.

Any questions regarding compliance with the Municipal General Order, shall be directed to the Compliance and Enforcement Unit, attention Warren Gross at warren.gross@waterboards.ca.gov. Mr. Gross can also be reached at (559) 445-5128.

Clay L. Rodgers

for Pamela C. Creedon
Executive Officer

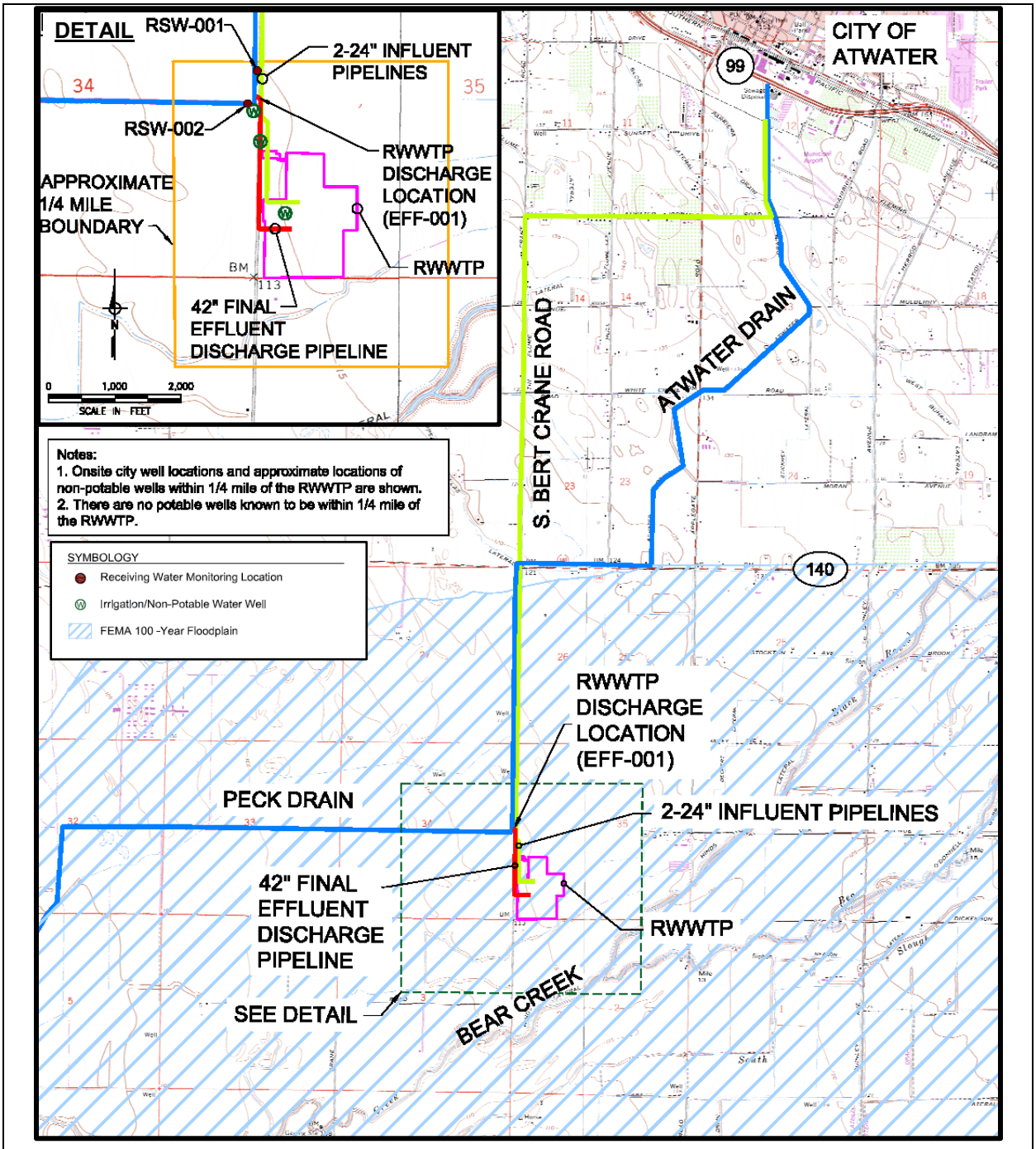
Enclosures: Municipal General Order R5-2017-0085 (Discharger only)

Attachments
Attachment A – Site Location Map
Attachment B – Liquid Process Schematic
Attachment C – Solids Process Schematic
Attachment D – Rationale for Effluent Limitations and Monitoring Requirements

cc: See next page

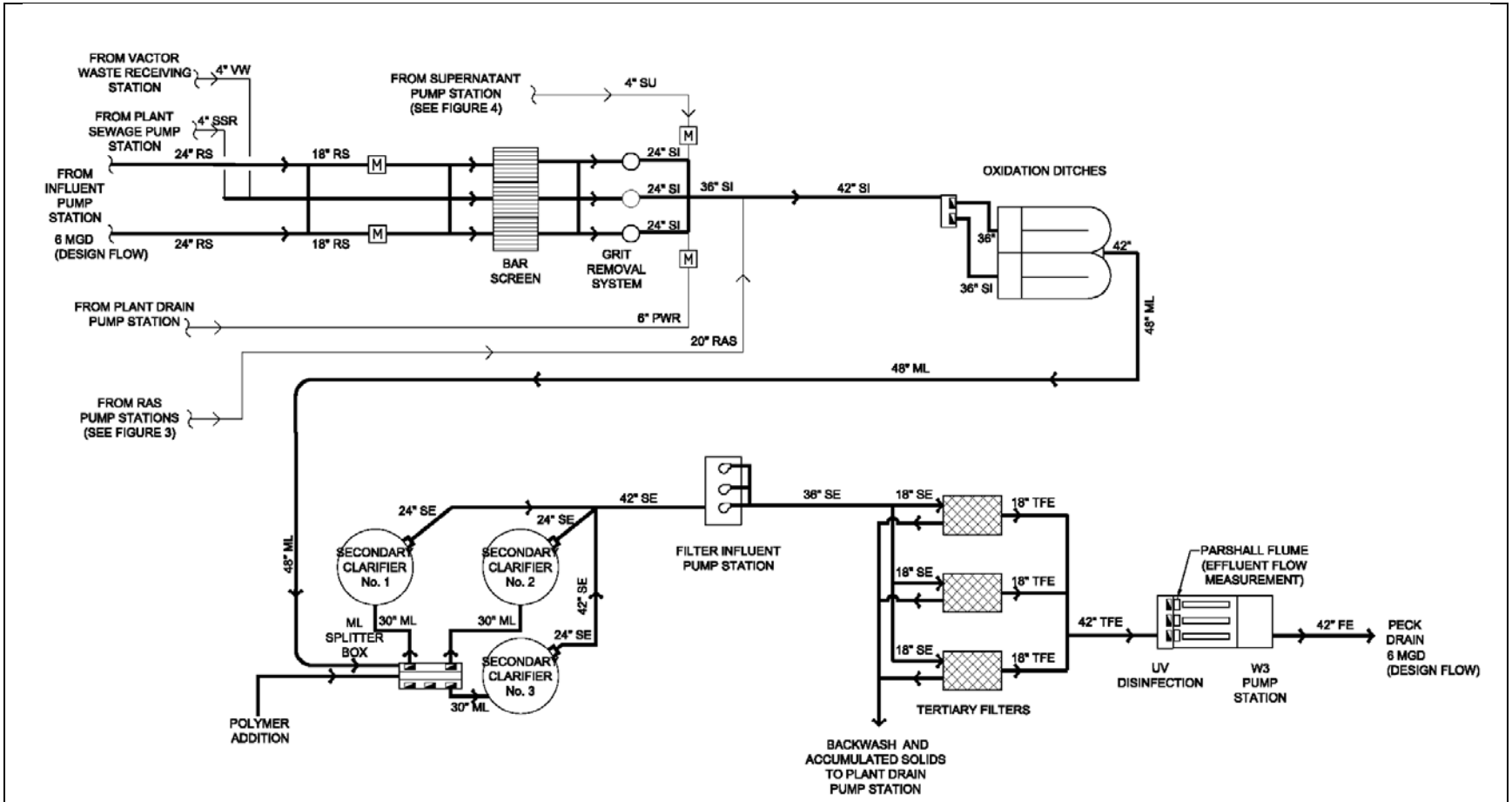
cc: David Smith, U.S. EPA, Region IX, San Francisco (email only)
Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)
Linda Colella, Bureau of Reclamation, Sacramento (email only)
U.S. Fish and Wildlife Service, Sacramento
Division of Water Quality, State Water Board, Sacramento (email only)
Julie Vance, Regional Manager, California Department of Fish and Wildlife, Fresno
Carl Carlucci, State Water Resources Control Board, Division of Drinking Water, Fresno
Brian Shaw, Interim Public Works Director, City of Atwater, Atwater (email only)
Merced Irrigation District, Merced
Debbie Webster, Executive Officer, Central Valley Clean Water Association, 700 R Street, Ste. 200, Scramento, CA 95811 (email only)
Steve Pound, Veolia Water, Atwater (email only)
Kathryn Gies, West Yost Associates, Walnut Creek (email only)
Michael D. Gallo, Joseph Gallo Farms, P.O. Box 775, Atwater, CA 95301-0775
Bill Jennings, California Sportfishing Protection Alliance, Stockton (and via email)
Michael Garabedian, Placer Group Sierra Club & Friends of the North Fork (and via email)

ATTACHMENT A – SITE LOCATION MAP



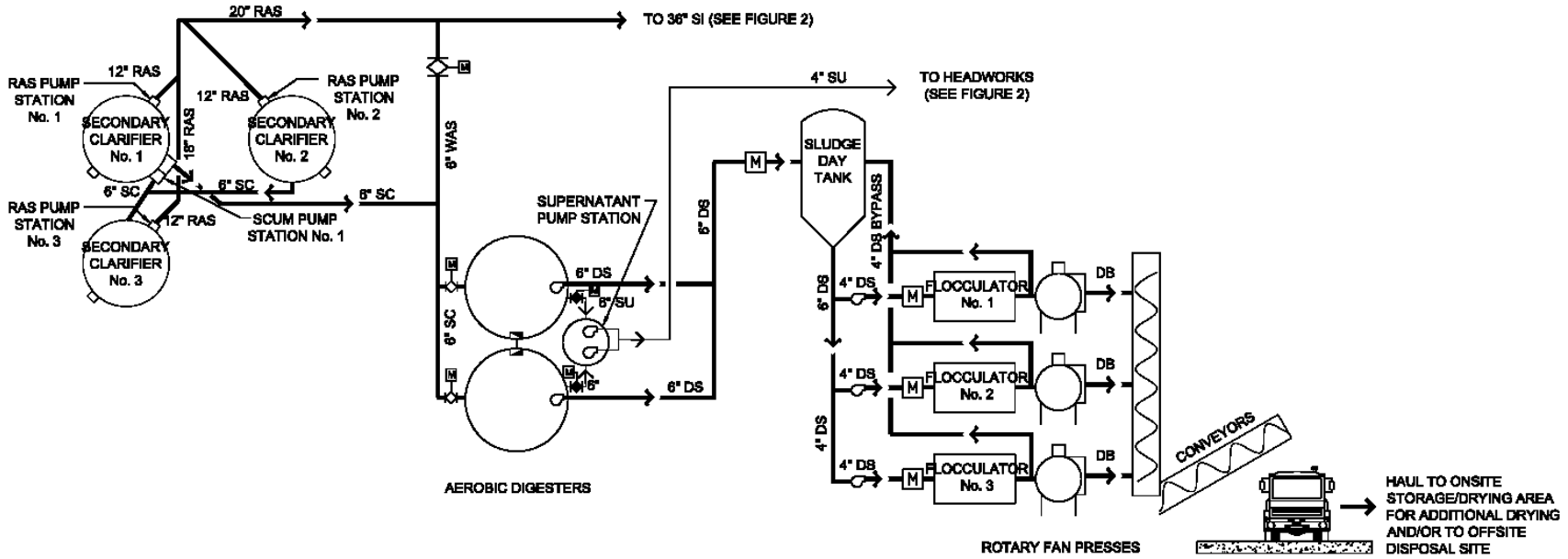
Drawing Source: Report of Waste Discharge, June 2016	**Site Location Map** City of Atwater Atwater Regional Wastewater Treatment Facility	N W E S 0 2,000 4,000 SCALE IN FEET

ATTACHMENT B – LIQUID PROCESS SCHEMATIC



Drawing Source:	**Liquid Process Schematic**	
Report of Waste Discharge, June 2016	City of Atwater Atwater Regional Wastewater Treatment Facility	

ATTACHMENT C – SOLIDS PROCESS SCHEMATIC



Drawing Source:	Solids Process Schematic City of Atwater Atwater Regional Wastewater Treatment Facility	
Report of Waste Discharge, June 2016		

ATTACHMENT D – RATIONALE FOR EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

I. RATIONALE FOR EFFLUENT LIMITATIONS

A. Applicable Beneficial Uses

Peck Drain is a man-made extension of Atwater Drain, which is also a man-made channel. Peck/Atwater Drain provides water that supports wetland ecosystems and wildlife within its reaches and in the Merced National Wildlife Refuge. Furthermore, water from Peck/Atwater Drain can be diverted to the East Bear Creek Unit of the San Luis National Wildlife Refuge via Bear Creek. During a 12 June 2001 inspection, Central Valley Water Board staff observed humans harvesting crayfish and frogs from Atwater Drain. On a 29 June 2005 reconnaissance inspection of Atwater Drain, Central Valley Water Board staff observed crayfish, catfish, carp, and other unidentified fishes. Self-monitoring reports from March 2008 through December 2010 for the old Atwater Wastewater Treatment Facility noted that the facility staff observed fish, birds, frogs, crawdads, minnows, and crayfish in Atwater Drain.

It is not appropriate to use the tributary rule to determine the beneficial uses of Peck/Atwater Drain because it is a man-made storm drain. Given the flow conditions, the beneficial uses actually attained in Peck/Atwater Drain since 1975, information in the case file, and information submitted by the City of Atwater (Discharger), the beneficial uses applicable to Peck/Atwater Drain are listed in the table below. Municipal and domestic supply (MUN) is applied in accordance with the Basin Plan, which states that water bodies that do not have beneficial uses designated in Table II-1 are assigned MUN designations based on State Water Resources Control Board (State Water Board) Resolution 88-63. Agricultural supply (AGR) is applied because water in Peck/Atwater Drain can be diverted to Gallo Ranch for irrigation use. The beneficial use category of agricultural supply includes irrigation of crops for direct human consumption, otherwise known as unrestricted irrigation use. Water contact recreation (REC-1) is applicable because sections of Peck/Atwater Drain are accessible to the public and the people who harvest aquatic life such as frogs and crayfish from the Drain have body contact with the water. Warm freshwater habitat (WARM) is applicable because information available shows Peck/Atwater Drain supports warm freshwater aquatic life. Wildlife habitat (WILD) is applied because Peck/Atwater Drain provides water that supports wetland ecosystems and wildlife within its reaches and in both the Merced National Wildlife Refuge and the East Bear Creek Unit of the San Luis National Wildlife Refuge (via Bear Creek). Groundwater recharge (GWR) is applicable because in areas where groundwater elevations are below the invert of Peck/Atwater Drain, water conveyed in the Drain can percolate to groundwater.

The table below lists the beneficial uses applicable to Peck/Atwater Drain, and the beneficial uses the Basin Plan designates for groundwater beneath the Atwater Regional Wastewater Treatment Facility (Facility) and discharge point.

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Peck/Atwater Drain	MUN, AGR, REC-1, WARM, WILD, GWR
--	Groundwater	MUN, AGR, industrial service supply (IND), industrial process supply (PRO)

B. Chronic Toxicity

The Municipal General Order, Attachment F, Section V.C.5.b. states the following:

> *No dilution has been granted for the chronic condition in this General Order. Therefore,* chronic toxicity *testing results exceeding 1.3 chronic toxicity unit (TUc) and exceeding 25% effect demonstrates the discharge has a reasonable potential to cause or contribute to an exceedance of the Basin Plans' narrative toxicity objective, if the cause of toxicity has not been addressed by the time of issuance of the Notice of Applicability.*

Using the Municipal General Order's basis for determining reasonable potential for *chronic toxicity*, the City has not had a result that exceeded 1.3 TUc and 25% effect. Therefore, the Facility's discharge has not demonstrated reasonable potential to cause or contribute to an excursion of the Basin Plans' narrative toxicity objective. However, the Discharger's February 2017 *chronic toxicity* result was >1 TUc (no dilution series was done or required) and had an effect of 48.56% for the 100% effluent sample. Since a dilution series was not completed for this test, it is unclear if the result demonstrated reasonable potential for the Facility.

The duration of this Notice of Applicability is limited to two years. The purpose of the Notice of Applicability's limited duration is to allow the Discharger to conduct quarterly chronic toxicity monitoring using the dilution series specified in the Municipal General Order. By 31 March 2020, Central Valley Water Board staff will conduct a new reasonable potential analysis for chronic toxicity using the Facility's new chronic toxicity data. If the chronic toxicity data demonstrate reasonable potential, staff will either revise this NOA to include the chronic toxicity effluent limitation specified in the Municipal General Order or draft individual waste discharge requirements for the Facility.

C. Satisfaction of Anti-Backsliding Requirements

The Clean Water Act (CWA) specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation is justified based on exceptions to the anti-backsliding provisions contained in CWA sections 402(o) or 303(d)(4), or, where applicable, 40 C.F.R. section 122.44(l).

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the previous Order R5-2011-0082, with the exception of effluent limitations for chlorine, copper, electrical conductivity, lead, and zinc. The relaxation of effluent limitations for these constituents is consistent with the anti-backsliding requirements of the CWA and federal regulations.

1. **CWA section 402(o)(1) and 303(d)(4).** CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limits "*except in compliance with Section 303(d)(4).*" CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.

   a. For waters where standards are not attained, CWA section 304(d)(4)(A) specifies that any effluent limit based on a TMDL or other WLA may be revised only if the cumulative effect of all such revised effluent limits based on

such TMDL's or WLAs will assure the attainment of such water quality standards.

b. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on a water quality standard may be relaxed where the action is consistent with the antidegradation policy.

Peck/Atwater Drain is considered an attainment water for chlorine, copper, electrical conductivity, lead, and zinc because the receiving water is not listed as impaired on the 303(d) list for these constituents.[1] As discussed below, removal/relaxation of the effluent limits complies with federal and state antidegradation requirements. Thus, removal/relaxation of the effluent limitations for chlorine, copper, electrical conductivity, lead, and zinc from this NOA meets the exception in CWA section 303(d)(4)(B).

2. CWA section 402(o)(2). CWA section 402(o)(2) provides several exceptions to the anti-backsliding regulations. CWA 402(o)(2)(B)(i) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation for a pollutant if information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

Updated information that was not available at the time Order R5-2011-0082 was issued indicates that lead and chlorine do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. Additionally, updated information that was not available at the time Order R5-2011-0082 was issued indicates that less stringent effluent limitations for copper and zinc are appropriate for the Facility's discharge to Peck/Atwater Drain The updated information that supports the relaxation of effluent limitations for these constituents includes the following:

a. Copper, Lead, and Zinc. When Order R5-2011-0082 was adopted, the current Facility was not yet constructed. To determine the appropriate criteria/effluent limitations for copper, lead, and zinc for Order R5-2011-0082, staff used the effluent hardness data (prior to dechlorination) for the former Atwater Wastewater Treatment Plant. Based on the ambient hardness data collected since the Facility began operating in 2012, less stringent criteria for copper, lead, and zinc are applicable to the Facility's discharge. The effluent and upstream receiving water data collected from January 2015 to January 2018 indicates the Facility's discharge still exhibits reasonable potential to cause or contribute to an exceedance of the aquatic life criteria for copper and zinc, but not for lead. Therefore, this NOA includes effluent limitations for copper and zinc (less stringent than the effluent limitations in Order R5-2011-0082), but not for lead.

b. Chlorine. The Facility uses a UV system for disinfection. However, at the time of the adoption of Order R5-2011-0082, the Discharger intended to occasionally use chlorine at the Facility for operation and maintenance

[1] "*The exceptions in Section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e. waters on the section 303(d) impaired waters list*." State Water Board Order WQ 2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility.

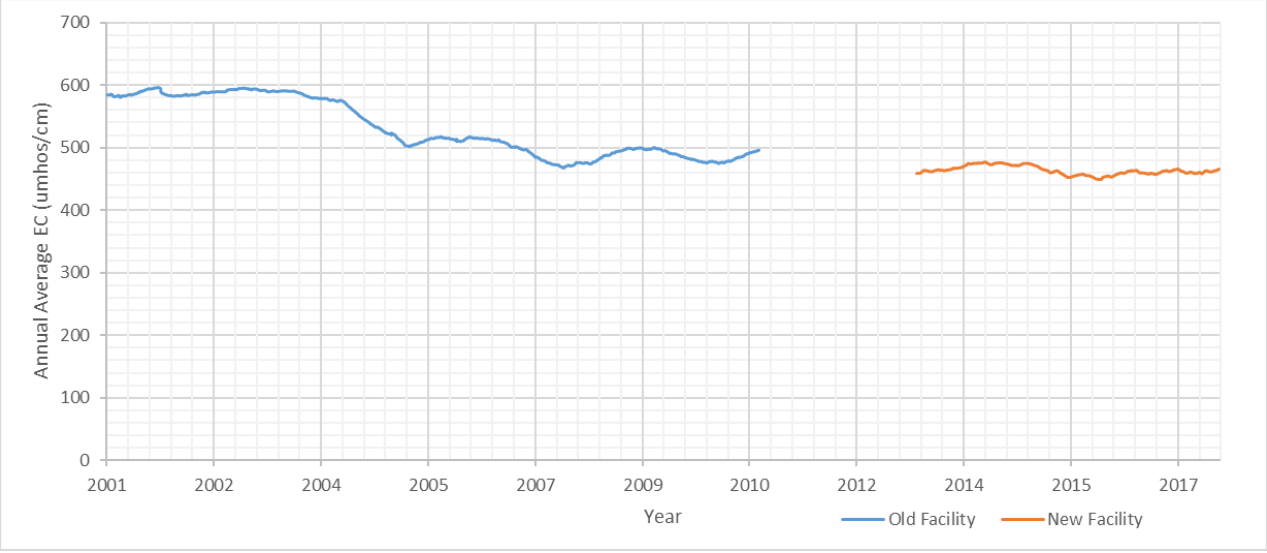
purposes. According to the Discharger's self-monitoring reports and 2016 ROWD, the Discharger has not used chlorine at the Facility since the Facility began operating. The Discharger stated in the ROWD that a non-chlorine disinfectant (e.g., hydrogen peroxide), not chlorine, would be used for operation and maintenance purposes if needed.

Thus, relaxation the copper and zinc effluent limitations and removal of the lead and chlorine effluent limitations in this NOA is in accordance with CWA section 402(o)(2)(B)(i), which allows for the relaxation/removal of effluent limitations based on information that was not available at the time Order R5-2011-0082 was issued.

D. Antidegradation Policies

This NOA does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. The NOA requires compliance with applicable federal technology-based standards and with water quality-based effluent limitations (WQBELs) where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted surface water discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

This NOA removes effluent limitations for chlorine and lead based on updated monitoring data demonstrating that the effluent does not cause or contribute to an exceedance of the applicable water quality criteria or objectives in the receiving water. In addition, this NOA relaxes the effluent limitations for copper and zinc based on new ambient hardness data. Finally, this NOA removes the electrical conductivity performance-based effluent limit of 700 µmhos/cm included in Order R5-2011-0082. The effluent electrical conductivity level has consistently been well below the 700 µmhos/cm average monthly effluent limitation in Order R5-2011-0082 as well as the 900 µmhos/cm secondary maximum contaminant level for electrical conductivity. The figure below graphs both the old and new wastewater treatment facility's rolling annual average electrical conductivity concentration.



The relaxation of the WQBELs for these parameters will not result in an increase in pollutant concentration or loading, a decrease in the level of treatment or control, or a reduction of water quality. Therefore, the Central Valley Water Board finds that the relaxation of the effluent limitations does not result in an increase in pollutants or any additional degradation of the receiving water. Thus, relaxation of the effluent limitations is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

II. RATIONALE FOR EFFLUENT AND RECEIVING WATER MONITORING REQUIREMENTS

A. Effluent Monitoring

1. CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Valley Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Municipal General Order, Attachment E, establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the NOA for discharges of treated municipal wastewater to Peck/Atwater Drain.

   a. Effluent monitoring frequency for flow (continuous), pH (1/day), , ammonia (1/week), nitrate + nitrite (1/week), boron (1/year), copper (1/month), zinc, (1/month), electrical conductivity (1/week), dissolved oxygen (3/week), hardness (1/month), temperature (1/day), total dissolved solids (1/month), and chronic toxicity (1/quarter) have been retained from existing Order R5-2011-0082 to determine compliance with effluent limitations for these parameters, where applicable, and to characterize effluent.

   b. Monitoring data collected over the permit term for Order R5-2011-0082 for chloride, iron, lead, manganese, and total residual chlorine did not demonstrate reasonable potential to exceed water quality objectives/criteria. Therefore, specific monitoring requirements for these parameters have not been retained from Order R5-2011-0082.

   c. Order R5-2011-0082 required effluent monitoring for aluminum twice a year. Monitoring data collected over the permit term for Order R5-2011-0082 for aluminum did not demonstrate reasonable potential to exceed water quality objectives/criteria. This NOA relaxes the aluminum effluent monitoring requirement to once a year.

   d. Order R5-2011-0082 required effluent monitoring for total kjeldahl nitrogen (1/month). This NOA replaces the total kjeldahl nitrogen monitoring requirement with total nitrogen (1/week).

   e. Monitoring data collected over the permit term for Order R5-2011-0082 showed the discharge consistently complied with the chlorpyrifos and diazinon effluent limitation. Therefore, this NOA reduces the effluent monitoring requirement for chlorpyrifos and diazinon from once per quarter to once per year.

   f. Order R5-2011-0082 required monitoring once every quarter for acute toxicity. Acute toxicity monitoring results did not exhibit reasonable potential

for toxicity in the discharge. Therefore, this NOA reduces acute toxicity monitoring to once per year.

g. This NOA does not carry over the general minerals monitoring requirement (1/year) in Order R5-2011-0082 consistent with the Municipal General Order Monitoring and Reporting Program. However, most of the general minerals are required during the effluent and receiving water characterization monitoring.

h. Order R5-2011-0082 required effluent monitoring for priority pollutants and other pollutants of concern once per year. This NOA requires effluent characterization monitoring (see Table 11) once per year. The Central Valley Water Board finds that this frequency is sufficient to characterize the discharge.

B. Receiving Water Monitoring

1. Peck/Atwater Drain

a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge to Peck/Atwater Drain.

b. Order R5-2011-0082 required receiving water monitoring at three separate locations in Peck/Atwater Drain. The purpose of the furthest downstream monitoring location, RSW-003, was to determine compliance with the receiving water limitations for temperature based on the Discharger's report entitled *Assessment of Water Temperatures and Characterization of Aquatic Biological Resources in the Atwater Drain and Peck Drain to Determine Temperature Controls for the Atwater Wastewater Treatment Facility,* June 2009. The Discharger's 2016 ROWD requested the receiving water monitoring location RSW-003 be removed. The ROWD states that the consultant who prepared the June 2009 report confirmed that applying the temperature receiving water limits at Monitoring Location RSW-002 instead of RSW-003 would be appropriate. Therefore, this NOA only includes receiving water monitoring requirements for Monitoring Locations RSW-001 and RSW-002.

c. Order R5-2011-0082 required upstream receiving water monitoring for priority pollutants once per year. This NOA requires upstream receiving water characterization monitoring (see Table 11) twice per permit term and concurrent with effluent characterization monitoring. The Central Valley Water Board finds that this frequency is sufficient to characterize the receiving water.

III. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Constituent	Units	MEC	B	C	CMC	CCC	Water & Org	Org. Only	Basin Plan	MCL	RP
Aluminum	µg/L	190	510	200	750	--	--	--	--	200	No[4]
Ammonia Nitrogen, Total (as N)	mg/L	0.84	NA	1.14	8.41[1]	1.14[2]	--	--	--	--	Yes[3]
Bis (2-Ethylhexyl) Phthalate	µg/L	1.8[5]	ND	1.8	--	--	1.8	5.9	--	4	No
Copper	µg/L	8.6	14	6.7[6] 1.6[7]	--	6.7[6] 1.6[7]	9.7[6] 2.0[7]	--	--	1000	Yes
Zinc	µg/L	100	83	86[6] 21[7]	86[6] 21[7]	86[6] 21[7]	--			5000	Yes
Nitrate Plus Nitrite (as N)	mg/L	9.4	6.2	10	--	--	--	--	--	10	Yes[3]

General Note: All inorganic concentrations are given as a total recoverable.
MEC = Maximum Effluent Concentration
B = Maximum Receiving Water Concentration
C = Criterion used for RP Analysis
CMC = Criterion Maximum Concentration (CTR or NTR)
CCC = Criterion Continuous Concentration (CTR or NTR)
Water & Org = Human Health Criterion for Consumption of Water & Organisms (CTR or NTR)
Org. Only = Human Health Criterion for Consumption of Organisms Only (CTR or NTR)
Basin Plan = Numeric Site-specific Basin Plan Water Quality Objective
MCL = Drinking Water Standards Maximum Contaminant Level
NA = Not Available
ND = Non-detect
RP = Reasonable Potential

Footnotes:
1 U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 1-hour average.
2 U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 30-day average.
3 Reasonable potential exists due to the biological processes inherent to the treatment of domestic wastewater.
4 In accordance with Municipal General Order, Attachment C – Screening Levels, section III, Central Valley Water Board staff determined that the National Ambient Water Quality Criteria (NAWQC) chronic criterion is not applicable to Peck/Atwater Drain. Therefore, a reasonable potential analysis was conducted for aluminum by comparing the maximum observed calendar year annual average effluent aluminum concentration to 200 µg/L.
5 The Discharger reported a 4.4 µg/L result from an effluent sample collected on October 2015. However, the result was an estimated value (MDL = 1.9 µg/L, RL = 4.8 µg/L). The maximum quantified value was used for the reasonable potential analysis (1.8 µg/L).
6 Criterion applicable to the maximum effluent concentration (MEC).
7 Criterion applicable to the maximum upstream receiving water concentration (B)

Appendix B

Discharge Agreement between the City of Atwater and Gallo

City- Gallo

DISCHARGE AGREEMENT

This Agreement ("Agreement") by and between the City of Atwater, a municipal corporation, hereinafter called "City", and Santa Rita Farms LLC and its managing members, Michael D. Gallo and Linda A. Jelacich hereinafter called "Gallo", is entered into this 9th day of January 2012 based on the facts and for the purposes set forth in the following recitals. Together the City and Gallo are referred to as the "Parties" and singularly as "Party."

RECITALS

WHEREAS, in 1978, the City and Michael Gallo, Joseph E. Gallo and Gallo Cattle Company, a limited partnership entered into an Agreement whereby the City was granted the right to flow on and deposit on the Gallo properties 6,000,000 gallons of sewer effluent per day and upon reaching Gallo property the deposited effluent would become the exclusive property of Gallo. Said Agreement has been in effect since the date of execution; and

WHEREAS, in 2007, the City and Michael Gallo, Linda A. Jelacich and Gallo Cattle Company entered into a 2nd Agreement under which the City was granted the right to flow on and deposit on the Gallo properties a total of 12,000,000 gallons per day of sewer effluent and storm water. Said Agreement has been in effect since the date of execution; and

WHEREAS, under the terms of said Agreements, the sewer effluent and storm water were delivered to the Gallo properties via the Atwater Drain, over which the City owned an easement, and the Peck Drain located on the Gallo properties. The two drains interconnect; and

WHEREAS, the City has decided, and is in the process of, constructing a new sewer treatment facility on City owned property located on Bert Crane Road in the vicinity of Gallo's Santa Rita Farm which is located adjacent to Bert Crane Road; and

WHEREAS, the Parties desire in this Agreement to set forth the parties rights and responsibilities with respect to the flowage to and deposit of treated sewer effluent from the City's new sewer treatment plant to Gallo's properties.

AGREEMENT

NOW, THEREFORE, in consideration of the provisions of this Agreement, both the City and Gallo agree to as follows:

A. WATER DISCHARGE INTO PECK DRAIN.

Gallo grants the City the right to discharge treated wastewater effluent of up to an average daily dry weather flow rate of twelve (12) million gallons per day into the Peck Drain, an irrigation/drainage ditch located on Gallo's property. Gallo acknowledges the importance of having a reliable discharge location for the City's treated effluent

wastewater and agrees that the right granted under this Agreement shall be uninterrupted.

The City may transport the treated wastewater effluent from the Atwater Regional Waste Water Treatment Plant ("WWTP") through a pipeline owned by the City ("City Pipeline") to the edge of Gallo's property where it will connect to a pipeline owned by Gallo ("Gallo Pipeline"). The Gallo Pipeline will transport the treated wastewater effluent to a junction box structure ("Gallo Junction Box Structure") where it will be discharged into the Peck Drain. The transportation, connection of pipes and discharge of the treated wastewater effluent is illustrated in Attachment A.

B. TERM.

Gallo grants the City the right to discharge treated wastewater effluent onto Gallo property as described under this Agreement in perpetuity.

C. COMPENSATION.

As compensation for the right to discharge treated wastewater effluent onto Gallo property as described under this Agreement, City shall pay to Gallo a one-time payment in the sum of Twenty-Six Thousand Dollars ($26,000). This payment shall be made within 30 days of executed agreement.

D. CITY RESPONSIBILITIES.

1. City Pipeline.

City shall be responsible for the construction and maintenance of the City Pipeline. Gallo shall have no responsibility to care for, maintain, improve or enlarge the City Pipeline and its carrying capacity ("City Pipeline Improvements"). City shall be responsible for any City Pipeline Improvements at its sole cost and expense.

2 Pipeline Design Criteria.

In order to ensure that all pipelines and connections are compatible and function properly, the City agrees to develop engineering design criteria for the City Pipeline and submit such design criteria to Gallo in order for Gallo to design and construct the Gallo Pipeline and the Gallo Junction Box Structure required on Gallo Property to receive and discharge the treated effluent.

3. Collection of Samples.

City shall be responsible for the collection of any required samples of water from the Peck Drain, and shall deliver such samples to a laboratory for water quality chemical analysis as required by the California Regional Water Quality Control Board or any other regulating agency, with jurisdiction over the City's discharge of treated wastewater effluent. City will provide Gallo 24 hours notice prior to entering the property to collect

such samples. If an emergency arises requiring the City to go onto Gallo's property to collect samples, and a 24 hours notice is not possible, City will provide as much notice as possible prior to entering the property. The City will share the test results with Gallo.

E. GALLO RESPONSIBILITIES.

1. Gallo Pipeline.

a. Design and Construction. Gallo shall use the design criteria used for the City Pipeline in order to design and construct the Gallo Pipeline in order to ensure that the two pipelines can connect and function properly. Gallo shall construct the Gallo Pipeline at Gallo's sole cost and expense.

b. Useful Life. Gallo will design and construct the Gallo Pipeline to the level and in the manner required so that the pipeline has at least a 50 year useful life.

c. Notice of Commencement of Construction. Before commencing the construction of the Gallo Pipeline, Gallo shall submit the design of such pipeline to the City for review and comment.

d. Maintenance and Repair. Gallo shall be responsible for the maintenance and repair of the Gallo Pipeline. The City shall have no responsibility to care for, maintain, improve or enlarge the Gallo Pipeline and its carrying capacity ("Gallo Pipeline Improvements"). Gallo shall be responsible for any Gallo Pipeline Improvements at its sole cost and expense.

2. Gallo Junction Box Structure.

a. Design and Construction. Gallo shall construct the Gallo Junction Box Structure in a manner which will be compatible with both the City and Gallo Pipelines in order to ensure the proper connectivity and transportation of treated effluent into the Peck Drain. The Gallo Junction Box Structure shall be designed to be the connection point between the Gallo Pipeline and Peck Drain. Gallo shall construct the Gallo Junction Box at Gallo's sole cost and expense.

b. Useful Life. Gallo will design and construct the Gallo Junction Box Structure to the level and in the manner required so that the structure has at least a 50 year useful life.

c. Notice of Commencement of Construction. Before commencing the construction of the Gallo Junction Box Structure, Gallo shall submit the design of such structure to the City for review and comment.

d. Maintenance and Repair. Gallo shall be responsible for the maintenance and repair of the Gallo Junction Box Structure. The City shall have no responsibility to care for, maintain, improve or enlarge the Gallo Junction Box Structure

("Gallo Junction Box Structure Improvements"). Gallo shall be responsible for any Gallo Junction Box Structure Improvements at Gallo's sole cost and expense.

3. Inspections of Pipeline and Junction Box Structure by City.

Gallo will allow the City to enter Gallo's property as needed in order to inspect Gallo's Junction Box Structure and the Gallo Pipeline. City will provide Gallo at least 24 hours' notice prior to such inspections. If an emergency arises requiring the City to go onto Gallo's property to inspect Gallo's Junction Box Structure and Gallo Pipeline, and a 24 hours' notice is not possible, City will provide as much notice as possible prior to entering the property.

4. Collection of Samples by City and Regulatory Agencies.

Gallo will allow City to enter Gallo's property as needed in order to collect samples from the Peck Drain. As provided for in Section D(3) above, City will provide Gallo 24 hours notice prior to entering the property to collect such samples when possible.

Gallo will also allow the California Regional Water Quality Control Board or any other regulating agency with jurisdiction over the City's discharge of treated wastewater effluent to enter Gallo's property as needed solely for the purpose of collecting samples from the Peck Drain. City shall request that the agencies coordinate with the City in order to provide Gallo with 24 hours notice prior to the regulatory agencies entering the property to collect such samples. If an emergency arises or an inspection is scheduled by an agency requiring the agency to go onto Gallo's property to collect samples from the Peck Drain, and a 24 hours notice is not possible, City will attempt to coordinate with the agencies to provide as much notice as possible prior to entering the property.

Gallo shall be given prompt notice if the City's sewer effluent does not conform to the requirements of the NPDES permit granted by the California Regional Water Quality Board or any other regulation of said Board or other governmental entity.

5. Peck Drain.

Gallo shall, at Gallo's sole cost and expense, be responsible for the maintenance, repair and any needed improvements of the Peck Drain. The Parties agree that the City shall have no responsibility to care for, maintain, improve, enlarge or repair the Peck Drain.

6. Operation of Gallo Pipeline and Gallo Junction Box Structure.

Gallo will operate and maintain the Gallo Junction Box Structure, Gallo Pipeline and Peck Drain so as not to cause an unanticipated back-up into the pipeline or to introduce pipeline flows into the drain upstream of the sampling locations for the WWTP effluent located below the point of discharge into the Peck Drain.

F. REQUIRED PERMITS.

Gallo will cooperate with the City in preparing the City's applications for all required NPDES permits and any other necessary permit or report required relating to the discharge of the treated wastewater effluent. In the event it is necessary for Gallo to obtain a NPDES permit relating to the treated wastewater effluent, the City will cooperate with Gallo in the process of obtaining such permit.

Before the treated wastewater effluent is discharged onto Gallo property, City and Gallo will comply with the requirements and standards set forth by any federal, state or local agency, including but not limited to, the City's NPDES permit.

G. CONTINUED COOPERATION.

City and Gallo agree to cooperate in complying with any future requirements or requests by any federal, state or local agency relating to the permits or reports for the discharge of the treated wastewater effluent pursuant to this Agreement.

H. OWNERSHIP OF TREATED WASTEWATER EFFLUENT.

The Parties agree that upon Gallo's receipt of the treated wastewater effluent into the Gallo Pipeline, such treated effluent shall be the sole and exclusive property of Gallo and the City shall have no further rights or responsibility with respect thereto other than those rights and responsibilities granted/imposed under this Agreement.

I. INDEMNIFICATION.

The City shall defend, indemnify and hold Gallo, its agents and employees, free and harmless with respect to any and all claims, actions or causes of action, damages, liabilities, or expenses, including payment of reasonable attorney's fees, that may be asserted by any third party which arises out of the process involving the City's receipt of sewer effluent or the production of treated Sewer effluent. Gallo shall defend, indemnify and hold the City, its officers, agents and employees, free and harmless with respect to any and all claims, actions or causes of action, damages, liabilities, or expenses, including payment of reasonable attorney's fees, that may be asserted by any third party which arises out of the use or distribution of the treated wastewater effluent on Gallo property after Gallo's receipt of the wastewater effluent into the Gallo Pipeline.

J. PREVIOUS AGREEMENTS.

It is the intention of the parties that this Agreement modify the previous Agreements between the Parties recited above only to the extent that they pertain to matters concerning waste water sewer effluent and the location of the sewer treatment facility.

K. MISCELLANEOUS.

1. Dispute Resolution and Opportunity to Cure.

Prior to filing suit for any claim under this Agreement for any alleged breach, the aggrieved Party shall first give the other Party an opportunity to cure the alleged breach by sending written notice to the breaching party and giving the breaching party a minimum of thirty (30) days from the receipt of notice to cure the alleged violation.

2. Venue.

This Agreement shall be construed in accordance with, and governed by, the laws of the State of California. In the event that either Party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the Superior Court of the County of Merced.

3. Attorneys' Fees.

If a Party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.

4. Amendments.

The Parties may amend this Agreement only by a writing signed by both Parties.

5. Entire Understanding.

This Agreement constitutes the entire understanding between the City and Gallo regarding the subject matter of this Agreement.

6. Third Party Beneficiaries.

This Agreement is not intended to create, nor shall it be in any way interpreted or construed to create, any rights in any person not a party hereto.

7. Covenant Runs with Land.

This Agreement, and the rights conveyed under it, shall run with all the land now owned by Gallo over which the Gallo Pipeline and the Peck Drain traverses and shall inure to the benefit of and be binding on the Parties and their respective legal representatives, successors and assigns.

8. Notice.

All notices, consents, requests, demands or other communications to or upon the respective Parties shall be in writing and shall be effective for all purposes upon receipt on any business day before 5:00 p.m. local time and on the next business day if received after 5:00 p.m., or on other than a business day, including without limitation, in

the case of (i) personal delivery, (ii) delivery by messenger, express or air courier or similar courier, or (iii) delivery by United States first class certified or registered mail, postage prepaid, addressed as follows:

If to City:
City Manager,
Atwater City Hall
750 Bellevue Road
Atwater, CA 95301

If to Gallo:
Michael D. Gallo
P.O. Box 775
Atwater, CA 95301

In this section "business day" means days other than Saturdays, Sundays, and Federal and State legal holidays. Either Party may change its address by written notice to the other in the manner set forth above. Receipt of communications by United States first class or registered mail shall be sufficiently evidenced by return receipt.

9. Partial Invalidity.

The provisions of this Agreement are intended to be severable and enforced to the maximum extent permitted by law. If for any reason any provision of this Agreement shall be held invalid, illegal or unenforceable in whole or in part in any jurisdiction, then that provision shall be ineffective only to the extent of the invalidity, illegality or unenforceability and in that jurisdiction only, without in any manner affecting the validity, legality or enforceability of the unaffected portion and the remaining provisions in that jurisdiction or any provision of the Agreement in any other jurisdiction. The unaffected portion and provisions of the Agreement will be enforced to the maximum extent permitted by law

10. Counterparts.

This Agreement may be executed in any number of identical counterparts and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document and any counterpart signature pages may be detached and assembled to form a single original document.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be entered into as of the date and year first above written.

City of Atwater:

By: _____ Date: 3/12/12
Carol Joan Faul, Mayor

Attest:

By: _____ Date: 3/13/12
Jeanna Del Real, City Clerk

Approved as to Form:

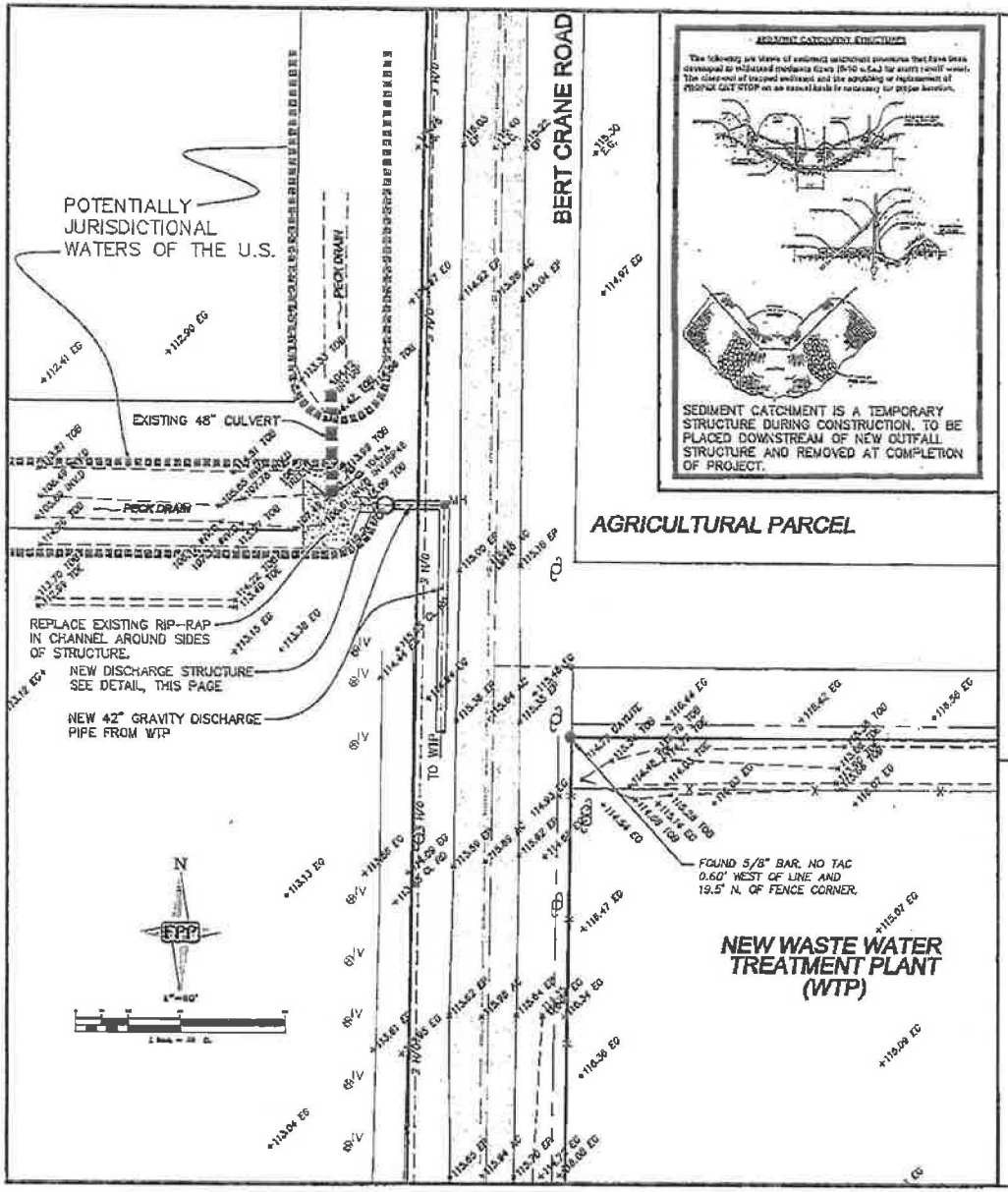
By: _____ Date: 3-12-12
Jose M. Sanchez, City Attorney

By: Western Assets LLC

By: _____ Date: 2-15-2012
Michael D. Gallo, Managing Member

By: _____ Date: _____
Linda Jelacich, Managing Member

1705161.1



IMPROVEMENT PLAN
IRRIGATION FACILITY

PECK DRAIN
OUTFALL STRUCTURE

FREEMAN, PARSON & PECKENPAUGH

1
1

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RECEIVED MAY 24 1978

AGREEMENT

This agreement, executed at Atwater, California, on the date set forth below, by and between CITY OF ATWATER, a Municipal Corporation, hereinafter called "CITY" and MICHAEL GALLO, JOSEPH E. GALLO and GALLO CATTLE CO., A Limited Partnership, hereinafter collectively called "GALLO".

W I T N E S S E T H :

The CITY now has plans and contemplates enlargement of its sewer treatment plant and an agreement has been entered into whereby sewage treatment will be furnished by such facilities to the Winton Sanitation District; and,

The CITY owns an easement which it acquired in 1964 to transport its effluent from its sewer treatment plant up to Highway 140 . Said easement is hereinafter called the "Atwater Drain"; and,

The Atwater Drian leaves Highway 140 in a southerly direction and communicates with the Peck Drain at the northeast corner of Section 27, Township 8 South, Range 12 East, in Merced County. Said Peck Drain commences on certain lands owned by GALLO in said Section 27, and terminates at Bear Creek and thence flows into the San Joaquin River on certain lands owned by GALLO; and,

Pursuant to an agreement entered into between GALLO'S

predecessors in interest, the County of Merced Drainage Improvement District No. 2 and other property owners, in 1918, GALLO has the right to use and transport waters in said Peck Drain from its point of origin in said Section 27, through to its terminus into Bear Creek; and

Whereas the CITY has never acquired a right to use or deposit effluent into said Peck Drain, and it has done so over the years with the consent of GALLO and GALLO'S predecessors in interest; and

It is now the desire of the parties herein to provide the CITY with the means for depositing its sewer effluent south of Highway 140 and ultimately into the San Joaquin River; and

It is the intent of the parties hereto that the CITY reserves the right to transfer, sell, give, convey or otherwise dispose of such quantities of sewage effluent which exceed the quantity of 6,000,000 gallons of sewage effluent per day to any party or in any fashion as CITY wishes; and

It is the intent of the parties hereto that GALLO reserves the right to refuse to receive on its lands such quantities of sewage effluent as may exceed the quantity of 6,000,000 gallons of sewage effluent per day;

NOW, THEREFORE, for valuable consideration, the parties agree as follows:

1. GALLO agrees that GALLO will receive and will be obligated and required to receive on its lands all sewage effluent entering the Atwater Drain and transported to the northeast corner of Section 27, Township 7 South, Range 12 East, and into the Peck Drain by means of the Atwater Drain.

2. The parties agree that upon receipt of the effluent at the northeast corner of said Section 27, said effluent sha be the sole and exclusive property of GALLO and the CITY shal have no further responsibility with respect thereto and said effluent may be used or disposed of in any manner which GALLC shall see fit to use or dispose of the same.

3. The covenants herein contained of GALLO shall be binding upon the lands now owned by GALLO and shall run with all lands now owned by GALLO over which the Peck Drain now traverses.

4. In consideration for the foregoing, the CITY agrees that hereafter, effluent entering the Atwater Drain from CITY'S sewage treatment plant shall not be abandoned by the CITY and shall not be subject to appropriation or diversion from the Atwater Drain by any person, provided, however, that the CITY shall not be responsible to GALLO to enforce its rights with respect to said effluent prior to said effluent reaching Highway 140 and any and all rights of action or causes of action which may in the future accrue to the CITY

with respect to said effluent shall be, and are, hereby assigned to GALLO for enforcement.

IN WITNESS WHEREOF, we have hereunto set our hands on this 6th day of June, 1978.

CITY OF ATWATER, A Municipal Corporation

By: _____
Mayor

_____
MICHAEL GALLO

_____
JOSEPH E. GALLO

GALLO CATTLE CO., A Limited Partnership

By: _____
GENERAL PARTNER

AGREEMENT

This agreement, executed at Atwater, California, on the date set forth below, by and between CITY OF ATWATER, a Municipal Corporation, hereinafter called "CITY" and MICHAEL GALLO, LINDA A. JELACICH, and GALLO CATTLE COMPANY, A Limited Partnership, hereinafter collectively called "GALLO".

WITNESSETH:

The CITY owns an easement which it acquired in 1964 for the purpose of transporting its treated effluent from its sewer treatment plant southerly to lands located near Highway 140. Said easement is a manmade canal and is called the "Atwater Drain"; and,

In about 1964, it was judicially determined that the City had acquired a prescriptive right to transport storm waters diverted into said Atwater Drain; and,

The Atwater Drain interconnects with a canal located on Gallo property which canal is known as the Peck Drain. The connection is made at the northeast corner of Section 27, Township 8 South, Range 12 East, in Merced County. Said Peck Drain commences on certain lands owned by GALLO in said Section 27, and terminates at Bear Creek and thence flows into the San Joaquin River on certain lands and easements owned by GALLO; and,

Pursuant to an agreement entered into between GALLO'S predecessors in interest, the County of Merced Drainage Improvement District No. 2 and other property owners, in 1918, GALLO has the right to use and transport waters in said Peck Drain from its point of origin in said Section 27, through to its terminus into Bear Creek and through the channel of Bear Creek to the San Joaquin River; and,

Prior to 1978, the CITY had never acquired a right to use or deposit its treated effluent or storm water through the Peck Drain and onto GALLO'S property, but did so over the years with the consent of GALLO and GALLO'S predecessors in interest; and,

In 1978, the CITY and GALLO entered into an Agreement under which the CITY was granted the right to deposit and flow up to 6,000,000 gallons per day of its treated effluent through its Atwater Drain and into the Peck Drain and deposit same onto GALLO property. Since 1978, the CITY has continued to flow storm water through the Peck Drain and onto GALLO property with GALLO's consent.

It is the intention of the parties hereto that subject to the terms hereof, the CITY is granted the right to flow its storm water and up to 12,000,000 gallons per day of its treated effluent through the Atwater Drain and into and through the Peck Drain and onto GALLO's real property.

NOW, THEREFORE, for valuable consideration, the parties agree as follows:

1. GALLO agrees that GALLO will receive and will be obligated and required to receive on its lands and its Peck Drain all storm waters diverted from the CITY into and through its Atwater Drain and up to 12,000,000 gallons per day of its treated sewer effluent transported through the Atwater Drain and to the northeast corner of Section 27, Township 7 South, Range 12 East.

2. The parties agree that upon receipt of the storm water and treated effluent at the northeast corner of said Section 27, said storm water and treated effluent shall be the sole and exclusive property of GALLO and the CITY shall have no further responsibility with respect thereto and said storm water and treated effluent may be used or disposed in any manner which GALLO shall see fit to use, divert and dispose of the same.

3. The covenants herein contained of GALLO shall be binding upon the lands now owned by GALLO and shall run with all lands now owned by GALLO over which the Peck Drain now traverses.

4. In consideration for the foregoing, the CITY agrees that hereafter, storm water diverted into the Atwater Drain and treated sewer effluent entering the Atwater Drain from CITY'S sewage treatment plant shall not be abandoned by the CITY and shall not be subject to appropriation or diversion from the Atwater Drain by any person, provided, however, that the CITY shall not be responsible to GALLO to enforce its rights with respect to said storm water and treated effluent prior to said storm water and treated effluent reaching Highway 140 and the City shall fully cooperate with GALLO with respect to diversions or interference with the flow of the Atwater Drain and any and all rights of action or causes of action which may in the future accrue to the CITY with respect to said storm water and treated effluent shall be, and are, hereby assigned to GALLO for enforcement.

5. The parties agree GALLO shall have no responsibility to care for, maintain, improve, enlarge or repair the Atwater Drain, and if it becomes necessary to improve or enlarge the Atwater Drain and its carrying capacity, such enlargement shall be carried out by the CITY at its sole cost and expense.

6. The parties agree that the CITY shall have no responsibility to care for, maintain, improve, enlarge or repair the Peck Drain, and if it becomes necessary to improve or enlarge the Peck Drain and its carrying capacity, such enlargement shall be carried out by GALLO at GALLO'S sole cost and expense.

7. The CITY agrees to notify GALLO of increases in flow in the Atwater Drain from time to time and to give GALLO notification six months in advance of any significant increases it is going to introduce into the Atwater Drain so that GALLO will have sufficient time to make necessary preparations in the Peck Drain to receive such increased flows.

8. The CITY shall comply with all county, state and federal ordinances, laws and regulations regarding the treatment and quality of the waters and treated effluent that it introduces into the Atwater Drain and is transported into the Peck Drain.

IN WITNESS WHEREOF, we have hereunto set our hands on this 14th day of March, 2007.

CITY OF ATWATER
A Municipal Corporation

By: Carol Joan Faul
Mayor

MICHAEL GALLO

LINDA A. JELACICH

GALLO CATTLE COMPANY
A Limited Partnership

By:
Michael D. Gallo, Managing Member
of Western Assets LLC, General Partner

RECEIVED MAY 24 1978

AGREEMENT

This agreement, executed at Atwater, California, on the date set forth below, by and between CITY OF ATWATER, a Municipal Corporation, hereinafter called "CITY" and MICHAEL GALLO, JOSEPH E. GALLO and GALLO CATTLE CO., A Limited Partnership, hereinafter collectively called "GALLO".

W I T N E S S E T H :

The CITY now has plans and contemplates enlargement of its sewer treatment plant and an agreement has been entered into whereby sewage treatment will be furnished by such facilities to the Winton Sanitation District; and,

The CITY owns an easement which it acquired in 1964 to transport its effluent from its sewer treatment plant up to Highway 140 . Said easement is hereinafter called the "Atwater Drain"; and,

The Atwater Drian leaves Highway 140 in a southerly direction and communicates with the Peck Drain at the northeast corner of Section 27, Township 8 South, Range 12 East, in Merced County. Said Peck Drain commences on certain lands owned by GALLO in said Section 27, and terminates at Bear Creek and thence flows into the San Joaquin River on certain lands owned by GALLO; and,

Pursuant to an agreement entered into between GALLO'S

predecessors in interest, the County of Merced Drainage Improvement District No. 2 and other property owners, in 1918, GALLO has the right to use and transport waters in said Peck Drain from its point of origin in said Section 27, through to its terminus into Bear Creek; and

Whereas the CITY has never acquired a right to use or deposit effluent into said Peck Drain, and it has done so over the years with the consent of GALLO and GALLO'S predecessors in interest; and

It is now the desire of the parties herein to provide the CITY with the means for depositing its sewer effluent south of Highway 140 and ultimately into the San Joaquin River; and

It is the intent of the parties hereto that the CITY reserves the right to transfer, sell, give, convey or otherwise dispose of such quantities of sewage effluent which exceed the quantity of 6,000,000 gallons of sewage effluent per day to any party or in any fashion as CITY wishes; and

It is the intent of the parties hereto that GALLO reserves the right to refuse to receive on its lands such quantities of sewage effluent as may exceed the quantity of 6,000,000 gallons of sewage effluent per day;

NOW, THEREFORE, for valuable consideration, the parties agree as follows:

1. GALLO agrees that GALLO will receive and will be obligated and required to receive on its lands all sewage effluent entering the Atwater Drain and transported to the northeast corner of Section 27, Township 7 South, Range 12 East, and into the Peck Drain by means of the Atwater Drain.

2. The parties agree that upon receipt of the effluent at the northeast corner of said Section 27, said effluent shall be the sole and exclusive property of GALLO and the CITY shall have no further responsibility with respect thereto and said effluent may be used or disposed of in any manner which GALLO shall see fit to use or dispose of the same.

3. The covenants herein contained of GALLO shall be binding upon the lands now owned by GALLO and shall run with all lands now owned by GALLO over which the Peck Drain now traverses.

4. In consideration for the foregoing, the CITY agrees that hereafter, effluent entering the Atwater Drain from CITY'S sewage treatment plant shall not be abandoned by the CITY and shall not be subject to appropriation or diversion from the Atwater Drain by any person, provided, however, that the CITY shall not be responsible to GALLO to enforce its rights with respect to said effluent prior to said effluent reaching Highway 140 and any and all rights of action or causes of action which may in the future accrue to the CITY

with respect to said effluent shall be, and are, hereby assigned to GALLO for enforcement.

IN WITNESS WHEREOF, we have hereunto set our hands on this 6th day of June, 1978.

CITY OF ATWATER, A Municipal Corporation

By: _____
Mayor

_____
MICHAEL GALLO

_____
JOSEPH E. GALLO

GALLO CATTLE CO., A Limited Partnership

By: _____
GENERAL PARTNER

Appendix C

Detailed Cost Estimates

BLACKWATER CONSULTING ENGINEERS
602 Lyell Drive, Modesto, CA 95356 T: 209.322.1820 F: 209.222.4088 www.blackwater-eng.com

City of Atwater
Estimated Construction and Project Cost for
Atwater Discharge Study
Alternative 1

Prepared by: Angel Mariscal, P.E.
Checked by: Aja Verburg, P.E.

11/7/2024

Item	Unit	Quantity	Unit Cost, $	Total Unit Cost, $
Mobilization	LS	1	180,000	180,000
Connections to Force Main	EA	1	5,000	5,000
42"x42"x18" Tee	EA	1	10,000	10,000
42" Butterfly Valve	EA	1	100,000	100,000
18" Butterfly Valve	EA	1	46,000	46,000
18" HDPE piping	LF	4,400	250	1,100,000
Air Relief Valve	EA	2	10,000	20,000
Trenching	LF	4,400	40	176,000
Backfill and Compaction	LF	4,400	50	220,000
Asphalt Concrete	TON	296	275	81,481
18" Magnetic Flow Meter	EA	1	20,000	20,000
Precast Vault with Access Door	EA	2	75,000	150,000
Outfall Structure	EA	1	100,000	100,000
18" Flap Valve	EA	1	5,000	5,000
Pump Station	EA	1	500,000	500,000
Geotechnical Investigation	LS	1	80,000	80,000
Storm Water Pollution Prevention Plan (SWPPP)	LS	1	15,000	15,000
Traffic Control	LS	1	25,000	25,000
Flow Diversion and Dewatering	LS	1	50,000	50,000
Electrical Service	LS	1	250,000	250,000
			Subtotal	3,133,481
			30% construction contingency	940,044
			Total Construction Cost	4,073,526
			Easement Acquisition	50,000
			Administration (2%)	81,471
			Design (10%)	407,353
			Permitting, Regulatory Compliance, CEQA (10%)	407,353
			Construction Management and Engineering Services During Construction (15%)	611,029
			Estimated Project Cost	5,630,731

BLACKWATER CONSULTING ENGINEERS
602 Lyell Drive, Modesto, CA 95356 T: 209.322.1820 F: 209.222.4088 www.blackwater-eng.com

City of Atwater
Estimated Construction and Project Cost for
Atwater Discharge Study
Alternative 2

Prepared by: Angel Mariscal, P.E.
Checked by: Aja Verburg, P.E.

11/7/2024

Item	Unit	Quantity	Unit Cost, $	Total Unit Cost, $
Mobilization	LS	1	200,000	200,000
Connections to Existing Force Main	EA	1	5,000	5,000
42"x42"x18" Tee	EA	1	10,000	10,000
42" Butterfly Valve	EA	1	100,000	100,000
18" Butterfly Valve	EA	1	46,000	46,000
18" HDPE Piping	LF	4,300	250	1,075,000
Air Relief Valve	EA	4	10,000	40,000
Trenching	LF	4,300	40	172,000
Backfill and Compaction	LF	4,300	50	215,000
18" Magnetic Flow Meter	EA	1	20,000	20,000
Precast Vault with Access Door	EA	2	75,000	150,000
Outflow Structure	EA	1	100,000	100,000
18" Flap Valve	EA	1	5,000	5,000
Pump Station	EA	1	500,000	500,000
Geotechnical Investigation	LS	1	80,000	80,000
Storm Water Pollution Prevention Plan (SWPPP)	LS	1	15,000	15,000
Flow Diversion and Dewatering	LS	1	50,000	50,000
Electrical Service	LS	1	250,000	250,000
			Subtotal	3,033,000
			30% construction contingency	909,900
			Total Construction Cost	3,942,900
			Easement Acquisition	75,000
			Administration (2%)	78,858
			Design (10%)	394,290
			Permitting, Regulatory Compliance, CEQA (10%)	394,290
			Construction Management and Engineering Services During Construction (15%)	591,435
			Estimated Project Cost	5,476,773

BLACKWATER CONSULTING ENGINEERS

602 Lyell Drive, Modesto, CA 95356 T: 209.322.1820 F: 209.222.4088 www.blackwater-eng.com

City of Atwater
Estimated Construction and Project Cost for
Atwater Discharge Study
Alternative 3

Prepared by: Angel Mariscal, P.E.
Checked by: Aja Verburg, P.E.

11/7/2024

Item	Unit	Quantity	Unit Cost, $	Total Unit Cost, $
Mobilization	LS	1	200,000	200,000
Connections to Existing Force Main	EA	1	5,000	5,000
Connection to Existing Culvert	EA	1	5,000	5,000
42"x42"x18" Tee	EA	1	10,000	10,000
42" Butterfly Valve	EA	1	100,000	100,000
18" Butterfly Valve	EA	1	46,000	46,000
18" HDPE Piping	LF	5,400	250	1,350,000
Air Relief Valve	EA	4	10,000	40,000
Trenching	LF	5,400	40	216,000
Backfill and Compaction	LF	5,400	50	270,000
18" Magnetic Flow Meter	EA	1	20,000	20,000
Precast Vault With Access Doors	EA	2	75,000	150,000
Outflow Structure	EA	1	100,000	100,000
18" Flap Valve	EA	1	5,000	5,000
Deckert Lateral Rehabilitation	LS	1	200,000	200,000
Pump Station	EA	1	500,000	500,000
Geotechnical Investigation	LS	1	80,000	80,000
Storm Water Pollution Prevention Plan (SWPPP)	LS	1	15,000	15,000
Traffic Control	LS	1	10,000	10,000
Electrical Service	LS	1	250,000	250,000
			Subtotal	3,572,000
			30% construction contingency	1,071,600
			Total Construction Cost	4,643,600
			Easement Acquisition	85,000
			Administration (2%)	92,872
			Design (10%)	464,360
			Permitting, Regulatory Compliance, CEQA (10%)	464,360
			Construction Management and Engineering Services During Construction (15%)	696,540
			Estimated Project Cost	6,446,732

APPENDIX E

Tribal Consultation Notice

City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
PO Box 5272
Galt, CA 95632

RE: Native American Consultation, Pursuant to Assembly Bill 52 (AB 52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2 for Wastewater Treatment Plant Discharge Improvements Project in the City of Atwater, Merced County, CA

Dear Chairperson:

Please consider this letter as formal notification of a proposed project as required under the California Environmental Quality Act (CEQA), specifically Public Resources Code (PRC) Sections 21080.1, 21080.3.1, 21080.3.2, and Chapter 532 Statutes of 2014 (i.e., Assembly Bill 52). This notification is for the purpose of extending the opportunity to request a consultation regarding any tribal resources that may exist in the project area.

The Project proposes to construct improvements to discharge treated effluent from the Wastewater Treatment Plant located on South Bert Crane Road to the Merced Irrigation District via Black Rascal Creek or Bear Creek. These improvements would connect into the existing force main and allow the City to redirect effluent flows to the existing discharge area, to the creek, or both. See the attached project description for more information on the proposed Project.

Both a Sacred Lands File (SLF) check through the NAHC and a California Historical Resources Information System (CHRIS) Record Search through the Central California Information Center were requested. The result of the SLF check dated May 12, 2025, was negative. The CHRIS Record Search Results dated May 9, 2025 (Record Search No. 13350I) indicate that there are no formally recorded prehistoric or historic archaeological resources or historic buildings/structures within the project area. Additionally, the Project is located within the overall boundary of the Merced Irrigation District and there are five (5) water conveyance features within the project area. They are Bear Creek Canal (P-24-002046), Black Rascal Creek (P-24-002047), O'Donnell Lateral (P-24-001679), Gurr Lateral (P-24-002011), and Hinds Lateral (P-24-002012).

If you would like to consult with the City pursuant to AB 52, please respond in writing within 30 days from the date of this letter to Justin Vinson, Public Works Director, City of Atwater, Public Works Department at jvinson@atwater.org, or 750 Bellevue Road, Atwater, CA 95301. Please include in your request, at a minimum, (1) name, title, and contact information of the tribal representative(s); (2) suggested dates and location of consultation; (3) any preliminary concerns or questions related to the project (optional).

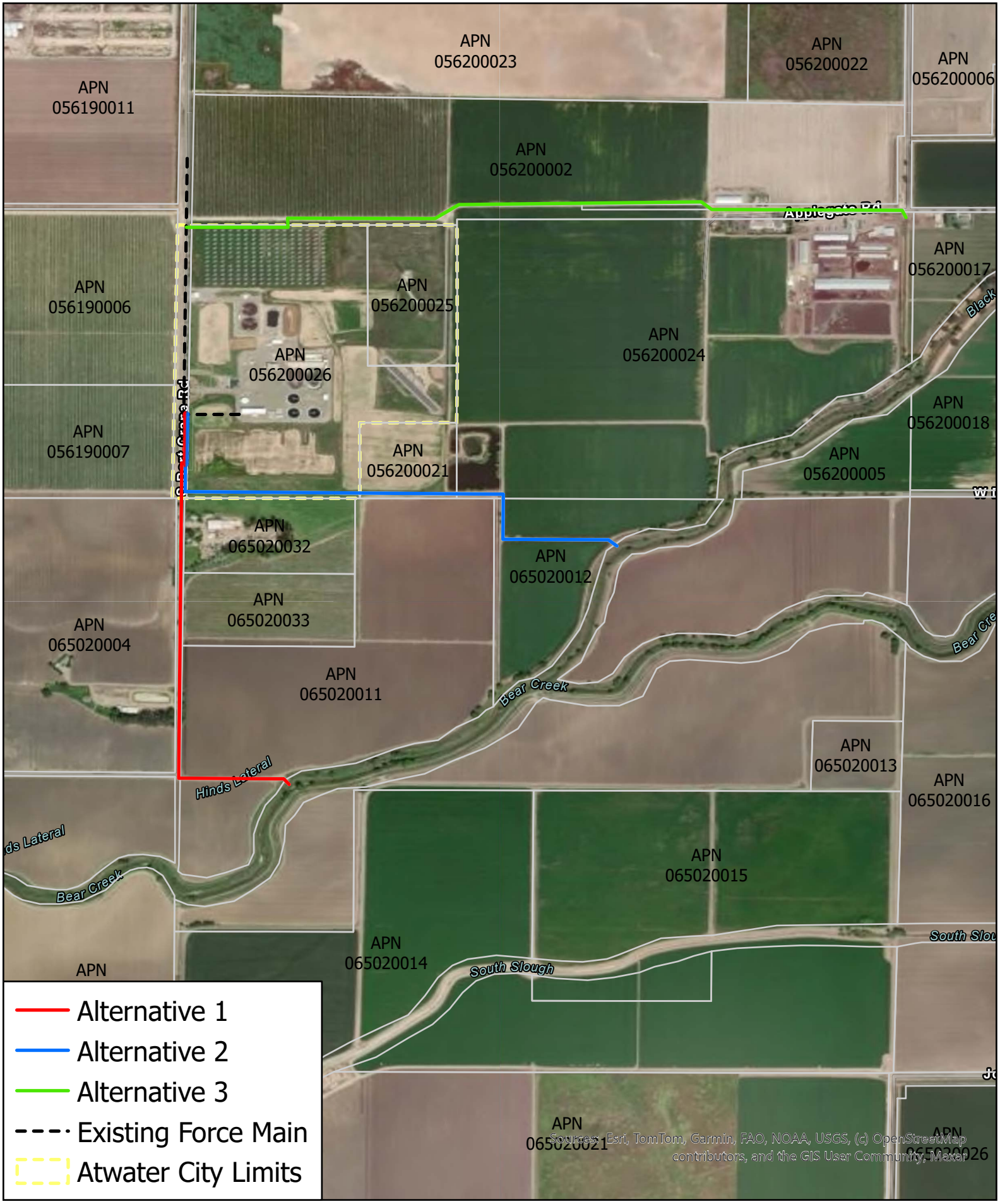
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City of Atwater
Justin Vinson, Public Works Director
750 Bellevue Road, Atwater, CA 95301
209-777-0273

Thank you,

Justin Vinson, Public Works Director

Attachment A: Project Location
Attachment B: Project Description



N

0 0.13 0.25 0.5 0.75 Miles

City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

Attachment B: Project Description

Project Description:

The City of Atwater owns and operates the Bert Crane Regional Wastewater Treatment Plant (WWTP), located on the east side of Bert Crane Road (APN: 056-200-026), which provides tertiary-level treatment for wastewater. Treated effluent from the WWTP is currently released via an effluent pump station and a 42-inch force main into the Atwater/Peck Drain, which flows through Joseph Gallo Farms (Gallo Ranch), where a significant portion is diverted for agricultural and wetland use.

In order to meet Sustainable Groundwater Management Act (SGMA) groundwater recharge requirements, the City of Atwater intends to construct improvements to discharge its treated effluent to the Merced Irrigation District (MID) via Black Rascal Creek or Bear Creek. These improvements would connect into the existing force main with a tee fitting and automatic actuated butterfly valves integrated into the City's SCADA system. The improvements would allow the City to redirect effluent flows to the Gallo Ranch, the creeks, or both.

A Discharge Study was prepared to evaluate three (3) alternatives for future improvements for discharge into either Black Rascal Creek or Bear Creek: Alternative 1 – Bert Crane Road Alignment, Alternative 2 – South WWTP Alignment, and Alternative 3 – Deckert Lateral Alignment.

All three (3) alternatives shared common infrastructure improvement recommendations, such as connecting to the existing force main from the WWTP, construction of a new pump station, and construction of an outfall structure. The following summarizes the recommended improvements that are applicable to each alternative:

- Installation of a 42-inch x 42-inch x 18-inch tee
- Installation of a 42-inch automatic actuated butterfly valve
- Installation of an 18-inch automatic actuated butterfly valve
- Installation of an air relief valve
- Installation of an 18-inch magnetic flow meter
- Construction of a pump station
- Installation of power source and connection to City SCADA system
- Construction of an outfall structure equipped with a flap valve.

The alternative specific improvements are as follows:

- Alternative 1 would include construction of 4,400 linear feet of 18-inch pipeline, traffic control, and flow diversion and dewatering.
- Alternative 2 would include construction of 4,300 linear feet of 18-inch pipeline and flow diversion and dewatering.
- Alternative 3 would include connection to the existing Deckert Lateral culvert, construction of 5,400 linear feet of 18-inch pipeline, increases to MIDs Deckert Lateral capacity, replacing the existing MID outfall structure to Black Rascal Creek, and traffic control.

City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Amah Mutsun Tribal Band
Ed Ketchum, Vice-Chairperson
PO Box 5272
Galt, CA 95632

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(Continued)

City of Atwater

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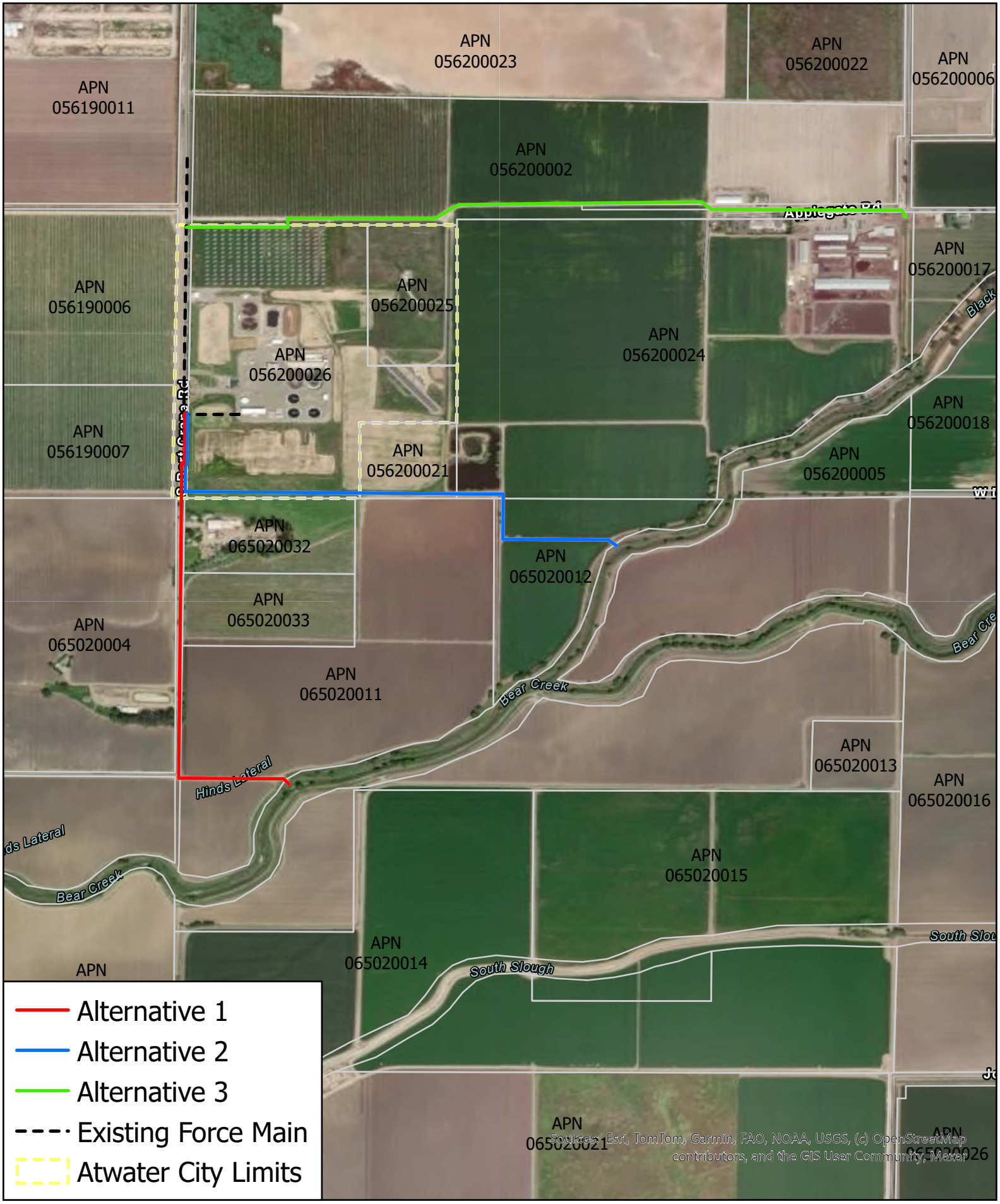
(Continued)

City of Atwater
Justin Vinson, Public Works Director
750 Bellevue Road, Atwater, CA 95301
209-777-0273

Thank you,

Justin Vinson, Public Works Director

Attachment A: Project Location
Attachment B: Project Description



N

0 0.13 0.25 0.5 0.75 Miles

City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

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City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Northern Valley Yokut / Ohlone Tribe
Katherine Perez, Chairperson
PO Box 717
Linden, CA 95236

RE: Native American Consultation, Pursuant to Assembly Bill 52 (AB 52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2 for Wastewater Treatment Plant Discharge Improvements Project in the City of Atwater, Merced County, CA

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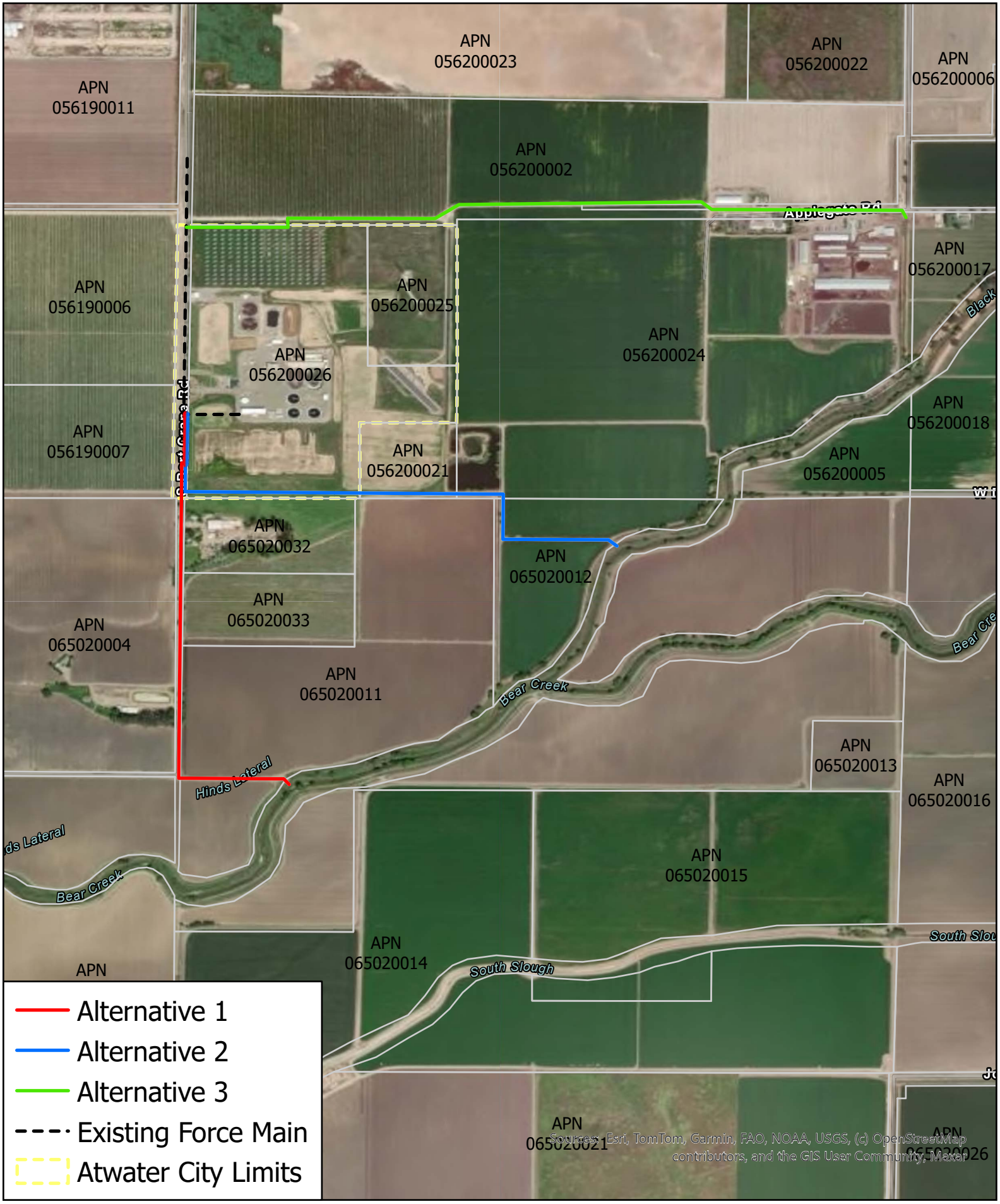
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City of Atwater
Justin Vinson, Public Works Director
750 Bellevue Road, Atwater, CA 95301
209-777-0273

Thank you,

Justin Vinson, Public Works Director

Attachment A: Project Location
Attachment B: Project Description



N

0 0.13 0.25 0.5 0.75 Miles

City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

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City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Northern Valley Yokut / Ohlone Tribe
Timothy Perez, Tribal Compliance Officer
PO Box 5272
Galt, CA 95632

RE: Native American Consultation, Pursuant to Assembly Bill 52 (AB 52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2 for Wastewater Treatment Plant Discharge Improvements Project in the City of Atwater, Merced County, CA

Dear Timothy Perez:

Please consider this letter as formal notification of a proposed project as required under the California Environmental Quality Act (CEQA), specifically Public Resources Code (PRC) Sections 21080.1, 21080.3.1, 21080.3.2, and Chapter 532 Statutes of 2014 (i.e., Assembly Bill 52). This notification is for the purpose of extending the opportunity to request a consultation regarding any tribal resources that may exist in the project area.

The Project proposes to construct improvements to discharge treated effluent from the Wastewater Treatment Plant located on South Bert Crane Road to the Merced Irrigation District via Black Rascal Creek or Bear Creek. These improvements would connect into the existing force main and allow the City to redirect effluent flows to the existing discharge area, to the creek, or both. See the attached project description for more information on the proposed Project.

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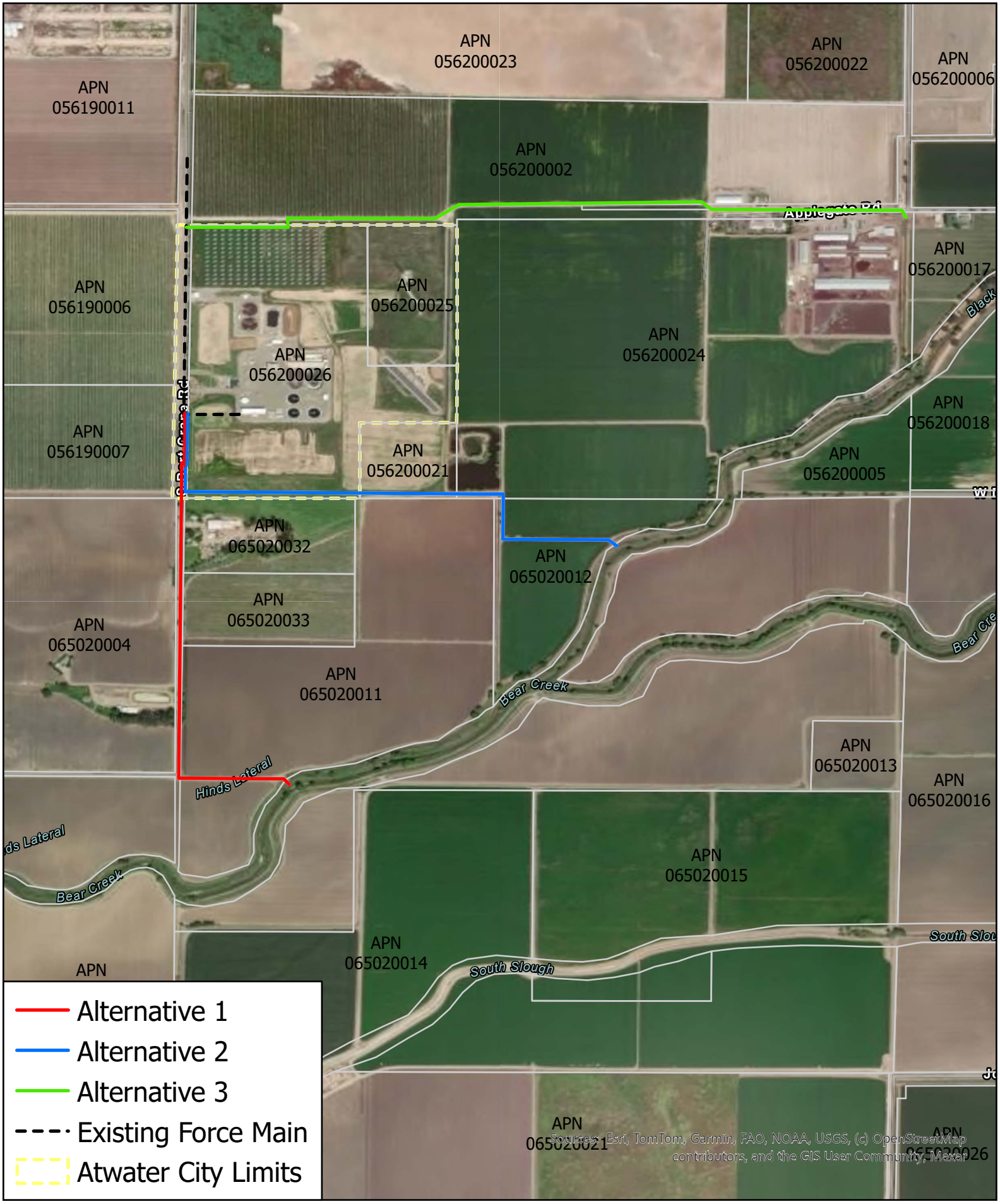
(Continued)

City of Atwater
Justin Vinson, Public Works Director
750 Bellevue Road, Atwater, CA 95301
209-777-0273

Thank you,

Justin Vinson, Public Works Director

Attachment A: Project Location
Attachment B: Project Description



N

0 0.13 0.25 0.5 0.75 Miles

City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

Attachment B: Project Description

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City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Southern Sierra Miwuk Nation
Sandra Chapman, Chairperson
PO Box 186
Mariposa, CA 95338

RE: Native American Consultation, Pursuant to Assembly Bill 52 (AB 52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2 for Wastewater Treatment Plant Discharge Improvements Project in the City of Atwater, Merced County, CA

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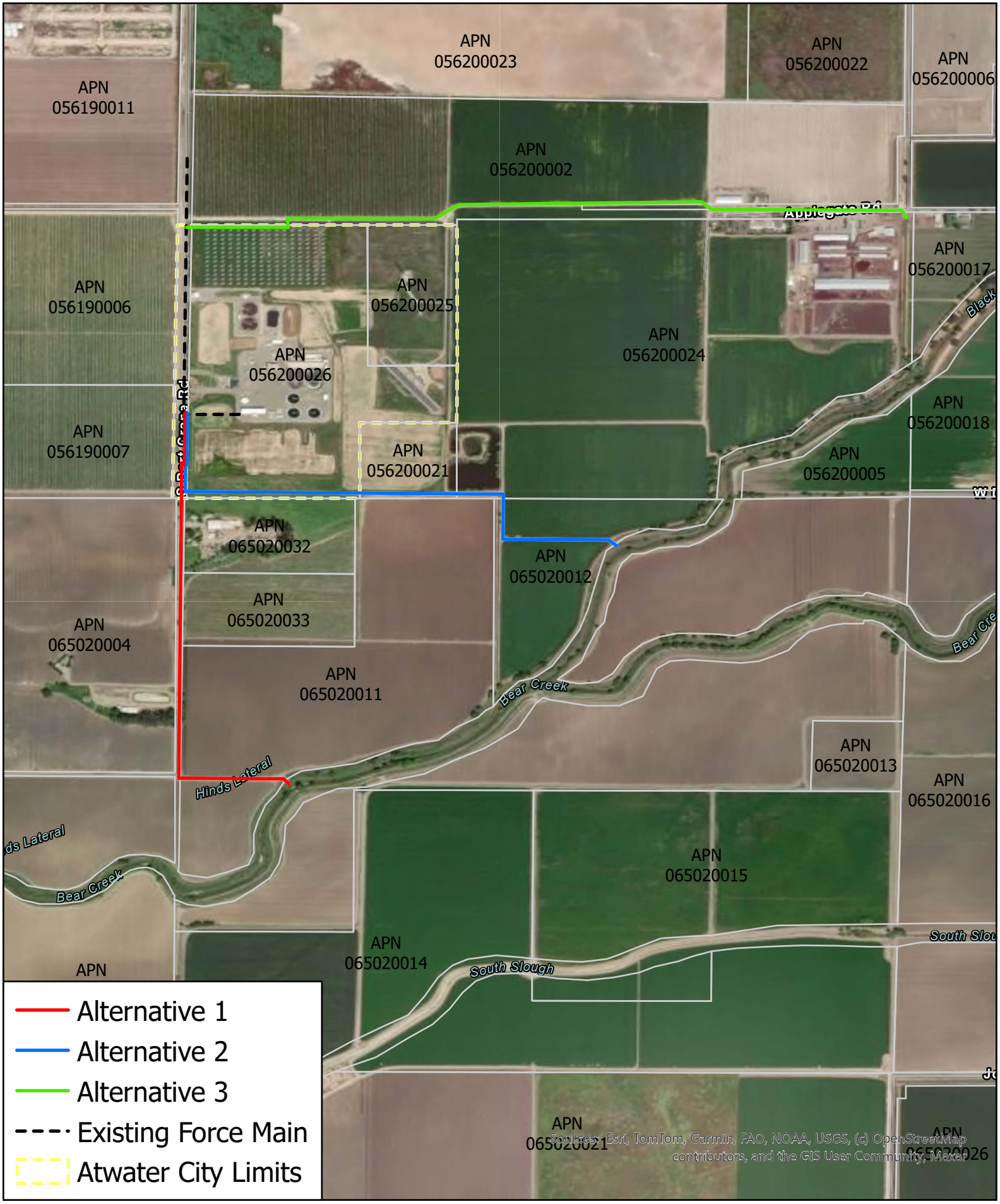
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City of Atwater
Justin Vinson, Public Works Director
750 Bellevue Road, Atwater, CA 95301
209-777-0273

Thank you,

Justin Vinson, Public Works Director

Attachment A: Project Location
Attachment B: Project Description



N

0 0.13 0.25 0.5 0.75 Miles

City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

Attachment B: Project Description

Project Description:

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City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Southern Sierra Miwuk Nation
Jazzmyn Gegere, Director of Cultural Resource Preservation
PO Box 5272
Galt, CA 95632

RE: Native American Consultation, Pursuant to Assembly Bill 52 (AB 52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2 for Wastewater Treatment Plant Discharge Improvements Project in the City of Atwater, Merced County, CA

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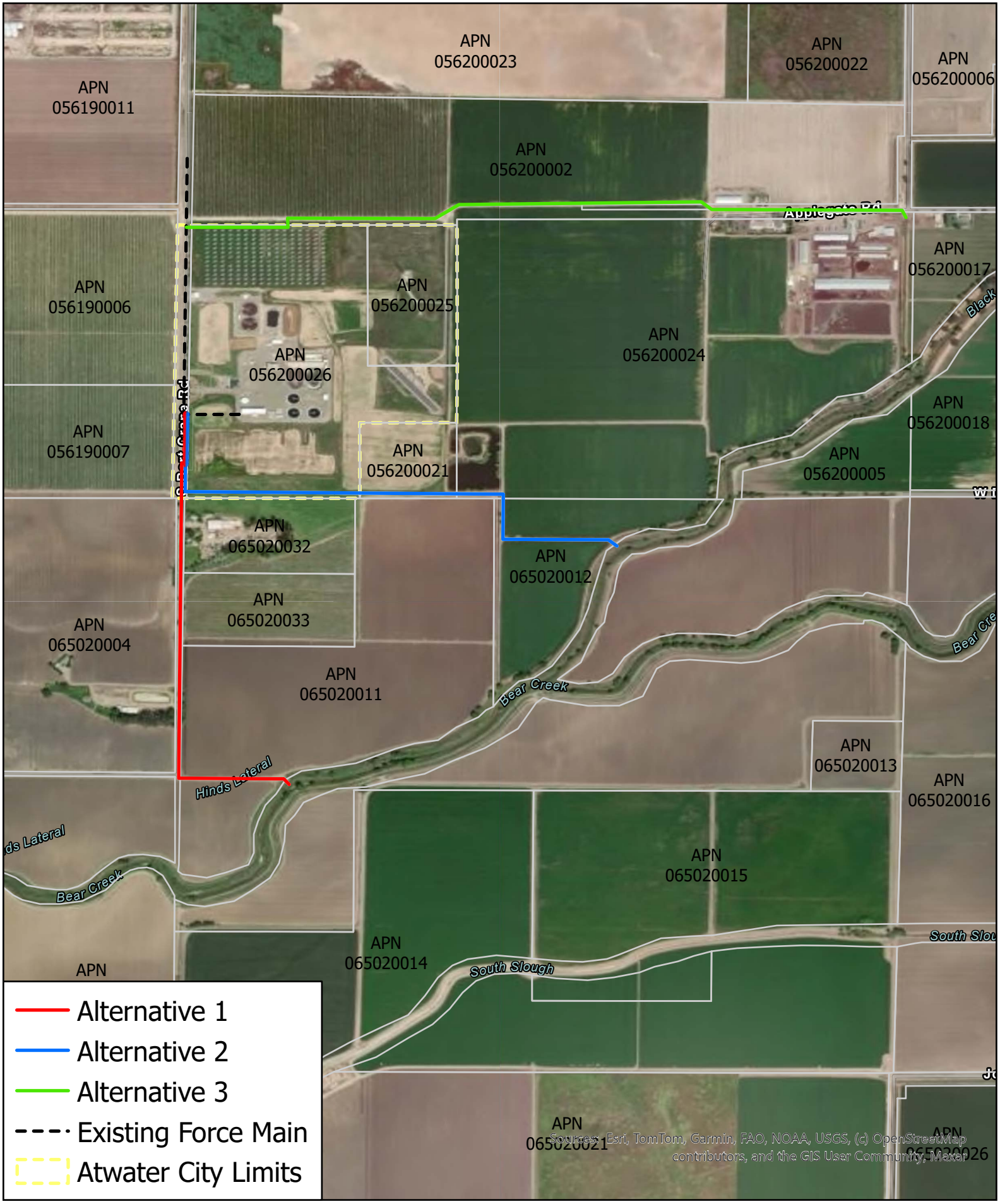
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City of Atwater
Justin Vinson, Public Works Director
750 Bellevue Road, Atwater, CA 95301
209-777-0273

Thank you,

Justin Vinson, Public Works Director

Attachment A: Project Location
Attachment B: Project Description



N

0 0.13 0.25 0.5 0.75 Miles

City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

Attachment B: Project Description

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City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Tule River Indian Tribe
Neil Peyron, Chairperson
PO Box 589
Porterville, CA 93258

RE: Native American Consultation, Pursuant to Assembly Bill 52 (AB 52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2 for Wastewater Treatment Plant Discharge Improvements Project in the City of Atwater, Merced County, CA

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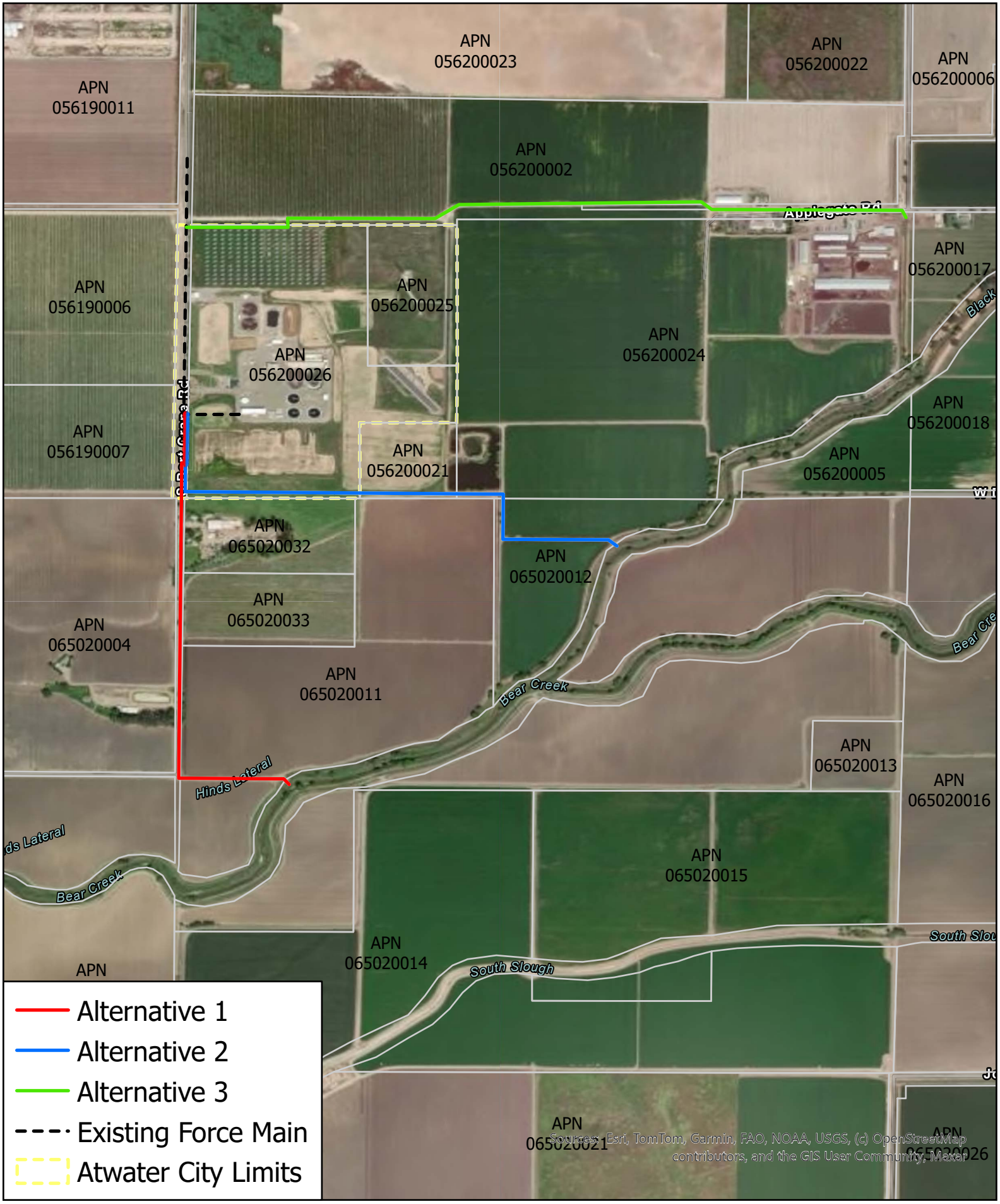
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City of Atwater
Justin Vinson, Public Works Director
750 Bellevue Road, Atwater, CA 95301
209-777-0273

Thank you,

Justin Vinson, Public Works Director

Attachment A: Project Location
Attachment B: Project Description



N

0 0.13 0.25 0.5 0.75 Miles

City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

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City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Wuksachi Indian Tribe / Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA 93906

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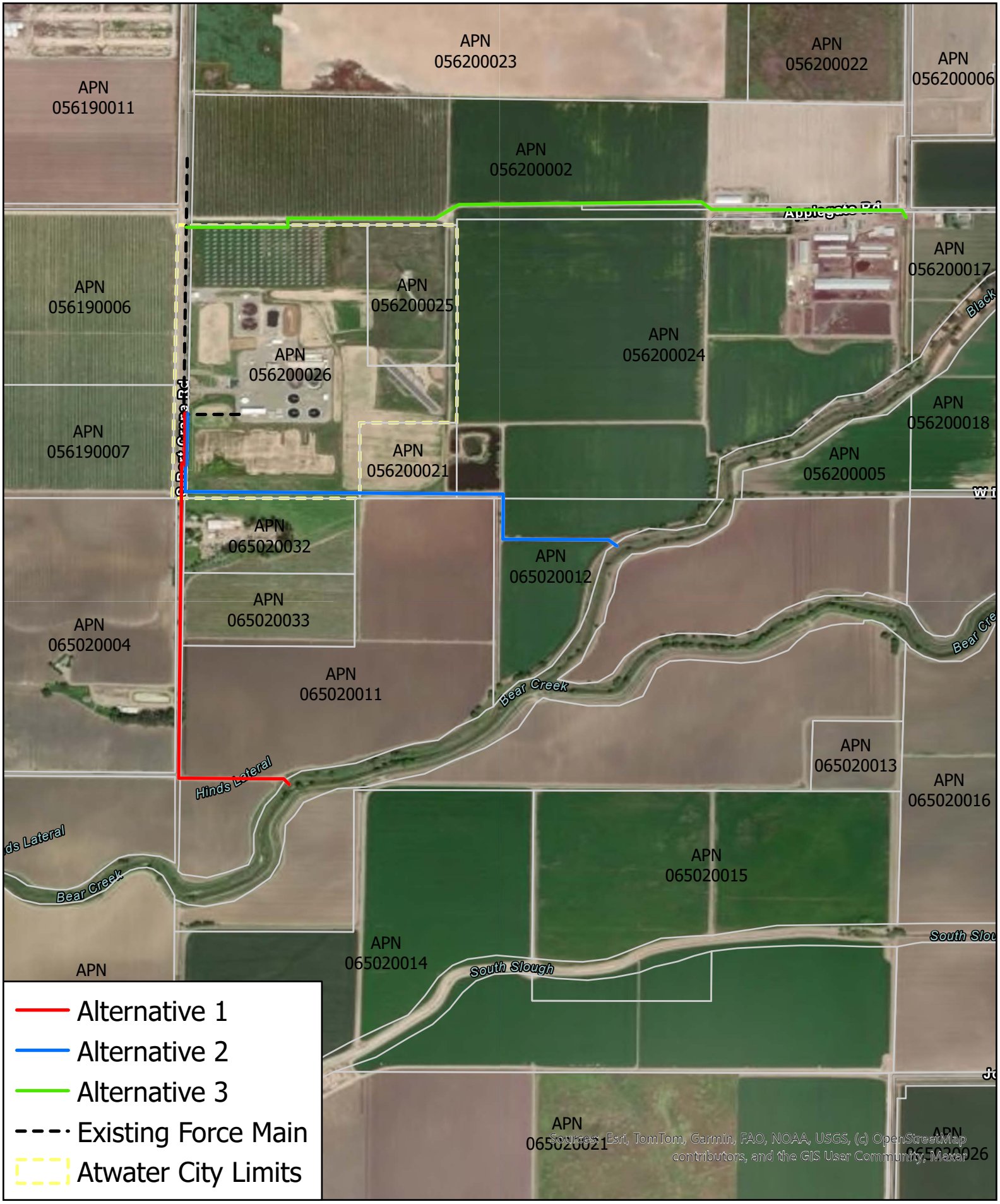
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City of Atwater
Justin Vinson, Public Works Director
750 Bellevue Road, Atwater, CA 95301
209-777-0273

Thank you,

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Attachment A: Project Location
Attachment B: Project Description



N

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City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

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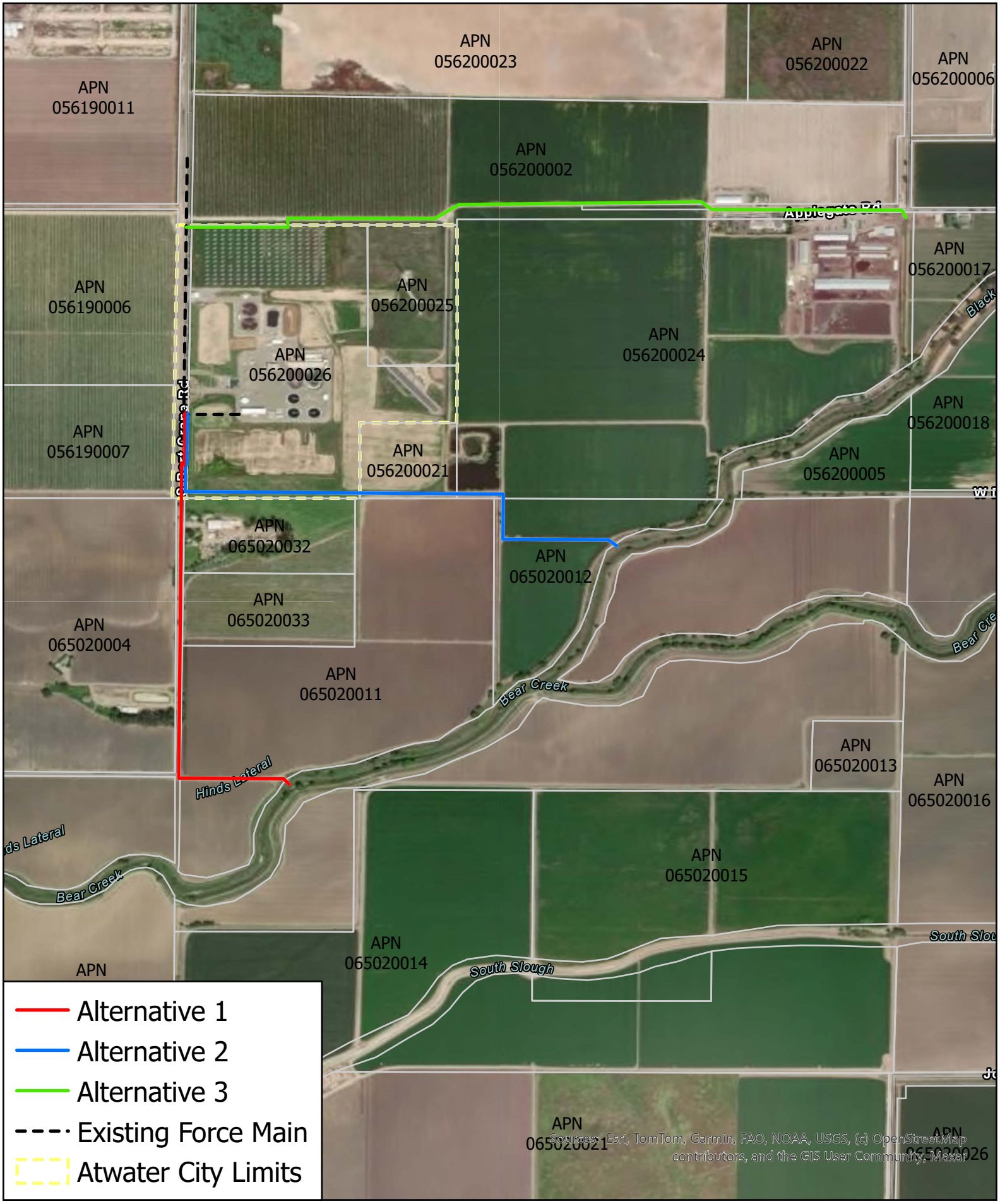
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City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

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City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Northern Valley Yokut / Ohlone Tribe
Katherine Perez, Chairperson
PO Box 717
Linden, CA 95236

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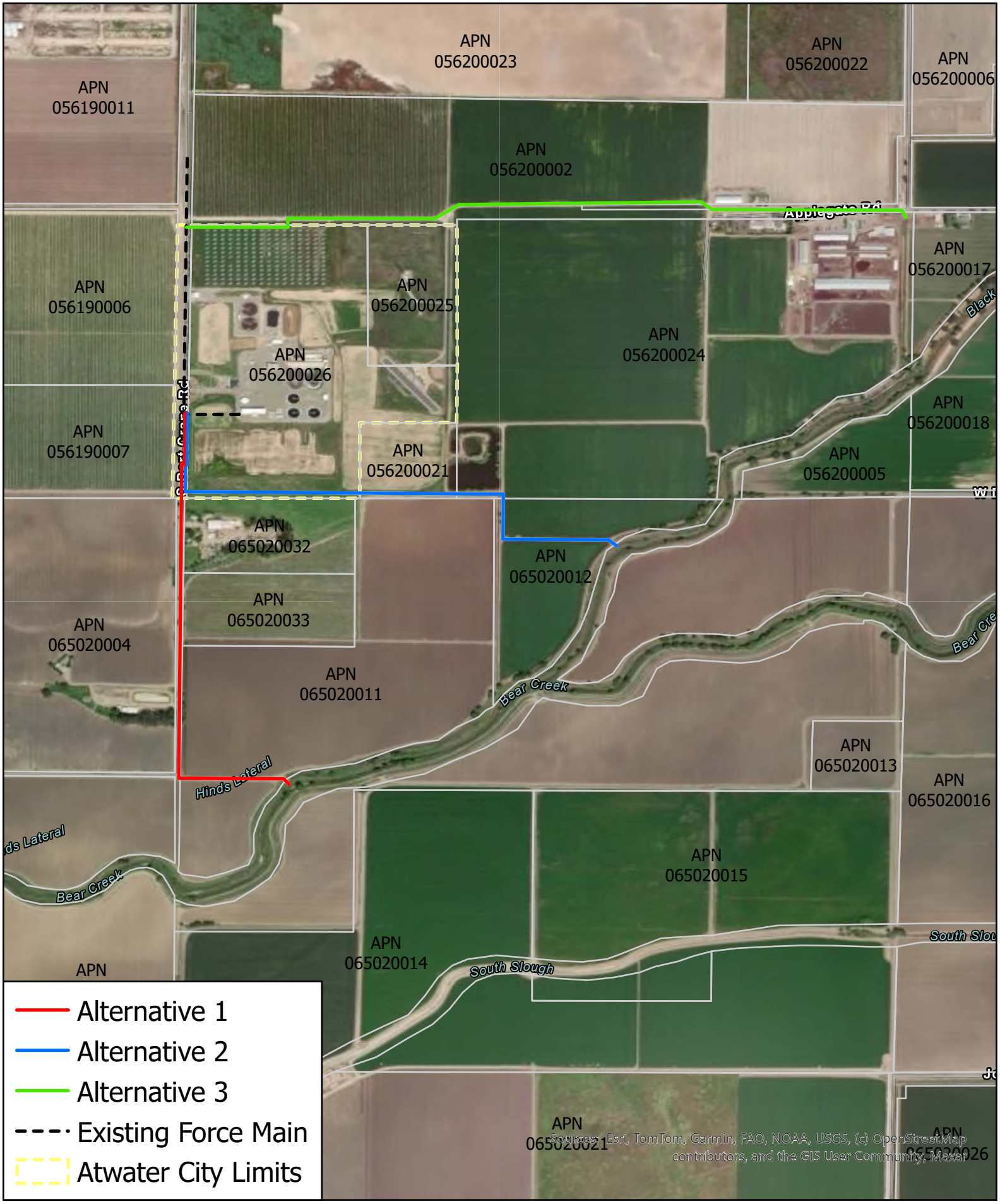
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City of Atwater - Wastewater Treatment Plant Discharge Improvements

PRECISION CIVIL ENGINEERING, INC

Created 6/2/2025

City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Northern Valley Yokut / Ohlone Tribe
Timothy Perez, Tribal Compliance Officer
PO Box 5272
Galt, CA 95632

RE: Native American Consultation, Pursuant to Assembly Bill 52 (AB 52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2 for Wastewater Treatment Plant Discharge Improvements Project in the City of Atwater, Merced County, CA

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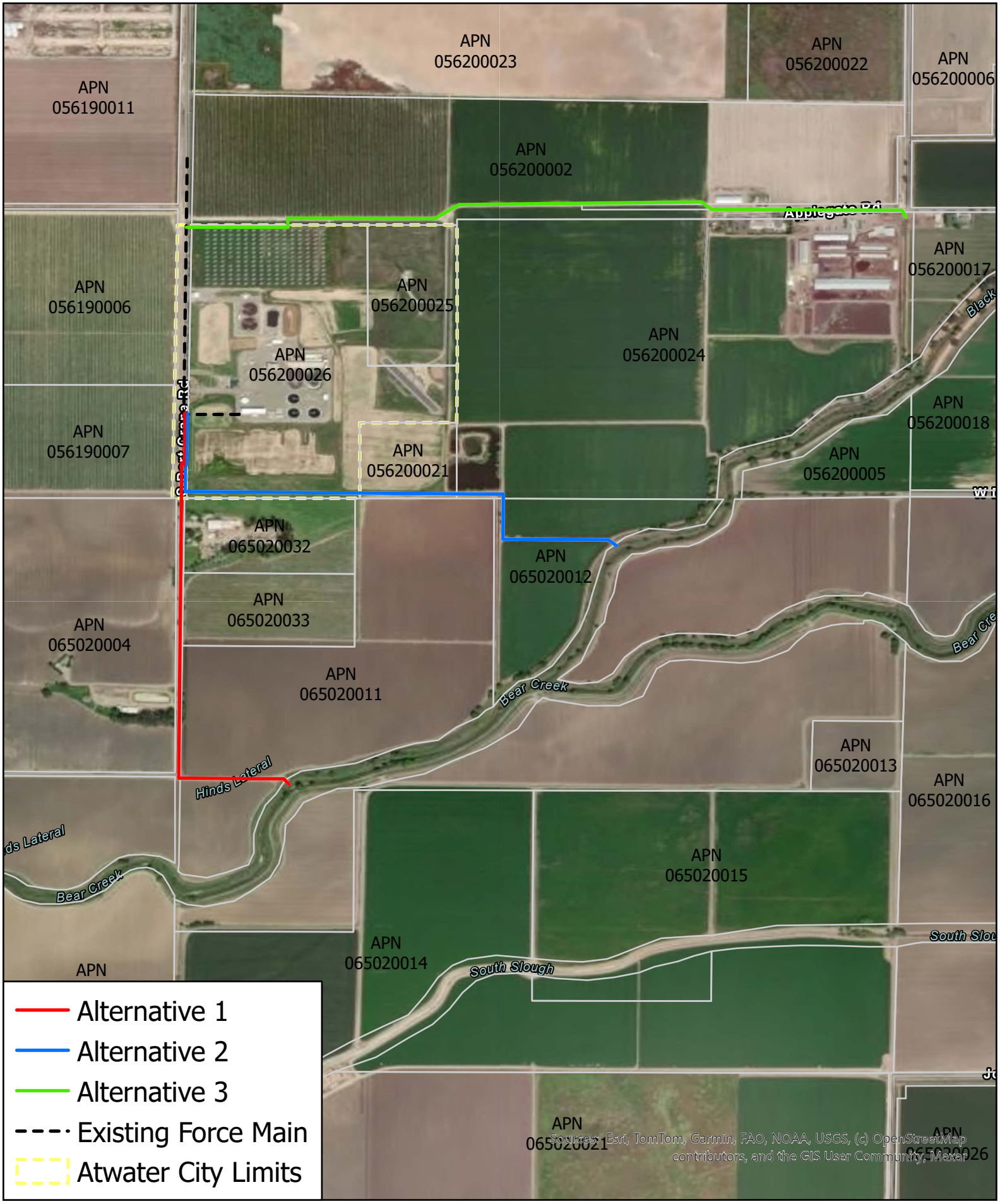
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750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Southern Sierra Miwuk Nation
Sandra Chapman, Chairperson
PO Box 186
Mariposa, CA 95338

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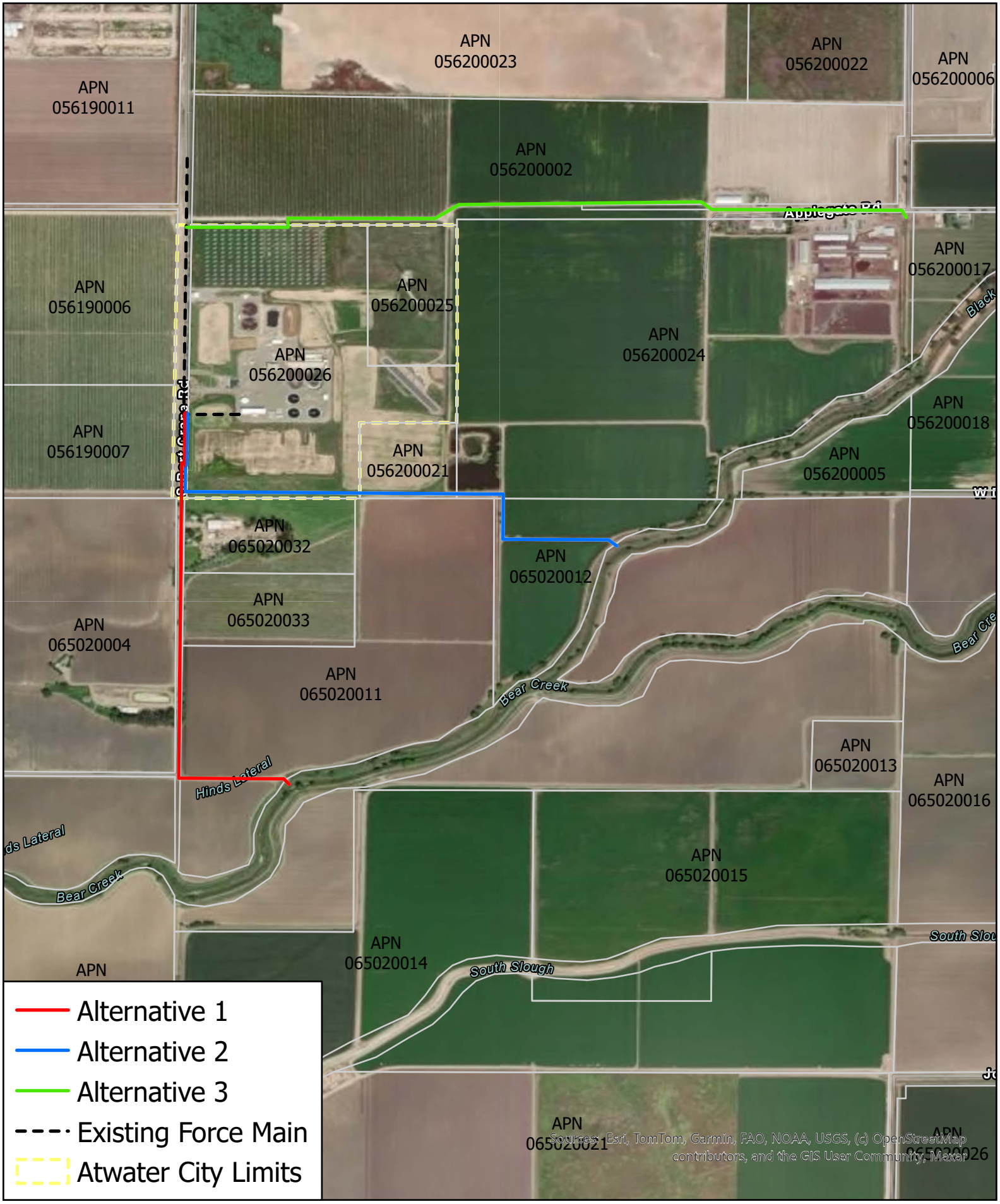
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City of Atwater

PLANNING DEPARTMENT
750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Southern Sierra Miwuk Nation
Jazzmyn Gegere, Director of Cultural Resource Preservation
PO Box 5272
Galt, CA 95632

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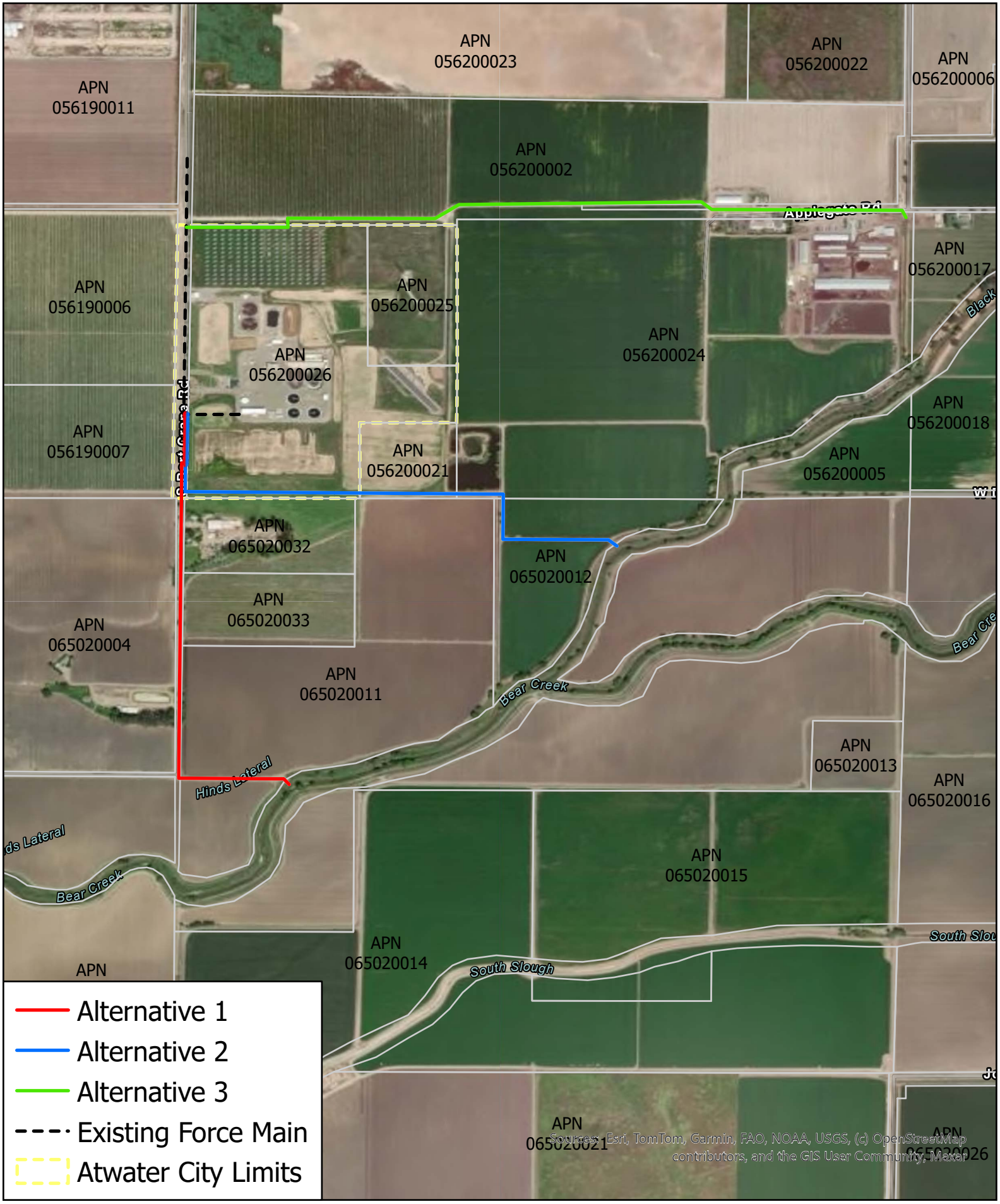
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750 BELLEVUE ROAD
ATWATER, CA 95301
(209) 357-6367

June 2, 2025

Tule River Indian Tribe
Neil Peyron, Chairperson
PO Box 589
Porterville, CA 93258

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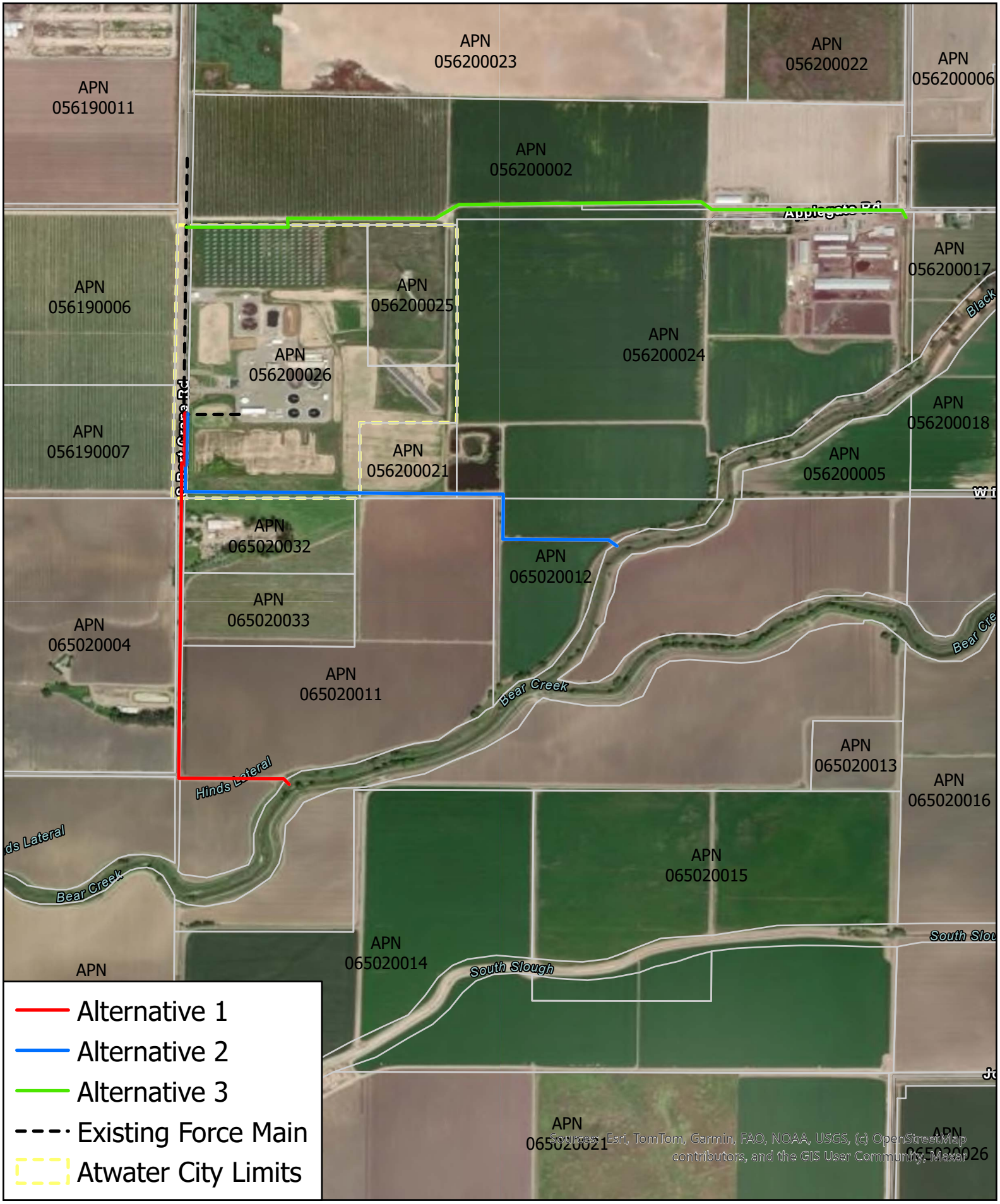
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June 2, 2025

Wuksachi Indian Tribe / Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA 93906

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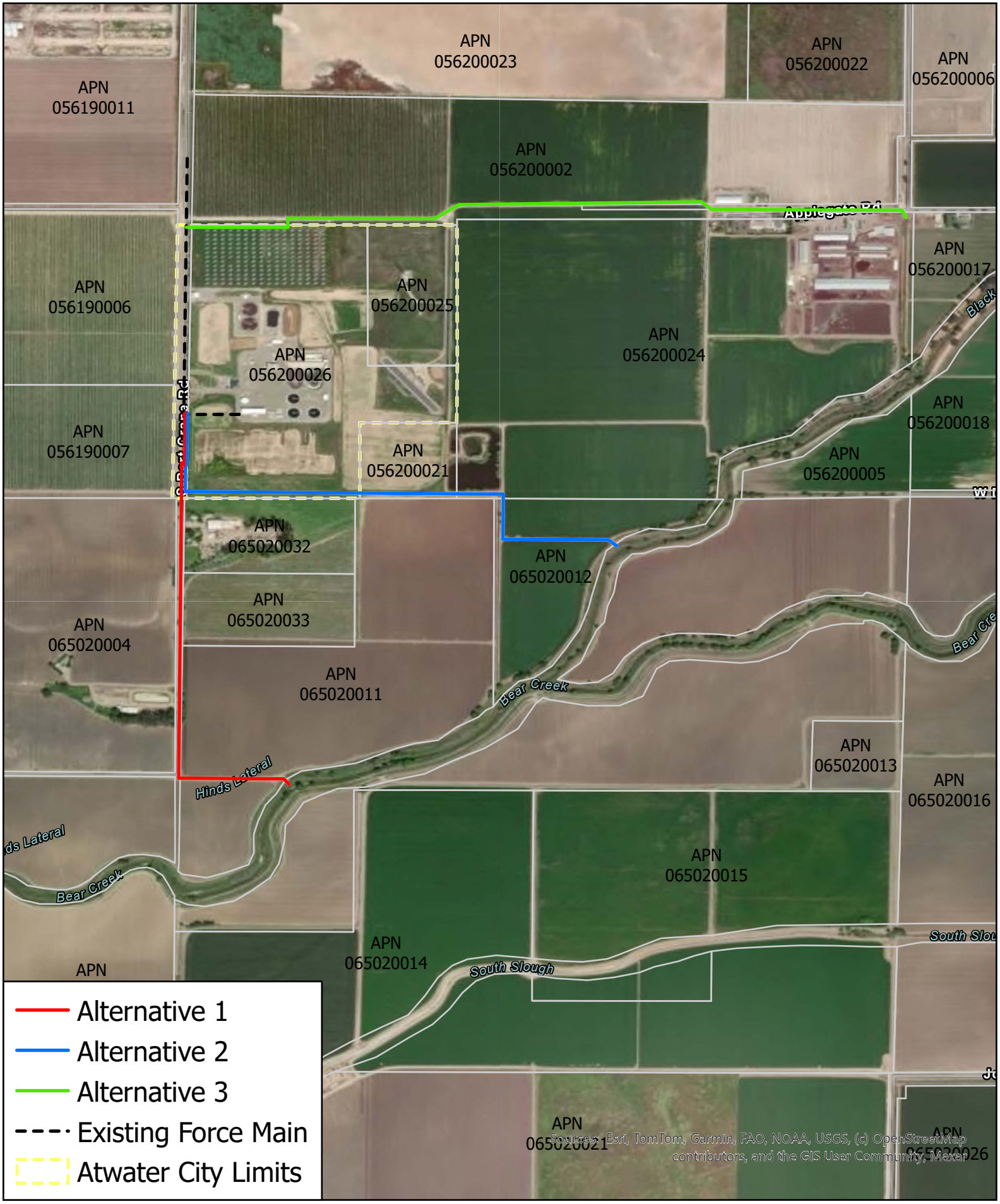
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