Appendix 4A Regulatory Requirements

Appendix 4A Regulatory Requirements

This appendix provides information regarding plans, policies and regulations applicable to the impact analysis in resource chapters throughout the RDEIR/SDEIS.

4A.1 Chapter 5, Surface Water Resources

4A.1.1. Federal Policies and Regulations

4A.1.1.1. Executive Order 11988, Floodplain Management

Executive Order 11988, signed May 24, 1977, addresses floodplain issues related to public safety, conservation, and economics. Executive Order 11988 requires federal agencies to prepare floodplain assessments for proposed actions located in or affecting floodplains. If an agency proposes to conduct an action in a floodplain, it must to the degree possible avoid short- and long-term adverse effects associated with the occupancy and the modification of a floodplain and avoid direct and indirect support of floodplain development whenever there is a reasonable and feasible alternative. If the only reasonable and feasible alternative involves siting in a floodplain, the agency must minimize potential harm to or in the floodplain and explain why the action is proposed in the floodplain.

Although new floodplain development is not considered an element of the Project, this regulation applies because improvements are proposed at Project facilities that are located in Federal Emergency Management Agency (FEMA)-recognized floodplains.

4A.1.1.2. National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 were intended to reduce the need for large, publicly funded flood control structures and disaster relief by restricting development on floodplains. FEMA administers the National Flood Insurance Program (NFIP) to subsidize flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA issues Flood Insurance Rate Maps (FIRMs) for communities participating in the NFIP. These maps delineate flood hazard zones (Special Flood Hazard Areas [SFHAs]) in the community. These maps are designed for flood insurance purposes only and do not necessarily show all areas subject to flooding. The maps designate lands likely to be inundated during a 100-year storm event and elevations of the base flood. They also depict areas between the limits affected by 100-year and 500-year events and areas of minimal flooding. These maps often are used to establish building pad elevations to protect new development from flooding effects. The locations of FEMA-designated floodplains in the study area for surface water resources are discussed in Chapter 5.2, *Environmental Setting*.

Although new floodplain development is not considered an element of the Project, this regulation applies because improvements are proposed at Project facilities that are located in FEMA-recognized floodplains.

4A.1.1.3. Flood Zone Regulations

SFHAs are subject to both federal and state requirements, which are defined primarily by federal regulations 44 Code of Federal Regulations (CFR) 60.3 and 44 CFR 65.12. The first citation requires the following:

> These federal regulations are intended to address the need for effective floodplain management and provide assurance that the cumulative effects of floodplain encroachment do not cause more than a 1-foot rise in water surface elevation after the floodplain has been identified on the FIRM (local flood ordinances can set a more stringent standard). The absence of a detailed study or floodway delineation places the burden on the project proponent to perform an appropriate engineering analysis to prepare hydrologic and hydraulic analyses consistent with FEMA standards. These analyses would then be used to evaluate the proposed project together "with all other existing and anticipated development." Defining future anticipated development is difficult. The purpose of this requirement is to avoid inequitable encroachments into the floodplain.

Although new floodplain development is not considered an element of the Project, this regulation applies because improvements are proposed at Project facilities that are located in FEMA-recognized floodplains.

4A.1.1.4. FEMA Levee Design and Maintenance Regulations

For guidance on floodplain management and floodplain hazard identification, communities turn to FEMA guidelines, as defined in 44 CFR 59 through 44 CFR 77. In order for a levee to be recognized by FEMA under the NFIP, the community must provide evidence demonstrating that adequate design and operation and maintenance systems are in place to provide reasonable assurance that protection from the base flood (1 percent or 100-year flood) exists. These specific requirements are outlined in 44 CFR 65.10, Mapping of Areas Protected by Levee Systems, and are summarized below.

Levee Height. Riverine levees must provide a minimum freeboard (the height of the top of a levee above a given level of water in a river) of 3 feet above the water-surface level of the base flood. An additional 1 foot above the minimum freeboard is required within 100 feet of either side of structures (such as bridges) riverward of the levee or wherever the flow is constricted. An additional 0.5 foot above the minimum freeboard at the upstream end of the levee, tapering to not less than the minimum freeboard at the downstream end of the levee, also is required.

Closures. All openings must be provided with closure devices that are structural parts of the system during operation and designed according to sound engineering practice.

Embankment Protection. Engineering analyses must be submitted that demonstrate no appreciable erosion of the levee embankment can be expected during the base flood, as a result of either currents or waves, and that anticipated erosion will not result in failure of the levee embankment or foundation directly or indirectly through reduction of the seepage path and subsequent instability.

Embankment and Foundation Stability. Engineering analyses that evaluate levee embankment stability must be submitted to FEMA. The analyses provided must evaluate expected seepage during loading conditions associated with the base flood and shall demonstrate that seepage into

or through the levee foundation and embankment will not jeopardize embankment or foundation stability.

Settlement. Engineering analyses must be submitted that assess the potential and magnitude of future losses of levee height as a result of levee settlement and demonstrate that freeboard will be maintained within the minimum standards.

Interior Drainage. An analysis must be submitted that identifies the source(s) of such flooding, the extent of the flooded area, and, if the average depth is greater than 1 foot, the water-surface elevation(s) of the base flood.

Operation Plans. For a levee system to be recognized, a formal plan of operation must be provided to FEMA. All closure devices or mechanical systems for internal drainage, whether manual or automatic, must be operated in accordance with an officially adopted operational manual, a copy of which must be provided to FEMA.

Maintenance Plans. For levee systems to be recognized as providing protection from the base flood, they must be maintained in accordance with an officially adopted maintenance plan. All maintenance activities must be under the jurisdiction of a federal or state agency, an agency created by federal or state law, or an agency of a community participating in the NFIP that must assume ultimate responsibility for maintenance. The plan must document the formal procedure that ensures that the stability, height, and overall integrity of the levee and its associated structures and systems are maintained. At a minimum, maintenance plans must specify the maintenance activities to be performed, the frequency of their performance, and the person by name or title responsible for their performance.

Although new levee development is not considered an element of the Project, this regulation applies because operational activities that would occur throughout the life of the Project may affect existing levee infrastructure.

4A.1.1.5. U.S. Army Corps of Engineers Levee Design Criteria

Some existing levees included in the study area for surface water resources are federally authorized and fall within the jurisdiction of the U.S. Army Corps of Engineers (USACE).

- *Overtopping of Flood Control Levees and Floodwalls* (Publication Engineer Technical Letter [ETL] 1110-2-299, August 22, 1986) (U.S. Army Corps of Engineers 1986).
- *Structural Design of Closure Structures for Local Flood Protection Projects* (Publication Engineer Manual [EM] 1110-2-2705, March 31, 1994) (U.S. Army Corps of Engineers 1994).
- *Design of Coastal Revetments, Seawalls, and Bulkheads* (Publication EM 1110-2-1614, June 30, 1995) (U.S. Army Corps of Engineers 1995).
- *Design Guidance on Levees* (Publication ETL 1110-2-555, November 30, 1997) (U.S. Army Corps of Engineers 1997).
- *Conduits, Culverts, and Pipes* (Publication EM 1110-2-2902, March 31, 1998) (U.S. Army Corps of Engineers 1998).

- *Guidelines on Ground Improvement for Structures and Facilities* (Publication ETL 1110-1-185, February 1, 1999) (U.S. Army Corps of Engineers 1999a).
- *Engineering and Design for Civil Works Projects* (Publication Engineer Regulation [ER] 1110-2-1150, August 31, 1999) (U.S. Army Corps of Engineers 1999b).
- *Design and Construction of Levees* (Publication EM 1110-2-1913, April 30, 2000) (U.S. Army Corps of Engineers 2000).
- *Geotechnical Investigations* (Publication EM 1110-1-1804, January 1, 2001) (U.S. Army Corps of Engineers 2001).
- *Recommendations for Seepage Design Criteria, Evaluation and Design Practices* (U.S. Army Corps of Engineers 2003a).
- *Slope Stability* (Publication EM 1110-2-1902, October 31, 2003) (U.S. Army Corps of Engineers 2003b).
- *Geotechnical Levee Practice* (Publication SOP EDG-03, June 28, 2004) (U.S. Army Corps of Engineers 2004).
- *Engineering and Design—Design Guidance for Levee Underseepage* (Publication ETL 1110-2-569, May 1, 2005). (U.S. Army Corps of Engineers 2005).
- *Quality Management* (Publication ER 1110-1-12, September 30, 2006) (U.S. Army Corps of Engineers 2006).
- *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures* (Publication ETL 1110-2-571, April 10, 2009) (U.S. Army Corps of Engineers 2009).

Although new levee development is not considered an element of the Project, this regulation applies because operational activities that would occur throughout the life of the Project may affect existing levee infrastructure.

4A.1.1.6. U.S. Army Corps of Engineers Operations and Maintenance Controls, Flood Control Projects

The maintenance and operation of federal project levee structures is discussed in 33 CFR 208.10. According to these regulations, no improvement shall be passed over, under, or through the walls, levees, improved channels, or floodways, nor shall any excavation or construction be permitted within the limits of the project right-of-way, nor shall any change be made in any feature of the works without prior determination by the District Engineer of the Department of the Army or his or her authorized representative that such improvement, excavation, construction, or alteration will not adversely affect the function of the protective facilities. This regulation is the basis for requiring a permit prior to any construction at federal project levees. Types of alterations/modifications typically covered by a 33 CFR 208 permit include bridges, pump houses, stairs, pipes, bike trails, and power poles.

Although new levee development is not considered an element of the Project, this regulation applies because operational activities that would occur throughout the life of the Project may affect existing levee infrastructure.

4A.1.2. State Policies and Regulations

4A.1.2.1. Coordinated Operation Agreement

The Coordinated Operation Agreement (COA) is an agreement between California Department of Water Resources (DWR) and Reclamation that coordinates Central Valley Project (CVP) and State Water Project (SWP) operations. It includes CVP and SWP project responsibilities for meeting in-basin water uses including diversions and instream requirements for environmental flows and water quality. The COA also allows shared use of export facilities and regulates rights to un-stored water. Some of these responsibilities depend on conditions in the Sacramento-San Joaquin River Delta and CVP and SWP Delta exports. The COA was first enacted in 1986 and has been modified several times since then, with the most recent changes occurring in December of 2018. (California Department of Water Resources 2020).

Modifications to the COA stipulated in the 2018 addendum include the following (California Department of Water Resources 2020):

- Meeting In-Basin Requirements: When water supply is in balance (i.e., not in excess), the percent of water required to be released from storage by each project to meet in-basin uses depends on water year type, with the CVP percent ranging from 80% during wet and above normal years to 60% during critical years.
- SWP Conveyance of CVP Water: The SWP may export up to 195 thousand acre-feet (TAF) of CVP water at the SWP Harvey Banks Pumping Plant as long as this conveyance does not interfere with SWP exports.
- Dividing Export Pumping when Exports are Limited by Delta Regulations. In the past, when Delta exports were constrained, the CVP and SWP divided allowable exports equally based on informal agreement. With the 2018 addendum, the division has become dependent on whether the Delta is in balanced or excess conditions. Under balanced conditions, the CVP can pump 65% of what is allowed and under excess conditions, the CVP can pump 60% of what is allowed.
- Periodic COA Review. COA review will occur every 5 years, after changes in export-related requirements imposed on both the CVP and SWP, or after construction of a new or substantially modified state or federal facility.
- The Project would need to be compatible with the requirements of this agreement.

4A.1.2.2. California Code Title 23 and Central Valley Flood Protection Board

The Central Valley Flood Protection Board (CVFPB, formerly the California Reclamation Board) regulates the modification and construction of levees and floodways in the Central Valley defined as part of the Sacramento Valley and San Joaquin Valley flood control projects. Rules promulgated in Title 23 of the California Code of Regulations (CCR Title 23, Division 1, Article 8 [Sections 111 through 137]) regulate the modification and construction of levees to ensure public safety. The rules state that existing levees may not be excavated or left partially excavated during the flood season, which is generally November 1–April 15 for the Sacramento River system.

The following Board guidance has been followed during the levee evaluation:

> The California Reclamation Board has primary jurisdiction approval of levee design and construction. The Reclamation Board standards are found in Title 23, Division 1, Article 8 (Sections 111 through 137) of the CCR and constitute the primary state standard. Section 120 of the CCR directs that levee design and construction be in accordance with the USACE EM 1110-2-1913, *Design and Construction of Levees*. This document is the primary federal standard applicable to this project, as supplemented by additional prescriptive standards contained in Section 120 of the CCR. These additional standards prescribe minimum levee cross-sectional dimensions, construction material types, and compaction levels.

Although new levee development is not considered an element of the Project, this regulation applies because Project operational activities that would occur throughout the life of the Project may affect existing levee infrastructure.

4A.1.2.3. Central Valley Flood Control Act of 2008

The Central Valley Flood Control Act of 2008, passed in 2007, recognizes that the Central Valley of California, in which parts of the Project are located, including the planning area, is experiencing unprecedented development, resulting in the conversion of historically agricultural lands and communities to densely populated residential and urban centers. Because of the potentially catastrophic consequences of flooding, the Act recognizes that the federal government's current 100-year flood protection standard is not sufficient to protect urban and urbanizing areas within flood-prone areas throughout the Central Valley and declares that the minimum standard for these areas is a 200-year level of flood protection. To continue with urban development, cities and counties must develop and implement plans for achieving this new standard by 2025. With respect to flood risk reduction, the Central Valley Flood Control Act also calls upon DWR to develop a comprehensive Central Valley Flood Protection Plan (CVFPP) by the end of 2012 for protecting the lands currently within the Sacramento–San Joaquin River Flood Management System.

According to California Government Code (GC) Sections 65302.9 and 65860.1, every jurisdiction located within the Sacramento–San Joaquin Valley is required to update its General Plan and Zoning Ordinance in a manner consistent with the CVFPP within 24 months after the CVFPP's adoption, which occurred July 1, 2012. In addition, the locations of the state and local flood management facilities, locations of flood hazard zones, and the properties located in these areas must be mapped and consistent with the CVFPP.

The Project would have to be compatible with the goals and requirements of this act.

4A.1.2.4. FloodSAFE California

In 2006, DWR initiated FloodSAFE California, which is a multi-faceted program to improve public safety through integrated flood management. Under the FloodSAFE Program, DWR provides leadership and works with local, regional, state, Tribal, and federal officials to improve flood management and emergency response systems throughout California, primarily by investing funds provided by Propositions 1E and 84. Although DWR is leading FloodSAFE, successful implementation of the program depends on active participation from many key partners and substantial federal and local cost participation.

The FloodSAFE vision is a sustainable integrated flood management and emergency response system throughout California that improves public safety, protects and enhances environmental and cultural resources, and supports economic growth by reducing the probability of destructive floods, promoting beneficial floodplain processes, and lowering the damages caused by flooding.

The FloodSAFE Program is designed to help improve integrated flood management statewide with a significant emphasis on the Central Valley and Delta where communities and resources face high risk of catastrophic damage. Integrated flood management includes recognition of: the interconnection of flood management actions within broader water resources management and land use planning, the value of coordinating across geographic and agency boundaries, the need to evaluate opportunities and potential impacts from a system perspective, and the importance of environmental stewardship and sustainability.

The Project would have to be compatible with the goals of the FloodSAFE program.

4A.1.2.5. Department of Water Resources Urban Levee Design Criteria

Pursuant to Senate Bill 5 (GC Section 65007(l)), the Urban Levee Design Criteria (ULDC) define the urban level of flood protection as the level of protection that is necessary to withstand flooding that has a 1 in 200 chance of occurring in any given year using criteria consistent with, or developed by, DWR. The ULDC was developed through a collaborative process with stakeholders from local government (including representatives from the Central Valley, San Francisco Bay Area, and Los Angeles Region), state government, and the federal government. Although new levee development is not considered an element of the Project, this regulation applies because operational activities that would occur throughout the life of the Project may affect existing levee infrastructure.

4A.1.2.6. Sacramento River Flood Control Project

The Sacramento River Flood Control Project (SRFCP) was authorized by Congress in 1917. The SRFCP was the major project for flood control on the Sacramento River and its tributaries. It was sponsored by the Reclamation Board of the State of California (today reauthorized as the CVFPB) and was the first federal flood control project constructed outside of the Mississippi River Valley.

The SRFCP includes more than approximately 1,000 miles of levees, overflow weirs, pumping plants, and bypass channels. Currently, the SRFCP extends from the Sacramento River's mouth near Collinsville in the Delta to near Chico Landing in the northern Sacramento Valley. More than approximately 1,000 miles of levees were constructed as part of the project, providing flood protection to roughly 800,000 acres of highly productive agricultural lands, the cities of Sacramento and Marysville, and numerous other small communities. Although the SRFCP levees often were constructed of poor foundation materials such as river dredge spoils that would not meet current engineering standards, the levees are relied upon to provide flood protection during major storms to more than 2 million people in approximately 50 communities with an estimated $37 billion in urban and agricultural development.

Although flood control structures, such as levees, would not be constructed as part of the Project, this regulation applies because operational activities that would occur throughout the life of the Project may affect existing flood control infrastructure.

4A.1.2.7. California Water Code 6000, Division 3: Dams and Reservoirs

California Water Code, Division 3: Dams and Reservoirs, requires DWR's Division of Safety of Dams to supervise the construction, maintenance, and operation of dams and reservoirs to safeguard life and property from injury due to failure. The code requires DWR to evaluate the possibility that a dam or reservoir might be endangered due to seepage, earth movement or other conditions and to require the dam or reservoir owner to take appropriate actions to remove the danger to life and property. Federally owned dams and reservoirs are not under State jurisdiction, except as noted under federal law.

4A.1.3. Local/Regional Policies and Regulations

4A.1.3.1. Glenn County General Plan Update, 2020 Existing Conditions Report

Sections 3.3, *Stormwater and Drainage, and 5.7, Hydrology and Water Quality, of the Glenn County General Plan Update, 2020 Existing Conditions Report* contain the following goals and policies from the 1993 Glenn County General Plan Element related to flooding (Glenn County 2020a:3-31,5-106).

Goal PSG-5. Protection and reduction of loss of life and personal property due to flooding.

Policy PSP-38. Recognize the special status of lands located within the designated floodways adopted by the State Reclamation Board.

Policy PSP-40. Endeavor to avoid areas subject to flooding when considering approval of new development.

Policy PSP-41. Require the installation of storm drain and other flood protection/prevention improvements as a condition of all new development approvals.

Policy NRP-32. Support programs that will provide better information to the County and other agencies concerning reservoir siltation and aid in the formulation of an appropriate plan of action.

4A.1.3.2. Glenn County Code

The purpose of Chapter 15.540, Flood Plain Management Zone, of the Glenn County Code (Glenn County 2020b) is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. Chapter 15.540 describes various methods and provisions for reducing flood losses. Chapter 15.540 also states that a development permit shall be obtained before any construction or other development begins within any area of special flood hazard.

4A.1.3.3. Colusa County General Plan

The Safety Element of the *Colusa County General Plan* (Colusa County 2012) identifies the following goals, objectives, and policies related to flooding hazards and flood protection:

Goal SA-1: Ensure the safety of County residents, businesses, and visitors from hazardous conditions, including natural catastrophes and human-caused emergencies.

Policy SA 1-22: Maintain designated floodways as open space and limit uses to low intensity uses such as agriculture, passive recreation, preservation of vegetation and wildlife habitat, and scenery; provided such uses do not impede floodwaters or pose a threat to public safety.

Policy SA 1-26: Provide ongoing maintenance of bridges, culverts, railroad trestle structures, and other flood control and storm water conveyance infrastructure to provide for adequate storm water flows.

Policy SA 1-29: Require new development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities.

Policy SA 1-30: Ensure that construction activities will not result in adverse impacts to existing flood control and drainage structures.

Policy SA 1-32: For properties located within a flood hazard zone, as identified on the most recent FEMA 100-year floodplain map or identified by the California Department of Water Resources, the County shall not enter into a development agreement, approve any discretionary entitlement, tentative parcel map, parcel map, final map, or any ministerial permit that would result in the construction of a new residence unless flood protection findings consistent with the requirements of California Government Code Sections 65865.5, 65962, 66474.5 can be made and documented.

Policy SA 1-34: Require new structures to be located outside of the 100-year floodplain to the greatest extent feasible. Exceptions may be made for agricultural structures that would not significantly impede flood waters or result in significant water quality impacts during a storm event.

Policy SA 1-38: Require adequate all-weather access to new development located within a flood zone.

Policy SA 1-39: Support coordinated efforts to maintain levees along the Sacramento River and adjacent to canals and waterways throughout the County.

Policy SA 1-41: Require new development proposals in levee inundation areas to conduct an analysis of risk from failure of levees.

Policy SA 1-42: Require new development proposals in dam inundation areas, as identified in Background Report Figure 4.3-2 or the most current available mapping, to consider risks from failure of these dams.

4A.1.3.4. Colusa County Code

The purpose of Chapter 33, Flood Damage Prevention, of the Colusa County Code (Colusa County 2020) is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. Chapter 33 describes various methods and provisions for reducing flood losses. Chapter 33 also states that a development permit shall be obtained

before any construction or other development begins within any area of special flood hazard established in Section 33-3.2.

4A.1.3.5. County of Yolo 2030 Countywide General Plan

The Health and Safety Element of the *County of Yolo 2030 Countywide General Plan* (Yolo County 2009) contains goals, policies, and implementation program actions aimed at reducing the risk of flooding within the county.

Goal HS-2: Flood Hazards. Protect the public and reduce damage to property from flood hazards.

Policy HS-2.2: Ensure and enhance the maintenance and integrity of flood control levees.

Policy HS-2.3: Actively update and maintain policies and programs to ensure consistency with State and federal requirements.

Policy HS-2.6: Maintain the structural and operational integrity of essential public facilities during flooding.

4A.1.3.6. Yolo County Code

The purpose of Chapter 4, Flood Protection, of the Yolo County Code (Yolo County 2020) is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. Chapter 4 describes various methods and provisions for reducing flood losses. Chapter 4 also states that a development permit shall be obtained before any construction or other development begins within any area of special flood hazard established in Section 33-3.2.

4A.1.3.7. Tehama County General Plan

The Safety Element of the *Tehama County General Plan* (Tehama County 2009) identifies the following goals and policies related to flooding hazards and flood protection:

Goal SAF-5.1: To minimize and reduce the risk of personal injury and property damage resulting from flooding.

Policy SAF-5.3: The County shall incorporate flood control mitigation into County ordinances and procedures.

4A.1.3.8. Tehama County Code

The purpose of Chapter 15.52, Floodplain Management Regulations, of the Tehama County Code (Tehama County 2020) is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. Chapter 15.22 describes various methods and provisions for reducing flood losses. Chapter 15.52 also states that a development permit shall be obtained before any construction or other development begins within any area of special flood hazard.

4A.2 Chapter 6, Surface Water Quality

4A.2.1. Federal Policies and Regulations

4A.2.1.1. Clean Water Act

The federal CWA (33 United States Code Section 1251 et seq.) establishes the institutional structure for the EPA to regulate point and nonpoint discharges of pollutants into the waters of the United States, establish water quality standards, and implement pollution control programs, such as setting wastewater standards for industry. The CWA authorizes EPA to delegate many permitting, administrative, and enforcement aspects of the law to state governments. In California, the State Water Board has been designated by EPA to develop and enforce water quality objectives and implementation plans. The State Water Board has delegated the specific responsibilities for the development and enforcement actions to the nine Regional Water Boards.

Section 303: Impaired Waters

CWA Section 303(d) requires states to identify waters that are not attaining water quality standards (303(d) list) and include a priority ranking of such waters. The priority ranking considers the severity of the pollution and the beneficial uses of such waters. The State Water Board and Regional Water Boards address water quality impairments that are caused by multiple dischargers and other sources of pollution by developing TMDLs, which set water quality objectives or targets and allocate allowable loads for sources of pollution. A TMDL represents the maximum load (usually expressed as a rate, e.g., grams methylmercury per year) of a pollutant that a water body can assimilate and not result in impairments. A TMDL describes the reductions needed to meet water quality objectives and allocates those reductions among the sources in the watershed. To meet federal and state requirements, TMDL programs must include the following elements: description of the problem; numerical water quality target; analysis of current loads; load reductions needed to eliminate impairments; plan/program of implementation to achieve the needed load reductions; and monitoring to document program progress. Multiple TMDLs have been developed for streams in the Sacramento River watershed and Delta.

There are waterways in the study area identified on the 303(d) list as impaired for one or more water quality constituents.

Section 402: Permits for Discharge to Surface Waters

Section 402 of the CWA regulates discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. In California, the State Water Board has been designated by EPA to develop and enforce water quality objectives and implementation plans. The State Water Board has delegated the specific responsibilities for the development and enforcement actions to the Regional Water Boards. The Project, which is under the jurisdiction of the Central Valley Regional Water Board (Region 5), would require a Section 402 permit as administrated by the California State NPDES program for discharges that might occur during construction activities.

Section 404: Permits for Fill Placement in Waters and Wetlands

Section 404 of the CWA requires that a permit be obtained from the USACE for the discharge of dredged or fill material into navigable waters of the United States, their tributaries, and associated wetlands. Activities regulated by Section 404 permits include dredging, bridge construction, flood control actions, and some fishing operations. The Project would require a Section 404 permit for construction activities and maintenance dredging.

Section 401: Water Quality Certification

Under CWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States (e.g., a CWA Section 402 or 404 permit) must obtain certification from the state in which the discharge would originate or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate. For an activity that may result in any discharge into navigable waters, Section 401 of the federal CWA requires a federal license or permit applicant to provide to the licensing or permitting agency a certification from the state in which the discharge originates that any such discharge will comply with state water quality standards and other appropriate requirements. In California, the authority to grant water quality certification has been delegated to the State Water Board (California Water Code, Section 13160), and applications for water quality certification are typically processed by the Regional Water Board with local jurisdiction. The Project would require Section 401 Water Quality Certification from the Central Valley Regional Water Board for construction activities and maintenance dredging.

4A.2.1.2. Rivers and Harbors Act

The Rivers and Harbors Act regulates development and use of navigable waterways in the United States. Activities identified within the act are regulated by USACE, with many of the original provisions related to discharge addressed in coordination with EPA as part of the CWA. The Rivers and Harbors Act gives the USACE the authority to regulate most kinds of obstructions to navigation.

Section 10 of the Rivers and Harbors Act requires authorization from the USACE for the construction of any structure in or over navigable waters of the United States, the excavation/dredging or deposition of material in these waters, or any obstruction or alteration in navigable waters. Project-related construction and dredging would be subject to regulation under Section 10 of the Rivers and Harbors Act.

Section 14 of the Rivers and Harbors Act (Section 408 of the CWA) requires that any proposed use or occupation of an existing USACE civil works project (e.g., levees, dams, jetties, or dikes) be authorized by the Secretary of the Army. Section 14 approval is required before construction of any proposed project that may affect any existing USACE levee (and/or State Plan of Flood Control levee) in the Central Valley and Delta. The USACE may grant such permission if it is determined that the alteration proposed will not be “injurious to the public interest” and “will not impair the usefulness” of the civil works project.

The Project would be excavating and dredging materials into waters that are identifiable as navigable and waters of the United States.

Historically, Reclamation has maintained a minimum flow of 5,000 cubic feet per second (cfs) in the Sacramento River at Chico Landing to support navigation in accordance with references to Sacramento River Division operations in the River and Harbors Act of 1935, as reauthorized in 1937. There is no commercial traffic between Sacramento and Chico Landing, and USACE has not dredged this reach to preserve channel depths since 1972. However, long-time water users diverting from the river have set their pump intakes just below this level. Therefore, the CVP is operated to meet the navigation flow requirement of 5,000 cfs at the Wilkins Slough gauging station when diversions are occurring downstream under all but the most critical water supply conditions.

4A.2.1.3. National Toxics Rule

In 1992, pursuant to the CWA, EPA promulgated the National Toxics Rule (NTR) to establish water quality criteria for 14 states and 2 territories, including California, that had not complied fully with §303(c)(2)(B) of the CWA (40 CFR §131.36). As described in the preamble to the final NTR, when a state adopts water quality criteria consistent with the requirements of §303(c)(2)(B) of the CWA, and EPA approves, EPA will issue a rule amending the NTR to withdraw the federal criteria for that state. If the state's criteria are no less stringent than the promulgated federal criteria, EPA will withdraw its criteria and commence rulemaking without notice because additional comment on the criteria is unnecessary. However, if a state adopts criteria that are less stringent than the federally promulgated criteria, but in EPA's judgment fully meet the requirements of the CWA, EPA will provide an opportunity for public comment before withdrawing the federally promulgated criteria. Implementation of the NTR has resulted in the California Toxics Rule (CTR) and the 303(d) list of impaired waters, which are used in the impact assessment of the Project to indicate water quality constituents of concern.

4A.2.1.4. Federal Antidegradation Policy

The Federal Antidegradation Policy is designed to provide the level of water quality necessary to protect existing uses and provide protection for higher quality water. The federal policy directs states to adopt a statewide policy that includes the following primary provisions (40 CFR 131.12):

1. Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
2. Where the quality of waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.
3. Where high quality waters constitute an outstanding national resource, such as waters of national and State parks and wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

As a result of this policy, the water quality assessment for the Project evaluates the potential for substantial degradation of water quality even if all water quality standards and requirements are expected to be maintained.

4A.2.1.5. Safe Drinking Water Act

The federal SDWA of 1974, and amendments in 1986 and 1996, directed EPA to establish national drinking water standards with maximum contaminant level (MCLs) for a wide variety of constituents and provisions for a mandatory monitoring program for aboveground and underground water sources. The 1996 amendments expanded the focus of the SDWA from primarily treatment to source water protection to reduce contamination in municipal water supplies. The owners or operators of public water systems are required to comply with primary (health-related) MCLs and are encouraged to comply with secondary (nuisance- or aesthetics-related) MCLs.

Federal SDWA standards apply to treated water as it is served to consumers. All surface waters require some form of treatment to meet drinking water standards. The degree of treatment needed depends on the quality of the raw water. The highest quality raw surface waters need only to be disinfected before being served to consumers. More typically, raw water is treated in a conventional water treatment plant that includes sedimentation, filtration, and disinfection processes. Municipal water suppliers prefer raw water sources of high quality because their use minimizes risk to public health and minimizes the cost and complexity of treatment to meet SDWA standards.

Many of the CVP and SWP water users are municipalities that must comply with the SDWA and are concerned about water supply facility operations that may increase the potential for contamination.

As specifically relates to surface water quality, EPA established the Federal Surface Water Treatment Rule as part of the implementation of the federal SDWA, which is implemented in the State of California by the State Water Board under the California Surface Water Treatment Rule. The California Surface Water Treatment Rule satisfies three specific requirements of the federal SDWA by: (1) establishing criteria for determining when filtration is required for surface waters; (2) defining minimum levels of disinfection for surface waters; and (3) addressing *Cryptosporidium* spp., *Giardia lamblia, Legionella* spp., *E. coli*, viruses, turbidity, and heterotrophic plate count bacteria growth by specifying a treatment technique. A treatment technique is set in lieu of an MCL for a contaminant when it is not technologically or economically feasible to measure that contaminant.

Because public water systems must meet drinking water standards either through treatment or source modifications, degradation of water quality resulting in exceedance of MCLs in source water will not likely result in exceedance of MCLs in the water served to customers. However, degradation could cause water treatment to be more difficult and could affect unregulated aspects of drinking water quality such as taste and odor.

4A.2.1.6. Human Health Recreational Criteria and Drinking Water Health Advisories for Microcystins and Cylindrospermopsin

The U.S. Environmental Protection Agency (USEPA) has established recommended criteria for two cyanotoxins, microcystin and cylindrospermopsin, in recreational waters in *Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories (AWQC/SA) for Microcystins and Cylindrospermopsin* (U.S. Environmental Protection Agency 2019). These recommended criteria have been published under CWA 304(a) for states to consider as the basis for swimming advisories for notification purposes in recreational waters to protect the public from cyanobacterial blooms (also "harmful algal blooms" [HABs]) and cyanotoxins. For use as a recreational water quality criterion, USEPA recommends that states use 10-day assessment periods (not a rolling 10-day period), over the course of a recreation season to evaluate ambient water body conditions and recreational use attainment where the water quality criterion for the cyanotoxins, microcystins, and cylindrospermopsin is 8 micrograms per liter (µg/L) and 15 µg/L, respectively. The 10-day period links the water body assessment period to the adverse health effects observed from ingestion of the toxins over short-term exposures. Where the concentration of these cyanotoxins exceeds the criterion during a 10-day period more than three times within a recreational season and this reoccurs in more than 1 year, USEPA considers this an indication that the water quality has been or is becoming degraded. USEPA recommends as a basis for issuing a swimming advisory that the criteria not be exceeded on any single day and that the advisory remain until the toxin concentration(s) fall below the recommended criterion/criteria.

USEPA has also developed 10-day drinking water health advisories for microcystin and cylindrospermopsin (Table 4A.2-1). Health advisories describe nonregulatory concentrations of drinking water contaminants at or below which adverse health effects are not anticipated to occur over specific exposure durations (e.g., 1-day, 10-days, several years, and a lifetime).

Table 4A.2-1. U.S. Environmental Protection Agency's Drinking Water Health Advisories for Cyanotoxins

Cyanotoxin	Drinking Water Health Advisory (10-day)	
	Bottle-Fed Infants and Pre-School Children	School-Age Children and Adults
Cylindrospermopsin	0.7 µg/L	3.0 µg/L
Microcystins	0.3 µg/L	1.6 µg/L

Source: U.S. Environmental Protection Agency 2020.
µg/L = micrograms per liter.

4A.2.2. State Policies and Regulations

4A.2.2.1. Porter-Cologne Water Quality Control Act

As described in Section 4A.2.1, the State of California develops and enforces water quality objectives and implementation plans for the federal CWA. The Porter-Cologne Act (California Water Code Sections 13000 et seq.) establishes the basis for water quality regulation within California. The State Water Board administers the CWA through the Porter-Cologne Act, pursuant to which the State Water Board oversees nine Regional Water Boards that regulate the quality of waters within their regions. Pursuant to the Porter-Cologne Act, each of the nine

Regional Water Boards must adopt a regional water quality control plan (also referred to as a "basin plan"), which must identify beneficial uses for the waters within the region, water quality objectives to protect those beneficial uses, and a program of implementation to achieve the water quality objectives. These basin plans are subject to State Water Board and EPA approval.

Beneficial uses of water that may be protected against degradation are defined in Water Code Section 13050(f)) and include "domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves." Basin plans establish numerical and narrative criteria for several key water quality constituents, including dissolved oxygen, water temperature, trace metals, turbidity, suspended material, pesticides and other constituents, which have the potential to impair beneficial uses of surface water or groundwater. Basin plans adopted by the Regional Water Boards are implemented primarily through the NPDES permitting system and issuance of waste discharge requirements to regulate waste discharges, so water quality objectives are met. Basin plans provide the technical basis for determining waste discharge requirements (WDRs; see "Nonpoint Source Implementation and Enforcement Policy" section of this appendix) and authorize the Regional Water Boards to take regulatory enforcement actions as deemed necessary. The Project is subject to the Porter-Cologne Act.

Water Quality Control Plans

The following three basin plans identify beneficial uses and associated water quality objectives applicable to the Project.

Water Quality Control Plan for the Sacramento and San Joaquin River Basins

The Sacramento-San Joaquin River Basin Plan covers the entire Sacramento and San Joaquin River Basins (Central Valley Regional Water Quality Control Board 2018). These basins are bound by the crests of the Sierra Nevada on the east and the Coast Range and Klamath Mountains on the west. The area covered in this basin plan extends approximately 400 miles from the California-Oregon border southward to the headwaters of the San Joaquin River, and this area is under the jurisdiction of the Central Valley Regional Water Board.

Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary

The Bay-Delta Plan protects the beneficial uses of the Bay-Delta Estuary and tributary watersheds and supersedes the regional water quality control plans in the event of any conflict between this plan and the regional water quality control plans. The Bay-Delta Plan "provides reasonable protection" for the beneficial uses of the Bay-Delta Estuary as regards salinity (caused by saltwater intrusion, municipal discharges, and agricultural drainage) and water project operations (flows and diversions) (State Water Resources Control Board 2018).

General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities

CWA Section 402 regulates discharges to surface waters through the NPDES program, which is administered by the Regional Water Boards. An NPDES permit sets specific discharge limits for point sources discharging pollutants into waters of the United States and establishes monitoring and reporting requirements. Typically, NPDES permits are issued for a 5-year period by the Regional Water Boards.

Dischargers whose projects disturb at least 1 acre of soil or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the NPDES Construction General Permit (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). Construction activities subject to this permit include clearing, grading and ground disturbances such as stockpiling or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development of a site-specific Storm Water Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer. The SWPPP must identify an effective combination of soil erosion and sediment controls, as well as non-stormwater best management practices (BMPs). The Construction General Permit requires that the SWPPP define a program of regular inspections of the BMPs and, in some cases, sampling of water quality parameters. The Central Valley Regional Water Board administers the NPDES stormwater permit program in the region that will be affected by construction of the Project. The Project would require site-specific SWPPPs and the development of BMPs to manage stormwater runoff.

Nonpoint Source Implementation and Enforcement Policy

The Nonpoint Source Implementation and Enforcement Policy (August 2004) requires that Regional Water Boards regulate all nonpoint sources of pollution using the administrative permitting authorities provided by the Porter-Cologne Act. Nonpoint source pollution typically results from contact between pollutants and land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification. The policy reaffirms the Regional Water Boards' use of permitting authorities contained in the Porter-Cologne Act for control of nonpoint source pollution. These permitting authorities are WDRs; waivers of WDRs; and Basin Plan prohibitions. Hence, all current and proposed nonpoint source discharges are regulated under these three permitting authorities or some combination therein. WDRs may include effluent limitations or other requirements that are designed to implement applicable basin plans. A WDR may specify certain conditions under which, or areas where, the discharge of waste or certain types of waste will not be permitted. WDRs may be waived by the Regional or State Water Board for a specific discharge or a specific type of discharge if it is determined, after a public meeting, that the waiver is consistent with any applicable State or regional basin plan and is in the public interest. All waivers are conditional and may be terminated at any time. Except for waivers for discharges that the State Water Board or a Regional Water Board determines do not pose a significant threat to water quality, waiver conditions must include, but need not be limited to, individual, group or watershed-based monitoring. Waivers may not exceed 5 years in duration but may be renewed. As with WDRs, Regional Water Boards may also prohibit discharges of waste or types of waste through discharge prohibitions specified in a basin plan.

TMDL Projects

Multiple water bodies in the study area are listed as impaired per the CWA Section 303(d) for a variety of constituents. The following TMDLs are of primary relevance in the study area with respect to the Project.

- Delta Methylmercury TMDL (Central Valley Regional Water Quality Control Board 2011)
- Cache Creek, Bear Creek, and Harley Gulch Mercury TMDL (Central Valley Regional Water Quality Control Board 2005)
- Clear Lake Mercury TMDL (approved 2003 and amended 2010)
- American River (Lower) Watershed Methylmercury TMDL (Central Valley Regional Water Quality Control Board 2010).
- Upper Sacramento River TMDL for Cadmium, Copper and Zinc (Central Valley Regional Water Quality Control Board 2002)
- Sacramento-San Joaquin Delta Diazinon and Chlorpyrifos TMDL (Central Valley Regional Water Quality Control Board 2006)

In addition, the State Water Board and Regional Water Boards are in the process of developing a statewide mercury control program for reservoirs. The Statewide Mercury Control Program for Reservoirs will address 131 reservoirs identified as mercury-impaired as of January 2018. The mercury control program will address controllable water quality factors such as point and nonpoint mercury sources, reservoir water chemistry conducive to mercury methylation, and fisheries management to reduce methylmercury bioaccumulation. The goals of this program are to (1) reduce methylmercury concentrations in fish in mercury-impaired reservoirs; (2) have a mercury control program in place to be applied to additional reservoirs as they become mercury-impaired; and (3) protect additional reservoirs from becoming mercury impaired (State of California 2017). To achieve these goals, the State Water Board is proposing to establish a rule titled, "Amendment to the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Mercury TMDL and Implementation Program for Reservoirs" (Mercury Reservoir Provisions). The Mercury Reservoir Provisions would include a program of implementation; recommendations to protect people who consume mercury-contaminated reservoir fish, for fisheries management by the California Department of Fish and Wildlife (CDFW), and for reductions in atmospheric mercury by other agencies; and a TMDL for mercury-impaired reservoirs.

4A.2.2.2. California Antidegradation Policy

The California Antidegradation Policy, formally known as the *Statement of Policy with Respect to Maintaining High Quality Waters in California* (State Water Board Resolution No. 68-16), restricts degradation of surface water and groundwater. This policy protects water bodies where existing quality is higher than necessary for the protection of beneficial uses. Pursuant to the Antidegradation Policy, any actions that can adversely affect existing high water quality in surface water and groundwater must be consistent with maximum benefit to the people of the state, must not unreasonably affect present and anticipated beneficial use of such water, and must not result in water quality less than that prescribed in water quality plans and policies. The policy further requires that dischargers meet WDRs, which will result in the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the state will be maintained. The federal anti-degradation policy is incorporated into the State of California's anti-degradation policy where the federal anti-degradation policy is applicable.

4A.2.2.3. Central Valley Drinking Water Policy for Surface Waters of the Delta and its Upstream Tributaries

The Central Valley Regional Water Board undertook a multi-year effort to develop a drinking water policy for surface waters in the Central Valley. Amendments to the Sacramento-San Joaquin River Basin Plan to establish a Drinking Water Policy for surface waters of the Delta and its upstream tributaries were adopted by the Central Valley Regional Water Board on July 26, 2013 (Resolution R5-2013-0098) and approved by the EPA on November 20, 2014. The amendments include a new narrative water quality objective for *Cryptosporidium* and *Giardia*, along with implementation provisions. The amendments also clarify that the existing narrative objective for chemical constituents includes drinking water chemical constituents of concern, such as organic carbon.

4A.2.2.4. California Toxics Rule

On May 18, 2000, EPA promulgated a final rule, the California Toxics Rule (CTR), which established numeric water quality criteria for priority toxic pollutants for the State of California, because the State had not complied fully with Section 303(c)(2)(B) of the CWA (65 FR 31682). The CTR establishes water quality criteria to protect human health and aquatic life. The *Policy for Implementing Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy), provides implementation measures for numeric criteria contained in the CTR. The State Implementation Policy, adopted by the State Water Board on March 2, 2000, and effective by May 22, 2000, applies to discharges of toxic pollutants into the inland surface waters, enclosed bays, and estuaries of California subject to regulation under the Porter-Cologne Act and the federal CWA. Such regulation may occur through the issuance of NPDES permits or other relevant regulatory approaches. The State Implementation Policy establishes: (1) implementation provisions for priority pollutant criteria promulgated by EPA through the NTR and through the CTR (40 CFR §131.38) (promulgated on May 18, 2000, and amended on February 13, 2001) and for priority pollutant objectives established by the Regional Water Boards in their water quality control plans; (2) monitoring requirements for 2,3,7,8-tetrachlorodibenzodioxin equivalents; and (3) chronic toxicity control provisions. In addition, this policy includes special provisions for certain types of discharges and factors that could affect the application of other provisions in the policy.

4A.2.2.5. California Safe Drinking Water Act

The California SDWA provides for the operation of public water systems and imposes various duties and responsibilities for the regulation and control of drinking water in California, including provisions of the federal SDWA. The State Water Board, as designated by EPA, administers and enforces requirements of the federal SDWA in California primarily through a permit system. Public water systems are required to monitor for regulated contaminants in their drinking water supply. California's drinking water standards (e.g., MCLs) are the same or more stringent than the federal standards and include additional contaminants not regulated by EPA. Like the federal MCLs, California's primary MCLs address health concerns, while secondary MCLs address aesthetics, such as taste and odor.

4A.2.2.6. Harmful Algal Blooms

The California Cyanobacteria and Harmful Algal Bloom (CCHAB) Network is a workgroup of the California Water Quality Monitoring Council and is comprised of multiple and varied

participating agencies including the State Water Board and Regional Water Boards, California Department of Public Health (CDPH), Office of Environmental Health Hazard and Assessment (OEHHA), CDFW, USEPA, and other federal, state, tribal, and local agencies, as well as academic researchers. The mission of the CCHAB Network is to develop and maintain a comprehensive, coordinated program to identify and address the causes and impacts of cyanobacteria and HABs in California. The CCHAB Network has developed guidance for responding to HABs including "trigger" levels for cyanotoxins. These voluntary guidelines or trigger levels for human and animal health apply to recreational waters and provide recommendations to post advisory signs based on the concentrations of three common cyanotoxins in the water column (Table 4A.2-2). The use of these trigger levels is recommended to promote consistency in public notification and risk communication throughout the state. The CCHAB Network has also developed benthic algal mat advisories and recommended signage for recreational waters (California Cyanobacteria and Harmful Algal Bloom Subcommittee 2020).

Table 4A.2-2. California Cyanobacteria and Harmful Algal Bloom Network Trigger Levels for Posting Planktonic[a] Advisory Signs

Criteria	No Advisory[b]	Caution (Tier 1)	Warning (Tier 2)	Danger (Tier 3)
Total Microcystins[c]	< 0.8 µg/L	0.8 µg/L	6 µg/L	20 µg/L
Cylindrospermopsin	< 1 µg/L	1 µg/L	4 µg/L	17 µg/L
Anatoxin-a	Non-detect[d]	Detected[d]	20 µg/L	90 µg/L
Cell Density of Potential Toxin Producers	< 4,000 cells/mL	4,000 cells/mL	_____	_____
Site-Specific Indicators	No site-specific indicators present	Discoloration, scum, algal mats, soupy or paint-like appearance. Suspected illness	_____	_____

Source: California Water Quality Monitoring Council 2021.
µg/L = microgram per liter.
[a] "Planktonic" harmful algal blooms refer to water column blooms.
[b] For de-posting, all criteria for no advisory must be met for a minimum of 2 weeks. General awareness sign may remain posted and healthy water habits are still recommended.
[c] Microcystins refers to the sum of all measured Microcystin congeners.
[c] Must use an analytical method that detects ≤ 1 µg/L anatoxin-a.

The CCHAB Network has also developed an online portal (California Harmful Algal Blooms Portal [CA HABs Portal]) and a HABs response plan. The CA HABs Portal is an informational resource for the public and also works as a tool to support coordination with statewide partners to address HABs. The CA HABs Portal includes a regularly updated HABs incident reports map, which provides data on voluntarily reported blooms in the state. The CCHAB Network HABs response plan outlines recommended actions for responding to suspected HABs in recreational inland waters (California Water Quality Monitoring Council 2021). The State Water Board's Division of Drinking Water recommends that for HABs in drinking water sources, California

water systems refer to the USEPA's health advisories (Table 4A.2-1) and associated materials for guidance in managing cyanotoxins (State Water Resources Control Board 2019).

4A.2.3. Local/Regional Policies and Regulations

Construction and changes in hydrology in Tehama, Glenn, Colusa, and Yolo Counties could affect water quality-related goals or objectives and policies contained in the general plans for these counties.

4A.2.3.1. Tehama County General Plan

The *Tehama County General Plan* (Tehama County 2009) addresses the importance of protecting and preserving water quality through polices and associated implementation measures in the Economic Development and Open Space and Conservation Elements of the general plan. The following goals, policies from the *Tehama County General Plan* may apply to the Project.

Open Space and Conservation Element

Goal OS-1. To ensure that water supplies of sufficient quality and quantity will be available to serve the needs of the Tehama County, now and into the future.

Policy OS-1.1. The County shall protect and conserve water resources and supply systems through sound watershed management.

Policy OS-1.3. Surface water quality and stream flows for water supply, water recharge, recreation, and aquatic ecosystem maintenance shall be protected while respecting adjudicated and appropriated (California recognized water rights) rights of use.

4A.2.3.2. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.7, *Hydrology and Water Quality*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* contains the following goals and policies from the 1993 *Glenn County General Plan* Public Safety Element related to water quality, which may apply to the Project because construction activities, water diversion from the Sacramento River, and water storage associated with the Project would occur in the county (Glenn County 2020:5-106,5-107).

Goal NRG-2. Protection and management of local water resources.

Goal PSG-6. Protection and enhancement of water quality.

Policy PSP-43. Support ongoing regulatory and compliance efforts at the federal and State level for the protection of water quality.

4A.2.3.3. Colusa County General Plan

The *Colusa County General Plan* Conservation Element (Colusa County 2012a) addresses the conservation, development, and utilization of natural resources, including water. The Public Services and Facilities Element of the *Colusa County General Plan* addresses a range of public and utilities services, including water and wastewater (sewer), that are integral to maintaining a high quality of life for Colusa County residents (Colusa County 2012b). The following goals, objectives, policies, and action from the *Colusa County General Plan* may apply to the Project.

Conservation Element

Goal CON-1: Conserve and protect Colusa County's ecosystem

Objective CON-1D: Protect surface water quality in the County's Lakes, Streams, Creeks and rivers

Policy CON 1-22. Maintain lakes, rivers, streams, creeks, and waterways in a natural state whenever possible. These water features may be actively managed and/or improved or modified in order to function as natural flood protection and storm water management features during storms and flooding events.

Policy CON 1-23. Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools through sound land use planning, community design, and site planning.

Policy CON 1-28. Support non-regulatory programs for protection of streams and riparian habitat, including education, technical assistance, tax incentives, and voluntary efforts to protect riparian resources.

Public Services and Facilities Element

Goal PSF-1: Ensure that adequate water and wastewater services are available to serve existing land uses and areas of planned growth, as identified in the General Plan Land Use Map

Policy PSF 1-3. Coordinate with water providers throughout the County to manage water supplies in a way that ensures adequate supplies for existing residents, agricultural uses, and businesses, and for projected growth, and avoids groundwater overdraft, water quality degradation and other adverse environmental impacts.

Objective PSF-1B: Provide safe, reliable, and environmentally sound wastewater services to existing County land uses and areas of planned growth

Policy PSF 1-22. For projects that will rely on on-site wastewater systems, applicants shall provide detailed plans demonstrating that the system will be adequate to serve the project and will meet or exceed all applicable water quality standards.

Policy PSF 1-27. Ensure future septic systems are designed and located to protect waterways and agricultural lands.

4A.2.3.4. County of Yolo 2030 Countywide General Plan

The Conservation and Open Space and the Public Facilities and Services Elements of the *2030 Countywide General Plan* contain goals and policies related to protecting surface water quality in Yolo County (County of Yolo 2009). The following goals and policies from the general plan may apply to the Project.

Conservation and Open Space Element

Goal CO-5. Ensure an abundant, safe, and sustainable water supply to support the needs of existing and future generations.

Policy CO-5.1. Coordinate with water purveyors and water users to manage supplies to avoid long-term overdraft, water quality degradation, land subsidence and other potential problems.

Policy CO-5.6. Improve and protect water quality for municipal, agricultural, and environmental uses.

Policy CO-5.8. Support efforts to reduce the accumulation of methyl mercury in fish tissue in Cache Creek and the Delta, as well as the consumption of fish with high levels of methyl mercury.

Policy CO-5.23. Support efforts to meet applicable water quality standards for all surface and groundwater resources.

Goal CO-9. Participate in State and regional efforts to establish governance, policy, and regulations for the Delta, to ensure the consideration of Yolo County's interests.

Policy CO-9.7. Protect water quality in the Sacramento River, its tributaries, and groundwater aquifers from excess salinity due to decreased fresh water inflow from Delta projects.

Public Facilities and Services Element

Goal PF-2. Provide efficient and sustainable stormwater management to reduce local flooding in existing and planned land uses.

Policy PF-2.1. Improve stormwater runoff quality and reduce impacts to groundwater and surface water resources.

Policy PF-2.4. Encourage sustainable practices for stormwater management that provide for groundwater recharge and/or improve the quality of runoff through biological filtering and environmental restoration.

4A.2.3.5. Yolo County Storm Water Management Program

The Yolo County Stormwater Management Program (SWMP) was developed by the County of Yolo to address stormwater quality within the County's jurisdiction. The SWMP is comprised of six elements: Public Education and Outreach, Public Involvement and Participation, Illicit Discharges, Construction Activities, New Development and Redevelopment, and County Operations. The program provides educational material to the public and businesses about stormwater quality; opportunities for public participation in the development and implementation of the SWMP; establishes a program to eliminate illicit discharges to the storm drain system; establishes a program to control pollutants associated with construction activities; establishes a program requiring permanent stormwater BMPs for major development and redevelopment projects; and implements improved control measures at County facilities and in field operations throughout the permitted urban area. The program was adopted by the Yolo County Board of

Supervisors in 1994 (Yolo County 2004). Some of the construction and stormwater BMPs are pertinent to construction of the Project and are included in Appendix 2D, *Best Management Practices*.

The County of Yolo Stormwater Ordinance (Ordinance 1352) is intended to implement and enforce the Yolo County's SWMP. The ordinance applies to all dischargers and potential dischargers located within or outside the unincorporated area of the county that discharge either directly or indirectly into the county's storm drain system, as well as to stormwater and non-stormwater discharges made directly to natural surface waters within the unincorporated area of Yolo County. The ordinance also applies to facilities subject to the Construction General Permit. The ordinance requires that all dischargers implement BMPs, "to the maximum extent practicable", to prevent or reduce pollutants from entering non-stormwater discharges and/or stormwater discharges. BMPs should include "schedules of activities, prohibition of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures…structural controls, treatment practices, source controls, training requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw materials storage."

4A.3 Chapter 7, Fluvial Geomorphology

4A.3.1. Federal Policies and Regulations

Federal policies and regulations applicable to fluvial geomorphology are discussed in Sections 4A.1 and 4A.8.

4A.3.2. State Policies and Regulations

State policies and regulations applicable to fluvial geomorphology are discussed in Sections 4A.1 and 4A.8. In addition, the Upper Sacramento River Fisheries and Riparian Habitat Management Plan is summarized below.

4A.3.2.1. Upper Sacramento River Fisheries and Riparian Habitat Management Plan

Senate Bill 1086 required a management plan for the Sacramento River and its tributaries that would protect, restore, and enhance both fisheries and riparian habitat. The law established an Advisory Council (the Sacramento River Conservation Area Advisory Council), which is composed of representatives of state and federal agencies, county supervisors, and representatives of landowner, water contractor, commercial and sport fisheries, and general wildlife and conservation interests. The committee developed the Sacramento River Conservation Area Forum Handbook in 2003 to guide an implementation program for riparian habitat management along the Sacramento River, and worked to ensure that the handbook addresses both the dynamic geomorphology of the upper Sacramento River as well as local agricultural issues.

4A.3.2.2. Local/Regional Policies and Regulations

Local and regional policies and regulations applicable to fluvial geomorphology are discussed in Sections 4A.1 and 4A.8.

In addition, Colusa County General Plan / County Ordinance requires drainage studies. Specifically, Colusa County General Plan Policies SA 1-29 and 1-30 require:

- SA 1-29: new development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities.
- SA 1-30: Ensure that construction activities will not result in adverse impacts to existing flood control and drainage structures.

4A.4 Chapter 8, Groundwater Resources

4A.4.1. Federal Policies and Regulations

Federal plans, policies, and regulations applicable to groundwater are discussed in Section 4A.2, *Surface Water Quality*. These regulations were not specifically promulgated to protect or administer regulations related to groundwater. However, their implementation may directly or indirectly affect groundwater conditions.

4A.4.2. State Policies and Regulations

4A.4.2.1. Porter-Cologne Water Quality Control Act

As discussed in Section 4A.2, the Porter-Cologne Water Quality Control Act is California's primary authority for regulating surface and groundwater quality (Wat. Code, § 13000 et seq.).

4A.4.2.2. Groundwater Management Act (Assembly Bill 3030)

Assembly Bill (AB) 3030 (1992) enables local water agencies to develop and implement groundwater management plans (GWMPs) to manage the groundwater resources in the jurisdiction of the participating parties. The State does not maintain a statewide program or mandate its implementation, but the legislation provides the guidelines and common framework through which groundwater management can be implemented. Groundwater management legislation was amended in 2002 with the passage of SB 1938, which provided additional groundwater management components supporting eligibility to obtain public funding for groundwater projects. In 2000, AB 3030 enabled the development of the Local Groundwater Assistance Grant Program which provides financial support to local public agencies that are developing groundwater management and monitoring programs in their area. In 2011, AB 359 modified the Groundwater Management Act by requiring public agencies to prepare and implement a GWMP with an additional requirement to identify groundwater recharge areas. The Tehama County and Yolo County Groundwater Management Plans were completed by the Tehama and Yolo Flood Control and Conservation Districts, respectively. Starting in 2015, in association with the Sustainable Groundwater Management Act (SGMA, described below), new GWMPs cannot be adopted in medium and high priority basins, which must now develop groundwater sustainability plans (GSPs).

Area of Origin Statute Limitations (California Water Code 1220)

California Water Code 1220 prohibits the pumping of groundwater "for export within the combined Sacramento and Delta-Central Sierra Basins…unless the pumping is in compliance with a groundwater management plan that is adopted by [county] ordinance." The statute enables, but does not require, the board of supervisors of any county within any part of the combined Sacramento and Delta-Central Sierra Basin to adopt GWMPs.

California Statewide Groundwater Elevation Monitoring Program (SB X7-6)

SB X7-6, enacted in November 2009, mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California's groundwater basins. This amendment to the California Water Code requires the collaboration between local monitoring entities and DWR to collect groundwater elevation data. To achieve

this goal, DWR developed the California Statewide Groundwater Elevation Monitoring (CASGEM) Program to establish a permanent, locally managed program of regular and systematic monitoring in all of the State's alluvial groundwater basins. DWR is required by the law to establish a priority schedule for monitoring groundwater basins and to report to the State Legislature on the findings from these investigations (California Water Code Section 10920 et seq.). The law requires that local agencies monitor and report groundwater elevation data for their groundwater basins. Monitoring entities can submit groundwater elevation data via the online CASGEM system.

Sustainable Groundwater Management Act

In September 2014, the SGMA (Wat. Code § 10720 et seq.) was enacted and took effect on January 1, 2015. SGMA establishes a structure for locally managing California's groundwater sustainably. SGMA requires the formation Groundwater Sustainability Agencies (GSAs) that will create GSPs for groundwater basins or subbasins that DWR designates as medium or high priority based upon groundwater conditions identified using the CASGEM results by 2022. Sustainable groundwater operations must be achieved within 20 years following completion of the GSPs. Both the Colusa and Yolo groundwater subbasins are designated as high priority; Red Bluff subbasin is designated as a medium priority; and Funks Creek and Antelope Creek basins are designated as low priorities.

SGMA defines sustainable groundwater management as "the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results." Undesirable results are defined as any of the following effects:

- Chronic lowering of groundwater levels (not including overdraft during a drought if a basin is otherwise managed).
- Significant and unreasonable reduction of groundwater storage.
- Significant and unreasonable seawater intrusion.
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.
- Significant and unreasonable land subsidence that substantially interferes with surface land uses.
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

4A.4.3. Local/Regional Policies and Regulations

Construction and changes in hydrology in Tehama, Glenn, Colusa, and Yolo Counties could affect groundwater-related goals and policies contained in the general plans for these counties. These goals focus on the need for protecting groundwater supply and several may be relevant to some potential small project elements such as use of on-site sewage disposal facilities or moving groundwater out of a county for construction purposes.

4A.4.3.1. Tehama County General Plan Update, 2009-2029

The *Tehama County General Plan Update, 2009-2029,* Section 2.0, *Land Use,* and Section 6.0, *Open Space and Conservation,* contain the following goals, policies, and measures that are related to groundwater quality and that may apply to the Project (Tehama County 2009:71, 135, 137).

Land Use

Goal LU-10. To promote development patterns that recognize the need to preserve water resources, consistent with other stated goals.

Policy LU-10.1. The County shall actively promote the implementation of the County's Groundwater Management Plan.

Implementation Measure LU-10.1a. Implement the recommended management and monitoring actions of the GWMP and identify and quantify the water production, water quality, and groundwater recharge activities occurring within the County.

Open Space and Conservation

Goal OS-1.1. To ensure that water supplies of sufficient quality and quantity will be available to serve the needs of the Tehama County, now and into the future.

Policy OS-1.1. The County shall protect and conserve water resources and supply systems through sound watershed management.

Implementation Measure OS-1.1a. Maintain local water ordinances to protect the integrity of water supplies in Tehama County.

Implementation Measure OS-1.1b. Consider and evaluate the need for a Water Conservation Ordinance.

Implementation Measure OS-1.1c. Ensure that projects adhere to the regulations of the State of California Reclamation Board, California Department of Fish and Game, Regional Water Quality Control Board, and U.S. Government.

Implementation Measure OS-1.1d. Work with local water providers and water conservation agencies to create an incentive program that encourages retrofitting existing development with low-flow water fixtures.

Implementation Measure OS-1.1e. Continue to maintain and implement the Adopted AB3030 Groundwater Management Plan to protect and preserve water supplies and water quality in Tehama County.

Implementation Measure OS-1.1f. Encourage continued involvement in Local, Regional, and Statewide Water Resource coordination, cooperation and collaboration to protect and preserve water supplies and water quality in Tehama County.

Implementation Measure OS-1.1g. Encourage water supply and wastewater plans to be developed in a regional master plan basis where appropriate.

Implementation Measure OS-1.1h. The export of groundwater from Tehama County shall be discouraged.

Policy OS-1.4: The County shall encourage development of land for the purposes of improving groundwater recharge.

Policy OS-1.5: The County shall ensure the high quality of groundwater by emphasizing programs that minimize erosion and prevent the intrusion of municipal and agricultural wastes into water supplies.

Implementation Measure OS-1.5a. Natural Resource Lands land use subcategories shall be used to indicate areas essential to the recharge of groundwater and to afford protection from stream bank erosion.

Implementation Measure OS-1.5b. The Regional Water Quality Control Board shall monitor irrigation runoff to prevent infiltration of herbicides/fertilizers/pesticides and municipal wastes into streams, rivers of the groundwater basin. The County shall also encourage irrigation water recycling.

4A.4.3.2. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 3.1, *Water Services*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* contains the following goals and policies from the *1993 Glenn County General Plan* Natural Resources Element and Public Safety Element that are related to water quality and which may apply to the Project (Glenn County 2020:3-5,3-6).

Natural Resources Element

Goal NRG-1. Preservation of agricultural land

Goal NRG-2. Protection and management of local water resources

Policy NRP-23: Oppose the exportation of groundwater resources outside the county.

Policy NRP-25: Protect groundwater recharge areas in the county from overcovering and contamination by carefully regulating the type of development which occurs within these areas.

Policy NRP-26. Discourage onsite sewage disposal systems in areas with high groundwater recharge potential and eliminate existing concentrations of septic tanks in such areas through construction of community sewage treatment and disposal systems.

Policy NRP-27: Prohibit uses with the potential to accidentally discharge harmful groundwater pollutants in areas of high groundwater recharge, unless appropriate mitigation measures have been incorporated into the operation of such uses.

Policy NRP-28: Identify and monitor potential sources of groundwater pollution, including harmful agricultural practices.

Policy NRP-29: Limit structural coverage and impervious surfaces within areas of high groundwater recharge through application of zoning that recognizes the importance of this feature.

Policy NRP-30: Protect important watershed areas from poor development practices and potential degradation.

Policy NRP-33: Carefully study the potential impact that any future reservoir construction may have on groundwater recharge areas in Glenn County.

Policy NRP-38: Recognize the impacts of gravel extraction on groundwater quantity and quality and encourage extraction methods that preserve and enhance groundwater resources.

Public Safety Element

PSG-6. Protection and enhancement of water quality.

Policy PSP-47: Support the preparation of area groundwater studies to ensure the protection of groundwater and to ensure that the holding capacity of the area is not exceeded.

4A.4.3.3. Colusa County General Plan

The Colusa County General Plan Conservation Element and Public Service and Facilities Element (Colusa County 2012a, 2012b) address the conservation, development, and utilization of natural resources, including water, as well as water supply reliability. The following goals, objectives policies and corresponding action from these general plan elements may apply to the Project.

Conservation Element

Goal CON-1: Conserve and protect Colusa County's ecosystem

Objective CON-1E: Ensure a sustainable and long-term supply of safe and reliable water to support the needs of county residents, businesses, and agricultural operations.

Policy CON 1-35: Encourage the use of water conservation measures, including low flow plumbing; reclaimed wastewater for non-potable uses; dual plumbing that allows grey water from showers, sinks, and washers to be reused for landscape irrigation in new developments; and native and drought-tolerant landscaping.

Action CON 1-H: Continue to implement the policies, actions, and Basin Management Objectives (BMOs) contained in the Colusa County Groundwater Management Plan.

Public Services and Facilities Element

Goal PSF-1: Ensure that adequate water and wastewater services are available to serve existing land uses and areas of planned growth, as identified in the General Plan Land Use Map

Objective PSF-1A: Provide safe, reliable, and environmentally sound water services to existing county land uses and areas of planned growth.

Policy PSF 1-3: Coordinate with water providers throughout the County to manage water supplies in a way that ensures adequate supplies for existing residents, agricultural uses, and businesses, and for projected growth, and avoids groundwater overdraft, water quality degradation and other adverse environmental impacts.

4A.4.3.4. County of Yolo 2030 Countywide General Plan

The Conservation and Open Space Element, Public Facilities and Services Element, and the Agriculture and Economic Development Element of the *2030 Countywide General Plan* contain policies related to protecting groundwater in Yolo County (County of Yolo 2009). The following goals and policies from the general plan may apply to the Project.

Conservation and Open Space Element

Goal CO-5. Water Resources. Ensure an abundant, safe, and sustainable water supply to support the needs of existing and future generations.

Policy CO-5.14. Require proposals to convert land within or near areas identified as having a moderate to very high recharge capability to uses other than agriculture, open space, or habitat to demonstrate that groundwater recharge will not be significantly diminished.

Policy CO-5.23. Support efforts to meet applicable water quality standards for all surface and groundwater resources.

Public Facilities and Services Element

Goal PF-1: Wastewater Management. Provide efficient and sustainable solutions for wastewater collection, treatment, and disposal.

Policy PF-1.3. Ensure that nitrates and other pollutants of concern entering the groundwater from septic disposal systems will not significantly impair groundwater quality.

Goal PF-2. Stormwater Management. Provide efficient and sustainable stormwater management to reduce local flooding in existing and planned land uses.

Policy PF-2.1. Improve stormwater runoff quality and reduce impacts to groundwater and surface water resources.

Policy PF-2.4. Encourage sustainable practices for stormwater management that provide for groundwater recharge and/or improve the quality of runoff through biological filtering and environmental restoration.

Agriculture and Economic Development Element

Goal AG-2. Natural Resources for Agriculture. Protect the natural resources needed to ensure that agriculture remains an essential part of Yolo County's future.

Policy AG-2.1. Protect areas identified as significantly contributing to groundwater recharge from uses that would reduce their ability to recharge or would threaten the quality of the underlying aquifers.

4A.4.3.5. Glenn County Code Title 20

The purpose and intent of Glenn County Code Title 20 (Water), Chapter 20.03, is to establish the Groundwater Coordinated Resource Management Plan, an effective policy regarding groundwater and coordinated resource management that will assure that the overall health, welfare, safety, economy, and environment of Glenn County is not adversely affected by excessive groundwater use. The code provides for groundwater BMOs and a monitoring network to detect changes in groundwater level, quality, and land subsidence. This provision also requires the Glenn County plan to define acceptable ranges of groundwater levels.

Pursuant to Chapter 20.08 of Glenn County Code Title 20, it is unlawful to drill any type of well for the extraction of groundwater without first obtaining a permit. Section 20.02.060 states that water well standards identified by the State of California (Department of Water Resources Bulletin 74-81 and 74-90) are the minimum standards to which well drilling and abandonment in the unincorporated areas of Glenn County should adhere.

4A.4.3.6. Colusa County Code

Colusa County Code Chapter 35 (Well Standards) provides for the protection of groundwater quality in the county by identifying minimum requirements for the construction, reconstruction, repair, and destruction of water wells, cathodic protection wells, and monitoring wells. Pursuant to Colusa County Code Chapter 35, a permit is required (unless exempted by law) for persons wishing to “dig, bore, drill, deepen, modify, repair, or destroy” a water well, cathodic protection well, observation well, monitoring well or any other excavation that may intersect groundwater.

Pursuant to Colusa County Code Chapter 43 (Groundwater Management), a permit is required for groundwater extraction if the groundwater is to be conveyed to users located outside of Colusa County. County Code Chapter 43 covers all groundwater transfers, whether direct, by groundwater substitution, or any other means.

4A.5 Chapter 9, Vegetation and Wetland Resources

4A.5.1. Federal Policies and Regulations

4A.5.1.1. Endangered Species Act

The federal Endangered Species Act (ESA) of 1973 and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems on which they depend. The U.S. Fish and Wildlife Service (USFWS) oversees the ESA with regard to federally listed plant species.

Section 7

Section 7 of ESA mandates that all federal agencies consult with USFWS if they determine that a proposed action may affect a listed species or its habitat. The purpose of consultation with USFWS is to ensure that the federal agencies' actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species.

Section 9

Section 9 of ESA describes activities that are prohibited. The ESA specifically prohibits the take of any fish or wildlife species listed as endangered; however, Section 9 also prohibits the unlawful removal and reduction to possession or malicious damage or destruction of any endangered plant from federal land. Section 9 prohibits acts to remove, cut, dig up, damage, or destroy an endangered plant species in nonfederal areas in knowing violation of any state law or in the course of criminal trespass. Candidate species and species that are proposed or under petition for listing receive no protection under Section 9.

Critical Habitat

Critical habitat refers to areas designated by USFWS for the conservation of species listed as threatened or endangered under ESA. When a species is proposed for listing under ESA, USFWS considers whether there are certain areas essential to the conservation of the species.

Critical habitat is defined in Section 3 of ESA as follows.

1. The specific areas within the geographical area occupied by a species at the time it is listed in accordance with ESA, on which are found those physical or biological features that:
    a. are essential to the conservation of the species, and
    b. may require special management considerations or protection; and
2. Specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Any federal action (permit, license, or funding) in critical habitat requires that federal agency to consult with USFWS and/or National Marine Fisheries Service (NMFS) where the action has potential to adversely modify the habitat for the species.

Because the Project would affect federally listed plant species, Reclamation would comply with the ESA by consulting with USFWS under Section 7 and receiving a biological opinion (BiOp) from USFWS.

4A.5.1.2. Clean Water Act

The federal CWA regulates discharges of pollutants to waters of the United States and serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands.

The CWA empowers USEPA to set national water quality standards and effluent limitations and includes programs addressing both point-source and nonpoint-source pollution. Point-source pollution is pollution that originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Nonpoint-source pollution originates over a broader area and includes urban contaminants in stormwater runoff and sediment loading from upstream areas. CWA operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

Permits for Fill Placement in Waters and Wetlands (Section 404)

Under CWA Section 404, USACE regulates the discharge of dredged and fill materials into waters of the United States. Waters of the United States subject to jurisdiction under CWA Section 404 are defined in USACE 1986 regulations at 33 C.F.R. Section 328.3 and in USEPA regulations at 40 C.F.R. Section 230.3, unless otherwise modified.

Unless an activity is exempt under Section 404(f) of the CWA, applicants must obtain a permit from USACE for all discharges of dredged or fill material into waters of the United States, including wetlands, before proceeding with a proposed activity.

Department of the Army permits issued by USACE are issued under various forms of authorization. These include individual permits that are issued following a review of individual applications and general permits that authorize a category or categories of activities in specific geographical regions or nationwide (33 C.F.R. § 320.1(c)). General permits are Department of the Army authorizations issued on a nationwide or regional basis for a category or categories of activities when:

- those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or
- the general permit would result in avoiding unnecessary duplication of the regulatory control exercised by another federal, state, or local agency provided it has been determined that the environmental consequences of the action are individually and cumulatively minimal. (33 C.F.R. § 323.2(h)).

General permits issued by USACE include regional and programmatic general permits, issued by a division or district engineer after compliance with the procedures of 33 C.F.R. Part 325, and nationwide permits, issued by regulation (33 C.F.R. § 330) for certain specified activities

nationwide. If certain conditions are met, the specified activities can take place without the need for an individual or regional permit (33 C.F.R. § 325.5(c)(2)).

Compliance with CWA Section 404 requires compliance with several other environmental laws and regulations. USACE cannot issue an individual permit or verify the use of a general permit until the requirements of National Environmental Policy Act (NEPA), ESA, and the National Historic Preservation Act (see Section 3.5, *Cultural Resources*) have been met. In addition, USACE cannot issue or verify any permit that may result in a discharge of a pollutant into waters of the United States until a water quality certification has been issued pursuant to CWA Section 401.

Because the Project would discharge fill into waters of the United States, the Authority would comply with the CWA Section 404 by obtaining a Section 404 permit from USACE.

Permits for Stormwater Discharge (Section 402)

As described in Section 4A.2, *Chapter 6, Surface Water Quality*, Section 402 of CWA regulates construction-related stormwater discharges to surface waters through the NPDES program, administered by USEPA. In California, the State Water Board is authorized by USEPA to oversee the NPDES program through the Regional Water Boards (see the related discussion under Porter-Cologne Act). The proposed action is within the jurisdiction of the Central Valley Regional Water Board.

NPDES permits are required for construction projects that disturb more than 1 acre of land. The NPDES permitting process requires the applicant to file a public notice of intent to discharge stormwater and to prepare and implement a stormwater pollution prevention plan. The stormwater pollution prevention plan includes a site map and a description of proposed construction activities. In addition, it describes the BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants (e.g., petroleum products, solvents, paints, cement) that could contaminate nearby water resources. Permittees are required to conduct annual monitoring and reporting to ensure that BMPs are correctly implemented and effective in controlling the discharge of stormwater-related pollutants.

Because the Project would disturb more than 1 acre of land, the Authority would comply with the CWA Section 402 by obtaining a NPDES permit from the Regional Water Board.

Water Quality Certification (Section 401)

Under CWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must obtain certification from the state in which the discharge would originate, or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate. Therefore, all projects that have a federal component and may affect state water quality (including projects that require federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401.

Because the Project would discharge fill into waters of the United States, the Authority would comply with the CWA Section 401 by obtaining a Section 401 permit from the Regional Water Board in coordination with the Section 404 permit from USACE.

4A.5.1.3. Executive Order 11990, Protection of Wetlands

EO 11990, signed May 24, 1977, directs all federal agencies to refrain from assisting in or giving financial support to projects that encroach on publicly or privately owned wetlands. It further requires that federal agencies support a policy to minimize the destruction, loss, or degradation of wetlands. Such a project that encroaches on wetlands may not be undertaken unless the agency has determined that: (1) there are no practicable alternatives to such construction, (2) the project includes all practicable measures to minimize harm to wetlands that would be affected by the project, and (3) the impact will be minor.

Because the Project would affect wetlands, the Authority would comply with EO 11990 by coordinating with USACE to implement the least damaging project alternative.

4A.5.1.4. Executive Order 13112, Invasive Species

EO 13112, signed February 3, 1999, directs all federal agencies to prevent and control the introduction of invasive species in a cost-effective and environmentally sound manner. The EO established the National Invasive Species Council, which is composed of federal agencies and departments, and a supporting Invasive Species Advisory Committee composed of state, local, and private entities. In 2016, the National Invasive Species Council released an updated national invasive species management plan (National Invasive Species Council 2016) that recommends objectives and measures to implement the EO and prevent the introduction and spread of invasive species. The EO requires consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Because the Project would potentially introduce and/or spread invasive species as part of construction activities, the Authority would comply with the EO 13112 by implementing measures to prevent introduction and spread of invasive species during construction.

4A.5.1.5. No Net Loss of Wetlands Policy

The national policy of "no-net loss of wetlands" was established in 1989 to replace each newly impacted wetland with a replacement wetland of the same size and with similar wetland functions and values. Because the Project would affect wetlands, the Authority would comply with the policy by implementing compensatory mitigation for wetland loss in coordination with USACE and Regional Water Board.

4A.5.2. State Policies and Regulations

4A.5.2.1. California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code §§ 2050–2116) states that all native species or subspecies of a fish, amphibian, reptile, bird, mammal, or plant and their habitats that are threatened with extinction and those experiencing a significant decline that, if not halted, would lead to a threatened or endangered designation will be protected or preserved.

Under Section 2081 of the California Fish and Game Code, a permit CDFW is required for projects that could result in take of a species that is state listed as threatened or endangered. *Take*

is defined more narrowly under CESA than ESA. Under CESA, take of a species means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill (California Fish and Game Code § 86). The state definition of take does not include harm or harass, as the definition of take under ESA does. As a result, the threshold for take under CESA is higher than that under ESA. For example, habitat modification is not necessarily considered take under CESA.

Because the Project would affect state-listed plant species, the Authority would comply with the CESA by obtaining an incidental take permit from CDFW.

4A.5.2.2. California Native Plant Protection Act

California Fish and Game Code Sections 1900–1913 codify the Native Plant Protection Act of 1977 (NPPA), which is intended to preserve, protect, and enhance endangered or rare native plants in the state. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it exists in such small numbers throughout its range that it may become endangered if its present environment worsens. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and the NPPA protected endangered and rare plants from take. According to CDFW, a CESA Section 2081 permit for incidental take of listed threatened and endangered plants from all activities is required, except for activities specifically authorized by the NPPA. Because rare plants are not included under CESA, mitigation measures for impacts on rare plants are specified in a formal agreement between CDFW and a project proponent.

State-listed rare plants are known in the project vicinity. Therefore, the Authority would comply with the NPPA by implementing mitigation measures specified by CDFW.

4A.5.2.3. California Wetlands Conservation Policy

The goals of the California Wetlands Conservation Policy, adopted in 1993 (EO W-59-93), are "to ensure no overall net loss, and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California, in a manner that fosters creativity, stewardship, and respect for private property"; to reduce procedural complexity in the administration of state and federal wetlands conservation programs; and to make restoration, landowner incentive programs, and cooperative planning efforts the primary focus of wetlands conservation.

Because the Project would affect wetlands, the Authority would comply with the policy by implementing compensatory mitigation for wetland loss in coordination with USACE and Regional Water Board.

4A.5.2.4. Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Act definition, waters of the state are "any surface water or groundwater, including saline waters, within the boundaries of the state." Although all waters of the United States that are within the borders of California are also waters of the state, the reverse is not true. Therefore, California retains authority to regulate discharges of waste into any waters of the state, regardless of whether USACE has concurrent jurisdiction under CWA Section 404,

and defines discharges to receiving waters more broadly than the CWA does. Revised definitions for state wetlands and procedures for permitting impacts on these wetlands were recently adopted by the State Water Board (State Water Resources Control Board 2019b).

Waters of the state fall under the jurisdiction of the nine Regional Water Boards. The Project area is under the jurisdiction of the Central Valley Regional Water Board, as stated in Section 4A.5.1. Under the Porter-Cologne Act, each Regional Water Board must prepare and periodically update water quality control basin plans. The basin plan that is in place for the Central Valley Water Board is the Sacramento River Basin and San Joaquin River Basin Water Quality Control Plan. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution. California Water Code Section 13260 requires any person discharging waste, or proposing to discharge waste, in any region that could affect the waters of the state to file a report of discharge (an application for waste discharge requirements) with the applicable Regional Water Board. California Water Code Section 13050 authorizes the State Water Board and the affiliated Regional Water Board to regulate biological pollutants. Aquatic invasive plants discharged to receiving waters are an example of this kind of pollutant. Construction and restoration activities associated with the Project that may discharge wastes into the waters of the state must meet the discharge control requirements of the Porter-Cologne Act.

Because the Project would discharge fill into waters of the state, the Authority would comply with the Porter-Cologne Act by obtaining waste discharge requirements for waters of the state and/or a Section 404 permit from USACE for federally regulated waters.

4A.5.2.5. California Fish and Game Code (Section 1600 et seq., Invasive and Noxious Plant Species)

California Fish and Game Code, Section 1600 (Lake and Streambed Alteration)

Sections 1600–1603 of the California Fish and Game Code state that it is unlawful for any person or agency to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources, or to use any material from the streambeds, without first notifying CDFW. A lake and streambed alteration agreement (LSAA) must be obtained if effects are expected to occur. A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports wildlife, fish, or other aquatic life. This definition includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. CDFW's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife.

Because the Project would affect streams, the Authority would comply with Section 1602 by obtaining an LSAA from CDFW.

4A.5.2.6. Oak Woodlands Conservation Act

Senate Bill 1334, the Oak Woodlands Conservation Act, was enacted by the California Legislature in 2004 to add Section 21083.4 to the Public Resources Code (PRC) regarding oak woodlands conservation. Section 21083.4(b) requires that a county make a determination whether a project within its jurisdiction may result in conversion of oak woodlands that would

have a significant effect on the environment. If a county determines that there may be a significant effect on oak woodlands, the county must require one or more of four oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of woodlands. These alternatives are conserving oak woodlands through conservation easements, planting an appropriate number of trees and maintaining them, contributing funds to the Oak Woodlands Conservation Fund, or other mitigation measures developed by the county. Exemptions from requirements of PRC Section 21083.4(b) include projects undertaken pursuant to an approved Natural Communities Conservation Plan (NCCP) or approved subarea plan within an approved NCCP that includes oaks as a covered species or that conserves oak habitat through natural community conservation preserve designation and implementation and mitigation measures that are consistent with PRC Section 21083.4(b). The Project would not fall under these exemptions, therefore, the Conservation Act would apply to Project mitigation for loss of oak woodlands.

4A.5.3. Local/Regional Policies and Regulations

4A.5.3.1. Yolo County Habitat Conservation Plan/Natural Community Conservation Plan

The Yolo Habitat Conservancy, consisting of the County of Yolo and the cities of Davis, West Sacramento, Winters, and Woodland, finalized the Yolo Habitat Conservation Plan (HCP)/NCCP in 2018. The plan was adopted, and implementation began in January 2019.

The Yolo HCP/NCCP provides ESA permits and associated mitigation for infrastructure and development activities that require a discretionary permit from Yolo County (Yolo Habitat Conservancy 2020). The Project is not covered by the Yolo HCP/NCCP; however, avoidance and minimization measures proposed for the Project would not conflict with the Yolo HCP/NCCP.

4A.5.3.2. Yolo Bypass Wildlife Area Land Management Plan

The Yolo Bypass Wildlife Area consists of approximately 16,770 acres of managed wildlife habitat and agricultural land within the Yolo Bypass. The bypass conveys seasonal high flows from the Sacramento River to help control river stage and protect the cities of Sacramento, West Sacramento, and Davis, as well as other local communities, farms, and lands from flooding. Substantial environmental, social, and economic benefits are provided by the Yolo Bypass, benefiting the people of the State of California (California Department of Fish and Game and Yolo Basin Foundation 2008).

The stated purposes of the Yolo Bypass Wildlife Area Land Management Plan are to (1) guide the management of habitats, species, appropriate public use, and programs to achieve CDFW's mission; (2) direct an ecosystem approach to managing the Yolo Bypass Wildlife Area; (3) identify and guide appropriate, compatible, public-use opportunities within the Yolo Bypass Wildlife Area; (4) direct the management of the Yolo Bypass Wildlife Area in a manner that promotes cooperative relationships with adjoining private-property owners; (5) establish a descriptive inventory of the sites and the wildlife and plant resources that occur in the Yolo Bypass Wildlife Area; (6) provide an overview of the Yolo Bypass Wildlife Area's operation, maintenance, and personnel requirements to implement management goals, and serve as a planning aid for preparation of the annual budget for the Bay-Delta Region (Region 3); and (7)

present the environmental documentation necessary for compliance with state and federal statutes and regulations, provide a description of potential and actual environmental impacts that may occur during plan management, and identify mitigation measures to avoid or lessen these impacts.

The Project is expected to release water that would enter the Yolo Bypass Wildlife Area.

4A.5.3.3. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.2, Biological and Natural Resources, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* contains goals and policies from the 1993 *Glenn County General Plan* Natural Resources Element for the preservation and management of biological resources (Glenn County 2020:5-16,5-17). The following Natural Resources Policies address the conservation and protection of sensitive natural communities, special-status plants, special-status plant habitats, and wetland and stream resources. These policies were considered when assessing the vegetation and wetland resources that may be affected by the Project.

Policy NRP-39. Approach the retention and enhancement of important habitat by preserving areas or systems which will benefit a variety of species or resources rather than focusing on individual species, resources or properties.

Policy NRP-41. Preserve natural riparian habitat, especially along Stony Creek and the Sacramento River and Butte Creek.

Policy NRP-44. Recognize that retention of natural areas is important to maintaining adequate populations of wildlife which is, in turn, important to the local economy.

Policy NRP-46. Promote protection of native biological habitats of local importance such as riparian forests, foothill oak woodlands, Stony Gorge and Black Butte Reservoirs.

Policy NRP-49. Coordinate with State and federal agencies, private landowners, and private preservation/conservation groups in habitat preservation and protection of rare, endangered, threatened and special concern species, to ensure consistency in efforts and to encourage joint planning and development of areas to be preserved.

Policy NRP-50. Recognize the Sacramento River corridor, the Sacramento National Wildlife Refuge, migratory deer herd areas, naturally occurring wetlands, and stream courses such as Butte and Stony Creeks as areas of significant biological importance.

Policy NRP-52. Direct development away from naturally occurring wetlands to the extent such policy is consistent with the concept of compact and contiguous development.

4A.5.3.4. Colusa County General Plan

The Conservation Element of the *Colusa County General Plan* addresses the conservation, development, and utilization of natural resources, including wildlife. The following Conservation Objectives and Policies address the conservation and protection of sensitive natural communities, special-status plants, special-status plant habitats, and wetland and stream resources. These

policies were considered when assessing the vegetation and wetland resources that may be affected by the Project (Colusa County 2012:5-2–5-7).

Objective CON-1A: Protect, Enhance, and Manage the County's Ecosystems and Habitats

Policy CON 1-7: Conserve and enhance those biological communities that contribute to the County's rich biodiversity including, but not limited to, blue oak woodlands, annual grasslands, mixed chaparral, pine woodlands, wetlands, riparian areas, aquatic habitat, and agricultural lands.

Policy CON 1-8: Conserve existing native vegetation where possible and integrate existing native vegetation into new development if appropriate.

Policy CON 1-9: Avoid oak tree removal within oak woodland habitat to the greatest extent feasible through appropriate project design and building siting. If full avoidance is not possible, prioritize planting replacement trees on-site over off-site locations.

Policy CON 1-11: Protect wetlands and riparian habitat areas from encroachment by development to the greatest extent feasible.

Policy CON 1-12: Require new development to include maintained and managed setbacks and buffers along riparian corridors and adjacent to sensitive habitat.

Objective CON-1B: Protect Endangered, Threatened, and Special-Status Plant and Animal Species, their Habitats, and Other Sensitive Habitats

Policy CON 1-13: Sensitive habitats include oak woodlands, wetlands, vernal pools, riparian areas, wildlife and fish migration corridors, native plant nursery sites, waters of the U.S., and other habitats designated by state and federal agencies and laws.

Policy CON 1-14: Require any proposed project that may affect special-status species, their habitat, or other sensitive habitat to submit a biological resources evaluation as part of the development review process. Evaluations shall be carried out under the direction of the Colusa County Department of Planning and Building and consistent with applicable state and federal guidelines. Additional focused surveys shall be conducted during the appropriate season (e.g., nesting season, flowering season, etc.), if necessary.

Policy CON 1-15: Require that impacts to wetlands and riparian habitat protected by State or Federal regulations be avoided to the greatest extent feasible. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State and Federal requirements.

Policy CON 1-16: Require new development projects to incorporate measures that eliminate or avoid direct impacts to lakes, reservoirs, rivers, creeks, streams, wetlands, and other waterways to the greatest extent feasible. Measures may include, but are not limited to, appropriate setbacks or the implementation of best management practices approved by the Department of Planning and Building.

Policy CON 1-17: All discretionary public and private projects that identify special-status species or sensitive habitats in a biological resources evaluation shall avoid impacts to special-status species and their habitat to the maximum extent feasible. Where impacts cannot be avoided, projects shall include the implementation of site-specific or project-specific effective mitigation strategies developed by a qualified professional in consultation with state or federal resource agencies with jurisdiction (if applicable) including, but not limited to, the following strategies:

a. Preservation of habitat and connectivity of adequate size, quality, and configuration to support the special-status species. Connectivity shall be determined based on the specifics of the species' needs.
b. Project design measures, such as clustering of structures or locating project features to avoid known locations of special-status species and/or sensitive habitats.
c. Provision of supplemental planting and maintenance of grasses, shrubs, and trees of similar quality and quantity to provide adequate vegetation cover to enhance water quality, minimize sedimentation and soil transport, and provide adequate shelter and food for wildlife.
d. Protection for habitat and the known locations of special-status species through adequate buffering or other means.
e. Provision of replacement habitat of like quantity and quality on- or off-site for special-status species.
f. Enhancement of existing special-status species habitat values through restoration and replanting of native plant species.
g. Provision of temporary or permanent buffers of adequate size (based on the specifics of the special-status species) to avoid nest abandonment by nesting migratory birds and raptors associated with construction and site development activities.
h. Incorporation of the provisions or demonstration of compliance with applicable recovery plans for federally listed species.
i. Monitoring of construction activities by a qualified biologist to avoid impacts to on-site special status species.

Policy CON 1-18: Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the following measures shall be implemented:

a. Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;
b. Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection; and
c. Employees shall be trained by a qualified biologist to identify and avoid protected species and habitat.

Objective CON-1D: Protect Surface Water Quality in the County's Lakes, Stream, Creeks, and Rivers

Policy CON 1-22: Maintain lakes, rivers, streams, creeks, and waterways in a natural state whenever possible. These water features may be actively managed and/or improved or modified in order to function as natural flood protection and storm water management features during storms and flooding events.

Policy CON 1-23: Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools through sound land use planning, community design, and site planning.

Policy CON 1-24: If a proposed project may result in impacts to wetlands or other Waters of the U.S., require the project proponent to consult with the appropriate regulatory agency and implement all applicable permit requirements as a condition of project approval.

Policy CON 1-26: Discourage development within 50 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and perennial streams unless County-approved best management practices have been incorporated into the project's design in order to protect water quality and shoreline resources. Appropriate uses within the setback areas may include, but are not necessarily limited to:

a. Fire and flood protection areas;
b. Maintenance of riparian habitat;
c. Recreational trails;
d. Vegetated landscaping;
e. Boat launch facilities;
f. Levees;
g. Docks; and h. Irrigation pumps.

4A.5.3.5. County of Yolo 2030 Countywide General Plan

The Conservation and Open Space Element of the *2030 Countywide General Plan* focuses on balancing the management of natural and cultural resources in Yolo County. The following goals and policies address the conservation and protection of sensitive natural communities, special-status plants, special-status plant habitats, and wetland and stream resources. These policies were considered when assessing the vegetation and wetland resources that may be affected by the Project (County of Yolo 2009:CO-13, CO-15, CO-34–CO-39).

Goal CO-1: Natural Open Space. Provide a diverse, connected and accessible network of open space, to enhance natural resources and their appropriate use.

Policy CO-1.17: Out-of-county mitigation easements in Yolo County for the loss of open space, agriculture, or habitat in other jurisdictions, and flood easements in Yolo County are generally acceptable, provided the easements meet the following criteria:

- Prior notification to Yolo County;
- Consistency with the goals and policies of the Yolo County General Plan, particularly as related to planned growth, infrastructure, and agricultural districts;
- Secured water rights and infrastructure to economically maintain the proposed mitigation use;
- Requirements that existing agricultural operations continue to be farmed for commercial gain;
- Prohibitions on residential use;
- Mandatory wildlife friendly strategies and practices;
- Compensation to Yolo County for all lost direct and indirect revenue; and
- Accommodation of recreational uses, such as hunting, fishing, bird-watching, hiking, etc.

Where proposed easements meet the above criteria, no further approval is needed. Where one or more criteria are not met, discretionary approval is required.

Goal CO-2: Biological Resources. Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.

Policy CO-2.1: Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.

Policy CO-2.3: Preserve and enhance those biological communities that contribute to the county's rich biodiversity including blue oak and mixed oak woodlands, native grassland prairies, wetlands, riparian corridors, aquatic habitat, agricultural lands, heritage valley oak trees, remnant valley oak groves, and roadside tree rows.

Policy CO-2.9: Protect riparian corridors to maintain and balance wildlife values.

Policy CO-2.14: Ensure no net loss of oak woodlands, alkali sinks, rare soils, vernal pools or geological substrates that support rare endemic species, with the following exception. The limited loss of blue oak woodland and grasslands may be acceptable, where the fragmentation of large forests exceeding 10 acres is avoided, and where losses are mitigated.

Policy CO-2.16: Existing native vegetation shall be conserved where possible and integrated into new development if appropriate.

Policy CO-2.22: Prohibit development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and perennial streams. A larger setback is preferred. The setback will allow for fire and flood protection, a natural riparian corridor (or wetland vegetation), a planned recreational trail where applicable, and vegetated landscape for stormwater to pass through before it enters the water body. Recreational trails and other features established in the setback should be unpaved and located along the outside of the riparian

corridors whenever possible to minimize intrusions and maintain the integrity of the riparian habitat. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses, so long as these uses are sited and operated in a manner that minimizes impacts to aquatic and riparian features.

Policy CO-2.23: Support efforts to coordinate the removal of non-native, invasive vegetation within watersheds and replacement with native plants.

Policy CO-2.24: Promote floodplain management techniques that increase the area of naturally inundated floodplains and the frequency of inundated floodplain habitat, restore some natural flooding processes, river meanders, and widen riparian vegetation, where feasible.

Policy CO-2.31: Protect wetland ecosystems by minimizing erosion and pollution from grading, especially during grading and construction projects.

Policy CO-2.36: Habitat preserved as a part of any mitigation requirements shall be preserved in perpetuity through deed restrictions, conservation easement restrictions, or other method to ensure that the habitat remains protected. All habitat mitigation must have a secure, ongoing funding source for operation and maintenance.

Policy CO-2.37 Where applicable in riparian areas, ensure that required state and federal permits/approvals are secured prior to development of approved projects.

Policy CO-2.41: Require that impacts to species listed under the State or federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements.

4A.5.3.6. Tehama County General Plan

The Open Space and Conservation Element of the *Tehama County General Plan* addresses a number of resources, including wildlife resources and natural land resources. The following goals, policies, and implementation measures address the conservation and protection of sensitive natural communities, special-status plants, special-status plant habitats, and wetland and stream resources. These policies were considered when assessing the vegetation and wetland resources that may be affected by the Project (Tehama County 2009:6.0-10–6.0-11, 6-18, 6-20, 6.0-27).

Policy OS-1.3. Surface water quality and stream flows for water supply, water recharge, recreation, and aquatic ecosystem maintenance shall be protected while respecting adjudicated and appropriated (California recognized water rights) rights of use.

Implementation Measure OS-1.3g. Establish and require the use of best management practices to protect receiving waters from the adverse effects of construction activities, sediment and urban runoff.

GOAL OS-3. To protect, preserve, and enhance fish and wildlife species by maintaining healthy ecosystems.

Policy OS-3.1. The County shall preserve and protect environmentally sensitive and significant lands and water valuable for their plant and wildlife habitat, natural appearance, and character.

Implementation Measure OS-3.1a. Significant wildlife and wildlife habitats shall be protected through designations under the Natural Resource Conservation Land Use Classifications.

Implementation Measure OS-3.1f. Require that prior to any public or private development project in areas identified to contain or possibly contain special-status species – based on the Land Use Map, data provided in the Biological Resource section of the General Plan EIR or other suitable technical material available at the time – a biological survey be conducted by the project applicant to identify potentially occurring special-status species or their habitat using protocol acceptable to the regulatory agencies with authority over these species, or species presence shall be inferred. The results of the survey shall be documented in a Biological Resources Report.

Implementation Measure OS-3.1g. For each project in which unavoidable removal of wetland habitat or other waters of the U.S. will occur, the County shall require the project proponent to develop a compensation plan prior to construction.

Policy OS-3.3. The County shall support and coordinate County plans with inter-jurisdictional programs for Best Management Practices of riparian resources in the County.

Implementation Measure OS-3.3a. Work with state and federal agencies on County plans to any areas with riparian resources, identify and implement Best Management Practices for the plans.

Goal OS-9. To protect and enhance resource lands in the County for the continued benefit of agriculture, timber, grazing, recreation, wildlife habitat, and quality of life.

Policy OS-9.1. The County shall strive for the protection and enhancement of resource lands for the continued benefit of agriculture, timber, grazing, recreation, waterfowl, wildlife habitat, watersheds, and quality of life.

Implementation Measure OS-9.1a. Resource lands shall be protected by the provisions outlined in the Resource Lands, Habitat Resource, and Commercial Recreation land use designation of this General Plan.

4A.6 Chapter 10, Wildlife Resources

4A.6.1. Federal Policies and Regulations

4A.6.1.1. Endangered Species Act

The federal ESA of 1973 and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems on which they depend. The two agencies that oversee ESA are USFWS, with jurisdiction over plants, wildlife, and resident fish, and the National Oceanic and Atmospheric Administration NMFS, with jurisdiction over anadromous fish and marine fish and mammals.

Section 7

Section 7 of ESA mandates that all federal agencies consult with USFWS and NMFS if they determine that a proposed action may affect a listed species or its habitat. The purpose of consultation with USFWS and NMFS is to ensure that the federal agencies' actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species.

Section 9

Section 9 of ESA describes activities that are prohibited. The ESA specifically prohibits the take of any fish or wildlife species listed as endangered. *Take* is defined as the action of or attempt to hunt, harm, harass, pursue, shoot, wound, capture, kill, trap, or collect a species. Section 9 prohibitions also apply to threatened species unless a special rule has been defined regarding take at the time of listing. The term *harm* is further defined as:

> … an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering (50 C.F.R. § 17.3).

The term *harass* is further defined as:

> …an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering (50 C.F.R. § 17.3).

Under Section 9 of ESA, the take prohibition applies only to wildlife and fish species. However, Section 9 does prohibit the unlawful removal and reduction to possession or malicious damage or destruction of any endangered plant from federal land. Section 9 prohibits acts to remove, cut, dig up, damage, or destroy an endangered plant species in nonfederal areas in knowing violation of any state law or in the course of criminal trespass. Candidate species and species that are proposed or under petition for listing receive no protection under Section 9.

Critical Habitat

Critical habitat refers to areas designated by USFWS or NMFS for the conservation of species listed as threatened or endangered under ESA. When a species is proposed for listing under ESA, USFWS or NMFS considers whether there are certain areas essential to the conservation of the species.

Critical habitat is defined in Section 3 of ESA as follows.

1. The specific areas within the geographical area occupied by a species at the time it is listed in accordance with ESA, on which are found those physical or biological features that:
   a. are essential to the conservation of the species, and
   b. may require special management considerations or protection; and
2. Specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Any federal action (permit, license, or funding) in critical habitat requires that federal agency to consult with USFWS and/or NMFS where the action has potential to adversely modify the habitat for the species.

Because the Project would affect federally listed wildlife species, Reclamation would comply with the ESA by consulting with USFWS under Section 7 and receiving a BiOp from USFWS.

4A.6.1.2. Bald and Golden Eagle Protection Act

The Eagle Act (16 U.S.C. § 668), signed into law in 1940 and expanded in 1962 to include golden eagle, prohibits take and disturbance of individuals and nests. *Take* under the Eagle Act includes any actions to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb eagles. *Disturb* is further defined in 50 C.F.R. Part 22.3 as follows.

> to agitate or bother a bald (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*) to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

Prior to 2009, permits for purposeful take of birds or body parts were limited to scientific (50 C.F.R. § 22.21), religious (50 C.F.R. § 22.22), or falconry (50 C.F.R. § 22.24) pursuits; eagles causing serious injury to livestock or other wildlife (50 C.F.R. § 22.23); and golden eagle nests that interfere with resource development or recovery operations (50 C.F.R. §§ 22.21–25). In 2009, USFWS issued the 2009 Final Rule on new permit regulations that allows take "for the protection of…other interests in any particular locality" and where the take is "associated with and not the purpose of an otherwise lawful activity…" (74 FR 46836–46879). The 2009 Final Rule authorized programmatic take (take that is recurring and not in a specific, identifiable timeframe or location) of eagles only if avoidance measures have been implemented to the maximum extent achievable such that take was no longer avoidable.

In 2016, USFWS issued revisions to the Final Rule pertaining to incidental take and take of eagle nests. The Final Rule changed the programmatic take standard to a new standard authorizing "incidental take" if all "practicable" measures to reduce impacts on eagles are implemented. An eagle incidental take permit under the 2016 Revisions to the Final Rule (50 C.F.R. § 22) is available for activities that may disturb or otherwise take eagles on an ongoing basis, such as operational activities. The eagle incidental take permit under the 2009 Final Rule was valid up to

5 years. In 2012, USFWS proposed to extend the maximum term for eagle incidental take permits from 5 to 30 years (77 FR 22267–22278). In 2013, USFWS issued a Final Rule to extend the maximum term for eagle incidental take permits to 30 years, subject to a recurring 5-year review process throughout the life of the permit. Although this rule was challenged in 2015, the final regulations under the 2016 Revisions to the Final Rule also include a maximum permit term of 30 years, subject to a recurring 5-year review process throughout the life of the permit (81 FR 91494–91554).

The Project has the potential to result in take of bald and/or golden eagle and may require an eagle incidental take permit.

4A.6.1.3. Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703–712) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It protects migratory birds, their occupied nests, and their eggs (16 U.S.C. § 703; 50 C.F.R. § 21; 50 C.F.R. § 10). Most actions that result in *take*—defined as hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof—are prohibited under the MBTA. Examples of permitted actions that do not violate the MBTA are the possession of a hunting license to pursue specific game birds, legitimate research activities, display in zoological gardens, bird-banding, and other similar activities. USFWS is responsible for overseeing compliance with the MBTA.

On December 22, 2017, the U.S. Department of the Interior Office of the Solicitor issued a memorandum: M-37050, The Migratory Bird Treaty Act Does Not Prohibit Incidental Take (referred to as the Jorjani Opinion). The Jorjani Opinion withdrew and replaced Solicitor's Opinion M-37041—Incidental Take Prohibited Under the Migratory Bird Treaty Act (referred to as the Tompkins Opinion), issued January 10, 2017. The Jorjani Opinion concludes that "the MBTA's prohibitions on pursuing, hunting, taking, capturing, killing, or attempting to do the same only criminalize affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs." USFWS issued guidance on the Jorjani Opinion on April 11, 2018, to clarify what constitutes prohibited take and what actions must be taken when conducting lawful intentional take. The guidance interprets the Jorjani Opinion to mean that the MBTA's prohibitions on take apply when the purpose of an action is to take migratory birds, their eggs, or their nests. The take of birds, eggs, or nests that results from an activity, the purpose of which is not to take birds, eggs, or nests, is not prohibited by the MBTA. In May and September 2018, three lawsuits were filed challenging the Jorjani Opinion's interpretation of the MBTA. On August 11, 2020, the United States District Court Southern District of New York concluded that the Jorjani Opinion is contrary to the plain meaning of the MBTA and therefore must be vacated. The court vacated the Jorjani Opinion and remanded the case to U.S. Department of the Interior and USFWS for further action.

The Project has the potential to result in take of migratory birds (through disturbance or removal of occupied nests); mitigation measures would be implemented to avoid take of migratory birds and ensure compliance with the MBTA.

4A.6.1.4. Executive Order 13186: Responsibilities of Federal Agencies to Protect Migratory Birds

EO 13186 (signed January 10, 2001) directs each federal agency taking actions that would have or would likely have a negative impact on migratory bird populations to work with USFWS to develop a memorandum of understanding to promote the conservation of migratory bird populations. Protocols developed under the memorandum of understanding must include the following agency responsibilities.

- Avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions.
- Restore and enhance habitat of migratory birds, as practicable.
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist federal agencies in their efforts to comply with the MBTA; it does not constitute any legal authorization to take migratory birds.

Reclamation would comply with EO 13186 by working with USFWS to ensure that the Project would avoid and minimize the Project's effects on migratory birds, restore temporarily impacted habitats, and prevent pollution and detrimental alteration of the environment as practicable.

4A.6.1.5. Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires consultation with USFWS, NMFS, and the state fish and wildlife agencies where the waters of any stream or other body of water are proposed, authorized, permitted, or licensed to be impounded, diverted, or otherwise controlled or modified under a federal permit or license. Consultation is undertaken for the purpose of preventing loss of and damage to wildlife resources.

The Project would divert water from tributary streams to the Sacramento River and therefore would require Reclamation to consult with USFWS and CDFW.

4A.6.1.6. Recovery Plan for the Giant Garter Snake

The Recovery Plan for Giant Garter Snake was published by USFWS in 2017. The objectives of the recovery plan are to reduce threats to and improve the population status of giant garter snake so that the species can be delisted. The recovery strategy consists of protecting existing, occupied habitat and identifying and protecting areas for habitat restoration, enhancement, or creation, including areas that provide connectivity between populations.

The recovery plan identifies nine recovery units that correspond to nine geographically and genetically distinct populations of giant garter snake: Butte Basin, Colusa Basin, Sutter Basin, American Basin, Yolo Basin, Delta Basin, Cosumnes–Mokelumne Basin, San Joaquin Basin, and Tulare Basin. Recovery criteria included in the recovery plan are listed below.

- Sufficient habitat is protected to support populations of giant garter snakes.
- Populations are connected with corridors of suitable habitat.

- Management plans and BMPs oriented to giant garter snake conservation are developed and implemented (and adaptively updated based on current research).
- Protected habitat is supplied with a reliable source of clean water during the critical active summer months.
- Threats due to disease are reduced or removed.
- Monitoring in recovery units demonstrates stable or increasing populations and evidence that the identified populations and their habitats are viable over a 20-year period, including at least one 3-year drought.

The recovery plan is relevant to the Project because it is located within the Colusa Basin and Yolo Basin giant garter snake populations and recovery units.

4A.6.2. State Policies and Regulations

4A.6.2.1. California Endangered Species Act

CESA (California Fish and Game Code §§ 2050–2116) states that all native species or subspecies of a fish, amphibian, reptile, bird, mammal, or plant and their habitats that are threatened with extinction and those experiencing a significant decline that, if not halted, would lead to a threatened or endangered designation will be protected or preserved.

Under Section 2081 of the California Fish and Game Code, a permit from CDFW is required for projects that could result in take of a species that is state listed as threatened or endangered. *Take* is defined more narrowly under CESA than ESA. Under CESA, *take* of a species means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill (California Fish and Game Code § 86). The state definition of take does not include *harm or harass*, as the definition of take under ESA does. As a result, the threshold for take under CESA is higher than that under ESA. For example, habitat modification is not necessarily considered take under CESA.

Because the Project would affect state-listed wildlife species, the Authority would comply with CESA by obtaining an incidental take permit from CDFW.

Fully Protected Species

The California Fish and Game Code provides protection for species identified as fully protected. Fully protected birds are listed under Section 3511 and fully protected mammals are listed under Section 4700. Section 5050 prohibits take of fully protected amphibians and reptiles. The California Fish and Game Code defines *take* as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Except for take related to scientific research, all take of fully protected species is prohibited. CDFW cannot issue a take permit for fully protected species, except under narrow conditions for scientific research or the protection of livestock, or if an NCCP has been adopted.

The Project has the potential to result in take of fully protected animals; mitigation measures would be implemented to avoid take of fully protected animals and ensure compliance with the California Fish and Game Code.

Protection of Birds

Section 3503 of the California Fish and Game Code prohibits the killing of birds and/or the destruction of bird nests. Section 3503.5 prohibits the killing of raptor species and/or the destruction of raptor nests. Typical violations include destruction of active bird and raptor nests as a result of tree removal and failure of nesting attempts (loss of eggs and/or young) as a result of disturbance of nesting pairs caused by nearby human activity. Section 3513 prohibits any take or possession of birds designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations pursuant to the MBTA.

The Project has the potential to result in take of migratory birds (through disturbance or removal of occupied nests); mitigation measures would be implemented to avoid take of migratory birds and ensure compliance with the California Fish and Game Code.

4A.6.3. Local/Regional Policies and Regulations

4A.6.3.1. Yolo County Habitat Conservation Plan/Natural Community Conservation Plan

The Yolo Habitat Conservancy, consisting of the County of Yolo and the cities of Davis, West Sacramento, Winters, and Woodland finalized the Yolo HCP/NCCP in 2018. The plan was adopted, and implementation began in January 2019.

The Yolo HCP/NCCP provides ESA permits and associated mitigation for infrastructure and development activities in Yolo County. Mitigation for these activities and conservation of an additional 8,000 acres of habitats will be coordinated though the HCP/NCCP. The Yolo Habitat Conservancy will ensure that conserved lands meet biological criteria set forth by the HCP/NCCP, including protecting lands that provide habitat for multiple species and are located near other protected lands and/or riparian areas. One plant (palmate-bracted bird's-beak) and 11 animals (valley elderberry longhorn beetle, California tiger salamander, western pond turtle, giant garter snake, Swainson's hawk, white-tailed kite, western yellow-billed cuckoo, western burrowing owl, least Bell's vireo, bank swallow, and tricolored blackbird) are covered by the plan. The HCP/NCCP has conservation measures that will mitigate the impacts of project activities on covered species and provide for the conservation of covered species habitats (Yolo Habitat Conservancy 2020).

Although the Yolo HCP/NCCP would not apply to the Project, avoidance and minimization measures proposed for the Project should not conflict with the Yolo HCP/NCCP.

4A.6.3.2. Yolo Bypass Wildlife Area Land Management Plan

The Yolo Bypass Wildlife Area consists of approximately 16,770 acres of managed wildlife habitat and agricultural land within the Yolo Bypass. The bypass conveys seasonal high flows from the Sacramento River to help control river stage and protect the cities of Sacramento, West Sacramento, and Davis, as well as other local communities, farms, and lands from flooding. Substantial environmental, social, and economic benefits are provided by the Yolo Bypass, benefiting the people of the State of California (California Department of Fish and Game and Yolo Basin Foundation 2008).

The stated purposes of the Yolo Bypass Wildlife Area Land Management Plan are to (1) guide the management of habitats, species, appropriate public use, and programs to achieve CDFW's mission; (2) direct an ecosystem approach to managing the Yolo Bypass Wildlife Area; (3) identify and guide appropriate, compatible, public-use opportunities within the Yolo Bypass Wildlife Area; (4) direct the management of the Yolo Bypass Wildlife Area in a manner that promotes cooperative relationships with adjoining private-property owners; (5) establish a descriptive inventory of the sites and the wildlife and plant resources that occur in the Yolo Bypass Wildlife Area; (6) provide an overview of the Yolo Bypass Wildlife Area's operation, maintenance, and personnel requirements to implement management goals, and serve as a planning aid for preparation of the annual budget for the Bay-Delta Region (Region 3); and (7) present the environmental documentation necessary for compliance with state and federal statutes and regulations, provide a description of potential and actual environmental impacts that may occur during plan management, and identify mitigation measures to avoid or lessen these impacts.

4A.6.3.3. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.2, *Biological and Natural Resources,* of the *Glenn County General Plan Update, 2020 Existing Conditions Report,* contains goals and policies from the 1993 *Glenn County General Plan* Natural Resources Element for the preservation and management of biological resources (Glenn County 2020:5-16–5-18). The following Natural Resources Policies address the conservation and protection of wildlife and wildlife habitats and were considered when assessing the wildlife resources that may be affected by the Project.

Policy NRP-39. Approach the retention and enhancement of important habitat by preserving areas or systems which will benefit a variety of species or resources rather than focusing on individual species, resources or properties.

Policy NRP-41. Preserve natural riparian habitat, especially along Stony Creek and the Sacramento River and Butte Creek.

Policy NRP-44. Recognize that retention of natural areas is important to maintaining adequate populations of wildlife which is, in turn, important to the local economy.

Policy NRP-46. Promote protection of native biological habitats of local importance such as riparian forests, foothill oak woodlands, Stony Gorge and Black Butte Reservoirs.

Policy NRP-49. Coordinate with State and federal agencies, private landowners, and private preservation/conservation groups in habitat preservation and protection of rare, endangered, threatened and special concern species, to ensure consistency in efforts and to encourage joint planning and development of areas to be preserved.

Policy NRP-50. Recognize the Sacramento River corridor, the Sacramento National Wildlife Refuge, migratory deer herd areas, naturally occurring wetlands, and stream courses such as Butte and Stony Creeks as areas of significant biological importance.

Policy NRP-60. Support efforts to improve water availability and management when the potential exists to benefit fish and wildlife in cooperation with Glenn County agricultural water users.

Policy NRP-61. Support the coexistence of agricultural and wildlife land uses, and cooperation of persons involved in agriculture and wildlife habitat preservation, in areas of wildlife habitat potential.

4A.6.3.4. Colusa County General Plan

The Conservation Element of the *Colusa County General Plan* addresses the conservation, development, and utilization of natural resources, including wildlife. The following Conservation Objectives and Policies address the conservation and protection of wildlife and wildlife habitats and were considered when assessing the wildlife resources that may be affected by the Project (Colusa County 2012:5-4–5-5).

Objective CON-1B: Protect Endangered, Threatened, and Special-Status Plant and Animal Species, their Habitats, and Other Sensitive Habitats

Policy CON 1-13: Sensitive habitats include oak woodlands, wetlands, vernal pools, riparian areas, wildlife and fish migration corridors, native plant nursery sites, waters of the U.S., and other habitats designated by state and federal agencies and laws.

Policy CON 1-14: Require any proposed project that may affect special-status species, their habitat, or other sensitive habitat to submit a biological resources evaluation as part of the development review process. Evaluations shall be carried out under the direction of the Colusa County Department of Planning and Building and consistent with applicable state and federal guidelines. Additional focused surveys shall be conducted during the appropriate season (e.g., nesting season, flowering season, etc.), if necessary.

Policy CON 1-15: Require that impacts to wetlands and riparian habitat protected by State or Federal regulations be avoided to the greatest extent feasible. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State and Federal requirements.

Policy CON 1-16: Require new development projects to incorporate measures that eliminate or avoid direct impacts to lakes, reservoirs, rivers, creeks, streams, wetlands, and other waterways to the greatest extent feasible. Measures may include, but are not limited to, appropriate setbacks or the implementation of best management practices approved by the Department of Planning and Building.

Policy CON 1-17: All discretionary public and private projects that identify special-status species or sensitive habitats in a biological resources evaluation shall avoid impacts to special-status species and their habitat to the maximum extent feasible. Where impacts cannot be avoided, projects shall include the implementation of site-specific or project-specific effective mitigation strategies developed by a qualified professional in consultation with state or federal resource agencies with jurisdiction (if applicable) including, but not limited to, the following strategies:

a. Preservation of habitat and connectivity of adequate size, quality, and configuration to support the special-status species. Connectivity shall be determined based on the specifics of the species' needs.
b. Project design measures, such as clustering of structures or locating project features to avoid known locations of special-status species and/or sensitive habitats.
c. Provision of supplemental planting and maintenance of grasses, shrubs, and trees of similar quality and quantity to provide adequate vegetation cover to enhance water quality, minimize sedimentation and soil transport, and provide adequate shelter and food for wildlife.
d. Protection for habitat and the known locations of special-status species through adequate buffering or other means.
e. Provision of replacement habitat of like quantity and quality on- or off-site for special-status species.
f. Enhancement of existing special-status species habitat values through restoration and replanting of native plant species.
g. Provision of temporary or permanent buffers of adequate size (based on the specifics of the special-status species) to avoid nest abandonment by nesting migratory birds and raptors associated with construction and site development activities.
h. Incorporation of the provisions or demonstration of compliance with applicable recovery plans for federally listed species.
i. Monitoring of construction activities by a qualified biologist to avoid impacts to on-site special status species.

Policy CON 1-18: Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the following measures shall be implemented:

a. Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;
b. Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection; and
c. Employees shall be trained by a qualified biologist to identify and avoid protected species and habitat.

4A.6.3.5. County of Yolo 2030 Countywide General Plan

The Conservation and Open Space Element of the *2030 Countywide General Plan* focuses on balancing the management of natural and cultural resources in Yolo County. The following goals and policies address the conservation and protection of wildlife and wildlife habitats and were considered when assessing the wildlife resources that may be affected by the Project (County of Yolo 2009:CO-34–CO-40).

Goal CO-2: Biological Resources. Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.

Policy CO-2.1: Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.

Policy CO-2.3: Preserve and enhance those biological communities that contribute to the county's rich biodiversity including blue oak and mixed oak woodlands, native grassland prairies, wetlands, riparian corridors, aquatic habitat, agricultural lands, heritage valley oak trees, remnant valley oak groves, and roadside tree rows.

Policy CO-2.9: Protect riparian corridors to maintain and balance wildlife values.

Policy CO-2.14: Ensure no net loss of oak woodlands, alkali sinks, rare soils, vernal pools or geological substrates that support rare endemic species, with the following exception. The limited loss of blue oak woodland and grasslands may be acceptable, where the fragmentation of large forests exceeding 10 acres is avoided, and where losses are mitigated.

Policy CO-2.16: Existing native vegetation shall be conserved where possible and integrated into new development if appropriate.

Policy CO-2.23: Support efforts to coordinate the removal of non-native, invasive vegetation within watersheds and replacement with native plants.

Policy CO-2.24: Promote floodplain management techniques that increase the area of naturally inundated floodplains and the frequency of inundated floodplain habitat, restore some natural flooding processes, river meanders, and widen riparian vegetation, where feasible.

Policy CO-2.31: Protect wetland ecosystems by minimizing erosion and pollution from grading, especially during grading and construction projects.

Policy CO-2.34: Recognize, protect and enhance the habitat value and role of wildlife migration corridors for the Sacramento River, Putah Creek, Willow Slough, the Blue Ridge, the Capay Hills, the Dunnigan Hills and Cache Creek.

Policy CO-2.35: Consider potential effects of climate change on the locations and connections between wildlife migration routes.

Policy CO-2.36: Habitat preserved as a part of any mitigation requirements shall be preserved in perpetuity through deed restrictions, conservation easement restrictions, or other method to ensure that the habitat remains protected. All habitat mitigation must have a secure, ongoing funding source for operation and maintenance.

Policy CO-2.38: Avoid adverse impacts to wildlife movement corridors and nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds). Preserve the functional value of movement corridors to ensure that essential habitat areas do not become isolated from one another due to

the placement of either temporary or permanent barriers within the corridors. Encourage avoidance of nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds) during periods when the sites are actively used and that nursery sites which are used repeatedly over time are preserved to the greatest feasible extent or fully mitigated if they cannot be avoided.

Policy CO-2.39: Require new or retrofitted bridges, and new or expanded roads to incorporate design and construction measures to maintain the functional value of wildlife movement corridors.

Policy CO-2.40: Preserve grassland habitat within 2,100 feet of documented California tiger salamander breeding ponds or implement required mitigation (equivalent or more stringent) as imposed by appropriate agencies or through the County HCP/NCCP, to fully mitigate impacts consistent with local, State, and federal requirements. Implementation and funding of mitigation measures for projects that will be developed in phases over time may also be phased, with the applicable mitigation being implemented and funded prior to the final approval of each phase or sub-phase.

Policy CO-2.41: Require that impacts to species listed under the State or federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements.

Policy CO-2.42: Projects that would impact Swainson's hawk foraging habitat shall participate in the Agreement Regarding Mitigation for Impacts to Swainson's Hawk Foraging Habitat in Yolo County entered into by the CDFG and the Yolo County HCP/NCCP Joint Powers Agency, or satisfy other subsequent adopted mitigation requirements consistent with applicable local, State, and federal requirements.

4A.6.3.6. Tehama County General Plan

The Open Space and Conservation Element of the *Tehama County General Plan* addresses a number of resources, including wildlife resources and natural land resources. The following goals, policies, and implementation measures address the conservation and protection of wildlife and wildlife habitats and were considered when assessing the wildlife resources that may be affected by the Project (Tehama County 2009:6.0-10, 6.0-18–6.0-27).

Policy OS-1.3. Surface water quality and stream flows for water supply, water recharge, recreation, and aquatic ecosystem maintenance shall be protected while respecting adjudicated and appropriated (California recognized water rights) rights of use.

Implementation Measure OS-1.3g. Establish and require the use of best management practices to protect receiving waters from the adverse effects of construction activities, sediment and urban runoff.

Goal OS-3. To protect, preserve, and enhance fish and wildlife species by maintaining healthy ecosystems.

Policy OS-3.1. The County shall preserve and protect environmentally sensitive and significant lands and water valuable for their plant and wildlife habitat, natural appearance, and character.

Implementation Measure OS-3.1a. Significant wildlife and wildlife habitats shall be protected through designations under the Natural Resource Conservation Land Use Classifications.

Implementation Measure OS-3.1f. Require that prior to any public or private development project in areas identified to contain or possibly contain special-status species – based on the Land Use Map, data provided in the Biological Resource section of the General Plan EIR or other suitable technical material available at the time – a biological survey be conducted by the project applicant to identify potentially occurring special-status species or their habitat using protocol acceptable to the regulatory agencies with authority over these species, or species presence shall be inferred. The results of the survey shall be documented in a Biological Resources Report.

Implementation Measure OS-3.1g. For each project in which unavoidable removal of wetland habitat or other waters of the U.S. will occur, the County shall require the project proponent to develop a compensation plan prior to construction.

Policy OS-3.3. The County shall support and coordinate County plans with inter-jurisdictional programs for Best Management Practices of riparian resources in the County.

Implementation Measure OS-3.3a. Work with state and federal agencies on County plans to any areas with riparian resources, identify and implement Best Management Practices for the plans.

Policy OS-3.4. The County shall endeavor to provide for wildlife circulation in and around new development projects, major transportation facilities, roads, railroads, and canals.

Implementation Measure OS-3.4a. Review projects through the entitlement process and CEQA analysis to ensure that they comply with this policy if the site contains unique habitat, creeks and/or wooded corridors.

Implementation Measure OS-3.4b. The effect on wildlife movement shall be analyzed prior to the approval of proposed development that encroaches upon vital corridors. The analysis shall include consultation with the CDFG to properly evaluate current wildlife movement and migration.

Goal OS-9. To protect and enhance resource lands in the County for the continued benefit of agriculture, timber, grazing, recreation, wildlife habitat, and quality of life.

Policy OS-9.1. The County shall strive for the protection and enhancement of resource lands for the continued benefit of agriculture, timber, grazing, recreation, waterfowl, wildlife habitat, watersheds, and quality of life.

4A.7 Chapter 11, Aquatic Biological Resources

4A.7.1. Federal Policies and Regulations

4A.7.1.1. Endangered Species Act

ESA requires that both USFWS and NMFS maintain lists of threatened and endangered species and designates critical habitat for listed species. Section 7(a)(2) of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry-out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat. If an activity proposed by a federal agency would result in the take of a federally listed species, the consulting agency will issue a BiOp analyzing the effects of the proposed action on listed species and an Incidental Take Statement if appropriate. Where a federal agency is not authorizing, funding, or carrying out a project, take that is incidental to the lawful operation of a project may be permitted pursuant to Section 10(a) of the ESA through approval of an HCP and issuance of an incidental take permit. Because the Project would affect federally listed fish species, Reclamation would comply with the ESA by consulting with USFWS under Section 7 and receiving a BiOp from USFWS.

4A.7.1.2. U.S. Fish and Wildlife Service and National Marine Fisheries Service Biological Opinions on the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project

The USFWS (2019) BiOp and NMFS (2019) BiOp under the ESA determined that coordinated operations of the Central Valley Project (CVP)/State Water Project (SWP) are not likely to jeopardize the continued existence of delta smelt, Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, California Central Valley steelhead, southern resident killer whale, or the southern distinct population segment (DPS) of green sturgeon or destroy or adversely modify critical habitat for these species. The proposed action includes several operational components, e.g., Shasta and Folsom seasonal operations and South Delta exports, that are related to those evaluated in these BiOps. The BiOps authorize operations until 2030. Operations of the Project will have to be in compliance with these BiOps.

4A.7.1.3. U.S. Fish and Wildlife Service Recovery Plan for Sacramento–San Joaquin Delta Native Fishes

USFWS, during ongoing revision of the plan (USFWS 1996) will review the new information and develop a strategy for the conservation and restoration of Delta native fish through the identification of recovery actions that specifically address the threats to their existence. Species covered by this plan are delta smelt, longfin smelt, Sacramento splittail, and Sacramento perch. The Project would release water that would ultimately be discharged into the Delta and potentially affect these species.

4A.7.1.4. National Marine Fisheries Service Recovery Planning for Salmon and Steelhead in California

The *Recovery Plan for the Evolutionarily Significant Units of Sacramento River Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the Distinct Population Segment of Central Valley Steelhead* was released in July 2014 (National Marine Fisheries

Service 2014). The California Central Valley Recovery Domain extends from the upper Sacramento River Valley to the northern portion of the San Joaquin River Valley (National Marine Fisheries Service 2014). Several priority recovery actions to address specific limiting factors were identified at the statewide, Central Valley–wide, and site-specific levels to help meet recovery objectives. Because the Project would affect the upper Sacramento River, it would potentially affect these species and their critical habitats, which include this portion of the river.

4A.7.1.5. National Marine Fisheries Service Recovery Planning for Green Sturgeon in California

The purpose and goal of the *Recovery Plan for the Southern Distinct Population Segment of North American Green Sturgeon* (National Marine Fisheries Service 2018) is to guide recovery of southern DPS green sturgeon and consequently remove it from the federal list of endangered and threatened wildlife, through provision of recovery needs and implementation measures to address previously identified limiting factors. Several priority recovery actions to address specific limiting factors were identified for the Sacramento River Basin Valley, the Bay/Delta Estuary, coastal bay and nearshore marine environments, and site-specific levels to help meet recovery objectives. Operations of the Project cannot be in conflict with the actions laid out in this plan.

4A.7.1.6. Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act grants the U.S. Secretary of the Interior the authority to aid federal, state, public, or private agencies in developing, protecting, rearing, or stocking all wildlife, wildlife resources, and their habitats (16 U.S.C. § 661). Under the Fish and Wildlife Coordination Act, whenever waters of any stream or other water body are proposed to be impounded, diverted, or otherwise modified by any public or private agency under federal permit, that agency must consult with USFWS and, in California, CDFW (16 U.S.C. §§ 661–667e, March 10, 1934, as amended 1946, 1958, 1978, and 1995). The Project would divert water from the Sacramento River and from tributary streams to the Sacramento River and therefore would require Reclamation to consult with USFWS and CDFW.

4A.7.1.7. Central Valley Project Improvement Act

The Central Valley Project Improvement Act (CVPIA) authorized the CVP to include fish and wildlife protection, restoration, and mitigation as project purposes of the CVP having equal priority with irrigation and domestic uses of CVP water and elevates fish and wildlife enhancement to a level having equal purpose with power generation. Dedication of CVPIA 3406(b)(2) water occurs when Reclamation takes a fish and wildlife habitat restoration action based on recommendations of USFWS (and in consultation with NMFS and CDFW), pursuant to Section 3406(b)(2). Water exports at the CVP pumping facilities have been reduced using Section 3406(b)(2) water to decrease the risk of fish entrainment at the salvage facilities and to augment river flows.

Anadromous Fish Restoration Program

The CVPIA directs the Secretary of the Interior to develop and implement the program to restore natural populations and ensure the sustainability of anadromous fish (e.g., Chinook salmon, steelhead, green sturgeon, white sturgeon, American shad, and striped bass) in Central Valley rivers and streams.

4A.7.1.8. Clean Water Act

The CWA is a comprehensive set of statutes aimed at restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. The CWA is the foundation of surface water quality protection in the United States (Andreen and Jones 2008). Initial authority for the implementation and enforcement of the CWA rests with USEPA; however, this authority can be exercised by states with approved regulatory programs. In California, this authority is exercised by the State Water Board and the Regional Water Boards. The CWA contains regulatory and nonregulatory tools to significantly reduce direct pollutant discharges into waters of the United States, to finance municipal wastewater treatment facilities, and to manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

Section 401: Water Quality Certification

Under CWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must obtain certification from the state in which the discharge would originate, or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate. Therefore, all projects that have a federal component and may affect state water quality (including projects that require federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401.

Because the Project would discharge fill into waters of the United States, the Authority would comply with CWA Section 401 by obtaining a Section 401 permit from the Regional Water Board in coordination with the Section 404 permit from USACE

Section 402: Permits for Stormwater Discharge

Section 402 of the CWA regulates construction-related stormwater discharges to surface waters through the NPDES program, administered by USEPA. In California, the State Water Board is authorized by USEPA to oversee the NPDES program through the Regional Water Boards (see the related discussion under Porter-Cologne Act). The proposed action is within the jurisdiction of the Central Valley Regional Water Board.

NPDES permits are required for construction projects that disturb more than 1 acre of land. The NPDES permitting process requires the applicant to file a public notice of intent to discharge stormwater and to prepare and implement a SWPPP. The SWPPP includes a site map and a description of proposed construction activities. In addition, it describes the BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants (e.g., petroleum products, solvents, paints, cement) that could contaminate nearby water resources. Permittees are required to conduct annual monitoring and reporting to ensure that BMPs are correctly implemented and effective in controlling the discharge of stormwater-related pollutants.

Because the Project would disturb more than 1 acre of land, the Authority would comply with CWA Section 402 by obtaining a NPDES permit from the Regional Water Board.

4A.7.1.9. Executive Order 13112, Invasive Species

Each federal agency whose actions may affect the status of invasive species must adopt programs and use authorities to prevent their introduction, provide for their control, and minimize their economic, ecological, and human health impacts. A federal agency must not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions. Reclamation would comply with EO 13112 by ensuring that the Project would avoid and minimize the Project's potential to introduce or spread invasive species and prevent their economic, ecological, and human health impacts.

4A.7.2. State Policies and Regulations

4A.7.2.1. California Endangered Species Act

CESA (Fish and Game Code Sections 2050 to 2089) establishes various requirements and protections regarding species listed as threatened or endangered under state law. California's Fish and Game Commission is responsible for maintaining lists of threatened and endangered species under CESA. CESA prohibits the take of listed and candidate (petitioned to be listed) species (Fish and Game Code Section 2080). In accordance with Section 2081 of the California Fish and Game Code, a permit from CDFW is required for projects "that could result in the incidental take of a wildlife species state-listed as threatened or endangered". Because the Project would affect state-listed wildlife and fish species, the Authority would comply with CESA by obtaining an incidental take permit from CDFW. California Fish and Wildlife Incidental Take Permit for Long-Term Operation of the State Water Project in the Sacramento-San Joaquin Delta.

The CDFW incidental take permit provides protections for delta smelt, longfin smelt, winter-run Chinook salmon and spring-run Chinook salmon under long-term operations of the SWP. The protections include dedicating water for Delta outflows during drier periods and providing flexibility to capture and store water during wet years for both water supply and the environment. This permit is applicable because the diversions to and releases from the Project potentially affect flow and water quality in the Delta.

4A.7.2.2. California Department of Fish and Wildlife Service Incidental Take Permit

CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species. The CDFW may issue an incidental take permit pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. authorizing the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met.

4A.7.2.3. California Fish and Game Code Section 5937

In 1915, the California Legislature passed California Fish and Game Code Section 5937. Under this law, "The owner of any dam shall allow sufficient water at all times to pass through a

fishway, or in the absence of a fishway, allow sufficient water to pass over, around, or through the dam to keep good condition any fish that may be planted or exist below the dam." Interpretation and enforcement of this law have varied over the years since it was passed, but it is increasingly cited in legal actions for protection of fish through minimum flow requirements, especially with regard to existing and proposed new dams and water diversion projects. A full history and discussion of the law can be found in Bork et al. 2012.

4A.7.2.4. California Fish and Game Code Section 1600 (Lake and Streambed Alteration)

Sections 1600–1603 of the California Fish and Game Code state that it is unlawful for any person or agency to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources or to use any material from the streambeds without first notifying CDFW. An LSAA must be obtained if effects are expected to occur. A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports wildlife, fish, or other aquatic life. This definition includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. CDFW's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife.

The Project would divert water from tributary streams to the Sacramento River and therefore would require an LSAA from CDFW.

4A.7.2.5. The Salmon, Steelhead Trout, and Anadromous Fisheries Program Act

The Salmon, Steelhead Trout, and Anadromous Fisheries Program Act requires that it is the policy of the State of California to increase the state's salmon and steelhead resources and directs CDFW to develop a plan and program that strives to double the salmon and steelhead resources (Fish and Game Code Section 6902[a]). It is also the policy of the state that existing natural salmon and steelhead habitat shall not be diminished further without offsetting the impacts of lost habitat (Fish and Game Code Section 6902[c]). The Project would affect salmon and steelhead habitat.

4A.7.2.6. California Aquatic Invasive Species Management Plan

The California Aquatic Invasive Species Management Plan meets federal requirements to develop statewide nonindigenous aquatic nuisance species management plans under Section 1204 of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990. The Plan identifies the steps that need to be taken to minimize the harmful ecological, economic, and human health impacts of aquatic invasive species in California by providing a comprehensive, coordinated effort to prevent new invasions, minimize impacts from established aquatic invasive species, and establish priorities for action statewide. The Project would be consistent with the Plan.

4A.7.2.7. Water Quality Control Plan for the Sacramento and San Joaquin River Basins

The Sacramento-San Joaquin River Basin Plan covers the entire Sacramento and San Joaquin River Basins (Central Valley Regional Water Quality Control Board 2018). The Plan provides water quality objectives for reasonable protection of beneficial uses (municipal and industrial,

agricultural, and fish and wildlife). These include compliance with various salinity and flow objectives. The Sacramento-San Joaquin River Basin Plan was originally adopted in 1975 and is now in its third edition since the fully approved May 2018 amendment. The plan is applicable based on the diversions to and releases made from the Project affecting flow and, potentially, water quality in the Sacramento River.

4A.7.2.8. Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary

The State Water Board is updating the Bay-Delta Plan. The Plan provides water quality objectives for reasonable protection of beneficial uses (municipal and industrial, agricultural, and fish and wildlife). These include compliance with various salinity and flow objectives, for example. The Bay-Delta Plan was originally adopted in 1995, updated in 2006, and is currently undergoing consideration of amendments, including amendments focused on the Sacramento River and its tributaries. This plan is applicable because the diversions to and releases made from the Project potentially affect flow and water quality in the Sacramento River and the Delta and would be subject to the water quality objectives.

4A.7.3. Local/Regional Policies and Regulations

4A.7.3.1. Sacramento Valley Salmon Resiliency Strategy

In June 2017, the California Natural Resources Agency developed the Sacramento Valley Salmon Resiliency Strategy (SVSRS) to address near- and long-term needs for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and California Central Valley steelhead. The goals and objectives of the SVSRS focus on addressing life-stage specific stressors, improving habitat conditions, and increasing overall viability of salmonid species. The Project would potentially affect these species as a result of diversions and releases into the Sacramento River and as such, needs to consider the goals and objectives of this plan.

4A.7.3.2. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.2, *Biological and Natural Resources*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* contains natural resource policies from the 1993 *Glenn County General Plan* for the conservation and protection of natural resources, including aquatic habitat and fisheries (Glenn County 2020:5-11–5-46). The natural resources policies that were developed to protect valued aquatic biological resources and judged to be potentially relevant to the evaluation of the Project include:

NRP-41. Preserve natural riparian habitat, especially along Stony Creek and the Sacramento River and Butte Creek.

NRP-50. Recognize the Sacramento River corridor, the Sacramento National Wildlife Refuge, migratory deer herd areas, naturally occurring wetlands, and stream courses such as Butte and Stony Creeks as areas of significant biological importance.

NRP-60. Support efforts to improve water availability and management when the potential exists to benefit fish and wildlife in cooperation with Glenn County agricultural water users.

Table 5.2-5 of the General Plan, Special Status Animals present or Potentially Present in Glenn County includes, includes, only steelhead and does not include Chinook salmon or green sturgeon.

4A.7.3.3. Colusa County General Plan

The Conservation Element of the *Colusa County General Plan* addresses the conservation, development and utilization of natural resources, including aquatic habitat and fisheries (Colusa County 2012:5-1–5-14). Conservation policies and actions of the General Plan designed to protect valued aquatic biological resources and judged to be potentially relevant to the evaluation of the Project include:

Policy CON 1-14: Require any proposed project that may affect special-status species, their habitat, or other sensitive habitat to submit a biological resources evaluation as part of the development review process. Evaluations shall be carried out under the direction of the Colusa County Department of Planning and Building and consistent with applicable state and federal guidelines. Additional focused surveys shall be conducted during the appropriate season (e.g., nesting season, flowering season, etc.), if necessary.

Policy CON 1-16: Require new development projects to incorporate measures that eliminate or avoid direct impacts to lakes, reservoirs, rivers, creeks, streams, wetlands, and other waterways to the greatest extent feasible. Measures may include, but are not limited to, appropriate setbacks or the implementation of best management practices approved by the Department of Planning and Building.

Policy CON 1-21: Protect riparian habitat along the Sacramento River in order to maintain suitable habitat for anadromous fish species, including salmon and steelhead trout, and for native sport- fishing species.

4A.7.3.4. County of Yolo 2030 Countywide General Plan

The *County of Yolo 2030 Countywide General Plan* includes a Conservation and Open Space Element that establishes goals, policies, and actions for natural and cultural resources, including aquatic habitat and fisheries (County of Yolo 2009:CO-34–CO-43). Goals, policies, and actions of the General Plan designed to protect valued aquatic biological resources and judged to be potentially relevant to the evaluation of the Project include:

GOAL CO-2: Biological Resources. Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.

Policy CO-2.5: Protect, restore and enhance habitat for sensitive fish species, so long as it does not result in the large-scale conversion of existing agricultural resources.

Policy CO-2.11: Ensure that open space buffers are provided between sensitive habitat and planned development.

Policy CO-2.22: Prohibit development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and perennial streams. A larger setback is preferred. The setback will allow for fire and flood protection, a natural riparian corridor (or wetland vegetation), a planned recreational trail where applicable, and vegetated landscape for stormwater to pass through before it enters the water body. Recreational trails and other features established in the setback should be unpaved and located along the outside of the riparian corridors whenever possible to minimize intrusions and maintain the integrity of the riparian habitat. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses, so long as these uses are sited and operated in a manner that minimizes impacts to aquatic and riparian features. (DEIR MM BIO-1b)

Policy CO-2.24: Promote floodplain management techniques that increase the area of naturally inundated floodplains and the frequency of inundated floodplain habitat, restore some natural flooding processes, river meanders, and widen riparian vegetation, where feasible.

Policy CO-2.25: Support efforts to reduce water temperatures in streams via habitat restoration (e.g. increase shading vegetation) and water management (e.g. control of flows) that are compatible with the Integrated Water Resources Management Plan.

Policy CO-2.32: Encourage the development of, and connection to, healthy marsh and riparian woodlands along the county's waterways and channels.

Policy CO-2.41: Require that impacts to species listed under the State and federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements (DEIR MM BIO-5a). Action CO-A34 Coordinate with State and Federal agencies to rehabilitate and/or improve watersheds for the benefit of salmon and steelhead by encouraging landowner cooperation and participation, and involving agencies and local groups. (Policy CO-2.5 through Policy CO-2.11, Policy CO- 2.25, Policy CO-2.26, Policy CO-2.28)

4A.7.3.5. Yolo Regional Conservation Investment Strategy/Local Conservation Plan

The *Yolo County Regional Conservations Investment Strategy and Local Conservation Plan* (RCIS/LCP) is a collaborative conservation planning effort of Yolo County, Yolo Habitat Conservancy, California Natural Resources Agency, and California Department of Water Resources. It provides a framework for future conservation efforts in Yolo County. The RCIS/LCP includes conservation goals and objectives to protect landscapes, natural communities and valued plant and animal species present in the Plan's *Strategy Area*. Listed goals and objectives developed to protect fish species and habitat and potentially affected by the Project include:

Goal L2: Ecological Processes and Conditions. Maintain or restore ecological processes and conditions in *Strategy Area* landscapes that sustain natural communities, native species, and landscape connectivity.

Objective L2-1: Hydrologic and Geomorphic Processes. Improve dynamic hydrologic and geomorphic processes in watercourses and floodplains in a way that avoids or minimizes impacts

on terrestrial species habitat (including the HCP/NCCP) and agricultural land. Allow floods to promote fluvial processes, such that bare mineral soils are available for natural recolonization of vegetation, desirable natural community vegetation is regenerated, and structural diversity is promoted; or implement management actions that mimic those natural disturbances.

Goal FISH1: Protected and enhanced focal fish species habitat. Protect and enhance focal fish species spawning, rearing, and migration habitat in Yolo County.

RCIS/LCP Objective FISH1.5: Yolo Bypass inundation. Increase inundation in the Yolo Bypass so that it reaches an optimized magnitude, frequency, and duration that will benefit native fish while using an Integrated Water Management (IWM) approach. An IWM approach utilizes a system-wide perspective and considers all aspects of water management, including public safety and emergency management, environmental sustainability, and the economic stability of agricultural and recreational uses of the Bypass.

The Project would potentially affect flow in the Sacramento River where it borders Yolo County, which has a potential to influence achievement of the above Goals and Objectives.

4A.7.3.6. Tehama County General Plan

The *Tehama County General Plan* includes a Conservation and Open Space Element that establishes a number of policy goals and related implementation measures designed to protect resources, including aquatic habitat and fisheries (Tehama County 2009:6.0-10–6.0-20). One of the policy goals designed to protect valued aquatic biological resources was judged to be potentially relevant to the evaluation of the Project:

Policy OS-1.3: Surface water quality and stream flows for water supply, water recharge, recreation, and aquatic ecosystem maintenance shall be protected while respecting adjudicated and appropriated (California recognized water rights) rights of use.

4A.8 Chapter 12, Geology and Soils

4A.8.1. Federal Policies and Regulations

4A.8.1.1. Antiquities Act of 1906

The Antiquities Act of 1906 (Public Law 59-209; 16 U.S.C. §§ 431 et seq.; 34 Stat. 225) requires protection of historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest on federal lands. Paleontological resources are included in this category by many federal agencies, such as the Bureau of Land Management. In addition, NEPA (42 U.S.C. §§ 4321 et seq.; 40 C.F.R. § 1502.25), as amended, requires federal agencies to consider the impact of their actions (including the issuance of entitlements or permits, or financial support, to a project) on important historic, cultural, and natural aspects of our national heritage.

The Antiquities Act relates to the Project because of federal land ownership in the study area, federal agency involvement in the Project, and the potential to disturb paleontological resources.

4A.8.1.2. Clean Water Act

The CWA (formally, the Federal Water Pollution Control Act) is discussed in detail in Section 4A.2, *Chapter 6, Surface Water Quality*. However, because CWA Section 402 is directly relevant to soil erosion, additional information is provided here.

CWA Section 402 regulates discharges to surface waters through the NPDES program. In California, the State Water Board has been designated by USEPA to develop and enforce water quality objectives and implementation plans. The State Water Board has delegated the specific responsibilities for the development and enforcement actions to the Regional Water Boards. The study area is located within Region 5, the jurisdictional area of the Central Valley Regional Water Board (5R and 5S).

Under Section 402, dischargers whose projects would disturb at least 1 acre of soil or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the NPDES Construction General Permit (Order 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). Construction activity subject to this permit includes clearing, grading, and other ground disturbances, such as soil stockpiling and excavation.

Obtaining coverage under the Construction General Permit requires the preparation, submittal, and implementation of a site-specific SWPPP by a Qualified SWPPP Developer (QSD).,The SWPPP and other Permit Registration Documents must be submitted to the State Water Board. The SWPPP must identify an effective combination of soil erosion and sediment control measures, as well as nonstormwater BMPs. The Construction General Permit requires that the SWPPP define a program of regular inspections of the BMPs and, in some cases, sampling of water quality parameters.

Section 402 applies to the Project because the area of soil disturbance will be 1 acre or more.

4A.8.1.3. Omnibus Public Land Management Act of 2009

On March 31, 2009, President Obama signed into law the Omnibus Public Land Management Act of 2009 (H.R. 146) (OPLMA). Title 6, Subtitle D of the OPLMA, *Paleontological Resources Preservation*, requires the secretaries of the Department of the Interior (exclusive of Indian trust lands) and the Department of Agriculture (insofar as U.S. Forest System lands are concerned) to "… manage and protect paleontological resources on Federal land using scientific principles and expertise… [and] develop appropriate plans for inventory, monitoring, and the scientific and educational use of paleontological resources …" The OPLMA further excludes casual collection from restrictions under the law and then describes the requirements for permitting collection on federal lands, stipulations regarding the use of paleontological resources in education, continued federal ownership of recovered paleontological resources, and standards for acceptable repositories of collected specimens and associated data (Sections 6303–6305). The OPLMA also provides for criminal and civil penalties for unauthorized removal of paleontological resources from federal land and for rewards for reporting the theft of fossils (Sections 6306–6309).

OPLMA relates to the Project because of federal land ownership in the study area, federal agency involvement in the Project, and the potential to disturb paleontological resources.

4A.8.1.4. Federal Land Policy and Management Act (1976)

The Federal Land Policy and Management Act of 1976 (FLPMA) mandates the treatment of paleontological resources as a scientific value (FLPMA Section 102[8]). This Act strengthens the references pertaining to suitability and compatibility of land areas, stresses the maintenance of productivity, and seeks to avoid the permanent impairment of the productive capability of the land. For the purpose of this analysis, scientifically significant paleontological resources are defined as vertebrate fossils that are identifiable to taxon and/or element, noteworthy occurrences of invertebrate and plant fossils, and vertebrate trackways.

FLPMA relates to the Project because of federal land ownership in the study area, federal agency involvement in the Project, and the potential to disturb paleontological resources.

4A.8.1.5. Code of Federal Regulations, Title 43

Title 43 C.F.R., Subpart 8365.1-5 prohibits the willful disturbance, removal, and/or destruction of scientific resources or natural objects. It does allow the collection of common invertebrate and common plant fossils. Subpart 8360.0-7 identifies the penalties for violation of this regulation. Title 43 applies to the Project because of federal land ownership in the study area, federal agency involvement in the Project, and the potential to disturb paleontological resources.

4A.8.2. State Policies and Regulations

4A.8.2.1. California Public Resources Code, Chapter 1.7, Archaeological, Paleontological, and Historical Sites Section 5097.5/5097.9)

Several sections of the PRC protect paleontological resources. Section 5097.5 prohibits "knowing and willful" excavation, removal, destruction, injury, and defacement of any paleontological feature on public lands (lands under state, county, city, district, or public authority jurisdiction, or the jurisdiction of a public corporation), except where the agency with

jurisdiction has granted express permission. Section 30244 requires reasonable mitigation for impacts on paleontological resources that occur as a result of development on public lands.

These sections apply to the Project because counties have jurisdiction over land in the study area.

4A.8.2.2. California Water Code, Division 3, Chapter 5, Article 1

The California DSOD has oversight and approval authority for structures considered a dam under the California Water Code. Dams under DSOD jurisdiction are artificial barriers more than 6 feet high impounding more than 50 acre-feet of water or more than 25 feet high impounding more than 15 acre-feet. Additionally, some levees qualify as "dams" (Water Code Section 6002) and are required to meet DSOD standards and design review requirements.

DSOD reviews and approves proposed dam enlargements, repairs, alterations, and removals to ensure that the dam appurtenant structures are designed to meet minimum requirements. It performs independent analyses to understand dam and appurtenant structure performance, including structural, hydrologic, hydraulic, and geotechnical evaluations. DSOD also oversees construction of dams to ensure that the work is done in accordance with the approved plans and specifications. Dams are inspected by DSOD on an annual basis to ensure the safety of the dam.

Under California Water Code, Division 3, Chapter 5, Article 1 (New Dams and Reservoirs or Enlargements of Dams and Reservoirs), applicants must provide DSOD information about the location, type, size, height, storage capacity, and hydrologic conditions related to the dam. DSOD may also require reports on the materials used to construct the dam; exploratory pits, trenches, and adits; drilling, coring, and geophysical surveys; tests to determine leakage rates; and physical test results on the in situ properties and behavior of the foundation materials at the dam site; as well as other information.

This regulation applies to the Project because the Project would involve construction of a dam that reaches the thresholds for height and impoundment to be under the jurisdiction of the DSOD.

4A.8.2.3. Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations

The intent of CCR Title 17, Section 93105 is to control naturally occurring asbestos emissions from construction, grading, quarrying, and surface mining operations to the lowest achievable rates by using Best Available Control Technology. Section 93105 applies to any road construction and maintenance, construction, grading, quarrying, and surface mining operations where a geographic ultramafic rock unit (GURU) may exist according to the California Department of Conservation, Division of Mines and Geology maps that identify deposits of ultramafic rock; or where any area to be disturbed has naturally occurring asbestos, serpentine (i.e., serpentinite), or GURU as determined by the owner/operator or the Air Pollution Control Officer (APCO); or where naturally occurring asbestos, serpentine, or GURU is discovered by the owner/operator, a registered geologist, or APCO in the area to be disturbed after the start of construction, grading, quarrying, or surface mining. There are no asbestos-containing rocks in the study area for geology and soils.

4A.8.2.4. Alquist-Priolo Earthquake Fault Zoning Act of 1972

The Alquist-Priolo Earthquake Fault Zoning Act, passed in 1972, required the establishment of earthquake fault zones (known as Special Studies Zones prior to January 1, 1994) along known active faults in California.

Similar to the Seismic Hazards Mapping Act (see below), its main purposes are to identify known active faults in California and to prevent the construction of buildings used for human occupancy on the surface trace of active faults. For the purpose of this Act, a fault is considered active if it displays evidence of surface displacement during the Holocene (approximately during the last 11,000 years). The Project would involve construction of buildings used for human occupancy possibly within areas prone to liquefaction and earthquake-induced landslides and as such needs to consider locations of faults.

4A.8.2.5. Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (California PRC Sections 2690 to 2699.6) was passed following the 1989 Loma Prieta earthquake to reduce threats to public health and safety by identifying and mapping known seismic hazard zones in California. The Act directs the California Geological Survey of the Department of Conservation to identify and map areas prone to earthquake hazards of liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the maps is to assist cities and counties in fulfilling their responsibilities for protecting public health and safety. The Act requires site-specific geotechnical investigations be conducted identifying the seismic hazard and formulating mitigation measures prior to permitting most developments designed for human occupancy within areas prone to liquefaction and earthquake-induced landslides (also known as a Zone of Required Investigation).

This Act applies to the Project because the Project would involve construction of facilities designed for human occupancy within areas prone to liquefaction and earthquake-induced landslides.

4A.8.3. Local/Regional Policies and Regulations

4A.8.3.1. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.5, *Geology, Soils, and Seismicity*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* (Glenn County 2020:5-75) contains a goal and policies from the 1993 *Glenn County General Plan* that are applicable to the Project. Goal PSG-3 is to protect and enhance the quality of life in the county by reducing the loss of life and personal property. Policies PSP-28 through PSP-32 generally encourage protecting soil resources, controlling erosion, and ensuring that the public is protected from geologic and seismic hazards. These policies apply to the Project because the Project will involve the loss of topsoil, could cause increased erosion rates, and is located in areas that have existing geologic hazards.

The 1993 *Glenn County General Plan* does not contain policies related to paleontological resources.

4A.8.3.2. Colusa County General Plan

The Safety Element of the *Colusa County General Plan* (Colusa County 2012:12-3 and 12-4) contains an objective to identify and mitigate a range of natural and human-caused hazards that may pose a risk to life and property in the county, including seismic and geologic hazards. The policies are primarily directed to ensuring that proper geotechnical engineering studies are conducted for proposed projects and that projects are designed to avoid or reduce the potential for damage to structures and facilities caused by geologic and seismic hazards (Policies and Actions SA 1-7. SA 1-9, SA 1-13, SA 1-14 through 1-19. SA 1-21, SA 1-F, SA 1-H, SA 1-J, and SA 1-K).

The Conservation Element of the *Colusa County General Plan* (Colusa County 2012:5-13) describes protective measures for paleontological resources.

Goal CON-3: Conserve and protect cultural and historical resources.

Objective CON-3A: Conserve Important Cultural Resources and the County's Heritage

Policy CON 3-1: Require a cultural and archaeological survey prior to approval of any project which would require excavation in an area that is sensitive for cultural or archaeological resources. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource.

Policy CON 3-2: Require all development, infrastructure, and other ground---disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the County Department of Planning and Building shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the County Department of Planning and Building.

Policy CON 3-3: Encourage and cooperate with cities, special districts, State and Federal agencies in acknowledging and preserving the County's cultural heritage, historical and archaeological structures, sites and landmarks.

Policy CON 3-4: Encourage voluntary landowner efforts to protect cultural resources consistent with applicable State law.

4A.8.3.3. County of Yolo 2030 Countywide General Plan

The Health and Safety Element of the *Yolo Countywide General Plan* (County of Yolo 2009:HS-10) provides goals, policies, and actions that guide Yolo County in ensuring adequate safety from seismic activity and unstable geologic conditions (Policies HS-1.1 through HS-1.3), The

Agriculture and Economic Development chapter (County of Yolo 2009:HG-22) provides a goal and policy that guide Yolo County in protecting soil resources (Policy AG-2.6).

The *Yolo Countywide General Plan* (County of Yolo 2009:CO-41, CO-42) provides protection for paleontological resources.

GOAL CO-4: Cultural Resources. Preserve and protect cultural resources within the County.

Policy CO-4.1 Identify and safeguard important cultural resources.

4A.8.3.4. Tehama County General Plan

The Safety Element of the *Tehama County General Plan* (Tehama County 2009: 8.0-14 to 16) has several goals and policies directed to minimizing the threat of personal injury and property damage due to seismic, geologic, and soil hazards (Policies SAF-4.1 through 4.4). The Open Space and Conservation Element (Tehama County 2009:6.0-32) contains a policy to protect soil as a resource (Policy OS-12.2).

4A.9 Chapter 13, Minerals

4A.9.1. Federal Policies and Regulations

4A.9.1.1. Critical Minerals Executive Order and Secretary Order

The President (Executive Office of the President 2017) and Secretary of the Interior (U.S. Department of the Interior 2017) issued orders directing the U.S. Geological Survey to develop and plan to improve the Nation's understanding of domestic critical mineral resources. That ongoing initiative has identified 35 critical minerals. There are no known chromium prospects or mines in the study area that would be regulated pursuant to these orders. The only identified critical mineral near the Project is chromium although it is not within the project inundation zone or any disturbance zone.

4A.9.2. State Policies and Regulations

4A.9.2.1. Surface Mining and Reclamation Act of 1975 (Public Resources Code 2762 and 2714)

Mining activities are regulated in California by the Surface Mining and Reclamation Act (SMARA) (PRC Section 2710 et seq.). This law's purpose is to create and maintain an effective and comprehensive surface mining and reclamation policy with regulation of surface mining operations to ensure that adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition that is readily adaptable for alternative land uses. Production and conservation of minerals are encouraged, and consideration is given to values relating to recreation, wildlife, range and forage, and aesthetic enjoyment, while eliminating residual hazards to public health and safety. These goals are achieved through land use planning by allowing jurisdictions to balance the economic benefits of resource extraction with the need to provide other land uses.

Sections 2761(a) and (b) and Section 2790 of SMARA provide for a mineral lands inventory process known as *classification-designation*, which is administered by California Geological Survey and State Mining and Geology Board (SMGB). *Classification* is the process of identifying lands containing significant mineral deposits. *Designation* is the formal recognition by SMGB of areas containing mineral deposits of regional or statewide significance, following a public participation process. The objective of classification and designation processes is to ensure, through appropriate lead agency policies and procedures, that mineral deposits of statewide or of regional significance are available when needed (California State Mining and Geology Board n.d.).

It is also the intent of this process, through the adoption of local mineral resource management policies, that significant mineral resources be considered in future local land-use planning decisions (PRC Section 2762). PRC Section 2762 directs that if a use is proposed that might threaten the potential recovery of minerals from an area that has been classified Mineral Resource Zone (MRZ)-2, the county (or city) must specify its reasons for permitting use, provide public notice of those reasons, and forward a copy of its statement of reasons to the State Geologist and SMGB.

SMARA defines activities that constitute *surface mining* (for example, open-pit mining of naturally exposed minerals); activities such as borrow pitting also constitute surface mining activities as defined by SMARA. Activities that are excluded from the SMARA regulations are identified in PRC Section 2714.

Four primary MRZ categories are used in classifying mineral resource potential.

- **MRZ-1.** Available information indicates that significant mineral resources are not present or little likelihood exists for their presence.
- **MRZ-2a.** Geologic data indicate that significant mineral resources underlie the area. Lands included in this category are of prime importance because they contain known economic mineral deposits.
- **MRZ-2b.** Geologic data indicate that significant mineral resources underlie the area. The area has discovered deposits that are either inferred reserves or deposits that are presently subeconomic as determined by limited sample analysis, exposure, and past mining history. With future advances in technology or changes in economics, the area could be upgraded to MRZ-2a.
- **MRZ-3a.** The area is considered to have a moderate potential for the discovery of economic mineral deposits. Further exploration work could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories.
- **MRZ-3b.** The geologic evidence leads to the plausible conclusion that economic mineral deposits are present in the area and that it is in a geologic setting that appears to be a favorable environment for the occurrence of specific mineral deposits.
- **MRZ-4.** There is a lack of knowledge of the area regarding mineral occurrence.

Of the four primary MRZ categories, MRZ-2 is perhaps the most important classification for land-use planning because of the high likelihood for occurrence of substantial mineral deposits in such areas. SMGB may determine that some MRZ-2a or MRZ-2b areas contain mineral resources with statewide or regional significance and initiate a public process for designation. Designated areas are incorporated into state regulations (California Code of Regulations Title 14, Division 2, Chapter 8, Subchapter 1, Article 2). Such designations require that a lead agency's land use decisions involving these areas be made in accordance with its established mineral resource management policies, and they require consideration of the importance of the designated mineral resource to the market region or state as a whole, not just its importance to the lead agency's area of jurisdiction (PRC, Division 2, Chapter 9, Section 2763). The area around the project inundation area has no mapped MRZ.

SMARA requires restoration plans and restoration of disturbed surface areas when mining is completed. Reclamation plan submittal and approval along with financial assurance are required as part of the permit process. Reclamation includes consideration of wildlife habitat; backfilling, regrading, slope stability, and recontouring; revegetation; drainage, diversion structures, waterways, and erosion control; prime and other agricultural land reclamation; building, structure, and equipment removal; stream protection; topsoil salvage, maintenance, and

redistribution; and tailings and mine waste management. These items apply to the extent they are consistent with the planned and actual subsequent use or uses of the mining site.

The Project would develop borrow locations and quarries within the proposed inundation zone and around the perimeter of the proposed reservoir. Quarries and borrow are regulated under SMARA and would require permits and appropriate restoration plans when their use is complete (Appendix 2D). It is anticipated that reclamation plans would not be required for any sites within the inundation area because they would be inundated. There are three quarries proposed outside the inundation zone that would require Reclamation Plans.

4A.9.2.2. California Geologic Energy Management Division Construction-Site Plan Review Program

The California Geology Energy Management Division (CalGEM; formerly Division of Oil, Gas, and Geothermal Resources) regulates drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells. As part of CalGEM's responsibilities for implementing PRC Section 3208.1, districts have developed the Construction-Site Plan Review Program to assist local agencies in identifying and reviewing the status of oil or gas wells near proposed development. The program is aimed at addressing potentially dangerous issues associated with development near oil or gas wells. CalGEM serves in an advisory role to make relevant information available to local agencies. Section 3208.1 of the PRC states that if any property owner, developer, or local permitting agency either fails to obtain an opinion from CalGEM, or fails to follow the advice of CalGEM when development occurs near an oil or gas well, then the owner of the property on which the well is located may be responsible for re-abandonment costs should a future problem arise with the well. To use the CalGEM Well Review Program, the developer or property owner submits a completed Well Review Program Application to CalGEM. Before issuing building or grading permits, local permitting agencies review and implement CalGEM's preconstruction well requirements. Interaction between local permitting agencies and CalGEM helps resolve land-use issues and allows for responsible development in oil and gas fields.

4A.9.3. Local/Regional Policies and Regulations

4A.9.3.1. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.6, *Mineral and Energy Resources*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* includes a goal and policies from the 1993 Glenn County General Plan that are relevant to the Project (Glenn County 2020:5-94,5-95). Goal NRG-5 to conserve and protect non-renewable mineral and energy resources is supported by multiple policies. Policies NPR-70 through NPR-77 generally encourage responsible mineral extraction operations and identify the proper management of the Stony Creek fan aggregate. The Project would take aggregate from the Stony Creek fan aggregate from existing facilities and would comply with county requirements for removal of materials from existing facilities. Policies NPR-79 and NPR-79 also encourage support of the natural gas industry and protection of natural gas resources.

4A.9.3.2. Colusa County General Plan

The *Colusa County General Plan* (2012) Conservation Element and Public Services and Utilities Element include the objective to conserve and protect mineral and natural gas resources and avoid land use conflicts (CON-2C) supported by multiple policies. The policies generally

encourage extraction and processing of sand and gravel to support economic uses and ensure an adequate supply of aggregate resources, as well as conserving these resources (CON 2-22, 2-24, 2-25, and 2-26). The policies also require appropriate land use siting and permitting for extraction sites (CON 2-25, and 2-26). In addition, Policy CON 2-28 requires mining property to be left in a condition that harmonizes with the natural environment and is suitable for reuse in accordance with SMARA once mining activities cease. The Project would comply with county requirements for removal of materials from existing facilities.

4A.9.3.3. County of Yolo 2030 Countywide General Plan

There would be no mining activities within Yolo County jurisdiction as part of the Project, and therefore policies and actions related to mining are not applicable.

4A.9.3.4. Tehama County General Plan

There would be no mining activities within Tehama County jurisdiction as part of the Project, and therefore goals and policies related to minerals are not applicable. Furthermore, there are no natural gas wells near the Red Bluff Pumping Plant, and therefore *Tehama County General Plan* goals and policies are not applicable.

4A.10 Chapter 14, Land Use

4A.10.1. Federal Policies and Regulations

4A.10.1.1. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

Title II, Uniform Relocation Assistance, Section 201(b) establishes a uniform policy for the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a federal agency or with federal financial assistance. The primary purpose of this Act is to ensure that such persons shall not suffer disproportionate injuries as a result of programs and projects designed for the benefit of the public as a whole and to minimize the hardship of displacement on such persons. Title III, Uniform Real Property Acquisition Policy, Section 301 was developed "in order to encourage and expedite the acquisition of real property by agreements with owners, to avoid litigation and relieve congestion in the courts, to assure consistent treatment for owners in the many federal programs, and to promote public confidence in federal land acquisition practices."

Construction of the Project may require that one or more parcels in the Project area be acquired. If federal funding is used for the Project, Reclamation would be subject to complying with the policies and provisions set forth in this Act.

4A.10.2. State Policies and Regulations

4A.10.2.1. Regulation of Local Agencies by Counties and Cities

Sites Project Authority is a local agency within the meaning of Government Code sections 53090(a) and 65402(c). The Government Code limits the applicability of County and City general plans and zoning ordinances to certain local agency facilities, including water and electrical energy projects. Specifically, Government Code section 53091(e) provides that "[z]oning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, or for the production or generation of electrical energy" by a local agency. With respect to water facilities, section 53091(e) generally covers indispensable facilities that are directly and immediately used to produce, generate, store or transmit water, and the essential components of a local agency's water storage and transmission system. Another Government Code provision authorizes a local agency, by resolution, to exempt facilities not covered by section 53091(e) but which are "integral" to water storage and transmission facilities (see Gov. Code § 53096); these might include support facilities such as storage yards and buildings, office space, and parking areas necessary for crews and support personnel. Lastly, Government Code section 65402(c) provides that a local agency may overrule county general plans that would obstruct its construction of any building or structure for a public purpose.

4A.10.2.2. California Relocation Assistance Act and the California Relocation Assistance and Real Property Acquisition Guidelines

Chapter 16, Sections 7260 to 7277 of the California Government Code state that whenever programs or projects undertaken by a public entity result in the displacement of any person, the

displaced person is entitled to payment for actual moving and related expenses as the public entity determines to be reasonable and necessary.

CCR Title 25, Chapter 6 provides guidelines to ensure that uniform, fair, and equitable treatment is afforded persons displaced from their homes, businesses, or farms as a result of the actions of a public entity in order that such persons shall not suffer disproportionate injury as a result of action taken for the benefit of the public as a whole.

Construction of the Project may require that one or more parcels in the Project area be acquired, in which case, the Authority would comply with these guidelines.

4A.10.3. Local/Regional Policies and Regulations

4A.10.3.1. Glenn County General Plan Update, 2020 Existing Conditions Report

The *Glenn County General Plan Update, 2020 Existing Conditions Report* (Glenn County 2020) contains countywide goals from the 1993 *Glenn County General Plan* that it uses as a basis for evaluating development proposals and other land-use related activities within Glenn County, as well as policies and implementation measures to support those goals. The Glenn County General Plan Update, 2020 Existing Conditions Report was reviewed for applicable goals and policies; however, the goals and policies reviewed do not instruct or influence the avoidance or mitigating of environmental effects and therefore are not further described. The 1993 *Glenn County General Plan* goals, objectives, and policies related to agriculture, noise, traffic, biological resources, public services, cultural resources, and flooding or water resources are addressed as appropriate in the respective chapters throughout this appendix and the RDEIR/SDEIS.

Glenn County Land Use Designations

Foothill Agriculture/Forestry:

Definition and Purpose: The Foothill Agriculture/Forestry classification is used to preserve foothill areas of the county by providing for areas of intensive and extensive agricultural uses; to protect grazing land; to protect timber and forest lands economically suitable for logging; and to promote and encourage the use of forest lands for multiple purposes such as preserving wildlife, hunting, hiking, or other compatible uses.

Permitted Uses: Examples of uses which are considered appropriate under this classification include, but are not limited to: grazing; animal raising operations; growing and harvesting timber; uses directly related to growing, harvesting and processing forest products; growing and harvesting agricultural crops; uses directly related to growing, harvesting and processing agricultural products; and bunting lodges, clubs and camps.

Standards for Population Density and Building Intensity: The minimum parcel size shall be one hundred sixty (160) acres. Population density shall not exceed 12 persons per square mile (640 acres) and building intensity shall not exceed one permanent residence for every 160 acres.

Currently 1,253 parcels totaling approximately 290,689 acres (approximately 35% of the unincorporated county) are included with the General Plan's Foothill Agriculture/Forestry Land Use Designation.

Intensive Agriculture:

Definition and Purpose: The Intensive Agriculture classification is used to identify areas suitable for commercial agriculture which provide a major segment of the county's economic base; to protect the agricultural community from encroachment of unrelated agricultural uses which, by their nature, would be injurious to the physical and economic well-being of the agricultural community; to accommodate lands under Williamson Act contracts; to encourage the preservation of agricultural land, both in production and potentially productive, which contain State-designated Important Farmlands or Locally Significant Farmlands.

Permitted Uses: Examples of uses which are considered appropriate under this classification include, but are not limited to: growing and harvesting field crops, grain and hay crops; growing and harvesting fruit and nut trees, vines and vegetables; pasture and grazing land; and animal raising operations.

Standards for Population Density and Building Intensity: The minimum parcel size shall be forty (40) acres. Population density shall not exceed 100 persons per square mile (640 acres) and building intensity shall not exceed one residential unit per forty (40) acres except that housing for farm labor and senior citizens in excess of the above standard may be permitted subject to permitting procedures established in the Glenn County Zoning Code.

Currently 3,834 parcels totaling approximately 304,743 acres (approximately 36% of the unincorporated county) are included with the General Plan's Intensive Agriculture Land Use Designation.

General Agriculture:

Definition and Purpose: The General Agriculture classification is used to identify those areas where it is desirable to retain agriculture as the primary land use.

Permitted Uses: Examples of uses which are considered appropriate under this classification include, but are not limited to: growing and harvesting field crops, grain and hay crops; growing and harvesting fruit and nut trees, vines and vegetables; pasture and grazing land; and animal raising operations.

Standards for Population Density and Building Intensity: The minimum parcel size shall be twenty (20) acres. Population density shall not exceed 200 persons per square mile (640 acres) and building intensity shall not exceed one residential unit per twenty (20) acres except that housing for farm labor and senior citizens in excess of the above standard may be permitted subject to permitting procedures established in the Glenn County Zoning Code.

Currently 805 parcels totaling 14,321.36 acres (approximately 1.71% of the unincorporated county) are included with the General Plan's General Agriculture Land Use Designation.

Highway and Visitor Service Commercial:

Definition and Purpose: The purpose of the Highway and Visitor Service Commercial classification is to provide sites to serve the commercial needs of travelers and visitors to the county.

Permitted Uses: Examples of uses which are considered appropriate under this classification include, but are not limited to: travel-related services such as gasoline service stations, truck stops, food and beverage sales, eating and drinking establishments and lodging located along major streets, major collectors, and major highways for travelers. Resort development is appropriate under this designation, as are other types of development that would attract visitors to the county.

Standards for Population Density and Building Intensity: Areas designated as Highway and Visitor Service Commercial shall not be utilized for permanent residences except for those units required for caretaker and/ or employee housing incidental to hotel or motel uses. The minimum parcel size shall be 8,000 square feet. Structures shall not cover more than fifty percent (50%) of the site or be higher than thirty feet (30'), unless developed as part of a Planned Development.

Currently 43 parcels totaling 728.46 acres (approximately 0.09% of the unincorporated county) are included with the General Plan's Highway and Visitor Service Commercial Land Use Designation.

Rural Residential:

Definition and Purpose: The Rural Residential classification is utilized to identify areas suitable for large lot, low density residential use that provide for development which is compatible with a rural character and lifestyle.

Permitted Uses: Examples of uses which are considered appropriate under this classification include, but are not limited to: single-family residences; agricultural and domestic livestock farming on a limited scale; and home occupations.

Standards for Population Density and Building Intensity: The minimum parcel size shall be five (5) acres. Population density shall not exceed 800 persons per square mile (640 acres) and building intensity shall not exceed one residential unit per five (5) acres except that housing for senior citizens in excess of the above standard may be permitted, subject to the permitting procedures established in the Glenn County Zoning Code.

Currently 767 parcels totaling 4,631.38 acres (approximately 0.55% of the unincorporated county) are included with the General Plan's Rural Residential Land Use Designation.

Glenn County Zoning Designations

AP – Agricultural Preserve Zone

The Agricultural Preserve Zone is to be applied to lands which are covered by a California Land Conservation Act (Williamson Act) contract with the county for the following purposes:

- To preserve the maximum amount of the limited supply of agricultural land which is necessary in the conservation of the county's economic resources and vital for a healthy agricultural economy of the county
- To protect the general welfare of the agricultural community for encroachments of unrelated agricultural uses which, by their nature, would be injurious to the physical and economic well-being of the agricultural community

AE – Exclusive Agricultural Zone

This zoning classification is established for the following purposes:

- To preserve the maximum amount of the limited supply of agricultural land which is necessary in the conservation of the County's economic resources and vital for a healthy agricultural economy of the County;
- To eliminate the encroachment of land uses which are incompatible with the agricultural use of land;
- To prevent the unnecessary conversion of agricultural land to urban uses;
- To provide areas for both intensive and extensive agricultural activities.

FA – Foothill Agricultural/Forestry Zone

This zoning classification is established for the following purposes:

- To provide areas for extensive agricultural activities
- To protect the timber and forest lands economically suitable for logging

PDC – Planned Development Commercial Zone

This zoning classification is established for the following purposes:

- To provide a means for encouraging creative and innovative commercial or industrial developments that are environmentally pleasing through the application of imaginative land planning techniques not permitted within other zones with fixed standards
- To provide for an orderly and cohesive growth, physical development pattern and the efficient delivery of county or community service
- To assure conformance of the project with the county general plan with respect to use, intensity, circulation, public facilities and the preservation of natural features
- To encourage the design of commercial planned developments for compatibility with both existing and potential land uses, including a proper functional relationship with such adjacent areas
- To promote an equitable distribution of public facilities.

HVC – Highway Visitor Commercial Zone

The purpose of this zoning district is to provide for the location of the facilities and services needed by the traveling public along the county's major collectors, at intersections with state highways and where they can be reached conveniently and safely and to provide for tourist recreational development in areas of unique scenic and recreational value, while providing for maximum conservation of the resources of the parcel.

RE-5 – Rural Residential

This zoning classification is established for the following reasons:

- To provide for residential development within a range of densities compatible with a rural character and lifestyle
- To allow residential uses in areas where agriculture is clearly a secondary use
- To use as a buffer zone between agricultural land and urbanized development
- To provide areas for hobby farms.

4A.10.3.2. Colusa County General Plan

The 2012 *Colusa County General Plan* (Colusa County 2012) includes countywide goals, objectives, and policies that it uses as a basis for evaluating development proposals and other land-use related activities within the County. Provided below are the goals, objectives, and policies that reflect Colusa County's approach to managing land use, open space, and recreational uses. All the Colusa County goals, objectives, and policies related to agriculture, noise, traffic, biological resources, public services, cultural resources, and flooding or water resources are addressed as appropriate in the respective chapters throughout this appendix and the RDEIR/SDEIS.

Land Use Element

Goal LU-4: Provide Clear Land Use Objectives and Standards to Address the Unique Needs and Conditions Associated with the Proposed Sites Reservoir.

Objective LU-4A: Provide for Orderly, Well-planned, and Compatible Growth associated with the Proposed Sites Reservoir and Surrounding Area

Policy LU 4-1: Support the creation of Sites Reservoir.

Policy LU 4-2: Participate in State and regional planning efforts related to the creation of Sites Reservoir to the greatest extent feasible.

Policy LU 4-3: Ensure that future land use decisions regarding Sites Reservoir and the surrounding area recognize the needs of the County and existing property owners to address adequate access for existing landowners and persons who travel beyond the area, noise, habitat for displaced species, and recreation and tourist opportunities that are compatible with the surrounding region.

Policy LU 4-4: Support the efforts of the Sites Reservoir Joint Powers Authority, with particular emphasis on landowner relocation assistance and ensuring financial compensation for landowners adversely impacted by the creation of Sites Reservoir.

Policy LU 4-5: Future land use and zoning designations in the Sites Reservoir Planning Area should emphasize natural resource and wildlife habitat protection, recreational opportunities, open space preservation, and limited commercial development to support recreation and tourism. Year-round housing in the vicinity of Sites Reservoir should be discouraged.

Open Space and Recreation Element

Goal OSR-2: Increase Opportunities for Recreational Activities in Open Space.

Objective OSR 2-A: Ensure Adequate and Increased Public Access is Available to Open Space Recreation Areas

Policy OSR 2-1: Develop "gateways" or trailheads that provide access for the public to recreation areas, including County, State and Federal lands. Where located on private land, gateways shall be developed by working with willing landowners.

Policy OSR 2-5: Public access to the water and shoreline areas of lakes, reservoirs, rivers and streams, should be provided where appropriate.

Policy OSR 2-7: Require the development of open space corridors, bicycle paths and trails providing access and connectivity to waterways, scenic areas, parks, and other outdoor recreation areas in collaboration with affected landowners as a part of project approval. The intent is to provide trails and corridors that connect each community and city to special places and recreation opportunities, throughout the County.

Objective OSR 2-B: Increase Opportunities for County Residents and Visitors to Engage in a Broad Variety of Outdoor Recreation Activities.

Policy OSR 2-12: Enhance parking and public facilities at the Sacramento River, East Park Reservoir, Mendocino National Forest, and other open space and waterway recreation areas. Encourage the use of alternative transportation by providing bike racks and other appropriate facilities.

Policy OSR 2-13: Encourage recreational uses that emphasize use of the waterways in locations directly on the Sacramento River, East Park Reservoir, and the proposed Sites Reservoir. Examples include fishing, canoeing, boating, and nature observation. With the exception of boat launches and docks, more active uses, such as parking, restrooms, and picnic areas, shall be located in areas away from the river and sensitive riparian habitat.

Policy OSR 2-14: Encourage recreational uses that emphasize a range of outdoor activities, such as hiking, drive-in camping, hike-in camping, picnics, off-highway vehicle use, and nature observation, at the Mendocino National Forest, East Park Reservoir, proposed Sites Reservoir, Sacramento River, and other outdoor recreation areas. Policy

Policy OSR 2-15: Support the location and creation of Sites Reservoir in Colusa County. (See Policies LU 4-1 through 4-5.)

Policy OSR 2-16: Require future water development projects, including reservoirs, marinas, and water-front developments, to include provisions for public access to the water and shoreline areas to the greatest extent feasible, without compromising private property rights.

Goal OSR-3: Support the Creation and Expansion of Recreational Opportunities in and Around Existing Communities

Objective OSR 3-A: Ensure Adequate Parks and Active Recreational Facilities are Available to County Residents

Policy OSR 3-1: Pursue partnerships with the private sector and non-governmental organizations to provide services and/or maintain all or components of park facilities, wherever practical.

Policy OSR 3-4: Support the efforts of existing parks and recreation districts to provide facilities within and around communities. The County should also support the creation of new parks and recreation districts in communities that are not already served by one.

Policy OSR 3-7: Ensure access for disabled people is provided for park and recreation areas and facilities as appropriate.

Policy OSR 3-8: Incorporate security measures into park design and recreation facilities to ensure public health and safety

Colusa County Land Use Designations

Agriculture General

The Agriculture General (AG) designation identifies areas to be retained for agriculture and/or uses that are complementary to existing or nearby agricultural uses. This designation includes lands under agricultural preservation and/or conservation contracts and easements; land having present or future potential for agricultural production, and contiguous or intermixed smaller parcels on which non-compatible uses could jeopardize the long-term agricultural use of nearby agricultural lands. Lands designated Agriculture General are planned to be preserved for agricultural uses and the intent of the designation is to preserve such lands for existing and future agricultural use and protect these lands from the pressures of development.

Government

Within Colusa County, this Land Use designation has been applied to land owned or administered by the Federal government. With regards to this Project, the land designated as Government is administered by Reclamation for Funks Dam and Reservoir.

Parks and Recreation

The Parks and Recreation (PR) designation identifies areas suitable for public and quasi---public recreational and tourist activities. Specific sites for community parks to serve future residential growth are not identified on the land use map, but ample room has been provided in future urban residential and urban reserve areas for such parks.

Rural Residential

The Rural Residential (RR) designation is intended for areas where land ownership and parcel patterns preclude the use of land for agriculture, but the land is not appropriate for urban uses and densities due to lack of public water and sewer service. The primary use of the rural residential designation is housing, with parcels usually large enough for backyard gardening, raising horses, or other small-scale agricultural activities that are not the primary use of the parcel. This designation accommodates semi-rural and rural living at average densities of one house per two to ten acres. This designation is used to preserve the attractive low-density character of the areas around or adjacent to established urban areas, such as Colusa, Williams, Arbuckle, and Maxwell and adjacent to rural community centers, such as Grimes, Princeton, and Stonyford and the partially developed non-sewered communities and settlements such as College

City and Century Ranch. The Rural Residential designation may serve as a buffer between farmland and urban uses.

Colusa County Zoning Designations

Exclusive Agriculture (E-A)

The purpose of the E-A zone is to protect agricultural uses and agricultural operations in areas where fertile soils particularly suited to crop production are present, areas where agriculture is the natural and desirable primary land use, and where the protection of agriculture from the encroachment of incompatible land uses is essential to the general welfare and economic prosperity of the County.

Foothill Agriculture (F-A)

The purpose of the F-A zone is to protect, support, and maintain a viable, long-term agricultural sector in areas of the County with soil types that are not optimal for crop production. The F-A zone is intended to be applied in areas where agricultural activities such as grazing, orchards, and vineyards are the natural and desirable primary land use, and where the protection of agriculture from the encroachment of incompatible land uses is essential to the general welfare and economic prosperity of the County.

Rural Services (R-S)

The R-S zone identifies areas suitable to provide necessary housing and services to the rural communities of Delevan, Sites, and Lodoga. The R-S zone facilitates multiple land uses on any given lot, consistent with and supportive of a higher intensity of development in the community area core that will contribute to a prosperous economy and higher quality of life in each of these rural centers. Subdivision or lot splitting into parcels smaller than two acres is prohibited, unless community water and septic/sewer systems can be provided to serve lots smaller than two acres.

Upland Conservation (U-C)

The purpose of the U-C zone is to protect the mountain and upland foothill areas where forestry, mining, grazing, and recreational uses are natural and desirable uses. The U-C zone is intended to provide protection in these areas of the County from man-made fire and erosion hazards, pollution, and other detrimental effects of incompatible land uses.

State, Federal and Other Agency Land

Within Colusa County, this zoning code has been applied to land owned or administered by the Federal government. With regards to this Project, the land zoned as State, Federal, and Other Agency Land is administered by Reclamation for Funks Dam and Reservoir.

4A.10.3.3. County of Yolo 2030 Countywide General Plan

The 2030 *Yolo Countywide General Plan* (County of Yolo 2009) includes countywide goals and policies that it uses as a basis for evaluating development proposals and other land-use related activities within Yolo County. The Yolo Countywide General Plan was reviewed for applicable goals and policies; however, the goals or policies reviewed do not instruct or influence the avoidance or mitigating of environmental effects and therefore are not further described. All the Yolo County goals and policies related to agriculture, noise, traffic, biological resources, public

services, cultural resources, and flooding or water resources are addressed as appropriate in the respective chapters throughout this appendix and the RDEIR/SDEIS.

Yolo Bypass is largely zoned as Agricultural Intensive. Part of Yolo Bypass is designated as a Public Open Space and characterized by its passive or low management use. Residential and industrial properties are prohibited in this designation (County of Yolo 2009 and 2014)

Yolo County Land Use Designations

Agriculture

Agriculture (AG) includes the full range of cultivated agriculture, such as row crops, orchards, vineyards, dryland farming, livestock grazing, forest products, horticulture, floriculture, apiaries, confined animal facilities and equestrian facilities. It also includes agricultural industrial uses (e.g. agricultural research, processing and storage; supply; service; crop dusting; agricultural chemical and equipment sales; surface mining; etc.) as well as agricultural commercial uses (e.g. roadside stands, "Yolo Stores," wineries, farm-based tourism (e.g. u-pick, dude ranches, lodging), horseshows, rodeos, crop-based seasonal events, ancillary restaurants and/or stores) serving rural areas. Agriculture also includes farmworker housing, surface mining, and incidental habitat.

Commercial General

Commercial General (CG) includes regional and highway-serving retail, offices, service retail and agricultural commercial uses. Research and development is allowed where offices and service support uses are the primary use (accounting for more than 50 percent of the total square footage). There is no limit on the amount of ground floor square footage. Upper floor and accessory attached residential uses are allowed.

Yolo County Zoning Designations

Agricultural Intensive (A-N)

The Agricultural Intensive (A-N) Zone is applied to preserve lands best suited for intensive agricultural uses typically dependent on higher quality soils, water availability, and relatively flat topography. The purpose of the zone is to promote those uses, while preventing the encroachment of nonagricultural uses. Uses in the A-N Zone are primarily limited to intensive agricultural production and other activities compatible with agricultural uses. This includes allowing agriculturally-related support uses, excluding incompatible uses, and protecting the viability of the family farm. Minimum lot size for newly created parcels(1) in the A-N Zone is 40 acres for irrigated parcels primarily planted in permanent crops, such as orchards or vineyards; 80 acres for irrigated parcels that are cultivated; 160 acres for parcels that are generally uncultivated and/or not irrigated. Yolo Bypass is largely zoned as Agricultural Intensive.

Agricultural Extensive (A-X)

The Agricultural Extensive (A-X) Zone is applied to protect and preserve lands that are typically less dependent on high soil quality and available water for irrigation. Such lands require considerably larger parcel sizes to allow extensive agricultural activities such as livestock and ranching operations, and dry land farming. These lands may also be used for open space functions that are often connected with foothill and wetlands locations, such as grazing and

pasture land, and wildlife habitat and recreational areas. Minimum lot size for newly created parcels in the A-X Zone is 160 acres for dry land farming and 320 acres for rangeland.

Highway Services Commercial (C-H)

The purpose of the Highway Services Commercial (C-H) Zone is to provide for retail, commercial, amusement, and transient residential (hotel/motel) uses which are appropriate to highway locations and dependent upon highway travel. Permitted uses include auto and truck service stations and repair, vehicle and boat equipment sales, hotels/motels, restaurants, small retail sales. The C-H Zones are applied on parcels of two (2) acres or more and are located only in the vicinity of highways or major arterials. The maximum permitted floor area ratio in the C-G zone is 1.0. The C-H Zone implements the Commercial General (CG) land use designation in the 2030 Countywide General Plan.

Public Open Space.

Part of Yolo Bypass is designated as a Public Open Space (POS). The purpose of the POS Zone is to recognize major publicly-owned open space lands, major natural water bodies, agricultural buffer areas, and habitat preserves. The POS lands are characterized by passive or low management uses. Detention basins are allowed in the POS zone if they are designed with naturalized features and native landscaping. Residential and industrial uses, and gas well exploration, drilling and extraction are prohibited.

4A.11 Chapter 15, Agriculture and Forestry Resources

4A.11.1. Federal Policies and Regulations

4A.11.1.1. Farmland Protection Policy Act

Farmland Protection Policy Act of 1981 (7 U.S.C. §§ 4201–4209 and 7 C.F.R. Part 658)

The Farmland Protection Policy Act (FPPA) was developed to protect farmland. It requires federal agencies to coordinate with the Natural Resources Conservation Service (NRCS) if a proposed activity would directly or indirectly result in conversion of farmland to a nonagricultural use. The FPPA requires federal agencies to evaluate potential direct and indirect effects of a proposed action and its alternatives on farmland before approving any activity that would convert farmland to a nonagricultural use.

Farmland under the FPPA refers to land that meets the definition of prime or unique farmland or farmland of statewide or local importance, as defined by Section 1540(c)(1) of the FPPA. Farmland subject to FPPA requirements does not have to be currently in use for cropland. However, farmland that has already been converted to industrial, residential, or commercial use or is used for recreational purposes is not subject to the requirements of the FPPA.

The FPPA applies to programs and projects wholly or partially sponsored or financed by the federal government. The FPPA requires completion of the Land Evaluation and Site Assessment (LESA) analysis, as described in 7 C.F.R. Section 658.5, in order to determine an overall rating for each alternative analyzed. The LESA analysis is based on completion of a form which requires input from both the federal agency involved and from NRCS.

Because Reclamation is a federal agency and is a NEPA co-lead agency for the RDEIR/SDEIS, it is required to coordinate with NRCS to comply with the FPPA.

4A.11.2. State Policies and Regulations

4A.11.2.1. Farmland Mapping and Monitoring Program

The California Department of Conservation administers the Farmland Mapping and Monitoring Program (FMMP), which evaluates the quality of farmlands throughout the state. The suitability of local soil resources plays a crucial part in FMMP's farmland classifications. FMMP uses U.S. Department of Agriculture NRCS soil survey information, land inventories, and monitoring criteria to classify most of the state's agricultural regions into five agricultural and three nonagricultural land types. Every 2 years, FMMP publishes this information in its Important Farmland map series. The five agricultural land classifications are as follows.

- **Prime Farmland.** Lands with the best combination of physical and chemical features that are able to sustain long-term production of agricultural crops. The land must be cropped and supported by a developed irrigation water supply that is dependable and of adequate quality during the growing season. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date.

- **Farmland of Statewide Importance.** Lands that are similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. These lands have the same reliable sources of adequate-quality irrigation water available during the growing season. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date.
- **Unique Farmland.** Lower-quality soils that are used for the production of the state's leading agricultural crops. These lands are usually irrigated but may include nonirrigated orchards or vineyards, as found in some climatic zones of California. Land must have been cropped at some time during the two update cycles prior to the mapping date.
- **Farmland of Local Importance.** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and local advisory committees. These lands can cover a broad range of agricultural uses, which are identified by a local advisory committee convened in each county by FMMP, in cooperation with NRCS, and the county board of supervisors. This category of lands may include confined animal agriculture facilities, at the discretion of each county.
- **Grazing Lands.** Lands of at least 40 acres on which the existing vegetation is suited to the grazing of livestock.

The three categories (Prime Farmland, Farmland of Statewide Importance, and Unique Farmland) are considered *Important Farmland* and also meet the definition of agricultural land under CEQA Section 21060.1.

4A.11.2.2. California Land Conservation Act of 1965 (Williamson Act)

The California Farmland Conservancy Program (California PRC 10200 et seq.) supports the voluntary granting of agricultural conservation easements from landowners to qualified nonprofit organizations, such as land trusts, as well as local governments. Conservation easements are voluntarily established restrictions that are permanently attached to property deeds, with the general purpose of retaining land in its natural, open-space, agricultural, or other condition while preventing uses that are deemed inconsistent with the specific conservation purposes expressed in the easements. Agricultural conservation easements define conservation purposes that are tied to keeping land available for continued use as farmland. Such farmlands remain in private ownership and the landowner retains all farmland use authority, but the farmland is restricted in its ability to be subdivided or used for nonagricultural purposes, such as urban uses. Contracts are generally for 10 or 20 years, although California Assembly Bill (AB) 1265 allows counties that received less than half of their foregone general fund property tax revenue in the prior year to shorten contract periods to 9 and 18 years, respectively.

According to Section 51292, no public agency or person shall locate a public improvement within an agricultural preserve unless (1) the location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve and (2) there is no other land within or outside the preserve on which it is reasonably feasible to locate the public improvement. However, according to Section 51293, this section does not apply to the location or construction of flood control works, including channel rectification and alteration. Such flood control works are determined to be compatible with or enhance land within an agricultural preserve.

4A.11.2.3. Farmland Security Zones

The California state legislature established the Farmland Security Zone (FSZ) program in 1998. Similar to the Williamson Act program, the FSZ program is intended to protect farmland from conversion. The FSZ program does so through offering property owners a tax reduction that is greater than the Williamson Act tax reduction. Contracts are valid only for Important Farmland—that is, Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance.

4A.11.3. Local/Regional Policies and Regulations

4A.11.3.1. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.8, *Agriculture Resources*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* contains policies regarding agriculture from the 1993 *Glenn County General Plan* that are relevant to the Project (Glenn County 2020:5-121–5-122). These policies generally recognize the importance of agriculture as a primary, extensive land use to preserve the economy and open space values in Glenn County. They support agricultural land preservation tools such as the Williamson Act, conservation easements, and zoning and minimum parcel sizes. The policies also acknowledge the value of grazing land in the foothills but note that limited conversion of grazing land to other uses may be less harmful than conversion of cropland.

4A.11.3.2. Glenn County Zoning Code

Title 15, Section 300.010 establishes zones to regulate land uses, including zones for agricultural use. These include:

- Foothill Agricultural/Forestry Zone (FA), provided to protect areas with extensive agricultural activities and areas with timber and forest lands economically suitable for logging
- Agricultural Preserve Zone (AP), applied to lands covered by a California Land Conservation Act (Williamson Act) contract with Glenn County, in order to preserve the maximum amount of the limited supply of agricultural land
- Farmland Security Zone (FS), applied to lands covered by a Farmland Security Zone Contract as allowed by the California Land Conservation Act, in order to protect against encroachments of unrelated uses
- Exclusive Agricultural Zone (AE), to preserve the maximum amount of the limited supply of agricultural land and provide areas for both intensive and extensive agricultural activities

4A.11.3.3. Colusa County General Plan

The *Colusa County General Plan* contains goals, objectives, and policies regarding agriculture relevant to the Project (Colusa County 2012:2-2–2-9). The goals set out the importance to preserve, protect, and enhance agriculture in the County as a critical land use, economic sector, and resource. Policies establish minimum parcel sizes, encourage the conservation of agricultural land use programs, and support and promote water development projects that provide additional sources of water for agricultural uses.

4A.11.3.4. Colusa County Zoning Code

Chapter 44, Section 2.20.10 describes the agricultural zones in Colusa County.

- Foothill Agriculture (F-A) protects a "viable, long-term" agricultural region with soil types that are not optimal for crop production. It applies in areas with grazing, orchards, and vineyards.
- Exclusive Agriculture (E-A) protects areas where fertile soils suitable for crop production are present from the encroachment of incompatible land uses.
- Upland Conservation (U-C) protects the mountain and foothill areas used for grazing, among other uses.
- Upland Transition (U-T) provides opportunities for lot subdivision in the areas where grazing and other uses occur. This serves as a land use buffer between established communities and large-scale U-C parcels.
- Agricultural Transition (A-T) identifies areas where small-scale agricultural uses are appropriate and have been established on parcels smaller than 40 acres. While lot sizes are smaller than in other agricultural zones, land in the A-T zone is intended to remain in agricultural use.

4A.11.3.5. County of Yolo 2030 Countywide General Plan

The *Yolo County General Plan* contains goals and policies regarding agriculture relevant to the Project (Yolo County 2009:AG-18–AG-33). The goals set out the importance to preserve agricultural as fundamental to Yolo County's identity and to protect natural resources that are needed to ensure that agriculture remains an essential part of Yolo County's future. Policies establish minimum parcel sizes, discourage conversion of agricultural land to nonagricultural uses, set minimum mitigation ratios for agricultural land conversion, and focus on the importance of preserving water resources for agricultural use.

4A.11.3.6. Yolo County Zoning Code, Title 8, Chapter 2

Section 8-2.301 (Purpose)

The purpose of the agricultural zones is to provide for land uses that support and enhance agriculture in the unincorporated area of Yolo County. These uses must be "compatible with agriculture, and may include uses that support natural resource management, open space, outdoor recreation, and enjoyment of scenic beauty."

Section 8-2.302 (Agricultural Zones)

Agricultural land in Yolo County is separated into five zoning districts, with specific use types, minimum lot area, and other requirements. These include

- Agricultural Intensive (A-N), applied to preserve lands best suited for intensive agricultural uses typically dependent in higher quality soils, water availability, and flat topography
- Agricultural Extensive (A-X), applied to protect and preserve lands that are typically less dependent on high soil quality and available water for irrigation

- Agricultural Commercial (A-C), applied to existing and planned commercial uses in the agricultural areas
- Agricultural Industrial (A-I), applied to land in the rural areas for more intensive processing and industrial-type uses, which are directly related to the local agricultural industry
- Agricultural Residential (A-R), applied only to those lots created through a subdivision approved under the Clustered Agricultural Housing Ordinance

Section 8-2.404 (Agricultural Conservation and Mitigation Program)

Zoning Ordinance Section 8-2.404 implements the agricultural land conservation policies in the *Yolo County General Plan* with a program designed to protect permanently agricultural land located within the unincorporated area through conservation of agricultural land and/or mitigation. Pursuant to this zoning ordinance, mitigation is required for (1) conversion of agricultural land or (2) change from agricultural use to a predominantly nonagricultural use prior to, or concurrent with, approval of a zone change from agricultural to urban zoning or other discretionary or ministerial approval by the County. With exceptions, projects that convert Prime farmland need to preserve a minimum of 3 acres of agricultural land for each acre of agricultural land converted (a 3:1 ratio). For projects that convert non-Prime farmland, a minimum of 2 acres of agricultural land needs to be preserved for each acre of land changed to a predominantly nonagricultural use or zoning classification (a 2:1 ratio). Projects that convert a mix of Prime and non-Prime lands need to mitigate at a blended ratio that reflects the percentage mix of converted Prime and non-Prime lands within project site boundaries.

For both Prime and non-Prime farmland in Yolo County, mitigation land must be located within 2 miles of the sphere of influence of a city or within 2 miles of the general plan urban growth boundary of the town of Esparto, or in any other area designated by the Yolo County Board of Supervisors based on substantial evidence demonstrating that the parcel at issue consists predominantly of Prime farmland and/or is subject to conversion to nonagricultural use in the foreseeable future. Such designation will be made by resolution and will specify whether the designated area is a “priority conservation area” subject to a 1:1 mitigation ratio. For all other designated areas, the resolution will specify the mitigation ratio for any mitigation occurring in the covered area, which may exceed the applicable base ratio.

There are exemptions from the conservation and mitigation program for uses and activities on agricultural land, including affordable housing projects; public uses such as parks, schools, cultural institutions, and other public agency facilities and infrastructure that do not generate revenue; gravel mining projects regulated under Title 10, Chapter 3-5 of the Yolo County Code; and projects covered by an approved specific plan that includes an agricultural mitigation program. The approving authority may partly or entirely deny the exemption if it is determined that the additional cost of complying with this program does not jeopardize project feasibility and no other circumstances warrant application of the exemption.

4A.12 Chapter 16, Recreation Resources

4A.12.1. Federal Policies and Regulations

4A.12.1.1. Federal Water Project Recreation Act of 1965, as Amended

The Federal Water Project Recreation Act [16 U.S.C. 460(L)(12)–460(L)(21)] declares the intent of Congress is that recreation, fish, and wildlife enhancement be given full consideration as purposes of federal water projects if nonfederal public bodies agree: (1) to bear 50% of the cost of recreation enhancement and 25% of the cost of fish and wildlife enhancement, (2) to administer project lands and water bodies for these purposes, and (3) to bear all operation, maintenance, and replacement costs. This cost sharing is not required on federal lands under federal programs for fish and wildlife conservation.

This Act also authorizes the use of federal water project funds for land acquisition to establish refuges for migratory waterfowl when recommended by the Secretary of the Interior and authorizes the Secretary to provide facilities for outdoor recreation, fish, and wildlife at all reservoirs under the Secretary's control, except those within national wildlife refuges.

The Act additionally requires federal agencies with authority to approve water projects to include recreation development as a condition of approving permits. Recreation development must be considered along with any navigation, flood control, reclamation, hydroelectric, or multipurpose water resource project. The Act states that "consideration should be given to opportunities for outdoor recreation and fish and wildlife enhancement whenever any such project can reasonably serve either or both purposes consistently." Compliance with the Act is achieved through the documentation of the consideration of recreation opportunities in USACE reports and NEPA documents. The Project aims to enhance water resources and would provide public access and recreation opportunities. The Project would also receive federal funding; therefore, it would be subject to the Federal Water Project Recreation Act.

4A.12.1.2. Management Guide for the Shasta and Trinity Units of the Whiskeytown-Shasta-Trinity National Recreation Area

The purpose of the 2014 Shasta-Trinity National Recreation Area (NRA) management guide is to provide a general framework to guide NRA management and to evaluate and gauge the appropriate NRA management efforts and analysis. The guide provides a collection of information that describes the area and the resources, desired conditions, and opportunities to move toward these conditions. The guide also describes management practices and administrative actions that interpret and implement goals, objectives, standards, and direction related to the creation of legislation, regulations and policy, and the Forest Land and Resource Management Plan. It provides a framework to work with others, including the public, partners, and cooperators, with the goal to balance often diverse public interests without compromising natural resources. The guide provides for consistent and fair decisions where there is discretion under existing laws, regulations, and policy. However, the NRA management guide is not a decision document or an assessment under NEPA and does not implement site-specific projects (Shasta-Trinity National Forest 2014). The Project would provide public access for recreation that connects to the Shasta and Trinity Units of the Whiskeytown-Shasta-Trinity NRA; therefore, it would be subject to the 2014 NRA Management Guide.

4A.12.1.3. San Luis Authorization Act

Congress passed the San Luis Authorization Act in 1960 to authorize the construction and operation of the San Luis Unit and to enable Reclamation to participate in the development of recreation facilities. The San Luis Unit is a part of the CVP and the SWP and is jointly operated by Reclamation and DWR. The principal purpose of the federal portion of the facilities is to furnish approximately 1.25 million acre-feet of water as a supplemental irrigation supply to 600,000 acres located in the western portion of Fresno, Kings, and Merced Counties.

4A.12.2. State Policies and Regulations

4A.12.2.1. California Public Trust Doctrine

The California Public Trust Doctrine holds that certain resources are above private ownership and reside in the trust of the government for the benefit of the people. It is the duty of the government to administer these resources for the highest public interest. California courts have expanded the scope of the Doctrine to include recreation and environmental benefits. Additionally, the Doctrine has been expanded to include not only navigable waters, but all state-owned lands, fish, and wildlife. The Project includes recreational opportunities for the benefit of the people and environment and is therefore subject to the California Public Trust Doctrine.

4A.12.2.2. California Department of Parks and Recreation's Division of Boating and Waterways Regulations and Programs

One of the primary missions of the California Division of Boating and Waterways (CDBW) is to promote a safer and more enjoyable boating environment. Boating law enforcement in California is primarily performed at the local level by local agencies, such as county sheriff and municipal marine patrol units. CDBW, through its Boating Law Enforcement Unit, acts to meet the goals of providing for adequate and consistent law enforcement through local agencies throughout the state. California boating laws are contained in instruments of state law, including the California Harbors and Navigation Code, Vehicle Code, Penal Code, and California Code of Regulations, among others. California boating laws and regulations apply uniformly on all waters of the state. However, California law does not replace the U.S. Coast Guard and other federal regulations in force on federally navigable waters, but it is in general conformity with these (California Department of Parks and Recreation's Division of Boating and Waterways 2009).

To meet CDBW's major objective to protect the public's right to safe and enjoyable boating on the waterways of California, the Boating Law Enforcement Unit has established two primary goals:

1. To provide for adequate boating law enforcement through local agencies.
2. To ensure that enforcement of California boating laws is uniform throughout the state.

The Boating Law Enforcement Unit meets these goals through programs that provide financial aid and officer training to local boating law enforcement agencies. CDBW provides grants to local governments to fund Marine Law Enforcement equipment and remove abandoned recreational vessels, marine debris, and to accept surrendered recreational vessels. The Division also provides funding to local government agencies to augment their existing budget for boating law enforcement personnel, search and rescue operations, and recovery of drowned bodies.

CDBW invests in facilities on state-owned and state-managed properties, including those on State Parks and State Water Project properties. Local public entities may apply for grants to plan, design, renovate, and construct launching ramps and facilities for motorized and nonmotorized boats. It also provides funding so that local agencies can renew deteriorated facilities or develop new public access. Public and private marinas may apply for funding to plan, design, renovate and construct small craft harbors, marinas, dry storage facilities and fund emergency repairs.

CDBW also administers the Aquatic Invasive Species Program whose mission is to manage aquatic invasive plants in the Sacramento–San Joaquin Delta and to help prevent Dreissenid mussels in partnership with other state, local, and federal agencies. This program implements the Floating Aquatic Vegetation (FAV) Control Program, the Submerged Aquatic Vegetation (SAV) Control Program, and the Quagga and Zebra Mussel Infestation Prevention Grant Program. The FAV Control Program uses a strategic and adaptive Integrated Pest Management (IPM) system, including herbicide treatment supported by hand-picking, herding, mechanical removal, and biological efforts. The SAV Control Program uses herbicide treatment as part of a strategic and adaptive IPM system, including herbicide treatment supported by hand-picking. The Quagga and Zebra Mussel Infestation Prevention Grant Program, which supports preventative plans that help protect California's reservoirs from a Dreissenid mussel infestation. The Project includes opportunities for recreational boating and is therefore subject to the California Division of Boating and Waterways regulations and programs.

Folsom Lake State Recreation Area General Plan and Amendment

The first Folsom SRA General Plan was approved in 1979. The plan was amended in 1996 to include additional facility recommendations for the Negro Bar (Lake Natoma), Willow Creek (Lake Natoma), and Beals Point (Folsom Lake) areas as part of the American River Bridge Crossing Project at Lake Natoma. State Parks is updating the general plan for the Folsom Lake SRA. The original 1979 general plan identifies the objectives for both Lake Natoma and Folsom Lake.

Lake Oroville State Recreation Area Resource Management Plan and General Development Plan and Amendment

In 1973, the Lake Oroville SRA Resource Management Plan and General Development Plan were approved. The plans outlined the allowable use intensities and planned development for each area in the SRA. In 1988, an amendment to the plan was approved to address three issues in the Lime Saddle area: acquisition of land, disposal of a parcel, and expansion of the existing Lime Saddle Marina.

San Luis Reservoir State Recreation Area General Development Plan and Amendment

The General Development Plan for the San Luis Reservoir SRA was approved in 1971, although the plan was not developed to the same level of detail used for later State Parks general plans. In 1986, the General Development Plan was amended to revise the land use designation for about 65 acres of land on the northern side of O'Neill Forebay from undesignated to a day and overnight use designation, thus allowing development of overnight facilities in the Meadows area and boat-in day-use and camping facilities in the Grant Line area. State Parks is updating the general plan for the San Luis Reservoir SRA.

4A.12.3. Local/Regional Policies and Regulations

4A.12.3.1. Glenn County General Plan

In the 1993 *Glenn County General Plan* vision, "The county will retain its abundant recreational opportunities, attracting people who are also attracted to outdoor activity, and a lifestyle which permits time to enjoy the out-of-doors" (Glenn County 1993:V-3). The *Glenn County General Plan Update, 2020 Existing Conditions Report* (Glenn County 2020) did not include recreation policies relevant to the Project; however, the Project would have components located in Glenn County and the city of Willows, included below.

City of Willows

The City of Willows Recreation Department is responsible for operating four parks and recreation facilities in the city, as well as organizing various citywide recreational activities that are offered on a year-round basis to city and county residents. The GCID Main Canal of the Project are within the City of Willows city limits and therefore applicable to the *Glenn County General Plan Update, 2020 Existing Conditions Report* (Glenn County 2020).

4A.12.3.2. Colusa County General Plan

The Open Space and Recreation (OSR) Element of the *Colusa County General Plan* (Colusa County 2012) is intended, among other things, to "provide specific policies and implementing measures to govern preservation of open space and to govern the maintenance, expansion and creation of recreational resources and amenities to maintain a high quality of life for the citizens of Colusa County." The following objectives and policies are relevant to the Project, as it includes public access and recreation opportunities:

Objective OSR 1-A: Provide a Diverse and Accessible Range of Open Space Lands

Policy OSR 1-5: New development should be designed and constructed to preserve open space features such as scenic corridors, wetlands, riparian vegetation, native vegetation, trees and natural resource areas where feasible and appropriate.

Policy OSR 1-6: Publicly owned lands currently used for recreational purposes or as undeveloped open space should be retained in their present use, unless designated for an alternative use by the General Plan Land Use Map.

Objective OSR 1-D: Encourage the Preservation of Scenic Vistas and Limit the Proliferation of Unsightly Signage along County Roadways and in Scenic Areas

Policy OSR-1-16: Protect and preserve the following features along rural character corridors and in scenic areas to the extent appropriate and feasible:

- Trees, wildflowers, and other natural or unique vegetation
- Landforms and natural or unique features
- Views and vistas, including expansive views of open space and agricultural lands
- Historic structures (where feasible), including buildings, bridges, and signs

Policy OSR 1-17: Provide a greater number of areas along rural character corridors and in scenic areas for public access and recreation, including vistas, rest stops, or picnicking.

Objective OSR 2-A: Ensure Adequate and Increased Public Access is Available to Open Space Recreation Areas

Policy OSR 2-1: Develop "gateways" or trailheads that provide access for the public to recreation areas, including County, State and Federal lands. Where located on private land, gateways shall be developed by working with willing landowners.

Policy OSR 2-2: Require a clear, coordinated system of signage for any new equestrian, hiking, OHV or bicycling trails, with priority given to well-used or linked trail systems.

Policy OSR 2-5: Public access to the water and shoreline areas of lakes, reservoirs, rivers and streams, should be provided where appropriate.

Policy OSR 2-6: Prohibit the use of off-road vehicles on bicycling, hiking and horseback riding trails.

Policy OSR 2-7: Require the development of open space corridors, bicycle paths and trails providing access and connectivity to waterways, scenic areas, parks, and other outdoor recreation areas in collaboration with affected landowners as a part of project approval. The intent is to provide trails and corridors that connect each community and city to special places and recreation opportunities, throughout the County.

Policy OSR 2-8: Require dedication of public access by fee or easement from a public roadway to a public-use recreational stream, public lakes, and major reservoirs as a condition of approval for development projects adjacent to such features if: 1) the project blocks an existing public access point or it results in the need for additional access, and 2) other reasonable access to the public-use recreational waterway is not available.

Objective OSR 2-B: Increase Opportunities for County Residents and Visitors to Engage in a Broad Variety of Outdoor Recreation Activities

Policy OSR 2-11: Support development of new off-highway vehicle (OHV) parks and trails at appropriate locations.

Policy OSR 2-13: Encourage recreational uses that emphasize use of the waterways in locations directly on the Sacramento River, East Park Reservoir, and the proposed Sites Reservoir. Examples include fishing, canoeing, boating, and nature observation. With the exception of boat launches and docks, more active uses, such as parking, restrooms, and picnic areas, shall be located in areas away from the river and sensitive riparian habitat.

Policy OSR 2-14: Encourage recreational uses that emphasize a range of outdoor activities, such as hiking, drive-in camping, hike-in camping, picnics, off-highway vehicle use, and nature observation, at the Mendocino National Forest, East Park Reservoir, proposed Sites Reservoir, Sacramento River, and other outdoor recreation areas.

Policy OSR 2-15: Support the location and creation of Sites Reservoir in Colusa County. (See Policies LU 4-1 through 4-5.)

Policy OSR 2-16: Require future water development projects, including reservoirs, marinas, and water-front developments, to include provisions for public access to the water and shoreline areas to the greatest extent feasible, without compromising private property rights.

Policy OSR 2-17: Encourage future forest recreation projects to include provisions for public access and a range of amenities, including off-highway vehicles, hiking trails, drive-in campgrounds, and hike-in campgrounds, to serve a variety of visitors.

Objective OSR 3-A: Ensure Adequate Parks and Active Recreational Facilities are Available to County Residents

Policy OSR 3-1: Pursue partnerships with the private sector and non-governmental organizations to provide services and/or maintain all or components of park facilities, wherever practical.

Policy OSR 3-6: New parks and park rehabilitation projects should include recycling and composting facilities, and use local native plants and local materials to the greatest extent feasible.

Policy OSR 3-7: Ensure access for disabled people is provided for park and recreation areas and facilities as appropriate.

Policy OSR 3-8: Incorporate security measures into park design and recreation facilities to ensure public health and safety.

With respect to the Project, the Land Use (LU) Element of the *Colusa County General Plan* (Colusa County 2012) contains the following objective and policies.

Objective LU-4A: Provide for Orderly, Well-planned, and Compatible Growth associated with the Proposed Sites Reservoir and Surrounding Area

Policy LU 4-1: Support the creation of Sites Reservoir.

Policy LU 4-2: Participate in state and regional planning efforts related to the creation of Sites Reservoir to the greatest extent feasible.

Policy LU 4-3: Ensure that future land use decisions regarding Sites Reservoir and the surrounding area recognize the needs of the County and existing property owners to address adequate access for existing landowners and persons who travel beyond the area, noise, habitat for displaced species, and recreation and tourist opportunities that are compatible with the surrounding region.

Policy LU 4-4: Support the efforts of the Sites Reservoir Joint Powers Authority, with particular emphasis on landowner relocation assistance and ensuring financial compensation for landowners adversely impacted by the creation of Sites Reservoir.

Policy LU 4-5: Future land use and zoning designations in the Sites Reservoir Planning Area should emphasize natural resource and wildlife habitat protection, recreational opportunities, open space preservation, and limited commercial development to support recreation and tourism. Year-round housing in the vicinity of Sites Reservoir should be discouraged.

4A.12.3.3. County of Yolo 2030 Countywide General Plan

The *Yolo County 2030 Countywide General Plan* (County of Yolo 2009) notes the existing "resource" parks in the county, several of which are along the Sacramento River (Knights Landing River Access, Elkhorn Regional Park, Helvetia Oak Grove, and Clarksburg River Access Park) and provides a map of future parks and trails, including expanded Sacramento River access and trail linkages, a gateway park to the Yolo Bypass, trail linkages along the Sacramento River between Knights Landing and Clarksburg, a gateway park in the Delta region, and a new California Indian Heritage Center. The Conservation and Open Space Element of the plan identifies policies to increase public access, trail linkages, and recreational use along waterways, particularly the Yolo Bypass and the Sacramento River.

The plan's Conservation and Open Space Element includes the following policies and associated implementation actions that are relevant to the facilities, operations, and maintenance of the Project, which would convey water from Sites Reservoir to the Colusa Basin Drain for release, with flows entering the Yolo Bypass or Sacramento River.

Policy CO-1.1: Expand and enhance an integrated network of open space to support agriculture, recreation, natural resources, historic and tribal resources, habitat, water management, aesthetics, and other beneficial uses.

Policy CO-1.2: Develop a connected system of recreational trails to link communities and parks throughout the county.

Policy CO-1.3: Create a network of regional parks and open space corridors that highlight unique resources and recreational opportunities for a variety of users.

Policy CO-1.6: Develop "gateways" or trailheads that provide access for the public to County, State, and Federal lands. Where located on private land, gateways shall be developed working with willing landowners.

Policy CO-1.8: Encourage responsible stewardship of private lands. Promote increased opportunities for public access to waterways and other natural areas.

Policy CO-1.13: Create opportunities for ecotourism.

Policy CO-1.24: Increase public access and recreational uses along waterways wherever feasible, particularly Cache Creek, Lower Putah Creek, the Yolo Bypass, and the Sacramento River.

Policy CO-1.25: Allow for specified areas of resource parks to be preserved, enhanced and/or restored as mitigation sites for public agencies only, consistent with the requirements of appropriate regulatory and funding agencies, provided that adequate compensation, including funding for operations and maintenance of the mitigation, is provided.

Policy CO-1.28: Support improved access for bank fishing.

Policy AG-2.12: Balance the needs of agriculture with recreation, flood management, and habitat, within the Yolo Bypass.

4A.12.3.4. Tehama County General Plan

There would be limited construction activities associated with the existing Red Bluff Pumping Plant within Tehama County jurisdiction as part of the Project, and therefore goals and policies related to recreation are not applicable and are not discussed further.

4A.13 Chapter 17, Energy

4A.13.1. Federal Policies and Regulations

4A.13.1.1. Western Area Power Administration

Western Area Power Administration (WAPA) is one of four power marketing administrations within the U.S. Department of Energy that markets and transmits electricity from multiuse water projects to retail power distribution companies and public authorities. WAPA markets and delivers hydroelectric power and related services within a 15-state region of the central and western United States. The transmission system carries electricity from 55 hydropower plants operated by Reclamation, USACE, and the International Boundary and Water Commission. Together, these plants have a capacity of 10,600 megawatts.

WAPA sells excess CVP capacity and energy that are supplementary to CVP internal needs to municipal utilities, irrigation districts, and institutions and facilities such as wildlife refuges, schools, prisons, and military bases at rates designed to recover CVP costs. As part of its marketing function, WAPA ensures that CVP project use loads are met at all times by using a mix of generation resources, including CVP generation and other purchased resources. In marketing power surplus to the CVP project needs, WAPA follows a formal procedure for allocating CVP energy to preference customers. Preference power customers have 20-year contracts for their share of the CVP energy that is in excess of CVP needs. In addition to preference power customers, there are first preference customers. First preference customers are statutorily entitled to up to 25% of the generation built in their counties.

The Project would require power to operate and may receive power from WAPA.

4A.13.1.2. Public Utility Regulatory Policies Act of 1978

The Public Utility Regulatory Policies Act (PURPA) established an independent electric generator market, allowing nonutility companies to build power plants and obligating utilities to purchase renewable and higher efficiency power and energy from independent producers at the price it would otherwise cost the utility to produce the power and energy itself, based on its "avoided cost." This Act was largely responsible for the development of the renewable energy industry in the United States for the next 25 years. The Project would require power to operate and would be required to comply with this Act.

4A.13.2. State Policies and Regulations

State regulations related to renewable energy and California standards are discussed in Section 4A.17, *Chapter 21, Greenhouse Gas Emissions, State Policies and Regulations*.

4A.13.2.1. California Public Utilities Commission

The California Public Utilities Commission (CPUC) is the primary agency responsible for regulation of privately-owned public utilities in California, including regulation of investor-owned electric and natural gas utilities operating in California. The energy regulatory responsibilities of the CPUC are derived from the California State Constitution, including Article XII, Section 3. The CPUC oversees electricity utility rates, electric power procurement and generation, and electric and natural gas utility infrastructure. CPUC implements and administers

Renewable Portfolio Standard (RPS) compliance rules for California's retail sellers of electricity and established safety and service standards for public utilities. A Certificate of Public Convenience and Necessity (CPCN) issued by the CPUC is required for construction of electric transmission line facilities of 200 kV or greater capacity. CPUC Electric Rule 21 is a tariff that describes the interconnection, operating, and metering requirements for generation facilities to be connected to a utility's distribution system. Each IOU in California, including PG&E, is responsible for administration of CPUC Rule 21 within its service territory, and each maintains its own version of the rule. The Project would require the construction and operation of substations and may obtain power from PG&E, which is regulated by the CPUC.

4A.13.2.2. California Independent System Operator

The California Independent System Operator (CAISO) is the Independent System Operator (ISO) covering 80% of California, providing access to 26,000 circuit miles of transmission lines. CAISO operates a wholesale power market and conducts grid reliability and transmission planning and implements a generator interconnection process for electric power generators to connect to the electric power grid. The CAISO planning process includes both a grid reliability planning process and a more long-term transmission system planning process for all transmission facilities within its control area, which consists of the service territories of the state's three largest IOUs. The Project would power for operations and may obtain power from PG&E, which is an IOU.

4A.13.2.3. Electric Utility Industry Restructuring Act of 1996 (Assembly Bill 1890)

AB 1890 attempted to establish a direct access market for all customers of the IOUs in the state, allowing customers to purchase energy services from other utilities or third-party providers. It established the Power Exchange, through which all IOUs purchased all power and energy services on the day-ahead and day-of market, and established the ISO as the operator of the state's privately owned transmission system, which includes contracting for various reliability services to maintain required reliability standards. The attempt failed, and the direct access and Power Exchange provisions were repealed later in 2001, but the CAISO still maintains operational control of the interconnected IOU transmission system, including contracting of reliability services, as well as conducting planning for transmission system improvements. The Project would power for operations and may obtain power from PG&E or WAPA, both of which use the Power Exchange.

4A.13.2.4. California Department of Conservation, Geologic Energy Management

California Department of Conservation, Geologic Energy Management Regulations Chapter 4 - Development, Regulation, and Conservation of Oil and Gas Resources, Section 1726.10, establishes requirements for closure and decommissioning of oil and natural gas wells in California. Operators are required to submit a Notice of Intention (NOI) to CalGEM prior to oil well or natural gas well closure. CalGEM provides well operators with plugging requirements to minimize the potential for subsurface contamination and hazardous surface conditions. There are abandoned and plugged natural gas wells that would need to be removed as part of the Project.

4A.13.3. Local/Regional Policies and Regulations

4A.13.3.1. California Energy Code (Part 6, Title 24 of the California Code of Regulations) Building Energy Efficiency Standards

This is applicable to the Project because an Administration Building would be built in Colusa County that would require energy and other infrastructure would require power (California Energy Commission 2019). Multiple counties have adopted Title 24 into their various codes, including the following:

- Colusa County Code Chapter 5.14—Adopts the 2016 edition of the California Energy Code (Part 6, Title 24 - Energy Efficiency Standards for Residential and Nonresidential Buildings) without modification countywide.
- Glenn County Code Chapter 15.720.010—The 2019 California Energy Code energy efficiency standards are adopted without modification for Glenn County and apply to the unincorporated areas of the county.
- Tehama County Code Chapter 15.30.030—Incorporates the 2007 edition of the California Energy Code (Part 6, Title 24) into the county code by reference.
- Yolo County Code Chapter 7-1.09—Adopts the 2019 California Energy Code (Part 6, Title 24) without amendment.

4A.13.3.2. Colusa County Code Chapter 16—Location of Electrical Transmission and Distribution Facilities

Colusa County Code Chapter 16 provides the county with the opportunity to provide input and oversight over the location, construction, or reconstruction of any lines for the transmission or distribution of electrical energy, including poles, substations, and other accessory structures, by any municipal utility district as defined under California Public Utilities Code Section 11503.

4A.13.3.3. Colusa County Code Chapter 10-14 Schedule of License Fees.

Colusa County Code Chapter 10-14 establishes an annual license fee for Energy Plant/Power Generation operators in Colusa County. The power generation part of the Project is in Colusa County. The license fee would apply to the power generation operator.

4A.13.3.4. Colusa County 2030 General Plan (2012)

The *Colusa County 2030 General Plan* Chapter 11, *Public Services and Facilities Element* (Colusa County 2012) includes the following policies related to energy:

Policy PSF 4-5: New utility transmission lines should be undergrounded to the greatest extent feasible.

Policy PSF 4-7: Support the use of sustainable and renewable energy sources to power infrastructure, homes, businesses, and agriculture.

Action PSF 4-G: Amend the Zoning Ordinance to include development, siting, and design standards for new telecommunications facilities, power plants, and transmission facilities.

4A.13.3.5. Glenn County General Plan Update, 2020 Existing Conditions Report

The *Glenn County General Plan* (1993) and *Glenn County General Plan Update, 2020 Existing Conditions Report 2020* (Glenn County 1993, 2020) identify the following policies related to energy:

Policy NRP-78: Support the natural gas industry while ensuring that its operations are carried out in a safe and environmentally responsible manner.

Policy NRP-79: Protect gas fields from incompatible development and encroachment through appropriate land-use planning.

Policy NRP-81: Entertain proposals for additional hydroelectric development and biomass energy conversion, subject to the siting policies contained in the Energy Element of the General Plan.

4A.14 Chapter 18, Navigation, Transportation, and Traffic

4A.14.1. Federal Policies and Regulations

4A.14.1.1. Surface Transportation Assistance Act (STAA) of 1982

The Surface Transportation Assistance Act (STAA) of 1982 allowed large trucks, referred to as STAA trucks to operate on routes that are part of the national network. The Federal Highway Administration (FHWA) provides standards for STAA trucks based on the 23 CFR 658. These standards designate the minimum truck sizes that all states must allow on the national network. In California, the national network is under the jurisdictions of Caltrans.

4A.14.1.2. Accessibility Policy Statement

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR Part 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to Federal-aid projects, including Transportation Enhancement Activities.

4A.14.2. State Policies and Regulations

4A.14.2.1. Caltrans Planning and Policy Documents

The California Department of Transportation (Caltrans) has primary authority for the state highway systems in California. This includes the study area's regional freeways and highways, Interstate 5 (I-5), State Route 32 (SR-32) and State Route 162 (SR-162), and State Route 45 (SR-45). As such, Caltrans (District 3) planning and policy documents provide guidance on expectations for these routes related to traffic operations relevant to this analysis and potential effects of the Project.

4A.14.2.2. Senate Bill 743 (SB-743)

Senate Bill 743 (SB-743) requires the California Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines "for determining the significance of transportation impacts" for projects. Those guidelines shall "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses". The new criteria were required to move away from vehicle delay and level-of-service (LOS) and move toward more multimodal concepts "that may include, but are not limited to, vehicle miles traveled (VMT), vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

In 2018, Section 15064.3 was added to the CEQA Guidelines to reflect the provisions of SB-743. The section addresses both land use and transportation projects, and broadly describes the methodology, including the potential for qualitative analysis, used to assess VMT. Agencies are given "broad discretion" to select the methodology for analysis, or even apply a qualitative approach. The OPR prepared a Technical Advisory on Evaluating Transportation Impacts n

CEQA (April 2018). The guidance addresses a variety of projects, with recognition that the approach for evaluating impacts is necessarily project-specific.

4A.14.3. Local/Regional Policies and Regulations

4A.14.3.1. Glenn County General Plan Update, 2020 Existing Conditions Report

Chapter 2.0, Transportation and Circulation, in the *Glenn County General Plan Update, 2020 Existing Conditions Report* contains details of the existing physical and operational attributes of the County's transportation system (Glenn County 2020). The roadway network in Glenn County would be used during construction and operation of the Project and associated facilities.

4A.14.3.2. Glenn County General Plan

The Circulation Element of the 1993 *Glenn County General Plan* contains the following goals and policies that are relevant to the Project (Glenn County 1993:5-93–5-95):

Goal CDG-5. Development and maintenance of an efficient and effective road system

Policy CDP-54. Support actions at the local level that ensure roadways are adequate to accommodate present and future traffic

Policy CDP-56. Establish a minimum level of service for local roadways.

Policy CDP-57. Determine the impact proposed development will have on the local road system and ensure that the established level of service is maintained.

Policy CDP-58. Require new development to pay its fair share for the improvement of roadways

Policy CDP-60. Limit access to Principal Arterial streets consistent with their primary function as carriers of through traffic.

Goal CDG-6. Provision of a safe transportation system.

Policy CDP-62. Support the improvement of all State and local roads to adopted design standards

Goal CDG-8. Coordination of interagency transportation plans and programs.

Policy CDP-70. Coordinate the development of transportation plans with private operators and transportation users.

Glenn County Active Transportation Plan

Walking and bicycling are most common for short trips. Because of the rural nature of Glenn County, the Glenn County Active Transportation Plan (ATP; Glenn County 2019) focuses on improving walking and bicycling within the three largest communities of Orland, Willows, and Hamilton City, as they represent the highest concentrations of people and destinations. The ATP is an important tool guiding the development of a balanced transportation system that is pedestrian and bicycle friendly and encourages residents to use these modes of transportation. It

provides a set of recommended infrastructure improvements and studies paired with education, encouragement, enforcement, and evaluation programs.

City of Willows

The GCID Main Canal of the Project are within the City of Willows city limits and therefore applicable to the *Glenn County General Plan Update, 2020 Existing Conditions Report* (Glenn County 2020).

4A.14.3.3. Glenn County Regional Transportation Plan

The Policy Element of the Glenn County Regional Transportation Plan (Glenn County 2020) contains the regional vision and goals, supported by long-range objectives and course of action. The Policy Element is intended to describe the most important transportation issues in Glenn County as a region, identify regional needs for both short-term and long-term planning horizons, and maintain internal consistency with the Financial Element, the State Transportation Improvement Program fund estimates, and the Regional Transportation Improvement Program. The following goals and policies are relevant to the Project during construction and operations:

Goal #1: Upgrade and maintain existing road system

Policy 1.1: Promote investment in transportation infrastructure reconstruction.

Policy 1.2: Support a high level state of maintenance for Interstate 5.

Policy 1.3: Support reducing the potential for flooding of existing arterials and collectors to the extent that it is economically feasible to reduce the need for costly maintenance.

Policy 1.4: Support the development of justified capacity improvements in a timely manner.

Goal #2: Provide a safe transportation system

Policy 2.1: Support the improvement of all state, county, and local roads to adopted design standards.

Policy 2.2: Support the implementation of improved safety measures for at-grade rail crossings.

Policy 2.3: Promote aviation safety.

Policy 2.4: Promote the safety of transit passengers.

Policy 2.1: Support the improvement of all state, county, and local roads to adopted design standards

Goal #3: Align financial resources to meet the highest demonstrated transportation needs.

Policy 3.1: Support new development through “fair share payments” for required transportation infrastructure.

Policy 3.2: Support the development of assessment districts to maintain and/or improve existing road design standards to promote planning efficiency and prioritization of needs.

Goal #4: Promote coordination

Policy 4.1: Consider input from the Social Services Transportation Advisory Council (SSTAC) in formulating transportation service policies and programs.

Policy 4.2: Support the involvement of the general public in all phases of transportation planning and programming.

Goal #5: Efficient and effective transportation system

Policy 5.1: Promote strategies that result in an efficient and effective transportation system in Glenn County.

Policy 5.2: Utilize cost-efficiency guidelines in making decisions about new or existing public transit services.

Goal #6: Promote economic development and land use policies

Policy 6.1: Support the rehabilitation and widening of Forest Highway 7 to two travel lanes west from Highway 162 into Mendocino County.

Policy 6.2: Emphasize aviation-related uses on land at the two county-operated airports.

Policy 6.3: Support continued operation and expansion where feasible of existing private rail and bus operations.

Policy 6.4: Promote the orderly implementation of land use policies not specifically included above.

Goal #7: Provide non-auto transportation modes consistent with demand and available resources

Policy 7.1: Transit planning should include transit services to significant portions of Glenn County including the County airports.

Policy 7.2: Support improvements in specialized transportation services (including the acquisitions of new transit vehicles) provided by public and private corporations, as long as adequate coordination between other providers exists.

Goal #8: Develop a comprehensive system of bikeway facilities to serve Glenn County

Policy 8.1: Identify and serve existing and future bicycle travel demand for commuters and recreational purposes.

Policy 8.2: Promote a bikeway system that is cost-effective to construct, easy to maintain, respects landowners, utilities, and special districts' property rights, and minimizes the potential for conflicts with other types of vehicles and other recreational users.

Goal #9: Increase the efficiency of the existing transportation system and implement transportation system management (TSM) techniques where feasible

Policy 9.1: Manage the transportation system to achieve desire speeds and travel times in recognition of funding resources and environmental objective of the County.

Policy 9.2: Promote access management and accident scene management measures to increase traffic flow.

Goal #10: Reduce the demand for a single occupant vehicle travel through transportation demand techniques

Policy 10.1: Promote public awareness of transit and ridership opportunities through media and promotional events.

Policy 10.2: Increase the motor share for public transit by 5% by 2039.

Goal #11: Improve the livability in the County through land use and transportation integration and decisions that encourage walking, transit, and bicycling

Policy 11.1: Encourage all County entities to actively participate in the RTP update process to ensure all modal issues are addressed

4A.14.3.4. Colusa County General Plan

The Circulation Element of the *Colusa County General Plan* (Colusa County 2012) contains a framework that outlines specific goals and policies to provide guidance and regulation on the countywide transportation system's various modes of transportation, such as roadway transit, bike, pedestrian, rail, and aviation. The following objectives and policies are relevant to the Project during construction and operation:

Objective CIRC-1A: Maintain Safe and Efficient Operating Conditions on All County Roadways

Policy CIRC 1-3: Address the concept of "complete" streets, which requires more complete consideration of all users of the street, in new development and roadway improvement projects.

Policy CIRC 1-4: Define level of service (LOS) consistent with the latest edition of the Highway Capacity Manual and calculate using the methodologies contained in that manual. At a minimum, weekday AM and PM peak hour traffic volumes will be used in determining compliance with the level of service standard. The analysis of other periods may be appropriate and will depend on type of use.

Policy CIRC 1-5: Maintain LOS C or better for County roadways and intersections in the unincorporated County.

Policy CIRC 1-6: Maintain levels of service on state highways consistent with Caltrans standards, to the extent feasible.

Policy CIRC 1-7: Use transportation facilities to support the economic growth of the region and to provide safe and efficient movement of persons and goods.

Policy CIRC 1-8: Plan and design transportation facilities to avoid damage to the County's scenic and environmental resources, such as reductions in air quality and disruption of soils, topography, vegetative cover, and wildlife habitat.

Policy CIRC 1-9: Periodically evaluate the adequacy of traffic impact fees and roadway financing programs to ensure sufficient funding is provided for circulation network improvements necessitated by existing and planned future growth.

Policy CIRC 1-10: Ensure adequate funding and planning mechanisms are in place to identify needed roadway improvements and establish methods to finance roadway improvements, particularly those improvements that may not be provided in full by new development.

Policy CIRC 1-11: Require new development to: 1) finance and construct all off-site circulation improvements (including safety improvements) necessary to mitigate a project's transportation impacts to local roads, consistent with the policies of the General Plan: and 2) to analyze traffic impacts on the regional transportation system and require a fair-share contribution necessary to mitigate significant impacts to regional transportation improvements where a financing plan or other mechanism has been adopted to ensure the full funding and construction of improvements. Right-of-way dedication should be requested as a condition of a proposed new or widened major or minor collector.

Policy CIRC 1-12: Require new development and other projects with transportation impacts to pay their fair share cost of all feasible transportation improvements, including bicycle/pedestrian, transit, and safety, necessary to reduce the severity of cumulative transportation impacts.

Policy CIRC 1-13: Require specific plans, commercial and industrial projects, subdivisions, and other large-scale projects to implement appropriate transportation control measures to reduce vehicle miles traveled and traffic congestion.

Policy CIRC 1-14: Ensure that transportation and circulation improvements are constructed and operational prior to or concurrent with the need for the improvements, to the extent feasible.

Policy CIRC 1-16: Encourage transportation improvements that permit increased travel by recreational vehicles, provided that such improvements do not have a negative environmental impact.

Objective CIRC-1B: Provide and Sustain a Viable Rural Public Transit System

Policy CIRC 1-21: Work with Colusa County Transit and neighboring transit providers, including Yuba/Sutter Transit, Yolo Bus, and Glenn County Transit, to ensure that Colusa County residents have access to destinations throughout the region.

Policy CIRC 1-26: Prioritize providing public transportation for the elderly, handicapped, economically disadvantaged, and others with unmet transportation needs. Secondary priority is given to diverting automobile trips to transit.

Objective CIRC-1C: Promote and Ensure the Provision of Safe, Convenient and Attractive Sidewalks, Bikeways, and Trails where Appropriate for Local, Regional and Recreational Travel Policy

Policy CIRC 1-28: Work with appropriate agencies to implement a regional bikeway system that connects the cities, larger unincorporated communities, recreation destinations, and scenic areas as shown in Figure CIRC-3. Implement a dedicated multi-purpose bikeway between Arbuckle, Maxwell, Williams, and Colusa as a part of this effort.

Policy CIRC 1-29: Create a complete bikeway and sidewalk system within each community, including the completion of existing systems and provide connections to the regional system. Create walkways and bikeways that connect existing paths where feasible, and that connect to downtown/community core areas, schools, grocery stores, parks, and other community features.

Policy CIRC 1-30: Ensure that existing and new pedestrian facilities are compliant with the Americans With Disabilities Act (ADA).

Policy CIRC 1-31: Protect abandoned rail corridors for re-use as trails and other forms of alternative transportation, where feasible.

Policy CIRC 1-32: Support development of facilities that link bicyclists and pedestrians with other modes of transportation.

Policy CIRC 1-33: Require residential development at urban densities (3.5 units per gross acre or greater) to include provisions for bicycle and pedestrian travel. Where possible, these bicycle and pedestrian routes should be integrated with trails serving the rest of the community.

Policy CIRC 1-34: Sidewalks should be required within all new development at urban densities if such development is contiguous or within the communities of Arbuckle, Maxwell, Grimes, or Princeton. This requirement also applies to the unincorporated portions of Colusa and Williams, and its adoption by each of these two cities is encouraged.

Objective CIRC-1D: Prioritize the Improvement and Maintenance of Roads and Transportation Facilities, Directing County Funds to those Areas Most in Need of Improvement

Policy CIRC 1-38: Any excess local transportation funds not needed for new or improved circulation facilities should be used for road maintenance.

Policy CIRC 1-44: Coordinate with state and federal agencies that own and maintain roadways in Colusa County to continue to provide reasonable access to forest lands and recreation areas within the County that are not accessible by County-maintained roads.

Objective CIRC-3A: Minimize Inconveniences and Safety Hazards Caused by Road Flooding, Washouts, and Emergency Conditions

Policy CIRC 3-1: Ensure that roadway design standards include all-weather dual-purpose function, as appropriate, to increase capacity, improve safety, and enhance flood control.

Policy CIRC 3-2: Work with adjoining landowners to reduce roadway flooding. Where localized flooding occurs as a result of new private development, the cost for remediation should be the responsibility of the new development.

Policy CIRC 3-3: Ensure that development, roadway, and planning projects include adequate access and features to accommodate evacuations and movement of people to critical services during emergency conditions.

Objective CIRC-3B: Reduce Moving Traffic Hazards

Policy CIRC 3-4: Install stop signs, railroad crossing guards, and warning signs where appropriate and warranted.

Policy CIRC 3-5: Limit driveway intersections and curb cuts along arterial and collector roadways in order to provide improved mobility and safety for all travel modes.

Policy CIRC 3-6: Ensure adequate access for emergency vehicles.

Policy CIRC 3-7: Ensure adequate access to emergency facilities and between major communities.

Objective CIRC-4A: Provide Circulation Improvements that Address Livability, Accommodate Industrial and Commercial Development, and Consider Regional Planning Efforts, State Law, and Current Priorities

Policy CIRC 4-1: Ensure that transportation control measures, alternative transportation options, and congestion management strategies are applied to long-term planning activities and large-scale new development projects.

Policy CIRC 4-2: All transportation improvement projects proposed for inclusion in local and regional transportation plans (Regional Transportation Plan, Transportation Improvement Program, Congestion Management Plan, Capital Improvement Program, etc.) shall be consistent with the air quality, transportation, land use, and other goals and policies of the General Plan.

Policy CIRC 4-3: Projects included in the Capital Improvement Program and proposed for regional transportation plans should prioritize, in the following order: 1) projects that improve operations on existing roads without increasing capacity, 2) projects that encourage alternative transportation modes, 3) projects that increase capacity on existing roadways, and 4) new roadways.

Policy CIRC 4-4: Coordinate with Caltrans, the Colusa County Air Pollution Control District, and Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities.

4A.14.3.5. Colusa County 2018 Regional Transportation Plan Update

The Policy Element of the Colusa County Regional Transportation Plan (Colusa County 2019) contains the regional vision and goals, supported by long-range objectives and course of action. The Policy Element includes the addition of specific policies and objectives that are linked to program-level performance measures in the Action Element and identifies feasible solutions. The following goals and policies are relevant to the Project during construction and operations.

Goal 1.1: Provide mobility for people and goods in Colusa County on a reliable system

Policy 1.1.1: Promote a balanced multimodal transportation system that considers all modes.

Goal 1.2: Maintain and improve goods movement facilities in a manner that supports the economic well-being and quality of life in Colusa County

Policy 1.2.1: The CCTC will continue to work with Caltrans, the County, and the trucking industry to develop regulatory guidelines for truck travel in and through the county.

Goal 2.1: Develop streets and highway projects that meet environmental, social, economic, and circulation objectives

Policy 2.1.1: Transportation decisions will be based on equitable access to the region's transportation system and decision making process.

Goal 2.2: Promote the transit system for all users

Policy 2.2.1: Meet any unmet transit needs that are reasonable to meet according to the criteria established by CCTC.

Goal 3.1: Maintain and upgrade the existing transportation system to prevent costly deterioration; to ensure that the efficiency of the system does not decline; and to preserve access into communities for residents and emergency service providers

Policy 3.1.1: The CCTC shall work with State Legislature, the County, the City of Williams, and the City of Colusa to identify new sources of maintenance funding.

Policy 3.1.2: Use cost-effectiveness measures to prioritize transportation projects.

Goal 3.2: Rehabilitation and maintenance of the existing road system shall be a high priority of the County

Policy 3.2.1: Design and fund improvements of transportation facilities with primary consideration to providing for safety of school children and local residents on existing and proposed facilities.

Goal 4.1: Preserve high quality view-sheds along state highways and county roads in an effort to improve visitor experience and economic enhancement

Policy 4.1.1: Avoid areas of sensitive habitat for plants and wildlife when constructing facilities contained in the proposed system wherever possible, and if sensitive areas are affected, mitigate impacts to less than significant to remain consistent with the CEQA process.

Goal 4.2: Preserve the historic nature and rural atmosphere of the County

Policy 4.2.1: Conduct environmental review consistent with CEQA for individual projects as they advance to the implementation state of development.

Goal 6.1: Coordinate this plan with adopted environmental goals and policies addressed in the Colusa County General Plan and other documents

Policy 6.1.1: All specific projects shall be adequately reviewed through established environmental processes.

Goal 6.2: Coordinate improvement of transportation facilities with adopted land use plans

Policy 6.2.1: Transportation facilities shall be compatible with adjacent land use.

Goal 7.1: Minimize traffic congestion by increasing the efficiency of the existing transportation system through Transportation System Management (TSM) techniques

Policy 7.1.1: Periodically review traffic operations along state highways and major county roads to ensure adequate traffic operations are consistent with circulation goals.

Goal 8.1: Increase the efficiency of the existing transportation system. Implement Transportation System Management techniques where feasible

Policy 8.1.1: Periodically review traffic operations along state highways in major county roads and implement cost effective solutions to reduce congestion.

4A.14.3.6. County of Yolo 2030 Countywide General Plan

The *County of Yolo 2030 Countywide General Plan* (County of Yolo 2009) includes a Circulation Element that addresses transportation, circulation, and mobility throughout Yolo County. The following goals and policies are related to the Project through the construction of the pipeline to the Colusa Basin Drain or Sacramento River:

GOAL CI-1: Comprehensive and Coordinated Transportation System. Plan, develop and maintain a comprehensive, coordinated transportation system to ensure the opportunity for safe, efficient and convenient movement of persons and goods.

Policy CI-1.1 Ensure future county transportation routes are consistent with the planned improvements shown in the Circulation Element Diagram.

Policy CI-1.2 Preserve and continue to develop a fully-connected grid-based circulation system that distributes traffic evenly and avoids excessive concentrations of traffic in any given area.

Policy CI-1.3: Reduce the total vehicle miles of travel (VMT) per household by making efficient use of existing transportation facilities and by providing for more direct routes for pedestrians and bicyclists through the implementation of "smart growth" and sustainable planning principles.

Policy CI-1.4: Continue to work with California Department of Transportation (Caltrans), Sacramento Area Council of Governments and other regional agencies to achieve timely construction of freeway, interchange, highway and county road improvements that are consistent with this General Plan. The County shall assist Caltrans in implementing improvements to State Highway facilities that are required due to new growth and are consistent with this General Plan.

Policy CI-1.5: Program and spend available transportation funds to maximize the use of federal and other matching sources.

Policy CI-1.6: Maintain the county roadway network through a regular maintenance program that prioritizes improvement projects based on available funding.

Policy CI-1.8: Work with adjoining landowners to reduce roadway flooding.

Policy CI-1.10: Coordinate with appropriate entities to maintain the following as primary routes for emergency evacuation from Yolo County:

- Interstate 5 – North towards Redding and east into Sacramento
- State Route 16 – West from Woodland into the Capay Valley and then north into Colusa County.
- State Route 45 – North from Knights Landing into Colusa County.

Policy CI-1.12 CMP Consistency – 1) Coordinate with YCTD on the update to the Yolo County CMP to ensure consistency with the LOS policies established in the Yolo County Circulation Element; 2) Monitor roadways identified in the Yolo County CMP and prepare deficiency plan as outlined in the CMP, when the CMP LOS thresholds are exceeded. The deficiency plan shall focus on modifications to the transportation system that reduce vehicle travel by accommodating more travel by walking, bicycling, and transit modes consistent with the Draft General Plan; 3) Coordinate with cities to consider opting out of the CMP pursuant to Section 65088.3 of the Government Code.

Goal CI-2: Mode and User Equity. Design and implement a circulation and transportation system that reflects the needs of all transportation types and users.

Policy CI-2.1 When constructing or modifying roadways, plan for use of the roadway space by all users, including automobiles, trucks, alternative energy vehicles, agricultural equipment, transit, bicyclists, and pedestrians, as appropriate to the road classification and surrounding land uses.

Policy CI-2.3: Ensure that, wherever feasible, public transit and alternative mode choices are a viable and attractive alternative to the use of single-occupant motor vehicles.

Goal CI-3: Service Thresholds. Balance the preservation of community and rural values with safe and efficient circulation system.

Policy CI-3.1 Maintain Level of Service (LOS) C or better for roadways and intersections in the unincorporated county. In no case shall land use be approved that would either result in worse than LOS C conditions or require additional improvements to maintain the required level of service, except for specified locations. The intent of this policy is to consider level of service as a limit on the planned capacity of the County's roadway.

Policy CI-3.3 CEQA review for subsequent projects will analyze project traffic and circulation impacts using both the Yolo County General Plan policies and Caltrans policies (based on the CSMPs, TCCRs, or other guidelines) as applicable.

Policy CI-3.4 Define level of service consistent with the latest edition of the Highway Capacity Manual and calculate using the methodologies contained in that manual. At a minimum, weekday AM and PM peak hour traffic volumes will be used in determining compliance with the level of service standard. For recreational and other non-typical peak hour uses, weekday afternoon, weekday late evening, or weekends shall be considered.

Policy CI-3.7 Consider designs for planned roadway capacity improvements that recognize the unique conditions associated with rural and agricultural areas in accordance with established standards.

Policy CI-3.9 To the greatest feasible extent, require new development to construct safety improvements consistent with current design standards on existing roadways that are consistent with current design standards on existing roadways that are anticipated to accommodate additional traffic from planned development.

Policy CI-3.10 Upgrade the existing County road system to be consistent with current County design standards (such as horizontal curvature, site distance, etc) as transportation funding allows. Identified roadways that require design improvements to accommodate projected future traffic shall have the highest priority to be upgraded. Safety shall be a key factor in prioritizing specific projects.

Policy CI-3.11 Require new development to finance and construct all off-site circulation improvements necessary to mitigate a project's transportation impacts (including public transit, pedestrian, bicycle mobility, safety and level service-related impacts, and impact to the State Highway System). For mitigation to be considered feasible, it must be consistent with the policies of the General Plan.

Policy CI-3.13 Ensure that transportation and circulation improvements (including improvements to comply with County design standards) are constructed and operational prior to or concurrent with the need, to the extent feasible.

Policy CI-3.14 Encourage inter- and intra-regional traffic to use State and federal interstates and highways. The primary role of County roads is to serve local and agricultural traffic.

Policy CI-3.17 Count roadways shall be limited to a maximum of four lanes.

Policy CI-3.18 Ensure adequate access for emergency vehicles.

Goal CI-4: Environmental Impacts. Minimize environmental impacts caused by transportation.

Policy CI-4.1: Avoid or mitigate environmental impacts from the construction and/or operation of the transportation system, to the greatest feasible extent.

Policy CI-4.2 Support regional air quality and greenhouse gas objectives through effective management of the county's transportation system.

Policy CI-4.3: Reduce dependence upon fossil fuels through:

- Reduction of vehicle trips and vehicle miles traveled by requiring compact, infill and mixed- use development.
- Use of alternatives to the drive-alone automobile, including walking, bicycling and public transit.

Policy CI-4.5 Roads and road-related structures (bridges, culverts, retaining walls, abutments, etc) located in or near watercourses shall be placed, designed, built and landscaped so as to minimize the impact to riparian corridors. Structures shall reduce erosion during and after construction, accommodate flood flows, and minimize grading on slopes greater than 20 percent.

Policy CI-4.6 Parking standards and appropriate minimum and maximum requirements shall continue to be regulated through the County zoning code; however, the amount of parking provided to serve a particular project, in and of itself, shall not be considered an appropriate threshold for adverse environmental impact under CEQA.

GOAL CI-5: System Integration. Promote and ensure the provision of safe, convenient and attractive sidewalks, bikeways and trails where appropriate for local, regional and recreational travel.

4A.14.3.7. Tehama County General Plan

The Transportation and Circulation Element of the *Tehama County General Plan* (Tehama County 2009) provides goals and policies relating to roads and highways, public transit, bicycles, pedestrians, rail, and air as a guidance for Tehama County. The following goals and policies are relevant to the proposed Sites Reservoir Project access routes to the Red Bluff Pumping Plant located in the Secondary Study Area within Tehama County:

Goal CIR-1: To provide for the development and long-range planning of Tehama County's roadway system and for the safe and efficient movement of people and goods throughout the County.

Policy CIR-1.1: The County shall work to ensure that Levels of Service (LOS) and safety standards on County roadways and at intersections are maintained or enhanced when considering new development.

Policy CIR-1.2: The County shall utilize the development review process to ensure that non level-of-service impacts, such as roadway safety impacts, are identified and addressed in conjunction with new development proposals

Policy CIR-1.3: The County should maintain and upgrade existing roads, as feasible, to meet the needs of County residents, visitors, and through traffic.

Policy CIR-1.4: The County shall require the construction of new roads, as necessary, to support increases in land use density and to facilitate the movement of traffic through the County.

Policy CIR-1.5: The County shall utilize contemporary design standards and apply appropriate functional classifications in the construction of new roadways and for the reconstruction of existing roadways within the County.

Policy CIR-1.6: The County shall continue to support traffic safety enforcement safety as a means of improving traffic, bicycle, and pedestrian safety.

Policy CIR-1.7: The County shall work with local, state, tribal and federal agencies to assure opportunities for meaningful input in the review of proposed project roads and roadway improvements.

Goal CIR-2: For those lands deemed appropriate for commercial and industrial uses, improve access to road, rail, and air transportation in a cost-effective manner to facilitate their economic development.

Policy CIR-2.1 All commercial and industrial uses shall be served by paved roads designed to in accordance with the Tehama County Land Division Standards to effectively serve the long-term circulation.

4A.15 Chapter 19, Noise

4A.15.1. Federal Policies and Regulations

4A.15.1.1. Noise Control Act of 1972

The Noise Control Act of 1972 (Public Law 92 574) established a requirement for all federal agencies to administer their programs in a manner that promotes an environment that is free of noise that jeopardizes public health or welfare. The USEPA was given the following responsibilities.

- Providing information to the public regarding the identifiable effects of noise on public health and welfare.
- Publishing information on the levels of environmental noise to protect the public health and welfare with an adequate margin of safety.
- Coordinating federal research and activities related to noise control.
- Establishing federal noise emission standards for selected products distributed in interstate commerce.

4A.15.1.2. U.S. Environmental Protection Agency Standards for Environmental Noise

In 1974, USEPA published *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (U.S. Environmental Protection Agency 1974), a comprehensive document that identifies noise levels consistent with the protection of public health and welfare against hearing loss, annoyance, and activity interference.

In response to the requirements of the Noise Control Act, USEPA identified indoor and outdoor noise limits to protect public health and welfare. Outdoor Ldn (day-night sound level) limits of 55 decibels (dB) and indoor Ldn limits of 45 dB were identified as desirable for protecting against speech interference and sleep disturbance in residential areas and at educational and health care facilities. The sound-level criterion for protecting against hearing damage in commercial and industrial areas is identified as the 24-hour Leq (equivalent sound level) value of 70 dB (both outdoors and indoors). Based on attitudinal surveys, USEPA determined that a 5 dB increase in Ldn or Leq is the minimum required for a change in community reaction (U.S. Environmental Protection Agency 1974).

The Noise Control Act also directed federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. Although USEPA was given a major role in disseminating information to the public and coordinating with federal agencies, each federal agency retained authority to adopt noise regulations pertaining to agency programs. USEPA can, however, require federal agencies to justify their noise regulations in terms of Noise Control Act policy requirements.

Key federal agencies that have adopted noise regulations and standards are listed below.

- Housing and Urban Development: Noise standards for federally funded housing projects.

- Federal Aviation Administration: Noise standards for aircraft.
- Federal Highway Administration (FHWA): Noise standards for federally funded highway projects.
- Federal Transit Administration (FTA): Noise standards for federally funded transit projects.
- Federal Railroad Administration: Noise standards for federally funded rail projects.

4A.15.1.3. Federal Transit Administration Standards for Construction Noise

FTA has developed methods for evaluating construction noise levels, which are discussed in the *FTA Manual* (Federal Transit Administration 2018). The manual does not contain standardized criteria for assessing construction noise impacts but provides guidelines for suggested noise limits for residential uses exposed to construction noise to describe levels that may result in a negative community reaction. These guidelines are summarized in Table 4A.15-1.

Table 4A.15-1. Federal Transit Administration Construction Noise Impact Guidelines

Land Use	8-hour L_{eq} (dBA), Day	8-hour L_{eq} (dBA), Night
Residential	80	70
Commercial	85	85
Industrial	90	90

Source: Federal Transit Administration 2018.
Leq = equivalent sound level; dBA = A-weighted decibel.

Thresholds for construction noise may be set at the local level according to expected hours of equipment operation and the noise limits specified in the noise ordinances of the applicable jurisdictions.

4A.15.2. State Policies and Regulations

4A.15.2.1. California Noise Control Act of 1973

The California Noise Control Act was enacted in 1973. In preparing its General Plan noise element, a city or county must identify local noise sources and analyze and quantify to the extent practicable current and projected noise levels from various sources, including highways and freeways; passenger and freight railroad operations; ground rapid transit systems; commercial, general, and military aviation and airport operations; and other stationary ground noise sources.

The *State of California General Plan Guidelines* (State of California 2017) provides noise compatibility guidelines for land use planning according to the existing community noise level; however, these guidelines offer no information regarding construction noise. The state has also published its *Model Community Noise Ordinance* (California Office of Noise Control 1977), which provides guidance to cities and counties on how to develop a community noise ordinance.

4A.15.3. Local/Regional Policies and Regulations

4A.15.3.1. Colusa County

Colusa County General Plan

The Noise Element of the *Colusa County General Plan* (Colusa County 2012) states that nontransportation noise sources shall be in compliance with performance standards for all sensitive land uses, which indicate exterior noise limits of 55 A-weighted decibel (dBA) equivalent sound level (Leq) during daytime hours (7:00 a.m. to 10:00 p.m.) and 45 dBA Leq for nighttime hours (10:00 p.m. to 7:00 a.m.), and an interior level of 45 dBA Lmax.

The Noise Element specifies the following with respect to vibration:

> As part of the project review and approval process, require construction projects and new development anticipated to generate a significant amount of groundborne vibration to ensure acceptable interior vibration levels at nearby noise-sensitive uses based on Federal Transit Administration criteria.

Colusa County Municipal Code

Chapter 13 of the County municipal code indicates maximum allowable sound pressure levels at the property line of the property containing the noise source. These limits are shown in Table 4A.15-2.

Table 4A.15-2. Maximum 1-Hour Equivalent Sound Pressure Levels, Glenn County

Time of Day	Residential	Commercial	High Traffic Noise Corridor
7:00 a.m. to 9:00 p.m.	55	60	65
9:00 p.m. to 7:00 a.m.	50	55	65

The County Code section 13-8(b) provides an exception for construction site noise between the hours of 7:00 a.m. and 7:00 p.m. Monday to Friday and 8:00 a.m. to 8:00 p.m. Saturday and Sunday. However, construction activities are required to satisfy one of the following noise limitations:

1. No individual piece of equipment produces a noise level exceeding 83 dBA at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 20 feet from the equipment as possible.
2. The noise level at any point outside of the property plane of the project does not exceed 86 dBA.

In addition, County Code section 13-8(b)(A) stipulates:

"The provisions of subsections (b)(1) and (2) of this section shall not be applicable to impact tools and equipment; provided, that such impact tools and equipment shall have intake and exhaust mufflers recommended by manufacturers thereof and approved by the director of public works as best accomplishing maximum noise attenuation, and that pavement breakers

and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof and approved by the director of public works as best accomplishing maximum noise attenuation. In the absence of manufacturer's recommendations, the director of public works may prescribe such means of accomplishing maximum noise attenuation as he/she may determine to be in the public interest. Construction projects located more than two hundred feet from existing homes may request a special use permit to begin work at six a.m. on weekdays from June 15th until September 1st. No percussion type tools (such as ramsets or jackhammers) can be used before seven a.m. The permit shall be revoked if any noise complaint is received by the sheriff's department."

4A.15.3.2. Glenn County

Glenn County General Plan Update, 2020 Existing Conditions Report

Section 4.5, *Noise*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* (Glenn County 2020) contains standards for noise from the 1993 *Glenn County General Plan*. Noise created by new non-transportation sources should be mitigated to not exceed 50 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) or 45 dBA during nighttime hours (10:00 p.m. to 7:00 a.m.) at outdoor activity areas of existing noise-sensitive land uses (Glenn County 2020:4-47). If project implementation is anticipated to exceed these levels, an acoustical analysis is required to determine whether noise mitigation may be incorporated into the project design (Glenn County 2020:4-47). For noise created by transportation sources, the maximum allowable noise exposure for outdoor activity areas in residential land uses is 60 dBA Ldn, and for interior spaces in residential land use areas the maximum allowable noise exposure should not exceed 45 dBA Ldn (Glenn County 2020:4-49).

Glenn County Municipal Code

Section 15-560-100 of the municipal code indicates maximum allowable sound pressure levels at the property line of the property containing the noise source. These limits are shown in Table 4A.15-3.

Table 4A.15-3. Maximum 1-Hour Equivalent Sound Pressure Levels, Glenn County

Time of Day	Residential	Commercial	Industrial
7:00 a.m. to 10:00 p.m.	55	60	65
10:00 p.m. to 7:00 a.m.	45	55	60

The ordinance further specifies maximum levels at sensitive properties, including dwellings, hospitals, schools, libraries, and nursing homes. The maximum allowable 1-hour equivalent level for these uses is 57 dBA between the hours of 7:00 a.m. and 10:00 p.m. and 50 dBA between the hours of 10:00 p.m. and 7:00 a.m. The code provides an exception for construction site noise between the hours of 7:00 a.m. and 7:00 p.m.

4A.15.3.3. Tehama County

The Noise Element of the *Tehama County General Plan* (Tehama County 2009) states that nontransportation noise sources shall be in compliance with noise standards for sensitive land

uses such as residences, nursing homes, and transient lodging. The standards are shown in Table 4A.15-5.

Table 4A.15-5. Nontransportation Noise Standards

Land Use	Outdoor Activity Area		Interior
	Daytime L_{eq}	Nighttime L_{eq}	Day & Night L_{eq}
All Residential	50	45	35
Transient Lodging	55	--	40
Hospitals & Nursing Homes	50	45	35
Theaters & Auditoriums	--	--	35
Churches, Meeting Halls, Schools, Libraries, etc.	55	--	40
Office Buildings	55	--	45
Commercial Buildings	55	--	45
Playgrounds, Parks, etc.	65	--	--
Industry	65	65	50

L_{eq} = overall 24-hour sound level

County goals and policies relevant to construction are as follows:

Goal N-2: Develop strategies for abating excessive noise exposure through cost-effective mitigation measures in combination with appropriate zoning to avoid incompatible land uses.

Policy N-2.4: The County shall restrict construction activities to the hours as determined in the Countywide Noise Control Ordinance, if such an ordinance is adopted.

Implementation Measure N-2.4a: Restrict construction activities to the hours as determined by the County's Noise Control Ordinance unless an exception is received from the County to cover special circumstances. Special circumstances may include emergency operations, short-duration construction, etc.

Implementation Measure N-2.4b: Require all internal combustion engines that are used in conjunction with construction activities be muffled according to the equipment manufacturer's requirements.

Tehama County does not currently have a noise ordinance that specifies noise limits or allowed hours of construction.

4A.15.3.4. Yolo County

Yolo County Code of Ordinances

Yolo County does not have a noise ordinance (which sets specific noise levels for different zoning districts or for different land uses in the unincorporated area). Instead, the County relies

on the State of California Department of Health Services' recommended Community Noise Exposure standards, which are set forth in the state's *General Plan Guidelines* (State of California 2017). These standards are included in the *Yolo County 2030 Countywide General Plan* (County of Yolo 2009) and used to provide guidance for new development projects. The recommended standards provide acceptable ranges of dB levels. The noise levels are in the context of community noise equivalent level (CNEL) measurements, which reflect an averaged noise level over a 24-hour or annual period.

Yolo County 2030 Countywide General Plan

The *Yolo County 2030 Countywide General Plan* (County of Yolo 2009; Page HS-64) in Goal HS-7, Policy HS-7.1 includes a policy to "ensure that existing and planned land uses are compatible with the current and projected noise environment." The policy acknowledges that urban development generally experiences greater ambient (background) noise than rural areas and that increased density generally results in even greater ambient noise levels.

The *General Plan* establishes Exterior Noise Standards, or Noise Compatibility Guidelines, for development in the county. These guidelines are intended to apply to the outdoor use areas of new development and include different criteria for the variety of land uses that are present in the county (e.g., single-family residential, multifamily residential, schools). For development of residential land use, an ambient noise level of up to 60 dBA Ldn is considered "Normally Acceptable" for single-family or duplex-style residential land uses and is generally compatible with surrounding uses, based on the assumption of conventional construction materials being used. Noise levels of up to 70 dBA Ldn are considered "Conditionally Acceptable" for single-family homes, where new development should only be undertaken after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. In addition to these compatibility guidelines, the *General Plan* also references state regulations restricting "interior noise levels attributable to exterior sources …[to]… 45 dBA [Ldn or CNEL] in any habitable room."

4A.15.3.5. City of Willows

Willows Municipal Code

The City of Willows contains prohibitions on excessive noise but does not specify any numerical noise limits or regulations for noise from use of heavy equipment.

4A.16 Chapter 20, Air Quality

4A.16.1. Federal Policies and Regulations

The following federal regulations related to air quality may apply to implementation of some aspects of the Project.

4A.16.1.1. Clean Air Act and National Ambient Air Quality Standards

The federal Clean Air Act (CAA) was first enacted in 1963 and has been amended numerous times in subsequent years (1965, 1967, 1970, 1977, and 1990). The CAA establishes federal air quality standards, known as national ambient air quality standards (NAAQS), for six criteria pollutants and specifies future dates for achieving compliance. The CAA also mandates that the states submit and implement a State Implementation Plan (SIP) for local areas not meeting those standards. The plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA identify specific emission-reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones. Table 4A.16-1 shows the NAAQS currently in effect for each criteria pollutant, as well as the California ambient air quality standards (CAAQS) (discussed further below).

Table 4A.16-1. National and California Ambient Air Quality Standards

Criteria Pollutant	Average Time	California Standards	National Standards[a]	
			Primary	Secondary
Ozone	1-hour	0.09 ppm	None[b]	None[b]
	8–hour	0.070 ppm	0.070 ppm	0.070 ppm
Particulate Matter (PM10)	24-hour	50 µg/m^3	150 µg/m^3	150 µg/m^3
	Annual mean	20 µg/m^3	None	None
Fine Particulate Matter (PM2.5)	24-hour	None	35 µg/m^3	35 µg/m^3
	Annual mean	12 µg/m^3	12.0 µg/m^3	15 µg/m^3
Carbon Monoxide	8-hour	9.0 ppm	9 ppm	None
	1-hour	20 ppm	35 ppm	None
Nitrogen Dioxide	Annual mean	0.030 ppm	0.053 ppm	0.053 ppm
	1-hour	0.18 ppm	0.100 ppm	None
Sulfur Dioxide[c]	Annual mean	None	0.030 ppm	None
	24-hour	0.04 ppm	0.014 ppm	None
	3-hour	None	None	0.5 ppm
	1-hour	0.25 ppm	0.075 ppm	None
Lead	30-day average	1.5 µg/m^3	None	None
	Calendar quarter	None	1.5 µg/m^3	1.5 µg/m^3

Criteria Pollutant	Average Time	California Standards	National Standards[a]	
			Primary	Secondary
	3-month average	None	0.15 µg/m^3	0.15 µg/m^3
Sulfates	24-hour	25 µg/m3	None	None
Visibility-reducing Particles	8-hour	–[d]	None	None
Hydrogen Sulfide	1-hour	0.03 ppm	None	None
Vinyl Chloride	24-hour	0.01 ppm	None	None

Source: California Air Resources Board 2016.
ppm= parts per million; µg/m3 = micrograms per cubic meter; NAAQS = National Ambient Air Quality Standard; SO2 = sulfur dioxide; CAAQS = California Ambient Air Quality Standard.

[a] National standards are divided into primary and secondary standards. Primary standards are intended to protect public health, whereas secondary standards are intended to protect public welfare and the environment.

[b] The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through June 15, 2005. The revoked standard is referenced because it was employed for such a long period and is a benchmark for State Implementation Plans.

[c] The annual and 24-hour NAAQS for SO2 only apply for 1 year after designation of the new 1-hour standard to those areas that were previously in nonattainment for 24-hour and annual NAAQS.

[d] CAAQS for visibility-reducing particles is defined by an extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more due to particles when relative humidity is less than 70%.

4A.16.1.2. General Conformity Rule

Pursuant to CAA Section 176(c) requirements, the USEPA enacted the federal General Conformity Rule (40 C.F.R. Parts 5, 51, and 93) in 1993. The purpose of the General Conformity Rule is to prevent federal actions from generating emissions that interfere with state and local agencies' SIPs and emission-reduction strategies to attain the NAAQS.

The General Conformity Rule applies to all federal actions in areas that do not meet the NAAQS that are not exempt from the General Conformity Rule, covered by a Presumed-to-Conform approved list,[1] or do not meet *de minimis* emission levels established in the General Conformity Rule (75 FR 17255). The General Conformity Rule applies only to direct and indirect emissions generated by a federal action that are subject to New Source Review for which a federal permitting agency has directly caused or initiated, has continued program responsibility for, or can practically control. The rule does not include stationary industrial sources requiring air quality permits from local air pollution control agencies. Because of the involvement of Reclamation, all direct and indirect emissions generated by the construction and operations of the Project are subject to the General Conformity Rule.

A conformity determination under the General Conformity Rule is required for the Project if all of the following criteria apply:

- The action will occur in a nonattainment or maintenance area
- One or more specific exemptions do not apply to the action

[1] Category of activities designated by a federal agency as having emissions below *de minimis* levels or otherwise do not interfere with the applicable SIP or the attainment and maintenance of the NAAQS.

- The action is not included in the federal agency's "presumed to conform" list
- The emissions from the proposed action are not within the approved emissions budget for an applicable facility
- The total direct and indirect emissions of a pollutant (or its precursors) are at or above the *de minimis* levels established in the General Conformity Rule (75 FR 17255)

The evaluation of whether total direct and indirect emissions exceed the requirements of 40 C.F.R. Section 93.158(c) is performed by comparing total annual emissions to the applicable *de minimis* emissions level listed in 40 C.F.R. Section 93.153(b). If the evaluation indicates that emissions are in excess of any of the General Conformity *de minimis* thresholds, a conformity determination must be performed.

4A.16.1.3. USEPA Non-Road Diesel Rule

USEPA has established a series of increasingly strict emission standards for new off-road diesel equipment, on-road diesel trucks, and locomotives. New equipment used for the Project, including heavy-duty trucks, off-road construction equipment, and locomotives, are required to comply with the emission standards.

4A.16.2. State Policies and Regulations

The following state regulations related to air quality may apply to implementation of some aspects of the Project.

4A.16.2.1. California Clean Air Act and California Ambient Air Quality Standards

In 1988, the state legislature adopted the California Clean Air Act (CCAA), which established a statewide air pollution control program. The CCAA requires all air districts in the state to endeavor to meet the CAAQS by the earliest practical date. Unlike the CAA, the CCAA does not set precise attainment deadlines. Instead, the CCAA establishes increasingly stringent requirements for areas that will require more time to achieve the standards. CAAQS are generally more stringent than NAAQS and incorporate additional standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. The CAAQS and NAAQS are shown in Table 4A.16-1.

California Air Resources Board (CARB) and local air districts bear responsibility for meeting the CAAQS, which are to be achieved through district-level air quality management plans incorporated into the SIP. In California, USEPA has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts. CARB traditionally has established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

The CCAA substantially adds to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The CCAA also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish traffic control measures

4A.16.2.2. CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 to accelerate a large-scale transition of zero-emission medium- and heavy-duty vehicles. The regulation requires the sale of zero-emission medium- and heavy-duty vehicles as an increasing percentage of total annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b–3 truck sales, 75% of Class 4–8 straight truck sales, and 40% of truck tractor sales. By 2045, every new medium- and heavy-duty truck sold in California will be zero-emission. Large employers, including retailers, manufacturers, brokers, and others, are required to report information about shipments and shuttle services to better ensure that fleets purchase available zero-emission trucks.

4A.16.2.3. CARB Truck and Bus Regulation

Originally adopted in 2005, the on-road truck and bus regulation requires heavy trucks to be retrofitted with particulate matter filters. The regulation applies to privately and federally owned diesel-fueled trucks with a gross vehicle weight rating greater than 14,000 pounds. Compliance with the regulation can be reached through one of two paths: (1) vehicle retrofits according to engine year or (2) phase-in schedule. Compliance paths ensure that, by January 2023, nearly all trucks and buses will have 2010 model year engines or newer.

4A.16.2.4. CARB Tailpipe Emission Standards

Like the USEPA at the federal level, CARB has established a series of increasingly strict emission standards for new off-road diesel equipment, on-road diesel trucks, and harbor craft operating in California. New equipment used to construct the Project would be required to comply with the standards.

4A.16.2.5. Carl Moyer Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) is a voluntary program that offers grants to owners of heavy-duty vehicles and equipment who upgrade their heavy-duty engines beyond the standards required by law through retrofitting, repowering, or replacing their engines with newer and cleaner ones. The program is a partnership between CARB and the local air districts throughout the state to reduce air pollution emissions from heavy-duty engines. Locally, the air districts administer the Carl Moyer Program.

4A.16.2.6. Toxic Air Contaminant Identification and Control Act

California regulates toxic air contaminants (TACs) primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). In the early 1980s, CARB established a statewide comprehensive air toxics program to reduce exposure to air toxics. The Toxic Air Contaminant Identification and Control Act (AB 1807) created California's program to reduce exposure to air toxics. The Air Toxics Hot Spots Information and Assessment Act (AB 2588) supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health threat, and facility plans to reduce these hazards.

In September 2000, CARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles (California Air Resources Board 2000). The goal of the plan was to reduce diesel PM (DPM) emissions and the

associated health threat by 75% in 2010 and by 85% by 2020. The plan identifies 14 measures that target new and existing on-road vehicles (e.g., heavy-duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., stand-by power generators). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before the CARB designates a substance as a TAC. To date, the CARB has identified 21 TACs and has also adopted the USEPA's list of hazardous air pollutants (HAPs) as TACs.

The Air Toxics Hot Spots Information and Assessment Act requires that existing facilities that emit toxic substances above specified levels complete the following.

- Prepare a toxic emission inventory.
- Prepare a risk assessment if emissions are significant.
- Notify the public of significant risk levels.
- Prepare and implement risk reduction measures.

CARB has adopted several regulations that will reduce diesel emissions from in-use vehicles and engines throughout California. For example, CARB adopted an idling regulation for on-road diesel-fueled commercial vehicles in July 2004 and updated it in October 2005. The regulation applies to public and privately owned trucks with a gross vehicle weight rating (GWR) greater than 10,000 pounds. Vehicles subject to the regulation are prohibited from idling for more than 5 minutes in any one location. CARB also adopted a regulation for diesel-powered construction and mining vehicles operation. Fleet owners are subject to retrofit or accelerated replacement/repower requirements for which CARB must obtain authorization from USEPA prior to enforcement. The regulation also imposes a 5-minute idling limitation on owners, operators, and renters or lessees of off-road diesel vehicles. In some cases, the particulate matter reduction strategies also reduce smog-forming emissions such as nitrogen oxides (NOX). As an ongoing process, the CARB reviews air contaminants and identifies those that are classified as TACs. CARB also continues to establish new programs and regulations for the control of TACs, including DPM, as appropriate.

4A.16.2.7. State Implementation Plans

A SIP is a collection of regulation and documents used by a state, territory, or local air district to reduce air pollution in areas that do not meet the NAAQS. The SIP provides a plan for implementation, maintenance, and enforcement of the NAAQS in each state. A SIP will typically include state-adopted control measures, non-regulatory components such as SIP narratives, ozone plans, and maintenance plans, and additional requirements promulgated by USEPA to satisfy a mandatory requirement in Section 110 or Part D of the CAA. USEPA will review and approve all SIPs, and generally the state will enforce the SIP (U.S. Environmental Protection Agency 2020).

4A.16.3. Local/Regional Policies and Regulations

At the local level, responsibilities of air quality districts include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality

stations, overseeing agricultural burning permits, and reviewing air quality–related sections of environmental documents required by CEQA. The air quality districts are also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and for ensuring that NAAQS and CAAQS are met.

The Project falls under the jurisdiction of four air districts: Glenn County Air Pollution Control District (GCAPCD), Colusa County Air Pollution Control District (CCAPCD), Tehama County Air Pollution Control District, and Yolo-Solano Air Quality Management District (YSAQMD). The air districts have local air quality jurisdiction over projects within their boundaries, and, collectively, these air districts represent much of the Sacramento Valley Air Basin (SVAB). The SVAB is comprised of nine total air districts, including the four districts where there would be permanent Project facilities constructed.

The following air district policies related to air quality may apply to implementation of some aspects of the Project.

4A.16.3.1. Colusa County Air Pollution Control District

CCAPCD has jurisdiction over projects within Colusa County; however, CCAPCD does not currently have CEQA guidelines or thresholds of significance by which to evaluate projects' significance. The air district does have the following list of rules that may apply to portions of the Project facilities that are located in Colusa County, which may not be an exhaustive list, as additional CCAPCD rules may apply as specific components of the Project are identified (Colusa County Air Pollution Control District 2002).

- Rule 200 (Nuisance): This rule prohibits discharging a source of air contaminants or other materials which may cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to a business or property.
- Rule 201 (Visible Emissions): This rule prohibits the discharge of emissions of air contaminants for a period or periods aggregating more than 3 minutes in any 1 hour.
- Rule 202 (Particulate Matter Concentration): This rule prohibits the discharge of particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions.
- Rule 204 (Dust and Fumes): This rule limits the dust or fumes total emissions based on process weight rate.
- Rule 207 (Abrasive Blasting): This rule allows for abrasive blasting to occur as long as it is performed under a valid permit issued by an air pollution control officer.
- Rule 230 (Architectural Coatings): This rule limits the quantity of Volatile Organic Compounds (VOCs) in Architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the CCAPCD.
- Rule 231 (Cutback and Emulsified Asphalt): This rule limits the emissions of organic compounds from the use of cutback and emulsified asphalts in paving materials, paving, and maintenance operations.

- Rule 252 (Stationary Internal Combustion Engines): This rule limits emissions of NOx and carbon monoxide (CO) from stationary internal combustion engines.
- Rule 262 (Sulfur Oxides): A person shall not discharge into the atmosphere from any single source of emission whatsoever any sulfur oxides in excess of 0.2% by volume (2,000 ppm) collectively calculated as sulfur dioxide (S02).

4A.16.3.2. Glenn County Air Pollution Control District

GCAPCD has jurisdiction over projects within the boundaries of Glenn County. Like CCAPCD, GCAPCD does not have established CEQA guidelines or thresholds of significance by which to evaluate the significance of projects' emissions. Nevertheless, portions of the Project in Glenn County may be subject to the following rules, though this list of rules is not exhaustive. Additional GCAPCD rules may apply as specific components of the Project are identified (Glenn County Air Pollution Control District 2010).

- Rule 76 (Visible Emissions): This rule prohibits the discharge of emissions of air contaminants for a period or periods aggregating more than 3 minutes in any 1 hour.
- Rule 78 (Nuisance): This rule prohibits discharging a source of air contaminants or other materials which may cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to a business or property.
- Rule 85 (Particulate Matter Concentration): This rule prohibits the discharge of particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions.
- Rule 86 (Dust and Fumes Total Emissions): This rule limits the dust or fumes total emissions based on process weight rate.
- Rule 89 (Sulphur Oxides): No person shall discharge into the atmosphere from any single source of emission whatsoever, any sulfur oxides in excess of 0.2% by volume (2,000 ppm) collectively calculated as sulfur dioxide (SO2).
- Rule 99.1 (Cutback and Emulsified Asphalt): This rule limits emissions of VOCs from the use of cutback and emulsified asphalt in paving, construction, or maintenance of parking lots, driveways, streets, and highways.

4A.16.3.3. Tehama County Air Pollution Control District

TCAPCD has jurisdiction over projects within Tehama County.

The following rules may apply to the Project facilities located in TCAPCD (Tehama County Air Pollution Control District 2015):

- Rule 4.01 (Visible Emissions): No person shall discharge into the atmosphere from any source, any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour which is: 1.1 As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or 1.2 Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection 1.1 of this rule.

- Rule 4.01 (Particulate Matter): A person shall not discharge into the atmosphere from any source particulate matter in excess of 0.15 grains per cubic foot of gas at standard conditions.
- Rule 4.04 (Nuisance): A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.
- Rule 4.08 (Dust and Condensed Fumes): This rule establishes the limit of dust and condensed fume emissions based on process weight rate.
- Rule 4.09 (Specific Contaminants): A person shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the contaminants, in any state or combination thereof, exceeding in concentration at the point of discharge:
  - Sulfur compounds calculated as sulfur dioxide (SO2) 250 ppm.
  - Combustion contaminants: 0.15 grains per cubic foot of gas calculated to 12% of carbon dioxide (CO2) at standard conditions, except during the start of an operation or change in energy source, during the time necessary to bring the combustion process up to operating level. In measuring the combustion contaminants from incinerators used to dispose of combustible refuse by burning, the carbon dioxide (CO2) produced by combustion of any liquid or gaseous fuel shall be excluded from the calculation to 12% of carbon dioxide (CO2).
- Rule 4.10 (Sulfur Content of Fuel): The use of any liquid or solid fuel with a sulfur content in excess of 0.5% by weight is prohibited.
- Rule 4.14 (Fuel Burning Equipment): The purpose of this rule is to limit emissions of oxides of nitrogen (NOx) from non-mobile fuel burning equipment.
- Rule 4.24 (Fugitive Dust Emissions): This rule provides the regulations for processes which may periodically cause fugitive dust emissions.
- Rule 4.26 (Cutback and Emulsified Asphalt): This rule limits the emissions of organic compounds from the use of cutback and emulsified asphalts in paving materials, paving, and maintenance operations.
- Rule 4.34 (Stationary Internal Combustion Engines): This rule establishes the regulations to operate a stationary internal combustion engine with greater than 50 brake horsepower (bhp) in order to limit emissions of nitrogen oxides and carbon monoxide.
- Rule 4.39 (Architectural Coatings): This rule limits the quantity of Volatile Organic Compounds (VOCs) in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the District.

4A.16.3.4. Yolo-Solano Air Quality Management District

Part of the Project area is under the jurisdiction of YSAQMD. YSAQMD's recommended CEQA thresholds are outlined in its *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD's CEQA Handbook) (Yolo-Solano Air Quality Management District 2007). YSAQMD supported development of the *Sacramento Regional 8-Hour Attainment and*

Reasonable Further Progress Plan and the *PM2.5 Implementation/Maintenance Plan and Redesignation Request for Sacramento PM2.5 Nonattainment Area*, which are regional attainment plans for the Sacramento Federal Nonattainment Area. YSAQMD also prepares a triennial report discussing the progress it has made toward improving the air quality and reducing ozone concentrations in its jurisdiction. The 2015 Triennial Assessment was adopted in July 2016; the draft 2018 Triennial Assessment was released in March 2019.

All activities located in Yolo County are subject to the YSAQMD regulations in effect at the time of construction. Specific regulations applicable to the Project may involve diesel construction equipment emissions, fugitive dust, on-road haul truck emissions, and general permit requirements. Below are descriptions of YSAQMD rules that may apply to the Project. This list of rules may not be all-encompassing, as additional YSAQMD rules may apply to the alternatives as specific components are identified.

- Regulation II, Rule 2.5 (Nuisance). This rule prohibits the discharge of any air contaminant that causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property.
- Regulation II, Rule 2.8 (Particulate Matter Concentration). This rule limits the emissions of particulate matter from any source operation which emits, or may emit dust, fumes, or total suspended particulate matter.
- Regulation II, Rule 2.28 (Cutback and Emulsified Asphalts). This rule limits the application of cutback and emulsified asphalt.
- Regulation II, Rule 2.32 (Stationary Internal Combustion Engines). This rule requires portable equipment greater than 50 horsepower, other than vehicles, to be registered with either CARB Portable Equipment Registration Program (PERP) or with YSAQMD.

4A.16.3.5. Glenn County Existing Conditions Report

The existing *Glenn County General Plan Update, 2020 Existing Conditions Report* includes the following policies related to air quality (Glenn County 2020).

Goal PSG-4: Protection and enhancement of air quality

The following policies are relevant to Goal PSG-4.

PSP-35: Review development requests to determine the impact such development will have on the existing air quality and for compliance with the air pollution reduction measures specified in the Glenn County Air Quality Attainment Plan.

PSP-36: Promote jobs/housing balance when evaluating development projects.

PSP-37: Encourage design of new development which minimizes automobile trips and maximizes other modes of transportation.

4A.16.3.6. Colusa County General Plan

The current *Colusa County General Plan* includes the following policies related to air quality that are relevant to the Project (Colusa County 2012):

Objective CON-2B: Minimize Air Pollutant Emissions and Improve Air Quality to Protect Public Health

Policy CON 2-16: Cooperate with the Colusa County Air Pollution Control District to monitor air pollution within the County, enforce APCD, state, and federal air quality rules, and require mitigation of significant impacts to the maximum extent feasible.

Policy CON 2-17: Require new sources of toxic air pollutants to prepare a Health Risk Assessment as required by Section 44300 of the California Health and Safety Code. The Health Risk Assessment shall be used to establish appropriate land use buffer zones around those areas posing substantial health risks based upon the California Air Resources Board's guidance provided in the Air Quality Land Use Handbook.

Policy CON 2-18: Ensure that any proposed new sources of toxic air contaminants or odors comply with applicable health standards and provide adequate maintained and managed buffers, including setbacks and screening, to protect sensitive receptors.

Policy CON 2-20: Ensure that agricultural burning and fuel management burning is conducted in a manner that does not pose significant public health risks.

4A.16.3.7. County of Yolo 2030 Countywide General Plan

Air-quality specific policies relevant to the Project from the *County of Yolo 2030 Countywide General Plan* include those listed below for GOAL CO-6 (Yolo County 2009:CO-81, CO-82).

Goal CO-6: Air Quality. Improve air quality to reduce the health impacts caused by harmful emissions.

Policy CO-6.1: Improve air quality through land use planning decisions.

Policy CO-6.2: Support local and regional air quality improvement efforts.

Policy CO-6.6: Encourage implementation of YSAQMD Best Management Practices to reduce emissions and control dust during construction activities

4A.16.3.8. Tehama County General Plan

Air-quality specific goals, policies, and implementation measures relevant to the Project from the *Tehama County General Plan* include those listed below (Tehama County 2009).

Goal OS-2: To maintain, protect, and improve the air quality in Tehama County at acceptable levels as defined by state and federal standards.

Policy OS-2.5: The County shall encourage and support the Tehama County Air Pollution Control District in their efforts to enforce local, state, and federal air quality laws, rules, and regulations in order to meet Ambient Air Quality Standards (AAQS).

Implementation Measure OS-2.5a: Coordinate with TCAPCD through the environmental review process to ensure that proposed projects would not significantly affect the region's ability to meet State and federal air quality standards.

Implementation Measure OS-2.5b: Use the emissions guidelines produced by the California Air Resources Board and TCAPCD to ensure that County facilities and operations comply with mandated measures.

Implementation Measure OS-2.5d: Request that the Tehama County Air Pollution Control District develop Indirect Source Guidelines for the potential air emissions from future development. Require to the extent practical and applicable that all new development adhere to the District Indirect Source Guidelines to mitigate air quality and greenhouse gas impacts.

Implementation Measure OS-2.5e: Strongly consider the adoption of a County Air Quality Impact Fee to assist in the reduction of air quality impacts in the County and support the efforts by the Tehama County Air Pollution Control District to prepare and adopt District air quality impact fees.

Implementation Measure OS-2.5f: When implementing or approving projects that would result in considerable grading and/or excavation activities, require as a condition of project approval those mitigation measures recommended by the Tehama County Air Pollution Control District to reduce construction related emissions.

Implementation Measure OS-2.5g: Consider as part of the project review and approval process the use of the following techniques to mitigate air quality impacts. These items may also be considered as potential project level measures by the TCAPCD to mitigate potential air quality impacts and be included in the Indirect Source Guidelines.

Policy OS-2.6: The County shall promote improved air quality benefits through energy conservation measures for new and existing development.

Implementation Measure OS-2.6a: Require energy-conserving features in the design and construction of new development. Many options exist for reducing pollution from energy-producing systems, including the following:

- Requiring the use of the best available technologies to reduce air pollution standards.
- Using building materials and methods that reduce emissions.

4A.17 Chapter 21, Greenhouse Gas Emissions

4A.17.1. Federal Policies and Regulations

In *Massachusetts v. U.S. Environmental Protection Agency, et al.*, 549 U.S. 497 (Supreme Court of the United States 2007), the United States Supreme Court ruled that GHGs fit within the CAA's definition of air pollutants and that the USEPA has the authority to regulate GHGs. Federal GHG regulation has continued to evolve since the initial Supreme Court ruling in 2007. Key legislation and regulatory orders applicable to the Project are briefly described below.

4A.17.1.1. U.S. Environmental Protection Agency Mandatory GHG Reporting Rule

On September 22, 2009, USEPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), which required USEPA to develop "mandatory reporting of greenhouse gasses above appropriate thresholds in all sectors of the economy…" The Reporting Rule would apply to most entities that emit 25,000 metric tons of CO2e or more per year. Starting in 2010, facility owners are required to submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule also mandates recordkeeping and administrative requirements for USEPA to verify annual GHG emissions reports.

4A.17.1.2. U.S. Environmental Protection Agency Endangerment and Cause or Contribute Findings

On December 7, 2009, USEPA signed the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the CAA. Under the Endangerment Finding, USEPA finds that the current and projected concentrations of the six key well-mixed GHGs—CO2, CH4, N2O, PFCs, SF6, and HFCs—in the atmosphere threaten the public health and welfare of current and future generations. Under the Cause or Contribute Finding, USEPA finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare. However, unlike some criteria pollutants and TAC, GHG emissions do not directly impact human health. Rather, elevated GHG concentrations in excess of natural levels induce large-scale climate shifts, which can expose individuals to increased public health risks. For example, increases in ambient temperature can lead to heat-related illnesses and death, whereas changes in disease vectors may lead to increased risk of infectious diseases. Climate change and air pollution are also closely coupled. Ozone and particulate pollution, both of which can negatively impact human health, are strongly influenced by weather and can be concentrated near Earth's surface during extreme heat events. These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite to finalizing USEPA's corporate average fuel economy standards for light-duty vehicles.

4A.17.1.3. National Corporate Average Fuel Economy Standards

The National Highway Traffic Safety Administration's (NHTSA) Corporate Average Fuel Economy (CAFE) requires substantial improvements in fuel economy and reductions in GHG emissions for all light-duty vehicles sold in the United States. On August 2, 2018, the NHTSA and USEPA proposed to amend the fuel efficiency standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026 by maintaining the current

model year 2020 standards through 2026 (Safer Affordable Fuel-Efficient [SAFE] Vehicles Rule). On September 19, 2019, USEPA and NHTSA issued a final action on the One National Program Rule, which is considered Part One of the SAFE Vehicles Rule and a precursor to the proposed fuel efficiency standards. The One National Program Rule enables USEPA/NHTSA to provide nationwide uniform fuel economy and GHG vehicle standards, specifically by (1) clarifying that federal law preempts state and local tailpipe GHG standards, (2) affirming NHTSA's statutory authority to set nationally applicable fuel economy standards, and (3) withdrawing California's CAA preemption waiver to set state-specific standards.

USEPA and NHTSA published their decisions to withdraw California's waiver and finalize regulatory text related to the preemption on September 27, 2019 (84 FR 51310). California, 22 other states, the District of Columbia, and two cities filed suit against Part One of the SAFE Vehicles Rule on September 20, 2019 (*California et al. v. United States Department of Transportation et al.*, 1:19-cv-02826, U.S. District Court for the District of Columbia). On October 28, 2019, the Union of Concerned Scientists, Environmental Defense Fund (EDF), and other groups filed a protective petition for review after the federal government sought to transfer the suit to the D.C. Circuit (*Union of Concerned Scientists v. National Highway Traffic Safety Administration*). Opening briefs for the petition are currently scheduled to be completed on November 23, 2020. The lawsuit filed by California and others is stayed pending resolution of the petition.

USEPA and NHTSA published final rules to amend and establish national CO2 and fuel economy standards on April 30, 2020 (Part Two of the SAFE Vehicles Rule) (85 FR 24174). The revised rule changes the national fuel economy standards for light-duty vehicles from 46.7 miles per gallon (mpg) to 40.4 mpg in future years. California, 22 other states, and the District of Columbia filed a petition for review of the final rule on May 27, 2020. The fate of the SAFE Vehicles Rule remains uncertain in the face of pending legal deliberations.

4A.17.1.4. GHG Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles

On September 15, 2011, the USEPA and NHTSA issued a final rule of *Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles* (76 FR 7106). This final rule is tailored to each of three regulatory categories of heavy-duty vehicles—combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles—and applies to model years 2014–2018. The USEPA and NHTSA signed Phase 2 of these standards on August 16, 2016, which apply to model years 2019–2027 medium- and heavy-duty vehicles.

4A.17.1.5. Council on Environmental Quality NEPA Guidance on Consideration of the Effects of Climate Change and GHG Emissions

The White House Council on Environmental Quality (CEQ) released final guidance regarding the consideration of GHG in NEPA documents for federal actions in August 2016. On April 25, 2017, CEQ withdrew the final guidance pursuant to EO 13783 but noted "the withdrawal of the guidance does not change any law, regulation, or other legally binding requirement (82 FR 16576)." The CEQ released new draft guidance on June 26, 2019, which, if finalized, would replace the withdrawn August 2016 guidance. The June 2019 guidance requires federal agencies

to analyze the direct, indirect, and cumulative impacts of a proposed action's GHG emissions, as well as consider the impacts of climate change on the project.

4A.17.2. State Policies and Regulations

The following state regulations related to GHGs may apply to implementation of some aspects of the Project. California has adopted statewide legislation addressing various aspects of GHG emissions reduction. Governors of California have also issued several executive orders related to the state's evolving climate change policy. Summaries of key policies, regulations, and legislation at the state level that are relevant to the Project are described below. Refer to Chapter 28, *Climate Change*, for a summary of plans and policies relating to climate change adaptation and resilience.

4A.17.2.1. Executive Order S-3-05

Signed by Governor Arnold Schwarzenegger on June 1, 2005, EO S-3-05 asserts that California is vulnerable to the effects of climate change. To combat this concern, Executive Order S-3-05 established the following GHG emissions reduction targets for state agencies.

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

EOs are binding only on state agencies. Accordingly, EO S-03-05 will guide state agencies' efforts to control and regulate GHG emissions but will have no direct binding effect on local government or private actions. The Secretary of the California Environmental Protection Agency (Cal-EPA) is required to report to the Governor and state legislature biannually on the impacts of global warming on California, mitigation and adaptation plans, and progress made toward reducing GHG emissions to meet the targets established in this EO.

4A.17.2.2. Assembly Bill 32

One goal of EO S-03-05 was further reinforced by AB 32 (Chapter 488, Statutes of 2006), the Global Warming Solutions Act of 2006, which requires the state to reduce GHG emissions to 1990 levels by 2020. Since AB 32 was adopted, CARB, the CEC, the CPUC, and the Building Standards Commission have been developing regulations that will help meet the goals of AB 32. Under AB 32, CARB is required to prepare a Scoping Plan and update it every 5 years. The Scoping Plan was approved in 2008, the first update approved in 2014, and an additional update was approved in 2017 (see discussion of SB 32 below). The Scoping Plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020 and requires CARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. Specifically, the AB 32 Scoping Plan articulates a key role for local governments, recommending they establish GHG reduction goals for both their municipal operations and the community consistent with those of the state.

4A.17.2.3. Senate Bill 32 and Assembly Bill 197

SB 32 requires CARB to ensure that statewide GHG emissions are reduced to at least 40 percent below 1990 levels by 2030. The companion bill, AB 197, creates requirements to form a Joint Legislative Committee on Climate Change Policies, requires CARB to prioritize direct emission

reductions and consider social costs when adopting regulations to reduce GHG emissions beyond the 2020 statewide limit, requires CARB to prepare reports on sources of GHGs and other pollutants, establishes 6-year terms for voting members of CARB, and adds two legislators to CARB as nonvoting members.

Pursuant to SB 32, CARB updated the prior AB 32 Scoping Plan to address implementation of GHG reduction strategies to meet the 2030 reduction target. The final plan was approved in December 2017. The 2017 plan continues the discussion from the original scoping plan and 2014 update of identifying scientifically backed policies within six of the state's economic sectors to reduce GHGs. The updated Scoping Plan includes various elements, including doubling energy efficiency savings, increasing the low carbon fuel standard (LCFS) from 10% to 18%, adding 4.2 million zero-emission vehicles on the road, implementing the Sustainable Freight Strategy, implementing a post-2020 Cap-and-Trade Program, creating walkable communities with expanded mass transit and other alternatives to traveling by car, and developing an Integrated Natural and Working Lands Action Plan to protect land-based carbon sinks.

4A.17.2.4. Executive Order B-55-18

EO B-55-18 acknowledges the environmental, community, and public health risks posed by future climate change. It further recognizes the climate stabilization goal adopted by 194 states and the European Union under the Paris Agreement.[2] While the United States was not party to the agreement, California is committed to meeting the Paris Agreement goals and going beyond them wherever possible. Based on the worldwide scientific agreement that carbon neutrality must be achieved by midcentury, EO B-55-18 establishes a new state goal to achieve carbon neutrality as soon as possible, and no later than 2045, and to achieve and maintain net-negative emissions thereafter. The EO charges the CARB with developing a framework for implementing and tracking progress toward these goals. This EO extends EO S-3-05 but is only binding on state agencies.

4A.17.2.5. Assembly Bill 1493

With the passage of AB 1493, also known as Pavley I, in 2002, California launched an innovative and proactive approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires CARB to develop and implement regulations to reduce automobile and light-truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the model year 2009. Although litigation challenged these regulations and the USEPA initially denied California's related request for a waiver, the waiver request was granted. Additional strengthening of the Pavley standards (referred to previously as Pavley II and now referred to as the Advanced Clean Cars measure) was adopted for vehicle model years 2017–2025 in 2012. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon in 2025.

[2] In 2015, the 21st session of the Conference of Parties (COP21) took place in Paris, France. The outcomes from the Paris Agreement at COP21 include, but are not limited to, limiting global temperature increase well below 2 degrees Celsius (°C). In April 2016, 174 states and the European Union signed the agreement. On November 4, 2019, President Donald Trump formally notified the United Nations that the United States would withdraw from the Paris Agreement. This announcement begins a 1-year process for exiting the deal, which can occur no sooner than November 2020.

As noted above, USEPA and NHTSA issued a regulatory order to withdraw California's waiver on September 27, 2019 (84 FR 51310). The rule has been challenged by California, and the fate of the waiver is uncertain given pending deliberations in federal courts.

4A.17.2.6. Executive Order S-01-07

EO S-01-07 mandates: (1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020 and (2) that a LCFS for transportation fuels be established in California. The EO initiates a research and regulatory process at CARB. Based on an implementation plan developed by CEC, CARB will be responsible for implementing the LCFS. In September 2018, the LCFS regulation was amended to increase the statewide goal to a 20% reduction in carbon intensity of California's transportation fuels at least by 2030.

4A.17.2.7. Senate Bill 743

SB 743 requires revisions to the CEQA Guidelines that establish new impact analysis criteria for the assessment of a project's transportation impacts. The intent behind SB 743 and revising the CEQA Guidelines is to integrate and better balance the needs of congestion management, infill development, active transportation, and GHG emissions reduction. The Office of Planning and Research (OPR) recommends that vehicle miles traveled (VMT) serve as the primary analysis metric, replacing the existing criteria of delay and level of service. In 2018, OPR released a technical advisory outlining potential VMT significance thresholds for different project types and identified a series of potential measures to reduce VMT, which in turn will reduce GHG emissions.

4A.17.2.8. Renewables Portfolio Standard (Senate Bills 1078/107/X1-2)

SBs 1078 and 107, California's RPS, obligates IOUs, energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached, no later than 2010. The CPUC and CEC are jointly responsible for implementing the program. SB X1-2 set forth a longer-range target of procuring 33% of retail sales by 2020.

4A.17.2.9. Senate Bill 350

SB 350 was approved by the California legislature in September 2015 and signed by Governor Brown in October 2015. Its key provisions are to require the following by 2030: (1) an RPS of 50% and (2) a doubling of energy efficiency (electrical and natural gas) by 2030, including improvements to the efficiency of existing buildings. These mandates will be implemented by future actions of the CPUC and CEC.

4A.17.2.10. Senate Bill 100

The state's existing RPS requires all retail sellers to procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours of those products sold to their retail end-use customers achieve 25% of retail sales by December 31, 2016 (achieved), 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 revises and extends these renewable resource targets to 50% by December 31, 2026, 60% by December 31, 2030, and 100% (carbon-free) by December 31, 2045.

4A.17.2.11. Senate Bills 605 and 1383

SB 605 directed CARB, in coordination with other state agencies and local air districts, to develop a comprehensive Short-Lived Climate Pollutant (SLCP) Reduction Strategy. SB 1383 directed CARB to approve and implement the SLCP Reduction Strategy to achieve the following reductions in SLCPs.

- 40% reduction in CH4 below 2013 levels by 2030
- 40% reduction in HFCs below 2013 levels by 2030
- 50% reduction in anthropogenic black carbon below 2013 levels by 2030

The bill also establishes the separate targets for reducing organic waste in landfills and CH4 emissions from dairy and livestock operations. CARB and California Department of Resources Recycling and Recovery (CalRecycle) are currently developing regulations to achieve the organic waste reduction goals under SB 1383. In January 2019 and June 2019, CalRecycle proposed new and amended regulations in Titles 14 and 27 of the CCR. Among other things, the regulations set forth minimum standards for organic waste collection, hauling, and composting. The final regulations will take effect on or after January 1, 2022.

4A.17.2.12. Short-Lived Climate Pollutant Reduction Strategy

CARB adopted the SLCP Reduction Strategy in March 2017 as a framework for achieving the methane, hydrofluorocarbon, and anthropogenic black carbon reduction targets set by SB 1383. The SLCP Reduction Strategy includes 10 measures to SLCPs, which fit within a wide range of ongoing planning efforts throughout the state, including CARB's and CalRecycle's proposed rulemaking on organic waste diversion.

4A.17.2.13. Greenhouse Gas Cap-and-Trade Program

CARB adopted the cap-and-trade program in October 2011. The California cap-and-trade program is a market-based system with an overall emissions limit for affected emission sources. Affected sources include in-state electricity generators, hydrogen production, petroleum refining, and other large-scale manufacturers and fuel suppliers and distributors. The Authority is not considered a covered entity (pursuant to the cap-and-trade regulation) and is therefore not subject to the GHG compliance obligations. However, the Project would affect emissions in other sectors that could indirectly affect the GHG emissions intensity associated with the Project (e.g., electricity).

The original cap-and-trade program set a compliance schedule through 2020. AB 398 extends the program through 2030 and requires CARB to make refinements, including establishing a price ceiling. Revenue generated from the cap-and-trade program is used to fund various programs. AB 398 established post-2020 funding priorities, to include (1) air toxics and criteria pollutants, (2) low- and zero-carbon transportation, (3) sustainable agricultural practices, (4) healthy forests and urban greening, (5) SLCPs, (6) climate adaptation and resiliency, and (7) climate and clean energy research.

4A.17.3. Local/Regional Policies and Regulations

As noted in Chapter 20, *Air Quality*, responsibilities of air quality districts include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining

air quality stations, overseeing agricultural burning permits, and reviewing air quality– and GHG-related sections of environmental documents required by CEQA.

CARB's Climate Change Scoping Plan states that local governments are "essential partners" in the effort to reduce GHG emissions. The Climate Change Scoping Plan also acknowledges that local governments have "broad influence and, in some cases, exclusive jurisdiction" over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Many of the proposed measures in the Scoping Plan to reduce GHG emissions rely on local government actions.

As noted in Chapter 20, *Air Quality*, the Project falls under the jurisdiction of four air districts: GCAPCD, CCAPCD, Tehama County Air Pollution Control District (TCAPCD), and YSAQMD.

While some air districts in the regional air quality study area have adopted CEQA guidelines outlining methods for quantifying GHG emissions as well as potential mitigation measures (TCAPCD, YSAQMD), others have not adopted CEQA guidelines (GCAPCD, CCAPCD) (Ledbetter pers. comm.; Ryan pers. comm.). TCAPCD's CEQA Guide include a recommended emissions threshold to assist CEQA lead agencies in determining the level of significance of a project's GHG emissions (Tehama County 2015). Although YSAQMD has CEQA guidelines, these air districts do not currently have any adopted GHG thresholds (Yolo Solano Air Quality Management District 2007).

In the air quality study area, two counties (Yolo and Tehama) also have adopted General Plans that contain goals and policies that pertain to GHG emissions. The policies that are relevant to the Project are summarized below for these two counties.

4A.17.3.1. Yolo County General Plan

GHG-specific policies relevant to the Project from the *County of Yolo 2030 General Plan* include those listed below (Yolo County 2009: CO-91, CO-92).

Goal CO-8: Climate Change. Reduce GHG emissions and plan for adaptation to the future consequences of global climate change.

Policy CO-8.1: Assess current greenhouse gas emission levels and adopt strategies based on scientific analysis to reduce global climate change impacts.

Policy CO-8.2: Use the development review process to achieve measurable reductions in greenhouse gas emissions.

Policy CO-8.3: Prepare appropriate strategies to adapt to climate change based on sound scientific understanding of the potential impacts.

Policy CO-8.6: Undertake an integrated and comprehensive approach to planning for climate change by collaborating with international, national, State, regional, and local organizations and entities.

Policy CO-8.7: Integrate climate change planning and program implementation into County decision making.

Policy CO-8.8: Increase public awareness about climate change and encourage county residents and businesses to become involved in activities and lifestyle changes that will aid in reduction of greenhouse gas emissions.

Policy CO-8.9: Work with local, regional, State, and Federal jurisdictions, as well as private and non-profit organizations, to develop a regional greenhouse gas emissions inventory and emissions reduction plan.

4A.17.3.2. Tehama County General Plan

Excerpted below are the relevant goal and policies from the *Tehama County General Plan* that pertain to GHGs and energy resources (Tehama County 2009).

Policy OS-2.7: Tehama County shall work with the Tehama County Air Pollution Control District, California Air Resources Board and/or other agencies to prepare a Climate Action Plan. The Climate Action Plan shall include at a minimum:

- An inventory of current (2008) GHG emissions within the Tehama County Air Pollution Control District consistent with methodologies developed by the International Environmental Agency for Local Governments (ICLEI) and California Air Resources Board.
- An inventory 1990 GHG emission levels within the Tehama County Air Pollution Control District consistent with methodologies developed by ICLEI and ARB.
- Estimated inventory of 2020 GHG emission levels within the Tehama County Air Pollution Control District consistent with methodologies developed by ICLEI and ARB.
- Specific targets for reductions of the current and projected 2020 GHG emissions inventory from those sources reasonably attributable to the County's discretionary land use decisions and the County's internal government operations.
- Specific and general tools and strategies to reduce the current and projected 2020 GHG inventories and to meet the Plan's target's for GHG reductions by 2020.
- The County shall seek funding from the state and/or other sources, including development impact fees, in order to fund the Plan.

4A.18 Chapter 22, Cultural Resources

The Project would affect cultural resources that meet the federal, state and local definitions and criteria identified in this section, and those resources and impacts are analyzed in Chapter 22 and Appendix 22A.

4A.18.1. Federal Policies and Regulations

4A.18.1.1. National Environmental Policy Act, 42 U.S.C. Sections 4321–4347, 40 C.F.R. Part 1508.27

NEPA, as amended, establishes the federal policy for assessing effects on important historic, cultural, and natural aspects of our national heritage during federal project planning. All federal or federally assisted projects requiring action pursuant to Section 102 of NEPA must take into account the effects on cultural resources. According to the NEPA regulations, in considering whether an action may "significantly affect the quality of the human environment," an agency must consider, among other things, unique characteristics of the geographic area such as proximity to historic or cultural resources (40 C.F.R. § 1508.27(b)(3)) and the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places (NRHP).

The NEPA regulations also require that, to the fullest extent possible, agencies prepare draft environmental impact statements concurrently with and integrated with environmental impact analyses and related surveys and studies required by the National Historic Preservation Act (NHPA). When Section 106 of the NHPA and NEPA are integrated, project impacts that cause adverse effects under Section 106 are usually considered to be significant under NEPA.

4A.18.1.2. Section 106 of the National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to consider the effects of their actions on historic properties (54 U.S.C. 306108). The Section 106 review process typically consists of the following major steps by federal agencies, all of which occur in consultation with the State Historic Preservation Officer (SHPO), Native American Tribes, and other consulting parties.

- Initiate Section 106 process by defining the federal undertaking and establishing a plan for consultation.
- Identify the area of potential effect (APE), and, within these limits, identify historic properties.
- Assess the effects of the undertaking by applying the criteria for adverse effects.
- Resolve adverse effects.

The Section 106 regulations define an adverse effect as an effect that alters, directly or indirectly, the qualities that make a resource eligible for listing on the NRHP (36 C.F.R. § 800.5[a][1]). Consideration must be given to the property's location, design, setting, materials, workmanship, feeling, and association, to the extent that these qualities contribute to the integrity and significance of the resource. Adverse effects may be direct and reasonably foreseeable or may be more remote in time or distance (36 C.F.R. § 800.5[a][1]).

4A.18.1.3. National Register of Historic Places

The NRHP is a federal registration program that was established in the NHPA and is administered by the National Parks Service. Historic properties are districts, sites, buildings, structures, and/or objects that are listed in or eligible for listing in the NRHP (36 C.F.R. § 800.16[l][1]). A property may be listed in the NRHP if it meets the criteria for significance and integrity described in the NRHP regulations (36 C.F.R. § 60.4).

Historic properties possess integrity of location, design, setting, materials, workmanship, feeling, and association that conveys historical significance found under one or more of the following significance criteria:

a. That are associated with events that have made a significant contribution to the broad patterns of our history; or
b. That are associated with the lives of persons significant in our past; or
c. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
d. That have yielded, or may be likely to yield, information important in prehistory or history.

Some property types do not typically qualify for NRHP listing; however, these properties may qualify if they fall into one or more of the following criteria considerations. Property types that require special consideration to be found eligible consist of the following (36 C.F.R. § 60.4):

a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
b. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life.
d. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
g. A property achieving significance within the past 50 years if it is of exceptional importance.

4A.18.1.4. Archaeological Resources Protection Act of 1979

The Archaeological Resources Protection Act (ARPA) requires a permit for intentional excavation of archaeological materials on federal lands (54 U.S.C. § 302910). The federal agency that owns or controls the land may dispense permits for excavation as provided in the ARPA regulations (43 C.F.R. § 7.5). The permit may require notice to affected Indian Tribes (43 C.F.R. § 7.7) and compliance with the terms and conditions provided in the ARPA regulations (43 C.F.R. § 7.9). Work conducted on federal lands and collections retrieved from federal lands are subject to ARPA.

4A.18.1.5. Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) provides a process for federal agencies to determine the rights of lineal descendants and culturally affiliated Indian Tribes and Native Hawaiian organizations to Native American cultural items and Native American human remains and funerary materials that are:

- In federal possession or control; or
- In the possession or control of any institution or state or local government receiving federal funds; or
- Excavated intentionally or discovered inadvertently on federal or tribal lands (43 C.F.R. § 10.1).

Ownership and disposition follow NAGPRA for all human burials and associated artifacts (25 U.S.C. § 3001; 43 C.F.R. § 10.6) on lands owned or controlled by the federal government. NAGPRA establishes a hierarchy of ownership rights for Native American human remains identified on these lands (25 U.S.C. § 3002[a]):

- Where the lineal descendants can be found, the lineal descendants own the remains.
- Where the lineal descendants cannot be found, the remains belong to the Indian Tribe or Native Hawaiian organization on whose land the remains were found.
- If the remains are discovered on other lands owned or controlled by the federal government and the lineal descendants cannot be determined, the remains belong to the Indian Tribe or Native Hawaiian organization that is culturally affiliated with the remains, or the tribe that aboriginally occupied the land where the remains were discovered.

Under NAGPRA, Native American human remains on lands owned or controlled by the federal government may be intentionally excavated only under the following circumstances (25 U.S.C. § 3002[c]):

- With a permit issued under ARPA (54 U.S.C. § 302902)
- After documented consultation with the relevant Tribal or Native American groups

NAGPRA also provides guidance on inadvertent discoveries of Native American or Hawaiian human remains on lands owned or controlled by the federal government. If human remains are inadvertently discovered during construction on these lands, construction must cease within the

immediate vicinity of the discovery. The party that discovers the remains must notify the relevant federal agency, and the remains must be transferred according to the ownership provisions above (25 U.S.C. § 3002[d]).

4A.18.2. State Policies and Regulations

4A.18.2.1. California Environmental Quality Act (PRC § 21083.2)

CEQA requires a lead state agency to consider the impacts of a project on historical resources. State CEQA Guidelines Section 15064.5(b) prescribes that project effects that would "cause a substantial adverse change in the significance of an historical resource" are significant effects on the environment. Substantial adverse changes include physical changes to both an historical resource and its immediate surroundings.

State CEQA Guidelines for Determining the Significance of Impacts on Archaeological and Historical Resources

State CEQA Guidelines Section 15064.5 provides specific guidance for determining the significance of impacts on historical resources (CEQA Guidelines § 15064.5(b)) and unique archaeological resources (CEQA Guidelines § 15064.5(c); PRC § 21083.2).

Under State CEQA Guidelines for implementation of CEQA Section 15064.5(a), the following resources are considered historical resources:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (CRHR) (PRC Section 5024.1) will be presumed to be historically significant.
2. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.
4. The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]), or not identified in a historical resources survey (meeting the criteria in PRC Section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Section 5020.1(j) or 5024.1.

State CEQA Guidelines for implementation of CEQA Section 15064.5(b) specifies that project effects that would "cause a substantial adverse change in the significance of an historical resource" are significant effects on the environment. Substantial adverse changes include physical changes to both the historical resource and its immediate surroundings.

Unique Archaeological Resources

State CEQA Guidelines for implementation of CEQA Section 15064.5(c) specifies how CEQA analysis applies to archaeological sites, including archaeological sites that are historical resources, unique archaeological resources, or neither.

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

State CEQA Guidelines for implementation of CEQA Section 15064.5(d) and (e) specify responsibilities and respectful treatment of human remains, including Native American human remains, that are found or likely to be found within a project.

Tribal Cultural Resources

CEQA was amended in 2014 by AB 52, which created a new category of CEQA historical resources, Tribal Cultural Resources (TCRs). AB 52 requires that state lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in State CEQA Guidelines Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment. CEQA statute and code related to the amendment, and State CEQA Guidelines related to TCRs, are presented in Chapter 23, *Tribal Cultural Resources*. As defined in Section 21074(a, b, and c) of the Pub. Res. Code, TCRs are:

(A.1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

a. Included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR); or

b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(A.2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(B) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(C) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

4A.18.2.2. California Register of Historical Resources

PRC Section 5024.1 establishes the CRHR. The CRHR lists all California properties considered to be significant historical resources. The CRHR automatically includes all properties listed in or determined eligible for listing in the NRHP.

Title 14 of the CCR Section 4850 governs the eligibility for listing in the CRHR. The regulations set forth the criteria for evaluating significance and the historical integrity of that significance.

To be eligible for listing in the CRHR, a resource must have significance at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

If a resource is found to have significance through the application of the four associative criteria, then the integrity of that significance must be evaluated. Integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance". Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association and must be judged with reference to its particular criterion or criteria of significance.

4A.18.2.3. State-Owned Historical Resources

Under California PRC Section 5024(f), a state agency must provide notification and submit to the SHPO documentation for any project having the potential to affect state-owned historical resources listed in or potentially eligible for inclusion in the NRHP or registered as or eligible for registration as a California Historical Landmark. PRC Section 5024(f) also applies to archaeological sites, landscapes, and other nonstructural resources that are listed in or have been determined eligible for inclusion in the NRHP or are registered or determined eligible for registration as a California Historical Landmark. PRC Section 5024(f) further requires that state agencies request SHPO's comments and provides documentation of effects (i.e., No Historic Properties Affected, No Adverse Effect, or Adverse Effect) on NRHP listed/eligible or California Historical Landmark registered/eligible archaeological sites, historic architectural or engineering resources, landscapes, and other nonstructural historical resources.

Like Section 106 but unlike CEQA, PRC Section 5024.5 uses the term "adverse effect" instead of "substantial adverse change" to describe effects on state-owned historic buildings and structures. PRC Section 5024.5 requires state agencies to adopt prudent and feasible measures that will eliminate or mitigate the adverse effects on state-owned historic buildings and structures. Under PRC Section 5024.5, early in the planning process, state agencies must seek SHPO's concurrence by providing SHPO with a notice and summary documentation of projects involving state-owned historic buildings and structures. As outlined in PRC Section 5024.5, SHPO makes the final determination as to whether an effect is adverse, not the state agency.

California State Law Governing Human Remains

California law sets forth special rules that prescribe specific courses of action that apply where human remains are encountered during project construction. These rules are set forth in PRC Section 5097.97, State CEQA Guidelines Section 15064.5(e), and California Health and Safety Code (CHSC) Section 7050.5. The Project would require the relocation of cemeteries and would be required to follow these regulations.

State CEQA Guidelines Section 15064.5(e) states the following:

In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

- There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the county in which the remains are discovered is contacted to determine that no investigation of the cause of death is required (as required under California Health and Safety Code [CHSC] Section 7050.5).

If the coroner determines the remains to be Native American:

- The coroner shall contact the Native American Heritage Commission within 24 hours.
- The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
- The most likely descendent (MLD) may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods (as provided in PRC § 5097.98), or

Where the following conditions occur, PRC Section 5097.98(e) applies and the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

- If the Native American Heritage Commission is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission.
- The descendant identified fails to make a recommendation; or

- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission.

4A.18.3. Local/Regional Policies and Regulations

4A.18.3.1. Colusa County

The *Colusa County General Plan* Conservation Element includes goals and objectives for conserving and protecting cultural resources that apply to the portions of the Project area in Colusa County (Colusa County 2012:5-13 to 5-14).

Goal CON-3A: *Conserve and protect cultural and historical resources* describes commitments to identify, conserve, and protect cultural, archaeological, and historical resources under the following policies.

Policy CON 3-1: Require a cultural and archaeological survey prior to approval of any project which would require excavation in an area that is sensitive for cultural or archaeological resources. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource.

Policy CON 3-2: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

a. If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the County Department of Planning and Building shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the County Department of Planning and Building.
b. If human remains are discovered during any ground disturbing activity, work shall stop until the County Coroner and County Department of Planning and Building have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the County Department of Planning and Building.

Policy CON 3-3: Encourage and cooperate with cities, special districts, State and Federal agencies in acknowledging and preserving the County's cultural heritage, historical and archaeological structures, sites and landmarks.

Policy CON 3-4: Encourage voluntary landowner efforts to protect cultural resources consistent with applicable State law.

Policy CON 3-5: Work with Native American representatives to identify and appropriately address, through avoidance or mitigation, impacts to Native American cultural resources and sacred sites during the development review process.

Policy CON 3-6: Encourage Native American Tribes to consult with the County prior to approval and development of new projects that may impact County resources, facilities, and the environment.

Policy CON 3-7: Consistent with State local and tribal intergovernmental consultation requirements such as SB18, the County shall consult with Native American Tribes that may be interested in proposed new development and land use policy changes.

Goal CON-3B: Protect Important Historic Resources and Use these Resources to Promote a Sense of Place and History in Colusa County encourages protection and re-use of historical resources to preserve the County's heritage and promote visitor programs.

4A.18.3.2. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.1, *Cultural Resources*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* contains policies from the 1993 *Glenn County General Plan* related to the protection of cultural and historical resources that apply to the portions of the Project area in Glenn County (Glenn County 2020:5-4). Policy NRP-79 includes an adopted list of historic sites that is a qualified local register for the purposes of CEQA (Glenn County 2020:5-4).

NRP-78. Protect identified areas of unique historical or cultural value within the county and preserve those sites for educational, scientific and aesthetic purposes.

NRP-79. Recognize historic sites in future planning and decision making.

NRP-80. Consider preparation of an historic preservation plan.

NRP-81. Require proper evaluation and protection of archaeological resources discovered in the course of construction and development.

4A.18.3.3. Tehama County

The *Tehama County General Plan Update* Open Space and Conservation Element contains goals and policies to protect historic, archaeological, and cultural resources that apply to the portions of the Project area in Tehama County (Tehama County 2009:6.0-28 to 6.0-29).

GOAL OS-10: To preserve the historic and archaeological resources of the County for their scientific, educational, aesthetic, recreational, and cultural values.

Policy OS-10.1: The County should protect and preserve significant archaeological and cultural resources.

Policy OS-10.2: The County shall encourage the rehabilitation, preservation, and utilization of historic buildings that are representative examples of the County's heritage.

Policy OS-10.3: The County shall provide incentive programs and encourage cooperation with the private sector for the preservation, protection, or enhancement of historic, archaeological, and cultural resources.

Policy OS-10.4: The County shall encourage and support inter-agency cooperation to protect historic, archaeological, and cultural resources.

4A.18.3.4. Yolo County

Yolo County's *2030 Countywide General Plan* Conservation and Open Space Element contains goals and policies to preserve and protect cultural resources (County of Yolo 2009:CO-49 to CO-60) and that apply to the portions of the Project area in Yolo County. As part of the plan, Yolo County adopted a local register that is a qualified local register for the purposes of CEQA.

Goal CO-4: Cultural Resources. Preserve and protect cultural resources within the County.

Policy CO-4.1: Identify and safeguard important cultural resources.

Policy CO-4.2: Implement the provisions of the State Historical Building Code and Uniform Code for Building Conservation to balance the requirements of the Americans with Disabilities Act with preserving the architectural integrity of historic buildings and structures.

Policy CO-4.3: Encourage owners of historic resources to preserve and rehabilitate their properties.

Policy CO-4.4: Encourage historic resources to remain in their original use whenever possible. The adaptive use of historic resources is preferred when the original use can no longer be sustained. Older residences may be converted to office/retail use in commercial areas and to tourist use in agricultural areas, so long as their historical authenticity is maintained or enhanced.

Policy CO-4.5: Increase knowledge of historic preservation through public education and outreach programs.

Policy CO-4.6: Support historically oriented visitor programs at the local and regional level through the Yolo County Visitor's Bureau and similar efforts.

Policy CO-4.7: Encourage the identification of historic resources through the integrated use of plaques and markers.

Policy CO-4.8: Explore opportunities for promoting heritage tourism, including cooperation with regional and State marketing efforts.

Policy CO-4.9: Promote the use of historic structures as museums, educational facilities, or other visitor-serving uses.

Policy CO-4.10: Encourage voluntary landowner efforts to protect cultural resources consistent with State law.

Policy CO-4.11: Honor and respect local tribal heritage.

Policy CO-4.12: Work with culturally affiliated tribes to identify and appropriately address cultural resources and tribal sacred sites through the development review process.

Policy CO-4.13: Avoid or mitigate to the maximum extent feasible the impacts of development on Native American archaeological and cultural resources.

4A.19 Chapter 23, Tribal Cultural Resources

4A.19.1. Federal Policies and Regulations

There are no federal regulations that apply to tribal cultural resources as defined by CEQA. Federal regulations applicable to Native American cultural resources, including archaeological and historical resources, traditional cultural properties, and cultural landscapes, are described in Section 4A.18, *Chapter 22, Cultural Resources*.

4A.19.2. State Policies and Regulations

4A.19.2.1. Assembly Bill 52 (California PRC Section 21074)

AB 52 (Chapter 532, Statutes of 2014) established 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" under CEQA (PRC § 21084.2). The legislation acknowledges that CEQA did not previously "directly include California Native American Tribes' knowledge and concerns," which resulted in significant impacts to tribal cultural resources and sacred places. To remedy this, AB 52 established a requirement for lead agencies to engage in a formal consultation process with California Native American Tribes for projects subject to CEQA. The process requires tribes to make a written standing request to lead agencies to be formally notified of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated and requires lead agencies to notify requesting tribes within 14 days of filing an NOP or deciding to undertake a project. Tribes must then request consultation in writing within 30 days of notice, and lead agencies must initiate consultation within 30 days of receiving their request. The process for complying with AB 52 is separate from consultation procedures under other state and federal cultural resources laws.

AB 52 was signed into law on September 25, 2014, applicable to projects with a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015. The Tribal Cultural Resources category was incorporated into Appendix G of the CEQA Guidelines in 2016.

> Section (1)(b)(4) recognizes that "California Native American Tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated …" and that "tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources."

PRC Section 21074(a) defines Tribal Cultural Resources as either:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following:

    1. Included in or determined to be eligible for inclusion in the California Register of Historical Resources.

    2. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

PRC Section 5024 is described above in Section 4A.18, *Chapter 22, Cultural Resources*.

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 NAHC (PRC § 21073). A cultural landscape that meets the criteria of subdivision (a) is a Tribal Cultural Resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Sacred places can include Native American sanctified cemeteries, places of worship, religious or ceremonial sites, and sacred shrines. As defined in PRC Section 21083.2, both unique and nonunique archaeological resources can be Tribal Cultural Resources if they meet the criteria detailed above. The lead agency must rely upon substantial evidence to make the determination that a resource qualifies as a Tribal Cultural Resource when it is not already listed in the CRHR or a local register.

The Tribal Cultural Resources question in Appendix G of the CEQA Guidelines asks:

a) 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 a 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 requires that consultation, if initiated, address project alternatives and mitigation measures for significant effects, if specifically requested by the tribe. Any mitigation measures recommended by the agency or agreed upon with the tribe may be included in the final environmental document and in the adopted mitigation monitoring program if they were determined to avoid or lessen a significant impact on a Tribal Cultural Resource. If the recommended measures are not included in the final environmental document, then the lead agency must consider the four mitigation methods described in PRC Section 21084.3 (PRC § 21082.3[e]).

Any information submitted by a tribe during the consultation process is considered confidential and is not subject to public review or disclosure. It will be published in a confidential appendix

to the environmental document unless the tribe consents to disclosure of all or some of the information to the public.

4A.19.3. Local/Regional Policies and Regulations

The following county general plans contain goals and policies related to protecting cultural resources including Native American cultural resources. While lands that the federal government holds in trust for Indian Tribes are not subject to county general plans, lands that tribes own in fee, such as properties owned by tribal businesses, are not trust lands and may be included in general plans. Such lands may have resources that tribes consider to be tribal cultural resources as defined by AB 52. Counties preparing general plans or updates must also consult with tribes under SB 18 to ensure general plans and specific plans help protect traditional tribal cultural places (County of Yolo 2009:CO-35; Glenn County 2020:5-3).

4A.19.3.1. Colusa County

Policies presented in *Colusa County General Plan* Conservation Element Goal CON-3: Conserve and Protect Cultural and Historical Resources, require actions to identify, conserve, and protect cultural, archaeological, and historical resources (Colusa County 2012). Under Objective CON-3A: Conserve Important Cultural Resources and the County's Heritage, the following policies specifically relate to Native American cultural resources or could also apply to Tribal Cultural Resources as defined by CEQA.

Policy CON 3-2: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

a. If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the County Department of Planning and Building shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the County Department of Planning and Building.
b. If human remains are discovered during any ground disturbing activity, work shall stop until the County Coroner and County Department of Planning and Building have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the County Department of Planning and Building.

Policy CON 3-5: Work with Native American representatives to identify and appropriately address, through avoidance or mitigation, impacts to Native American cultural resources and sacred sites during the development review process.

Policy CON 3-6: Encourage Native American tribes to consult with the County prior to approval and development of new projects that may impact County resources, facilities, and the environment.

Policy CON 3-7: Consistent with State local and tribal intergovernmental consultation requirements such as SB18, the County shall consult with Native American tribes that may be interested in proposed new development and land use policy changes.

4A.19.3.2. Glenn County General Plan Update, 2020 Existing Conditions Report

Section 5.1, *Cultural Resources*, of the *Glenn County General Plan Update, 2020 Existing Conditions Report* (Glenn County 2020:5-4) contains policies from the 1993 *Glenn County General Plan* related to the protection of cultural resources that could also apply to Tribal Cultural Resources as defined by CEQA.

Policy NRP-78. Protect identified areas of unique historical or cultural value within the county and preserve those sites for educational, scientific and aesthetic purposes.

Policy NRP-81. Require proper evaluation and protection of archaeological resources discovered in the course of construction and development.

4A.19.3.3. Tehama County

The Open Space and Conservation Element of the *Tehama County General Plan* (Tehama County 2009:6.0-28 to 6.0-29) contains goals and policies related to historic, archaeological, and cultural resources that could also apply to Tribal Cultural Resources as defined by CEQA.

GOAL OS-10: To preserve the historic and archaeological resources of the County for their scientific, educational, aesthetic, recreational, and cultural values.

Policy OS-10.1: The County should protect and preserve significant archaeological and cultural resources.

Policy OS-10.3: The County shall provide incentive programs and encourage cooperation with the private sector for the preservation, protection, or enhancement of historic, archaeological, and cultural resources.

Policy OS-10.4: The County shall encourage and support inter-agency cooperation to protect historic, archaeological, and cultural resources.

4A.19.3.4. Yolo County

The *Yolo County General Plan* Conservation and Open Space Element contains goals and policies with supporting actions related to cultural resources (County of Yolo 2009:CO-55 to CO-56). The following goal and policies relate to Native American cultural resources and could also apply to Tribal Cultural Resources as defined by CEQA.

Goal CO-4: Cultural Resources. Preserve and protect cultural resources within the County.

Policy CO-4.1: Identify and safeguard important cultural resources.

Policy CO-4.10: Encourage voluntary landowner efforts to protect cultural resources consistent with State law.

Policy CO-4.11: Honor and respect local tribal heritage.

Policy CO-4.12: Work with culturally affiliated tribes to identify and appropriately address cultural resources and tribal sacred sites through the development review process.

Policy CO-4.13: Avoid or mitigate to the maximum extent feasible the impacts of development on Native American archaeological and cultural resources.

4A.20 Chapter 24, Visual Resources

4A.20.1. Federal Policies and Regulations

There are no National Park Service lands or national scenic byways located within or near the Project area. Therefore, there are no federal laws governing visual resources for the Project.

4A.20.2. State Policies and Regulations

No roadways within or near the Project area are designated in state plans as a scenic highway or route worthy of protection for maintaining and enhancing scenic viewsheds (California Department of Transportation 2019).

4A.20.3. Local/Regional Policies and Regulations

4A.20.3.1. Glenn County General Plan Update, 2020 Existing Conditions Report

The *Glenn County General Plan Update, 2020 Existing Conditions Report* provides an overview of current conditions (as of 2019) of the physical, environmental, economic, and demographic setting of the county. The report acknowledges that scenic highways and corridors contribute to the quality of life by promoting the "development of community pride, the enhancement of property values, and the protection of aesthetically-pleasing open spaces" but that the 1993 *Glenn County General Plan* does not designate any such scenic corridors within the county (Glenn County 2020:5-135,5-136). The report identifies that the county contains outstanding natural vistas and landscapes and that the eastern portion of the county is noted for its expansive views over the agricultural landscape that are "framed primarily by the rolling foothills of the Coast Range to the west, the distant Sierra Nevada Mountains to the east and the jagged peaks of the Sutter Buttes to the southeast" (Glenn County 2020:5-136). The *Glenn County General Plan Update, 2020 Existing Conditions Report* further notes that the 1993 *Glenn County General Plan* does not designate any scenic viewsheds but does identify that the Sacramento River environment and scenic vistas of the Coast Range and the Sierra are considered scenic (Glenn County 2020:5-136). There are no other scenic resources that are identified in the *Glenn County General Plan Update, 2020 Existing Conditions Report* that are located near the features that would be constructed in the Project area.

4A.20.3.2. Glenn County General Plan

The 1993 *Glenn County General Plan* contains the following policies addressing visual resources that are applicable to the Project (Glenn County 1993:5-4,5-18,5-33,5-34,5-80,5-149,5-150).

Policy NRP-1: Maintain agriculture as a primary, extensive land use, not only in recognition of the economic importance of agriculture, but also in terms of agriculture's contribution to the preservation of open space and wildlife habitat.

Policy NRP-46: Promote protection of native biological habitats of local importance such as riparian forests, foothill oak woodlands, Stony Gorge and Black Butte Reservoirs.

Policy NRP-82: Protect identified areas of unique historical or cultural value within the county and preserve those sites for educational, scientific and aesthetic purposes.

Policy NRP-86: Avoid light and glare impacts when considering development.

Policy NRP-87: Consider preparation of a scenic highways plan.

Policy CDP-10: Encourage the preservation of agricultural lands, including those lands in production, and those which are potentially productive.

Policy CDP-158: Support the expansion of the county's recreational and tourism industries by:

- Encouraging private sector initiatives to develop recreational and tourist-oriented facilities.
- Seeking opportunities for cooperative development of resources with the U.S. Forest Service, the U.S. Fish and Wildlife Service, the Army Corps of Engineers, the Bureau of Reclamation and other public agencies with jurisdiction over, or interests in, the county's forest, water, and wildlife assets.
- Coordinating with regional, countywide and local economic development organizations and programs to ensure that the county's recreational opportunities and tourism potential are included in promotional activities undertaken by those organizations and programs.

4A.20.3.3. Colusa County General Plan

The *Colusa County General Plan* contains the following policies addressing visual resources that are applicable to the Project (Colusa County 2012).

Policy AG 2-2: Visitor-serving uses that support and are incidental to agricultural production, such as tasting rooms, including sales and promotion of products grown or processed in the County, educational activities and tours, incidental sales of items related to local area agricultural products, promotional events, and farm homestays, which allow visitors to visit a farm in the form of a vacation, that support and are secondary and incidental to local agricultural production, shall be allowed on agricultural lands provided the following findings are made:

a. The use promotes and markets only agricultural products grown or processed in the local area.
b. The use is compatible with and secondary and incidental to agricultural production activities in the area.
c. The use will not require the extension of sewer and water service.
d. The use is compatible with existing uses in the area.
e. The use will not adversely affect agricultural production in the area.
f. The use will not result in significant adverse traffic or air quality impacts.
g. The use will not be detrimental to the rural character of the area.

Policy CIRC 1-8: Plan and design transportation facilities to avoid damage to the County’s scenic and environmental resources, such as reductions in air quality and disruption of soils, topography, vegetative cover, and wildlife habitat.

Policy CC 1-1: Protect the rural atmosphere and historic character of Colusa County's towns and Unincorporated communities.

Policy CC 1-15: Preserve and enhance the rural landscape as an important scenic feature of the County.

Policy CC 1-16: Require all new development to protect the scenic beauty of the County, incorporate high quality site design, architecture, and planning so as to enhance the overall quality of the built environment in the County's communities and create a visually interesting and aesthetically pleasing built environment that respects the rural nature of the County.

Policy CC 1-17: Establish design standards, including community-specific policies, to encourage visually attractive development and lessen the visual impact of existing non-conforming uses.

Policy CC 1-18: Upgrade the visual appearance and quality of development on the approaches to each community and prevent development which degrades the aesthetic quality of scenic roadways elsewhere.

Policy CC 1-19: Require architecture and site design to reflect a human-scale that is sensitive, compatible and distinctive to both the site and the community.

Policy CC 1-22: Regulate the size, quantity, location, and design of signs to maintain and enhance the visual appearance of the unincorporated communities.

Policy CON 1-7: Conserve and enhance those biological communities that contribute to the County's rich biodiversity including, but not limited to, blue oak woodlands, annual grasslands, mixed chaparral, pine woodlands, wetlands, riparian areas, aquatic habitat, and agricultural lands.

Policy CON 1-8: Conserve existing native vegetation where possible and integrate existing native vegetation into new development if appropriate.

Policy CON 1-9: Avoid oak tree removal within oak woodland habitat to the greatest extent feasible through appropriate project design and building siting. If full avoidance is not possible, prioritize planting replacement trees on-site over off-site locations.

Policy CON 1-22: Maintain lakes, rivers, streams, creeks, and waterways in a natural state whenever possible. These water features may be actively managed and/or improved or modified in order to function as natural flood protection and storm water management features during storms and flooding events.

Policy CON 1-23: Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools through sound land use planning, community design, and site planning.

Policy CON 3-8: Encourage the voluntary identification, conservation, and re-use of historical structures, properties, and sites with special and recognized historic, architectural, or aesthetic value.

Policy ED 1-18: Actively promote and market the County's recreational areas and opportunities, including river activities, the Mendocino National Forest, wildlife viewing, hiking, camping, and biking.

Policy ED 1-19: Promote the expansion of tourist opportunities, especially agritourism (farm products and education) and outdoor recreation, including boating, rafting, fishing, hunting, horseback riding, bird watching, hiking, and camping.

Policy ED 1-22: Support the development of public amenities, such as boat ramps, picnic facilities, and/or restrooms at public access locations along or near the Sacramento River, East Park Reservoir, the wildlife refuges, Mendocino National Forest, and the proposed Sites Reservoir.

Policy LU 1-4: Locate lands designated for future development based on constraints associated with natural features, such as soil, slope, and drainage, preservation of the County's resources, including agriculture, open space, and scenic views, and by public service availability, such as sewer and water capability; policies and actions related to these requirements are set forth in more detail in the Safety, Conservation, and Public Facilities and Services Elements.

Policy LU 4-1: Support the creation of Sites Reservoir.

Policy LU 4-3: Ensure that future land use decisions regarding Sites Reservoir and the surrounding area recognize the needs of the County and existing property owners to address adequate access for existing landowners and persons who travel beyond the area, noise, habitat for displaced species, and recreation and tourist opportunities that are compatible with the surrounding region.

Policy LU 4-4: Support the efforts of the Sites Reservoir Joint Powers Authority, with particular emphasis on landowner relocation assistance and ensuring financial compensation for landowners adversely impacted by the creation of Sites Reservoir.

Policy LU 4-5: Future land use and zoning designations in the Sites Reservoir Planning Area (see Figure LU-1) should emphasize natural resource and wildlife habitat protection, recreational opportunities, open space preservation, and limited commercial development to support recreation and tourism. Year-round housing in the vicinity of Sites Reservoir should be discouraged.

Policy OSR 1-1: The following General Plan Land Use designations shall be considered Open Space uses: Resource Conservation (RC), Designated Floodway (DF), Parks and Recreation (PR), Agricultural General (AG), and Agricultural Upland (AU).

Policy OSR 1-5: New development should be designed and constructed to preserve open space features such as scenic corridors, wetlands, riparian vegetation, native vegetation, trees and natural resource areas where feasible and appropriate.

Policy OSR 1-6: Publicly owned lands currently used for recreational purposes or as undeveloped open space should be retained in their present use, unless designated for an alternative use by the General Plan Land Use Map.

Policy OSR 1-9: Maintain open space for future water and drainage projects.

Policy OSR 1-10: To the maximum extent feasible, maintain and protect views of the County's scenic resources, including water bodies, the Sutter Buttes, Snow Mountain, St. John Mountain, Goat Mountain, unique geologic features, and wildlife habitat areas.

Policy OSR 1-11: To the maximum extent feasible, the significant open space resources in the County, such as the western foothills, Indian Valley, and Bear Valley should remain visually undisturbed.

Policy OSR 1-12: Limit visually intrusive development near scenic resources in order to minimize visual impacts to the greatest extent feasible.

Policy OSR 1-13: Visual impacts to scenic resources, such as regional focal points, from new development or resource extraction activities shall be addressed and mitigated through the CEQA review process.

Policy OSR 1-14: Reduce light and glare from artificial lighting within open space and agricultural areas to the extent that it does not adversely impact the County's rural character.

Policy OSR 1-15: Protect roadway viewsheds with high scenic value and "rural flavor" and encourage the establishment of public viewing areas in areas with rural character and scenic beauty.

Policy OSR-1-16: Protect and preserve the following features along rural character corridors and in scenic areas to the extent appropriate and feasible:

- Trees, wildflowers, and other natural or unique vegetation
- Landforms and natural or unique features
- Views and vistas, including expansive views of open space and agricultural lands
- Historic structures (where feasible), including buildings, bridges, and signs

Policy OSR 1-17: Provide a greater number of areas along rural character corridors and in scenic areas for public access and recreation, including vistas, rest stops, or picnicking.

Policy OSR 1-18: Discourage non-agricultural or non-recreational roadside commercial and industrial activities along rural character corridors.

Policy OSR 1-19: Design new roads in hillside areas along the lines of the landscape and in a manner which minimizes visual impact from surrounding areas.

Policy OSR 2-5: Public access to the water and shoreline areas of lakes, reservoirs, rivers and streams, should be provided where appropriate.

Policy OSR 2-13: Encourage recreational uses that emphasize use of the waterways in locations directly on the Sacramento River, East Park Reservoir, and the proposed Sites Reservoir. Examples include fishing, canoeing, boating, and nature observation. With the exception of boat launches and docks, more active uses, such as parking, restrooms, and picnic areas, shall be located in areas away from the river and sensitive riparian habitat.

Policy OSR 2-14: Encourage recreational uses that emphasize a range of outdoor activities, such as hiking, drive-in camping, hike-in camping, picnics, off-highway vehicle use, and nature observation, at the Mendocino National Forest, East Park Reservoir, proposed Sites Reservoir, Sacramento River, and other outdoor recreation areas.

Policy OSR 2-15: Support the location and creation of Sites Reservoir in Colusa County. (See Policies LU 4-1 through 4-5.)

4A.20.3.4. County of Yolo 2030 Countywide General Plan

Aesthetic resources are addressed in the Land Use and Community Character Element of the *Yolo County General Plan*. Goals and policies seek to protect and enhance the rural landscape and night sky, important site features (e.g., watercourses), and scenic views and to minimize the aesthetic impact of infrastructure and utility facilities (Yolo County 2009:LU-28–LU-32). Yolo County has designated the following roadways as local scenic roadways: State Route 16 (Colusa County line to Capay); State Route 128 (Winters to Napa County line); County Roads 116 and 116B (Knights Landing to eastern terminus of County Road 16); County Roads 16 and 117 and Old River Road (County Road 107 to West Sacramento); South River Road (West Sacramento City limits to Sacramento County line) (Yolo County 2009:LU-29). However, none of these roadways are located near the features that would be constructed in the Project area. In addition, the following policies address visual resources:

Policy CC-1.2: Preserve and enhance the rural landscape as an important scenic feature of the County. (Yolo County 2009:LU-29)

Policy CC-1.3: Protect the rural night sky as an important scenic feature to the greatest feasible extent where lighting is needed (Yolo County.2009:LU-29).

Policy CC-1.12: Preserve and enhance the scenic quality of the County's rural roadway system. Prohibit projects and activities that would obscure, detract from, or negatively affect the quality of views from designated scenic roadways or scenic highways. (Yolo County.2009:LU-30)

Policy CC-1.15: The following features shall be protected and preserve along designated scenic roadways and routes, except where there are health and safety concerns: trees and other natural or unique vegetation; landforms and natural or unique features; views and vistas, and historic structures (where feasible), including buildings, bridges and signs. (Yolo County 2009:LU-30)

Policy CC-1.17: Existing trees and vegetation and natural landforms along scenic roadways and routes shall be retained to the greatest feasible extent. Landscaping shall be required to enhance

scenic qualities and/or screen unsightly views and shall emphasize the use of native plants and habitat restoration to the extent possible. Removal of trees, particularly those with scenic and/or historic value, shall be generally prohibited along the roadway or route. (Yolo County 2009:LU-32)

4A.20.3.5. Tehama County General Plan

As identified in the *Tehama County General Plan*, Open Space Element, State Routes 32, 36, 89, and 172 are county-designated scenic highways. However, none of these roadways are located near the features that would be constructed in the Project area. The *Tehama County General Plan* contains the following policies addressing visual resources that are applicable to the Project (Tehama County 2009).

Policy LU-1.5: The County shall Prepare and adopt an Oak Woodlands Protection Program, which will provide standards and guidelines for the harvesting and removal of Oak Woodlands.

Policy PS-5.3: The County shall strive to minimize visual impacts and physical impediments of utility infrastructure and equipment for all areas of the County.

Policy ED-6.1: The County shall work toward the protection of agricultural lands from development pressures or uses that will adversely impact or hinder existing or foreseeable agricultural operations and consider land use alternatives such as buffers, green belts, zoning and other methods whenever feasible.

Policy ED-7.1: The County shall continue to preserve Tehama County's natural resources including: agriculture, timberlands, water and water quality, wildlife resources, minerals, natural resource lands, recreation lands, scenic highways, and historic and archaeological resources. The protection of natural resources is of the utmost importance and promoting business expansion, retention, and recruitment should complement and enhance the natural resources while reducing negative impacts.

Policy OS-3.1: The County shall preserve and protect environmentally-sensitive and significant lands and water valuable for their plant and wildlife habitat, natural appearance, and character.

Policy OS-5.2: The County shall encourage the voluntary protection of woodlands through appropriate conservation measures.

Policy OS-9.1: The County shall strive for the protection and enhancement of resource lands for the continued benefit of agriculture, timber, grazing, recreation, waterfowl, wildlife habitat, watersheds, and quality of life.

Policy OS-11.1: The County shall identify significant scenic viewsheds for public viewing areas in the County designated scenic highways, such as views of Mt. Shasta, Mt. Lassen, the Sacramento River, and the Coastal Range, and protect the visual integrity of the view shed.

Policy OS-11.2: The County shall strive to protect the aesthetic and scenic beauty of its regional locations.

Policy OS-11.3: The County shall consider the visual impacts of development within areas of significant topography, and shall work to minimize the visual impacts resulting from development of ridgelines.

Policy OS-11.4: New development should be designed to be compatible with surrounding development in ways that contribute to the desired character of the surrounding area.

4A.21 Chapter 25, Population and Housing

4A.21.1. Federal Policies and Regulations

4A.21.1.1. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

Title II, Uniform Relocation Assistance, Section 201(b), establishes a uniform policy for the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a federal agency or with federal financial assistance. The primary purpose of this title is to ensure that such persons shall not suffer disproportionate injuries as a result of programs and projects designed for the benefit of the public as a whole and to minimize the hardship of displacement on such persons. Title III, Uniform Real Property Acquisition Policy, Section 301, was developed "In order to encourage and expedite the acquisition of real property by agreements with owners, to avoid litigation and relieve congestion in the courts, to assure consistent treatment for owners in the many federal programs, and to promote public confidence in federal land acquisition practices."

Construction of the Project may require that one or more parcels in the Project area be acquired. If federal funding is used for the Project, Reclamation may be subject to complying with the policies and provisions set forth in this Act.

4A.21.1.2. Housing and Community Development Act of 1974

Pursuant to Section 104(d) of the Housing and Community Development Act of 1974, as amended and the implementing regulations at 24 C.F.R. 42, a residential antidisplacement and relocation assistance plan is required and must provide for (1) one-for-one replacement of occupied and vacant occupiable low- and moderate-income dwelling units demolished or converted to another use in connection with a development project assisted under Parts 570 and 92; and (2) provide relocation assistance for all low- and moderate-income persons who occupied housing that is demolished or converted to a use other than for low- or moderate-income housing.

4A.21.2. State Policies and Regulations

4A.21.2.1. California Constitution: Article 1 Declaration of Rights, Section 19

Pursuant to the California Constitution and other statutes, public agencies may use eminent domain power to: (1) acquire private property (real, business, personal, tangible, or intangible property); or (2) reduce the economic value of property for a public purpose (these are referred to as "damages") if they pay "just compensation" to the owner. Just compensation includes: (1) the fair market value of the real property and its improvements; and (2) any diminution in value of the remaining property when property taken is part of a larger parcel.

4A.21.2.2. California Relocation Assistance Act and the California Relocation Assistance and Real Property Acquisition Guidelines

Chapter 16, Sections 7260 to 7277 of the California Government Code states that whenever programs or projects undertaken by a public entity result in the displacement of any person, the

displaced person is entitled to payment for actual moving and related expenses as the public entity determines to be reasonable and necessary.

CCR Title 25, Chapter 6 provides guidelines to ensure that uniform, fair, and equitable treatment is afforded persons displaced from their homes, businesses, or farms as a result of the actions of a public entity in order that such persons shall not suffer disproportionate injury as a result of action taken for the benefit of the public as a whole.

Construction of the Project may require that one or more parcels in the Project area be acquired, in which case, the Authority would have to comply with these guidelines.

4A.21.3. Local/Regional Policies and Regulations

4A.21.3.1. Regional Housing Needs Allocation and Assessment

The Regional Housing Needs Allocation and Regional Housing Need Assessment (RHNA) is mandated by state housing law as part of the periodic process of updating local housing elements of a local government's General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. Communities use the RHNA in land use planning, prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. Local governments must adopt plans and regulatory systems that provide opportunities for (and do not unduly constrain) housing development. As a result, housing policy in California rests largely on the effective implementation of local general plans and, in particular, local housing elements (California Department of Housing and Community Development 2020).

4A.22 Chapter 26, Public Services and Utilities

4A.22.1. Federal Policies and Regulations

Federal regulatory agency involvement for public services and utilities is limited to review of a public service/utility provider's operation related to a specific resource area. Federal regulation can oversee issues such as the environment, energy, waterways, and fisheries. The following are policies and regulations that are applicable to the Project.

4A.22.1.1. National Fire Protection Association Standards

The National Fire Protection Association 1710 Standard is not a law or a federally mandated regulation. However, it is used as a "best practice" standard. This standard contains minimum requirements relating to organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by substantially all career fire departments. The requirements address functions and objectives of fire department emergency service delivery, response capabilities, and resources. This standard also contains general requirements for managing resources and systems, such as health and safety, incident management, training, communications, and preincident planning. This standard addresses the strategic and system issues involving the organization, operation, and deployment of a fire department and does not address tactical operations at a specific emergency incident.

The National Fire Protection Association 1710 Standard recommends a response time of 6 minutes or less for 90% of the time for initial fire suppression and/or emergency medical response. This takes into account dispatch time (1 minute), turnout time (1 minute), and travel time (4 minutes).

The National Fire Protection Association 1710 Standard for the Organization and Deployment of Fire Suppression Operations is used as the best practice for determining appropriate initial response of fire suppression resources. This standard requires the initial response (4 firefighters) within 5 minutes, 90% of the time, and a full effective fire force (15 firefighters) within 9 minutes, 90% of the time. The fire departments within the study area generally use these best practice standard to ensure adequate service.

Standard 1720 contains minimum requirements relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by volunteer and combination fire departments. The requirements address functions and outcomes of fire department emergency service delivery, response capabilities, and resources. This standard also contains minimum requirements for managing resources and systems, such as health and safety, incident management, training, communications, and preincident planning. This standard addresses the strategic and system issues involving the organization, operation, and deployment of a fire department and does not address tactical operations at a specific emergency incident. This standard does not address fire prevention, community education, fire investigations, support services, personnel management, and budgeting.

4A.22.2. State Policies and Regulations

State regulatory agency involvement for public services and utilities is limited to review of a public service/utility provider's operation related to a specific resource area. State regulation can

oversee issues such as the environment, energy, and waterways. The following are state policies and regulations that are applicable to the Project.

4A.22.2.1. Health and Safety Code Sections 13000 et seq.

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code and include regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, and fire suppression training. As identified in Appendix 2D, the Project would comply with appropriate building codes and health and safety codes.

4A.22.2.2. California Health and Safety Code Section 13145 and 13146

CAL FIRE provides wildland fire protection and implements the State Fire Marshal's regulations. The State Fire Marshal is apart from CAL FIRE executive staff. California Health and Safety Code Section 13145 and 13146 authorizes, with some exceptions, local fire chiefs, or their designees, to enforce State Fire Marshal regulations. California Health and Safety Code Section 13145 states that the State Fire Marshal, the chief of any city, county, or city and county fire department or district providing fire protection services, or a Designated Campus Fire Marshal, and their authorized representatives, shall enforce in their respective areas building standards relating to fire and panic safety adopted by the State Fire Marshal and published in the California Building Standards Code and other regulations that have been formally adopted by the State Fire Marshal for the prevention of fire or for the protection of life and property against fire or panic. The Project, specifically the Administration and Operations Building, must comply with California Health and Safety Codes, including the California Building Standards, as identified in Appendix 2D.

4A.22.2.3. California Health and Safety Code Section 13801

Fire districts are formed and regulated pursuant to the California Health and Safety Code Section 13801 et seq., also known as the Fire Protection District Law of 1987. The enabling legislation authorizes fire districts to provide fire protection, ambulance, and rescue services. Recognizing that the state's communities have diverse needs and resources, it was the intent of the legislature in enacting this law to provide a broad statutory authority for local officials. The Project must comply with state fire regulations and emergency services as stated in the California Health and Safety Code Sections 13801.

4A.22.2.4. California Governor's Office of Emergency Services

The California Governor's Office of Emergency Services (Cal OES) responds to and aids in the recovery from emergencies within the State of California under the authorities of the California Emergency Services Act (ESA), the California Disaster Assistance Act (CDAA), the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), and other legislation. In connection with Cal OES, the Standardized Emergency Management Systems law (Government Code Section 8607) directs Cal OES to establish, implement, and maintain a coordinated emergency response system. The California Mutual Aid Agreement defines responsibilities and resource sharing between agencies to ensure that adequate resources, facilities, and other support are provided to jurisdictions when their own resources are insufficient to cope with the needs of a given emergency. The Project would construct a reservoir that would require assistance from Cal OES in the event of a flooding emergency.

4A.22.2.5. California Integrated Waste Management Act

CalRecycle provides regulatory oversight of solid waste management facilities. The California Integrated Waste Management Act (AB 939, Sher, Chapter 1095, Statutes of 1989, as amended) made all California cities, counties, and regional solid waste management agencies responsible for planning and implementing diversion of solid waste from solid waste disposal facilities. CalRecycle oversees and assists local governments to develop and implement the mandates and subsequent legislation. Enforcement of the regulations is primarily carried out by local enforcement agencies with CalRecycle acting as the state enforcement agency. The following local enforcement agencies serve the Plan Area.

- Glenn County: Environmental Health Department.
- Colusa County: Colusa County Environmental Health.
- Yolo County: County Health Department—Environmental Health.
- Tehama County: Department of Environmental Health.

In addition, AB 939 required every city and county in the state to prepare a source reduction and recycling element with its solid waste management plan that identified how each jurisdiction would meet the mandatory waste diversion goals of 25% by 1995 and 50% by 2000. SB 2202 mandated that jurisdictions continue 50% diversion after January 1, 2000. The purpose of AB 939 is to facilitate the reduction, recycling, and reuse of solid waste to the greatest extent possible. Noncompliance with the goals and timelines set forth within AB 939 can be severe on cities and counties not meeting these recycling and planning goals.

Further, activities involving removal and disposal of sediments within irrigation and flood control facilities or the use of inert materials in levee or flood control work by federal, state, or local governments may be excluded from solid waste permitting by CalRecycle Tiered Regulatory Placement criteria for construction and demolition waste and inert debris disposal (California Integrated Waste Management Board 2009). However, these activities would require permitting by the Regional Water Boards in implementing Title 24 Waters of the CCR and State Water Board requirements for dredging, filling, and disposal of dredge wastes. The Project would involve the removal or disposal of sediments within irrigation and flood control facilities during construction and would also require the demolition of existing structures and would therefore need to be in compliance with the California Integrated Waste Management Act.

4A.22.3. Local/Regional Policies and Regulations

Local regulatory agency involvement for public services and utilities includes county and city oversight and enforcement of regulations and policies related to public service/utility provider operations and the communities they serve. Construction and operation of the majority of the Project will be in Glenn and Colusa Counties. Relatively minor construction and operations would occur in Yolo and Tehama Counties; however, construction and operation of the Project would be confined to the Red Bluff Pumping Plant's existing footprint; therefore, Tehama County policies and regulations are not discussed further. Similarly, construction and operation

of the Project that would occur in Yolo County would be limited as discussed further in Chapter 26 Public Services and Utilities. Yolo County policies and regulations are not discussed further.

The following are policies and regulations that are applicable to the Project.

4A.22.3.1. Glenn County General Plan Update, 2020 Existing Conditions Report

Chapter 3, *Community Services and Facilities,* of the *Glenn County General Plan Update, 2020 Existing Conditions Report* (Glenn County 2020) contains sections such as water services, wastewater, public safety services, schools, and libraries and other public facilities. The following sections and associated policies are relevant to the Project and operations with the Glenn-Colusa Irrigation District (GCID) diversion and conveyance facilities (Glenn County 2020:3-5,3-6).

Water Services

PSP-43. Support ongoing regulatory and compliance efforts at the federal and State level for the protection of water quality.

PSP-45. Zone floodways and stream channels in a manner that promotes protection of water quality.

Wastewater

NRP-26. Discourage onsite sewage disposal systems in areas with high groundwater recharge potential and eliminate existing concentrations of septic tanks in such areas through construction of community sewage treatment and disposal systems.

Fire Protection

The *Glenn County General Plan* (Glenn County 1993:5-40–5-42) has adopted a goal to protect and enhance the quality of life by reducing the loss of life and personal property due to fire. The following policies are related to the Project:

Policy PSP-10: Maintain existing fire services levels and not allow their deterioration.

Policy PSP-11: Determine the impact proposed development will have on the provision of fire protection services, and ensure that the established level of service is maintained.

Policy PSP-22: Comply with the State of California Fire Safety Regulations for the State Responsibility Area located within Glenn County.

Policy PSP-24: Communicate the Emergency Response Plan to all public safety agencies when reviewing future development proposals throughout the county.

Policy PSP-25: Encourage development of educational programs that will increase public awareness of fire safety and emergency response planning.

4A.22.3.2. Colusa County General Plan

The Public Services and Facilities (PSF) Element of the *Colusa County General Plan* (Colusa County 2012) outlines specific goals and policies that provide guidance and regulation for the

provision of public services and utilities within Colusa County. The Project is a critical infrastructure that provides public services and utilities. The following goals and policies are related to the Project's operations with Colusa Basin Drain (CBD), Tehama-Colusa Canal (TC Canal), Funks Reservoir, GCID diversion and conveyance facilities, and the inundation of Antelope Valley:

Water and Wastewater Services

The *Colusa County General Plan* has a goal (PSF-1) to ensure that adequate water and wastewater services are available to serve existing land uses and areas of planned growth, as identified in the General Plan Land Use Map. Below are objectives and policies relating to the Project:

Goal PSF-1: Ensure that adequate water and wastewater services are available to serve existing land uses and areas of planned growth, as identified in the General Plan Land Use Map.

Objective PSF-1A: Provide Safe, Reliable, and Environmentally Sound Water Services to Existing County Land Uses and Areas of Planned Growth

Policy PSF 1-1: Encourage and support the expansion of municipal water systems to areas identified for current or future development and growth on the General Plan land use map.

Policy PSF 1-2: Prior to the approval of development, infrastructure, Specific Plans, or other projects that would result in increased demand for public water conveyance and treatment, projects must demonstrate proof of adequate water supply (e.g., that existing services are adequate to accommodate the increased demand, or improvements to the capacity of the system to meet increased demand will be made prior to project implementation), and that potential cumulative impacts to water users and the environment will be addressed.

Policy PSF 1-3: Coordinate with water providers throughout the County to manage water supplies in a way that ensures adequate supplies for existing residents, agricultural uses, and businesses, and for projected growth, and avoids groundwater overdraft, water quality degradation and other adverse environmental impacts.

Policy PSF 1-4: Municipal water and wastewater services should only be extended to lands designated Urban Reserve Area if the following conditions are met: 1. The majority of the adjacent designated urban residential and commercial lands have been built out or are planned for build out, 2. The extension of services would not facilitate creation of an island of urban uses in a rural or agricultural area, 3. The extension of services would not facilitate leapfrog development, and 4. A master or specific plan has been prepared for the lands requesting access to a municipal water and wastewater system.

Policy PSF 1-5: Facilitate, and to the extent feasible, assist with the development of new and reliable sources of water, consistent with County land use plans and regional water needs.

Policy PSF 1-7: Priority is given to serving existing water uses over new water uses.

Policy PSF 1-8: Require proof of an adequate (as defined by the County Environmental Health Division) potable water supply to serve the entire project prior to approval of any division of land or use permit.

Policy PSF 1-9: Make every effort to ensure that infrastructure is planned and available in a timely manner to accommodate development that supports the County's economic needs.

Policy PSF 1-10: Prioritize water system improvements to areas prioritized for economic growth (commercial and industrial development as well as related housing) in the next 5-10 years.

Objective PSF-1B: Provide Safe, Reliable, and Environmentally Sound Wastewater Services to Existing County Land Uses and Areas of Planned Growth

Policy PSF 1-15: Prioritize wastewater service assistance and improvements to areas within the County that pose a threat to public health and the environment as a result of deficiencies in existing wastewater or septic systems.

Policy PSF 1-18: Support efforts by municipal wastewater service providers to increase or restructure rates in order to increase available funding for necessary system improvements, upgrades and maintenance.

Policy PSF 1-19: Prior to the approval of new development that would result in increased demand for municipal wastewater conveyance and treatment, projects must demonstrate that existing services are adequate to accommodate the increased demand, or improvements to the capacity of the system to meet increased demand will be made prior to project implementation.

Policy PSF 1-22: For projects that will rely on on-site wastewater systems, applicants shall provide detailed plans demonstrating that the system will be adequate to serve the project and will meet or exceed all applicable water quality standards.

Fire Protection and Law Enforcement

Goal PSF-3: Maintain adequate and efficient fire protection, emergency medical response, and law enforcement services for existing and new communities.

Objective PSF-3A: Ensure Public Protection and Safety

Policy PSF 3-1: Support the continued use of automatic and/or mutual aid agreements between Rural Fire Protection Districts, City Fire Departments, the California Department of Forestry (CalFire), and the U.S. Forest Service and other emergency medical service providers.

Policy PSF 3-3: Continue to coordinate fire protection services with the planning and development review process.

Policy PSF 3-4: Promote more effective and efficient use of existing emergency and medical response services by emphasizing an integrated countywide response system.

Policy PSD 3-5: Support fire protection district efforts to achieve, maintain, and improve an overall fire insurance (ISO) rating of Rural 7 throughout the unincorporated communities.

Policy PSF 3-6: Ensure that the construction of fire facilities, staffing, and delivery of services keeps pace with new development and growth.

Policy PSF 3-7: Work with each community to upgrade its water system to provide adequate water pressure for sprinklers and fire response

Objective PSF-3B: Maintain Adequate and Efficient Law Enforcement Services

Policy PSF 3-8: Provide adequate law enforcement staffing and facilities to serve existing residents and planned communities.

Policy PSF 3-11: Support the use of private security firms to patrol commercial and industrial areas.

Utilities

Goal PSF-4: Provide community and utility services, including schools, libraries, and museums, that enhance the quality of life and desirability of the County's communities.

Objective PSF-4C: Expand Utility and Telecommunications Infrastructure to Serve all Developed Areas of the County

Policy PSF 4-13: Encourage new public utilities to utilize existing infrastructure corridors and rights-of-way, such as abandoned rail lines and existing roadways.

Policy PSF 4-14: Encourage expanded coverage and enhanced service for communications technology, such as mobile connectivity, high-speed wireless internet access, and emergency communication systems, in underserved areas of the County.

Policy PSF 4-15: New utility transmission lines should be undergrounded to the greatest extent feasible.

Policy PSF 4-16: Increase the availability and reliability of electrical and communication utilities in underserved communities and rural areas.

Policy PSF 4-17: Support the use of sustainable and renewable energy sources to power infrastructure, homes, businesses and agriculture.

4A.23 Chapter 27, Public Health and Environmental Hazards

The following policies and regulations provide the regulatory basis for conducting an assessment of the potential hazardous materials, hazardous waste, or hazardous constituents that may be present at and potentially released as a result of construction and operation of the Project.

4A.23.1. Federal Policies and Regulations

4A.23.1.1. National Emission Standards for Hazardous Air Pollutants 40 CFR Part 763, Subpart G – Asbestos Worker Protection

The National Emissions Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR 61[M]) and Federal Occupational Safety and Health Administration (OSHA) classify asbestos-containing materials (ACMs) as any materials or products that contain more than 1% of asbestos. Nonfriable ACMs are classified by the NESHAPs as either Category I or II material, including materials sometimes found in bridges, rail shims, pipes, pipe coverings, expansion joint facings, and certain cement products.

4A.23.1.2. Toxic Substances Control Act of 1976

The Toxic Substances Control Act of 1976 (TSCA) gives USEPA authority to require reporting, recordkeeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. The Act addresses the production, import, use, and disposal of specific chemicals, including polychlorinated biphenyl (PCB), asbestos, radon, and lead-based paint.

4A.23.1.3. Hazardous Materials Transportation Act of 1975

The objective of the Hazardous Materials Transportation Act is to improve the regulatory and enforcement authority of the Secretary of Transportation to protect the nation adequately against risks to life and property that are inherent in the transportation of hazardous materials in commerce. The Act empowered the Secretary of Transportation to designate as hazardous material any particular quantity or form of a material that may pose an unreasonable risk to health and safety or property.

Regulations apply to any person who transports, or causes to be transported or shipped, a hazardous material, or who manufactures, fabricates, marks, maintains, reconditions, repairs, or tests a package or container which is represented, marked, certified, or sold by such person for use in the transportation in commerce of certain hazardous materials.

Construction and operation of the Project would likely require the transportation of hazardous materials, including fuels, oils, lubricants, and materials to support blasting.

4A.23.1.4. Federal Insecticide, Fungicide and Rodenticide Act of 1996

The Federal Insecticide, Fungicide and Rodenticide Act provides for federal regulation of pesticide distribution, sale, and use. All pesticides distributed or sold in the United States must be registered (licensed) by USEPA. The Act also imposes pesticide-labeling requirements; pesticide use controls and how pesticides are mixed, stored, loaded, or used; specifies when fields can be reentered after pesticide application; and identifies when crops can be harvested. Operation of

the Project would likely involve the handling and use of insecticide, fungicides, and rodenticides around the administration building and the operations and maintenance building.

4A.23.1.5. The Clean Water Act of 1972

Section 402 of the CWA establishes the NPDES (33 U.S.C. § 1342), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. For projects greater than 1 acre (such as this project), an NPDES General Construction Permit must be obtained prior to any construction activities. One requirement for an NPDES permit is the development and implementation of a SWPPP that provides BMPs to prevent the discharge of pollutants and sediments into receiving waters. The Project would be required to develop a SWPPP as identified in Appendix 2D.

4A.23.1.6. Title 40, Protection of the Environment

RCRA regulations are contained in title 40 of the Code of Federal Regulations (CFR) parts 239 through 282. The CFR is a collection of all federal regulations codified and enforced by all federal agencies. Title 40 – Protection of the Environment - contains all of the regulations governing EPA's programs. Specific regulations governing hazardous waste identification and classification, are defined as follows:

§261.3 Definition of hazardous waste.

(a) A solid waste, as defined in §261.2, is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under §261.4(b); and

(2) It meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in subpart C of this part. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under §261.4(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under subpart C is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in table 1 to §261.24 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

(ii) It is listed in subpart D of this part and has not been excluded from the lists in subpart D of this part under §§260.20 and 260.22 of this chapter.

(iii) [Reserved]

(iv) It is a mixture of solid waste and one or more hazardous wastes listed in subpart D of this part and has not been excluded from paragraph (a)(2) of this section under

§§260.20 and 260.22, paragraph (g) of this section, or paragraph (h) of this section; however, the following mixtures of solid wastes and hazardous wastes listed in subpart D of this part are not hazardous wastes (except by application of paragraph (a)(2)(i) or (ii) of this section) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) and;

(A) One or more of the following spent solvents listed in §261.31—benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene or the scrubber waters derived-from the combustion of these spent solvents—Provided, That the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million, OR the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act, as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 1 part per million on an average weekly basis. Any facility that uses benzene as a solvent and claims this exemption must use an aerated biological wastewater treatment system and must use only lined surface impoundments or tanks prior to secondary clarification in the wastewater treatment system. Facilities that choose to measure concentration levels must file a copy of their sampling and analysis plan with the Regional Administrator, or State Director, as the context requires, or an authorized representative ("Director" as defined in 40 CFR 270.2). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

(B) One or more of the following spent solvents listed in §261.31-methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, 2-ethoxyethanol, or the scrubber waters derived-from the combustion of these spent solvents—Provided That the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater

into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million, OR the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 25 parts per million on an average weekly basis. Facilities that choose to measure concentration levels must file a copy of their sampling and analysis plan with the Regional Administrator, or State Director, as the context requires, or an authorized representative ("Director" as defined in 40 CFR 270.2). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

(C) One of the following wastes listed in §261.32, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation—heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050), crude oil storage tank sediment from petroleum refining operations (EPA Hazardous Waste No. K169), clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations (EPA Hazardous Waste No. K170), spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and spent hydrorefining catalyst (EPA Hazardous Waste No. K172); or

(D) A discarded hazardous waste, commercial chemical product, or chemical intermediate listed in §§261.31 through 261.33, arising from de minimis losses of these materials. For purposes of this paragraph (a)(2)(iv)(D), de minimis losses are inadvertent releases to a wastewater treatment system, including those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing. Any manufacturing facility that claims an exemption for de minimis quantities of wastes listed in §§261.31 through 261.32, or any nonmanufacturing facility that claims an exemption for de minimis quantities of

wastes listed in subpart D of this part must either have eliminated the discharge of wastewaters or have included in its Clean Water Act permit application or submission to its pretreatment control authority the constituents for which each waste was listed (in 40 CFR 261 appendix VII) of this part; and the constituents in the table "Treatment Standards for Hazardous Wastes" in 40 CFR 268.40 for which each waste has a treatment standard (i.e., Land Disposal Restriction constituents). A facility is eligible to claim the exemption once the permit writer or control authority has been notified of possible de minimis releases via the Clean Water Act permit application or the pretreatment control authority submission. A copy of the Clean Water permit application or the submission to the pretreatment control authority must be placed in the facility's on-site files; or

(E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in subpart D of this part, Provided, That the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation; or

(F) One or more of the following wastes listed in §261.32—wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157)—Provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or is recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilution into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight OR the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 5 parts per million on an average weekly basis. Facilities that choose to measure concentration levels must file copy of their sampling and analysis plan with the Regional Administrator, or State Director, as the context requires, or an authorized representative ("Director" as defined in 40 CFR 270.2). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the

Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

(G) Wastewaters derived-from the treatment of one or more of the following wastes listed in §261.32—organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156).—Provided, that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter OR the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 5 milligrams per liter on an average weekly basis. Facilities that choose to measure concentration levels must file copy of their sampling and analysis plan with the Regional Administrator, or State Director, as the context requires, or an authorized representative ("Director" as defined in 40 CFR 270.2). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

(v) Rebuttable presumption for used oil. Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subpart D of part 261 of this chapter. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter).

(A) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(B) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(b) A solid waste which is not excluded from regulation under paragraph (a)(1) of this section becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in subpart D of this part, when the waste first meets the listing description set forth in subpart D of this part.

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in subpart D is first added to the solid waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in subpart C of this part.

(c) Unless and until it meets the criteria of paragraph (d) of this section:

(1) A hazardous waste will remain a hazardous waste.

(2)(i) Except as otherwise provided in paragraph (c)(2)(ii), (g) or (h) of this section, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

(ii) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:

(A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).

(B) Waste from burning any of the materials exempted from regulation by §261.6(a)(3)(iii) and (iv).

(C)(1) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in paragraphs (6), (7), and (13) of the definition for “Industrial furnace” in 40 CFR 260.10), that are disposed in subtitle D units, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph for all constituents,

and exhibit no characteristics of hazardous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

Constituent	Maximum for any single composite sample—TCLP (mg/l)
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70
Generic exclusion levels for F006 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

(2) A one-time notification and certification must be placed in the facility's files and sent to the EPA region or authorized state for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater need only notify the EPA region or an authorized state on an annual basis if such changes occur. Such notification and certification should be sent to the EPA region or authorized state by the end of the calendar year, but no later than December 31. The notification must include the following information: The name and address of the subtitle D unit receiving the waste shipments; the EPA Hazardous Waste Number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(D) Biological treatment sludge from the treatment of one of the following wastes listed in §261.32—organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157).

(E) Catalyst inert support media separated from one of the following wastes listed in §261.32—Spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and spent hydrorefining catalyst (EPA Hazardous Waste No. K172).

(d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in subpart C of this part. (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of part 268, even if they no longer exhibit a characteristic at the point of land disposal.)

(2) In the case of a waste which is a listed waste under subpart D of this part, contains a waste listed under subpart D of this part or is derived from a waste listed in subpart D of this part, it also has been excluded from paragraph (c) of this section under §§260.20 and 260.22 of this chapter.

(e) [Reserved]

(f) Notwithstanding paragraphs (a) through (d) of this section and provided the debris as defined in part 268 of this chapter does not exhibit a characteristic identified at subpart C of

this part, the following materials are not subject to regulation under 40 CFR parts 260, 261 to 266, 268, or 270:

(1) Hazardous debris as defined in part 268 of this chapter that has been treated using one of the required extraction or destruction technologies specified in Table 1 of §268.45 of this chapter; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

(2) Debris as defined in part 268 of this chapter that the Regional Administrator, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

(g)(1) A hazardous waste that is listed in subpart D of this part solely because it exhibits one or more characteristics of ignitability as defined under §261.21, corrosivity as defined under §261.22, or reactivity as defined under §261.23 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in subpart C of this part.

(2) The exclusion described in paragraph (g)(1) of this section also pertains to:

(i) Any mixture of a solid waste and a hazardous waste listed in subpart D of this part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (a)(2)(iv) of this section; and

(ii) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in subpart D of this part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (c)(2)(i) of this section.

(3) Wastes excluded under this section are subject to part 268 of this chapter (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

(4) Any mixture of a solid waste excluded from regulation under §261.4(b)(7) and a hazardous waste listed in subpart D of this part solely because it exhibits one or more of the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (a)(2)(iv) of this section is not a hazardous waste, if the mixture no longer exhibits any characteristic of hazardous waste identified in subpart C of this part for which the hazardous waste listed in subpart D of this part was listed.

(h)(1) Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of 40 CFR part 266, Subpart N ("eligible radioactive mixed waste").

(2) The exemption described in paragraph (h)(1) of this section also pertains to:

(i) Any mixture of a solid waste and an eligible radioactive mixed waste; and

(ii) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.

(3) Waste exempted under this section must meet the eligibility criteria and specified conditions in 40 CFR 266.225 and 40 CFR 266.230 (for storage and treatment) and in 40 CFR 266.310 and 40 CFR 266.315 (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

[57 FR 7632, Mar. 3, 1992; 57 FR 23063, June 1, 1992, as amended at 57 FR 37263, Aug. 18, 1992; 57 FR 41611, Sept. 10, 1992; 57 FR 49279, Oct. 30, 1992; 59 FR 38545, July 28, 1994; 60 FR 7848, Feb. 9, 1995; 63 FR 28637, May 26, 1998; 63 FR 42184, Aug. 6, 1998; 66 FR 27297, May 16, 2001; 66 FR 50333, Oct. 3, 2001; 70 FR 34561, June 14, 2005; 70 FR 57784, Oct. 4, 2005; 71 FR 40258, July 14, 2006]

4A.23.2. State Policies and Regulations

4A.23.2.1. Definition of Hazardous Waste

California Code of Regulations defines hazardous wastes under Title 22 CCR Section 66261.3 as:

(a) A waste, as defined in section 66261.2, is a hazardous waste if:

(1) it is not excluded from classification as a waste or a hazardous waste under Health and Safety Code section 25143.2(b) or 25143.2(d) or section 66261.4; and

(2) it meets any of the following criteria:

(A) it exhibits any of the characteristics of hazardous waste identified in article 3 of this chapter except that any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under federal 40 CFR section 261.4(b)(7) and any other waste exhibiting a characteristic of hazardous waste under Article 3 of this chapter is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred or if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentrations for any contaminant listed in table I to section 66261.24 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture;

(B) it is listed in article 4 of this chapter and has not been excluded by the USEPA Administrator from 40 CFR Part 261 Subpart D pursuant to 40 CFR sections 260.20 and 260.22;

(C) it is listed in or contains a constituent listed in Appendix X to this chapter. However, the waste is not a hazardous waste if:

1. it is determined that the waste does not meet the criteria of subsection (a)(2)(B) of this section; and

2. it is determined that the waste does not meet the criteria of subsection (a)(2)(A) of this section by:

i. testing the waste according to the methods set forth in article 3 of this chapter, or according to an equivalent method approved by the Department pursuant to section 66260.21; or

ii. applying knowledge of the hazardous properties of the waste in light of the materials or the processes used and the characteristics set forth in article 3 of this chapter;

(D) it is listed in article 4.1 of this chapter;

(E) it is a mixture of a hazardous waste that is listed in article 4 of this chapter other than a hazardous waste listed with hazard code (T) or (H), and another waste, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in article 3 of this chapter. However, nonwastewater mixtures are still subject to the requirements of chapter 18 of this division, even if they no longer exhibit a characteristic at the point of land disposal;

(F) it is a mixture of a waste and one or more hazardous wastes listed in article 4 of this chapter which has not been excluded by the USEPA Administrator from 40 CFR Part 261 Subpart D pursuant to 40 CFR sections 260.20 and 260.22. However, the following mixtures of wastes and hazardous wastes listed in article 4 of this chapter are not hazardous wastes (except by application of subsection (a)(2)(A) or (a)(2)(B) of this section) if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater), and:

1. one or more of the following spent solvents listed in section 66261.31 - carbon tetrachloride, tetrachloroethylene, trichoroethylene - provided, that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million; or

2. one or more of the following spent solvents listed in section 66261.31 - methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene,

methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents - provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million; or

3. heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or

4. a discarded commercial chemical product, or chemical intermediate listed in section 66261.33 arising from “de minimis” losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subsection, “de minimis” losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

5. wastewater resulting from laboratory operations containing toxic (T) wastes listed in article 4 of this chapter, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation; or

6. One or more of the following wastes listed in 40 CFR § 261.32-wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157)-Provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that can not be demonstrated to be reacted in the process, destroyed through treatment, or is recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight; or

7. Wastewaters derived from the treatment of one or more of the following wastes listed in 40 CFR § 261.32-organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156).-Provided, that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter.

(G) it is not classified as a hazardous waste by application of the criteria in subsections (a)(2)(A) through (a)(2)(F) of this section, but has been classified as a hazardous waste by the Department because it otherwise conforms to the definition of hazardous waste set forth in Health and Safety Code section 25117.

(b) A waste which is not excluded from classification as a waste or hazardous waste under the provisions of section 66261.4(b) or Health and Safety Code section 25143.2(b) or 25143.2(d) becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in article 4 of this chapter, when the waste first meets the listing description set forth in article 4 of this chapter;

(2) In the case of a waste listed in article 4.1 of this chapter, when the waste first meets the listing description set forth in article 4.1 of this chapter;

(3) In the case of a mixture of waste and one or more hazardous wastes listed in article 4 of this chapter, when the hazardous waste listed in article 4 of this chapter is first added to the waste.

(4) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in article 3 of this chapter.

(c)(1) A hazardous waste will remain a hazardous waste unless and until it meets the criteria of subsection (d) of this section. Except as otherwise provided in subsections (c)(2), (c)(3), (c)(4), and (c)(5) of this section, any waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate including precipitation run-off is a hazardous waste. (However, materials that are reclaimed from wastes and that are used beneficially are not wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

(2) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332) is not hazardous even though it is generated from the treatment, storage, or disposal of a hazardous waste, unless it exhibits one or more of the characteristics of hazardous waste.

(3)(A) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in section 66260.10, for "Industrial furnace", (f), (g) and (l)), that are disposed in RCRA Subtitle D units, provided that these residues meet the generic exclusion levels identified below for all constituents, and exhibit no characteristics of hazardous waste, as identified in article 3 of Chapter 11 of division 4.5, Title 22, CCR. Testing requirements shall be incorporated in a facility's waste analysis plan; at a minimum, composite samples of residues shall be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

Constituent	Maximum for any single composite sample - TCLP mg/L
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70
Generic exclusion levels for F006 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total)(mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0

Constituent	Maximum for any single composite sample - TCLP mg/L
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

(B) A one-time notification and certification shall be placed in the facility's files and sent to the Department for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics in article 3 of chapter 11 that are sent to a RCRA subtitle D unit. The notification and certification that is placed in the generators or treaters files shall be updated if the process or operation generating the waste changes and/or if the 40 CFR subtitle D unit receiving the waste changes. However, the generator or treater need only notify the Department on an annual basis if such changes occur. Such notification and certification should be sent to the Department by the end of the calendar year, but no later than December 31.

The notification shall include the following information: (1) The name and address of the RCRA Subtitle D unit receiving the waste shipment; (2) the EPA hazardous waste number(s) and treatability group(s) at the initial point of generation; and (3) the treatment standards applicable to the waste at the initial point of generation. The certification shall be signed by an authorized representative and shall state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste, as identified in article 3 of chapter 11 of division 4.5, Title 22, CCR, is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(4) Biological treatment sludge from the treatment of one of the following wastes listed in 40 CFR § 261.32 - organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157) - is not a hazardous waste even though it is generated from the treatment, storage, or disposal of a hazardous waste, unless it exhibits one or more of the characteristics of hazardous waste.

(5) Waste consisting of only material derived from the treatment or recycling of one or more hazardous wastes listed in article 4.1 of this chapter is not a hazardous waste, provided the material does not exhibit any of the characteristics identified in article 3 of this chapter, and does not meet any listing description in article 4.1 of this chapter.

(d) Any waste described in subsection (c) of this section is not a hazardous waste if it meets all of the following criteria:

(1) the waste does not exhibit any of the characteristics of hazardous waste identified in article 3 of this chapter; (however, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of chapter 18, even if they no longer exhibit a characteristic at the point of land disposal,)

(2) in the case of a waste which is a waste listed in article 4 of this chapter, contains a waste listed under article 4 of this chapter or is derived from a waste listed in article 4 of this chapter (but not including precipitation run off), the waste also has been excluded by the USEPA Administrator from the lists of hazardous wastes in 40 CFR Part 261 Subpart D pursuant to 40 CFR sections 260.20 and 260.22, and

(3) the waste is not listed in article 4.1.

(e) Notwithstanding subsections (a) through (d) of this section and provided the debris as defined in section 66260.10 of chapter 10 of this division does not exhibit a characteristic identified in article 3 of chapter 11, the following materials are not subject to regulation under chapters 10, 11 to 16, 18 or 20 of this division;

(1) Hazardous debris as defined in section 66260.10 of chapter 10 of this division that has been treated using one of the required extraction or destruction technologies specified in Table 1 of section 66268.45; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

(2) Debris as defined in 66260.10 of chapter 10 of this division that the Department considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

4A.23.2.2. California Hazardous Waste Control Law of 1972

The state is authorized to administer a hazardous waste program equivalent to the federal RCRA program. Generation, transportation, treatment, storage, and disposal of characteristic and listed hazardous wastes are regulated pursuant to Health and Safety Code, Division 20, Chapter 6.5, Sections 25100 to 25250.28. As part of hazardous waste regulation, the California Health and Safety Code, Division 20, Chapter 6.5, Article 13, Sections 25250 through 25250.28 regulates PCBs in used oil and prohibits used oil recycling or reuse if the oil contains 5 parts per million or greater of PCBs. The Project would use oil and other hazardous materials during construction and operation.

4A.23.2.3. Hazardous Materials Release Response Plans and Inventory

California's equivalent to SARA was codified in Health and Safety Code, Division 20, Chapter 6.95, Sections 25500 to 25520. This code requires a business using hazardous materials to prepare a business plan describing the facility, inventory, emergency response plans, and training programs and to submit a business plan to the local Certified Unified Program Agency (CUPA).

4A.23.2.4. Worker Safety

The California Division of Occupational Safety and Health (Cal/OSHA) is the state agency responsible for assuring worker safety in the workplace. Cal/OSHA assumes primary

responsibility for developing and enforcing standards for safe workplaces and work practices within the state. At sites known to be contaminated, a site safety plan must be prepared to protect workers. The site safety plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

4A.23.2.5. California Division of Occupational Safety and Health, (§1532.1. Lead, California Code of Regulations)

Construction activities, including demolition, that disturb materials or paints containing any amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in 8 CCR 1532.1. Deteriorated paint is defined by 17 CCR 35022 as lead-based paint (LBP) "that is crackling, chalking, flaking, chipping, peeling, not intact, failed, or otherwise separating from a component." Demolition of a deteriorating LBP component would require proper waste characterization and appropriate disposal. Potential hazards exist to workers who remove or cut through LBP coatings during demolition. Dust containing hazardous concentrations of lead may be generated during scraping or cutting materials coated with LBP. Torching of these materials may produce lead oxide fumes.

4A.23.2.6. California Occupational Safety and Health Act: Tunnel Safety Orders of the California Code of Regulations

This regulation sets forth safety standards and provisions intended to protect workers during tunneling operations. Section 8425, *Operation of Gassy and Extrahazardous Tunnels*, identifies safety measures to ensure safe work in tunnels classified as "gassy" or "extrahazardous" by Cal/OSHA's Mining and Tunneling Unit. The Project involves tunneling.

4A.23.2.7. Cortese List

Cal-EPA maintains the Hazardous Wastes and Substances Site (Cortese) List used by state and local agencies and developers to comply with CEQA requirements in providing information about the locations of hazardous materials release sites. The list is updated at least once annually. The DTSC, State Water Board, and CalRecycle contribute to the hazardous material release site listings.

4A.23.2.8. Fire Hazard Severity Zones

Government Code Section 51178 and PRC Sections 4201–4204 requires the California Department of Forestry and Fire Protection (CAL FIRE) to identify fire hazard severity zones (FHSZ) in the state. Government Code Section 51179 requires a local agency to designate, by ordinance, high and very high FHSZs in its jurisdiction. The FHSZs are derived from the Fire Hazard Severity Scale, which was created by CAL FIRE and is used for evaluating and designating potential fire hazards in wildland areas. The Project is partially located in FHSZ.

4A.23.2.9. State Responsibility Areas

The areas where the state has financial responsibility for wildland fire protection are called State Responsibility Areas (SRA) (CAL FIRE 2007). CAL FIRE also has a legal responsibility to provide fire protection in SRAs. These lands are based on land ownership, population density, and land use. CAL FIRE does not have responsibility in populated areas or agricultural lands. The Project is partially located in SRAs.

4A.23.2.10. Mosquito Abatement Act of 1915

The 1915 Mosquito Abatement Act authorizes the formation of mosquito control districts in the state of California. It gives local governments the power to obtain revenues and form special districts to protect the public from the hazards of mosquito bites and mosquito-borne diseases. The Project is located in several Mosquito and Vector Control Districts, including the Glenn County Mosquito and Vector Control District, Colusa Mosquito Abatement District, and the Sacramento- Yolo Mosquito and Vector Control District.

4A.23.2.11. California Health and Safety Code (Mosquito and Vector Control District Law)

Sections 2040 and 2041 of the California Health and Safety Code, Division 3, Chapter 1, Article 4 authorize mosquito-control districts to conduct surveillance programs and studies and take any and all necessary and proper actions to prevent the occurrence of, and abate or control, vectors and vector-borne diseases.

Sections 2060 to 2065 authorize mosquito-control districts to abate a public nuisance by notifying the owner of the property that is causing the public nuisance, requiring the owner of the property to abate the nuisance within a specified time, and requiring the owner of the property to prevent the recurrence of the public nuisance. These sections also authorize the mosquito-control districts to impose fines for noncompliance and state that the owner of the property shall pay for the cost of abatement.

4A.23.2.12. California Office of Environmental Health Hazard Assessment Fish Advisory Program

The Office of Environmental Health Hazard Assessment (OEHHA) is the lead state agency for the assessment of health risks posed by environmental contaminants. Among other responsibilities, OEHHA develops fish consumption advisories for mercury and other contaminants in sport fish and shellfish from water bodies throughout the state. These advisories are guidelines that recommend how often certain sport fish species and shellfish from state waters can be safely consumed. For water bodies that do not have site-specific guidelines, the statewide advisories for eating fish from California's lakes, reservoirs, and coastal locations should be followed.

OEHHA provides separate guidelines in fish advisories for women of childbearing age and children because some chemicals, such as mercury, can be especially harmful to children, infants, and developing fetuses. Accordingly, the following populations each have separate guidelines:

- Women 18-49 years and children 1-17 years
- Women 50 years and older and men 18 years and older

Table 4A.23-1 identifies fish and shellfish consumption guidelines for water bodies in the study area based on potential mercury contamination.

Table 4A.23-1. Summary of Safe-Eating Guidelines for Fish and Shellfish from Water Bodies in the Study Area Based on Mercury (servings[a] per week)

Water Body[a]	Fish and Shellfish[c]	Guidelines for Children (1–17 Years) and Women (18–49 Years)[d]	Guidelines for Men (18+ Years) and Women (50+ Years)[d]
Shasta Lake	• Sunfish species	3	7
	• Rainbow Trout	2	6
	• Common Carp	1	3
	• Black Bass species, Chinook (king) Salmon	1	2
	• Channel Catfish	do not eat	1
Sacramento River and Northern Delta (includes all Water bodies in the Delta north of State Route 12)	• Rainbow Trout	5	5
	• American Shad, Small Baitfish, and Shrimp	3	7
	• Chinook (king) Salmon and Steelhead Trout	2	7
	• Bullhead	2	4
	• Sunfish species	1	4
	• Common Carp, Goldfish, Crappie, Crayfish, Hardhead, Sacramento Sucker	1	2
	• Catfish	do not eat	2
	• Striped Bass	do not eat	2
	• Black Bass species, Sacramento Pikeminnow, White Sturgeon	do not eat	1
Lake Oroville	• Sunfish Species	2	5
	• Common Carp, Coho Salmon	1	2
	• Black Bass Species	0	1
Lower Feather River	• American Shad	3	7
	• Chinook (king) Salmon, Steelhead Trout	2	7
	• Sunfish species	1	3
	• Common Carp, Hardhead, Sacramento Sucker	1	2
	• Black Bass, Catfish, Sacramento Pikeminnow, White Sturgeon	do not eat	1
	• Striped Bass	do not eat	
Folsom Lake	• Rainbow Trout (16 inches or less), Sunfish species	2	5

Water Body[a]	Fish and Shellfish[c]	Guidelines for Children (1–17 Years) and Women (18–49 Years)[d]	Guidelines for Men (18+ Years) and Women (50+ Years)[d]
	• Black Bass species, Chinook (king) Salmon, Channel Catfish, Rainbow Trout (over 16 inches)	0	1
Lower American River	• American Shad	3	7
	• Steelhead Trout, Chinook (king) Salmon	2	7
	• White Catfish, Sunfish species, Sacramento Sucker	1	2
	• Striped Bass	do not eat	2
	• Black Bass species, Sacramento Pikeminnow	do not eat	1
San Luis Reservoir	• Tule Perch	2	5
	• American Shad	1	2
	• Striped Bass, Common Carp, Black Bass species	do not eat	1
Central and south Delta (includes all water bodies in the Delta south of State Route 12, except the Sacramento River and San Joaquin River south of Stockton)	• Asian Clam (Corbicula)	7	7
	• American Shad	3	7
	• Catfish, Crayfish	2	5
	• Steelhead Trout, Sunfish species	2	7
	• Black Bass species, Common Carp, Crappie, Sacramento Sucker	1	2
	• Striped Bass	do not eat	2
	• White Sturgeon	do not eat	1
	• Any fish or shellfish from the Port of Stockton	do not eat	do not eat
All California rivers, estuaries, and coastal waters	• American shad	3	7
	• Chinook (king) Salmon and Steelhead Trout	2	7
	• Striped Bass	do not eat	2
	• White Sturgeon	do not eat	1

Sources: OEHHA 2017, 2018a, 2018b, 2018c, 2018d, 2018e, 2018f, 2018g. 2020a.

[a] The water body listings in this table are as they appear in the individual site-specific or statewide advisories, and are not intended to specifically identify the water bodies being considered in the methylmercury analysis in Chapter 27, *Public Health and Environmental Hazards*. For example, Funks Creek and Stone Corral Creek are in the study area, but do not have OEHHA site-specific advisories; therefore, the statewide advisories for all California rivers, estuaries, and coastal waters is included in this table.

[b] A "serving size" is 8 ounces of fish before cooking for an adult, and children should always be given "smaller portions" (OEHHA 2020b).
[c] All fish and shellfish names are as they appear in the OEHHA guidelines.
[d] The OEHHA guidelines refer to the total number of servings of fish per week for one water body, not just the total for a specific species. For example, if a fish species in the one-serving-per-week group is consumed, no other fish species from the consumption advisories from any location should be consumed that week.

4A.23.3. Local/Regional Policies and Regulations

4A.23.3.1. Certified Unified Program Agencies

Cal-EPA can delegate responsibility for many of its programs to a local government through certification as a CUPA. CUPAs consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. Cal-EPA and other state agencies set the standards for their programs, and local governments implement the standards through CUPAs. CUPAs regulate various activities related to hazardous materials waste and disposal (e.g., fire code implementation, hazardous materials business plans).

4A.23.3.2. Glenn County General Plan, 2020 Existing Conditions Report

Sections 3.4, *Solid Waste*, and 3.6, *Public Safety Services*, of the *Glenn County General Plan, 2020 Existing Conditions Report* identifies the following goals and policies from the 1993 *Glenn County General Plan* related to hazardous materials and waste (Glenn County 2020:3-38,3-48,3-49).

Goal PSG-8. Reduce the County's reliance on landfilling, reduce the volume of the solid waste stream, and increase recovery of materials, and dispose of remaining waste in the most environmentally and fiscally responsible manner available.

Policy PSP-57. Achieve maximum waste diversion through the expansion and/or development of cost-effective recycling and source reduction programs tailored for both rural and urbanized jurisdictions in the county.

Goal PSG-2. Protection and enhancement of the quality of life by reducing the loss of life and personal property due to fire.

Policy PSP-16. Require new development to be designed with fire protection and prevention in mind.

Policy PSP-19. Study the use of mutual aid agreements or memoranda of understanding for structural as well as wildland fire protection in areas currently under California Department of Forestry and U.S. Forest Service jurisdiction.

Policy PSP-20. Consider fire risk and hazard zones when approving residential development in areas subject to potential wildland fires.

Policy PSP-22. Comply with the State of California Fire Safety Regulations for the State Responsibility Area located within Glenn County.

Policy PSP-24. Communicate the Emergency Response Plan to all public safety agencies when reviewing future development proposals throughout the county.

The Glenn County Existing Conditions Report is primarily focused on preventing wildfire in residential and developed areas. California codes are followed to ensure current buildings and new development comply with safety standards. The report policies provide requirements mainly for development, land use planning, people, and property.

4A.23.3.3. Colusa County General Plan

The Safety Element of the *Colusa County General Plan* has the following goals and policies related to hazards and hazardous materials (Colusa County 2012).

Goal SA-1: Ensure the safety of County residents, businesses, and visitors from hazardous conditions, including natural catastrophes and human-caused emergencies.

Policy SA 1-1: Ensure that during natural catastrophes and emergency situations, the County can continue to provide essential emergency services.

Policy SA 1-2: Update emergency management and response plans regularly to improve emergency response for all areas of the County.

Policy SA 1-3: Keep emergency access routes free of traffic impediments.

Policy SA 1-4: Coordinate with the California Emergency Management Agency to ensure coordinated local and state level responses in the event of an emergency.

Policy SA 1-5: Ensure that all areas of the County are accessible to emergency response providers.

Policy SA 1-7: Permit development only in areas where the potential danger to the health and safety of people and property can be mitigated to an acceptable level.

Policy SA 1-9: Except as otherwise allowed by Federal or State law, require new buildings intended for human use to be designed in compliance with the latest edition of the California Building Standards Code, California Fire Code, and other adopted standards based on potential risks.

Policy SA 1-12: Require, where feasible, new road networks (public and private) to provide adequate access for emergency equipment and provide alternate routes for evacuation

Policy SA 1-50: Require proponents of projects that would involve the use, storage, transport or disposal of hazardous materials or hazardous waste to demonstrate full compliance with all applicable local, state and federal regulations related to hazardous materials and waste. Any significant adverse environmental impacts associated with exposure to hazardous materials should be mitigated to a less than significant impact prior to approval of the project.

The Colusa County General Plan primarily focuses on preventing wildfire in residential and developed areas. The standards in the Fire Hazards section of the Colusa County General Plan

contains policies to ensure adequate supplies of water sources, prepare wildland fire management plans, and reduce fire hazards through conservation and fuel management in wildland areas.

4A.23.3.4. County of Yolo 2030 Countywide General Plan

The following goals and policies excerpted from the Health and Safety Element of the *2030 Countywide General Plan* pertain to hazards and hazardous materials (Yolo County 2009).

Goal HS-3: Wildland Fires. Protect the public and reduce damage to property from wildfire hazard.

Policy HS-3.1: Manage the development review process to protect people, structures, and personal property from unreasonable risk from wildland fires.

Goal HS-4: Hazardous Materials. Protect the community and the environment from hazardous materials and waste.

Policy HS-4.1: Minimize exposure to the harmful effects of hazardous materials and waste.

Goal HS-6: Emergency Preparedness. Provide timely and effective emergency response to reduce the potential loss of life and property.

Policy HS-6.1: Respond to catastrophic emergencies by:

- Continuing and restoring critical services.
- Maintaining order.
- Supporting evacuations.
- Distributing emergency supplies.
- Ensuring search/rescue operations and medical care.
- Saving lives and protecting property.
- Repairing and restoring essential public infrastructure.
- Mobilize the necessary resources to carry out emergency response efforts.
- Coordinating operations with other jurisdictions.
- Disseminating emergency public information.
- Establishing emergency operation centers and maintaining communications.
- Notifying vulnerable populations (e.g., seniors, schoolchildren, disabled, non-English speaking households, etc.).

Policy HS-6.2: Provide continuous advance planning to anticipate potential threats and improve emergency response effectiveness.

4A.23.3.5. Tehama County General Plan

The Safety Element of the *Tehama County General Plan 2018 Update* has the following goals and policies related to hazards, hazardous waste, and wildland fires (Tehama County 2018).

Goal SAF-3: To protect the people and property within Tehama County against fire related loss and damage.

Policy SAF-3.2: The County shall require new developments in State Responsibility Areas and other fire prone areas to mitigate all hazards to acceptable levels.

Policy SAF-3.4: The County shall continue to support and cooperate with Cal-Fire in providing fire protection services and fire prevention programs for the unincorporated areas of the County.

GOAL SAF-9: To minimize the risk of personal injury, property damage, and environmental degradation resulting from the use, transport, disposal, and release or discharge of hazardous materials.

Policy SAF-9.1: The County shall ensure that the use, transport, and disposal of hazardous materials comply with all federal, state, and local regulations and requirements.

Policy SAF-9.2: The County shall implement safety measures regarding the transport, use, storage, and disposal of hazardous materials within the County.

Policy SAF-9.3: The County shall require the separation of hazardous or toxic materials from the public.

Policy SAF-9.4: The County shall ensure that all industrial facilities are constructed, maintained, and operated in accordance with current safety and environmental protection standards.

4A.23.3.6. Glenn County Mosquito and Vector Control District

The Glenn County Mosquito and Vector Control District (GCMVCD) was formed in 1962 and began operating in 1963. The GCMVCD covers 5 square miles that includes the city limits of Willows, North East Willows, and the unincorporated area north of Willows.

The GCMVCD is a special district governed by a five-member board of trustees that set policy for the GCMVCD. The main functions of the GCMVCD are to control the threat of mosquito-borne diseases and to reduce nuisance mosquito populations using sound abatement methods that minimize risk to the environment and the public.

In 2007, a special assessment for mosquito and disease services was proposed, and in 2007 the Valley-Wide Mosquito Abatement District was formed. The Valley-Wide Mosquito Abatement District continues to contract with the GCMVCD to provide mosquito-control services. The Valley-Wide Mosquito Abatement District roughly covers 420 square miles (basically the valley floor of Glenn County) (Glenn County Mosquito and Vector Control 2020).

4A.23.3.7. Colusa Mosquito Abatement District

The Colusa Mosquito Abatement District was established in 1958 and covers 160 square miles, with 20 square miles located in Sutter County. The District uses advanced control equipment and products and follows a strict IPM program. Services include ground fogging (i.e., low-volume spraying), mosquito fish, and mosquito-borne disease surveillance and monitoring.

There are three full-time employees and five seasonal employees that provide control services within the District. Full-time employees are certified and licensed with the California Department of Public Health, Vector Borne Disease Section. The District uses various means to track larval and adult mosquito populations, occurrences of West Nile virus, while keeping the public informed about mosquito counts, control measures used, and spraying schedule (Colusa Mosquito Abatement District n.d.).

4A.23.3.8. Sacramento–Yolo Mosquito and Vector Control District

The Sacramento–Yolo Mosquito and Vector Control District (SYMVCD) provides mosquito- and vector-control services to Sacramento and Yolo Counties. Services include ongoing surveillance of mosquitoes and other vectors to determine the threat of disease transmission and lower annoyance levels and communication with property owners, residents, and governmental agencies to help in these efforts. Actions to monitor and control vectors and vector diseases include: Public information and education, mosquito and vector surveillance, laboratory and mosquito surveillance program, use of biological controls (e.g., mosquito fish, *Gambusia affinis*), promoting effective drainage, and the use of chemical controls.

The SYMVCD may administer ultra low volume (ULV) treatments by using backpack foggers, hand sprayers, truck-mounted foggers, or aircraft in and around areas where virus activity has been detected (Sacramento–Yolo Mosquito and Vector Control District 2018). Currently as a part of the Mosquito and Mosquito-Borne Disease Management Plan, areas of concern in Sacramento and Yolo County are sprayed with ULV treatments (Sacramento–Yolo Mosquito and Vector Control 2018).

4A.24 Chapter 28, Climate Change

4A.24.1. Federal Policies and Regulations

There are no federal policies tied to climate adaptation requirements in the water sector. However, some of the tools and guidance provided by federal agencies may be relevant for the development of the Project.

- U.S. Geological Survey *Climate Change and Water Resources Management: A Federal Perspective* (U.S. Geological Survey 2009)
- U.S. Fish and Wildlife Service *Rising to the Urgent Challenge: Strategic Plan for Responding to Accelerating Climate Change* (U.S. Fish and Wildlife Service 2010)
- U.S. Geological Survey Water—*the Nation's Fundamental Climate Issue: A White Paper on the U.S. Geological Survey Role and Capabilities* (U.S. Geological Survey 2010)
- U.S. Army Corps of Engineers *Climate Change Adaptation Plan and Report* (U.S. Army Corps of Engineers 2014)
- U.S. Bureau of Reclamation *SECURE Water Act Section 9503(c)—Reclamation Climate Change and Water 2016* (U.S. Bureau of Reclamation 2016)
- U.S. Department of the Interior *WaterSMART (Sustain and Manage America's Resources for Tomorrow)* (U.S. Department of the Interior 2020)

4A.24.2. State Policies and Regulations

All of the regulations listed in Section 4A.17.2, Greenhouse Gas Emissions, State Policies and Regulations that are applicable to reducing or controlling greenhouse gases are also applicable to climate change because greenhouse gases contribute to climate change.

4A.24.2.1. Executive Order S-3-05 (2005)

Along with declaring GHG emission reduction targets, this EO required that biannual updates on climate impacts to California be reported to the governor and state legislature. This includes impacts to water supply, public health, agriculture, the coastline, and forestry.

Executive Order N-10-19 (2019).: This Executive Order called for the development of a water resilience portfolio that assessed priorities in the 2016 California Water Action Plan, updated climate change impacts onto California water systems, and identified key priorities for the water sector moving forward and how to improve integration across state agencies to implement priorities. This water resilience portfolio was released in 2020.

Senate Bill 246 (2015).: This bill established the Integrated Climate Adaptation and Resiliency program (ICARP) to be administered by the Office of Planning and Research (OPR) to coordinate regional and local efforts with state climate adaptation strategies. The bill also required that within one 1 year of an update to "Safeguarding California,", the Office of Emergency Services would work with other entities to review and update the Adaptation Planning Guide (APG) as necessary.

California Department of Water Resources California Water Plan Update (2018): This update to the California Water Plan provides recommended actions, funding scenarios, and an investment strategy to support efforts to overcome California water resource challenges.

California Natural Resources Agency California Climate Change Adaptation Strategy and Safeguarding California Plan Update (2018): This plan serves as the state's climate adaptation strategy. It gives brief descriptions of climate change impacts to various sectors in California as well as strategies to address those impacts.

4A.24.2.2. Sustainable Groundwater Management Act (2014)

Composed of bills AB 1739, SB 1168, and SB 1319, SGMA requires governments and water agencies of high- and medium-priority basins to develop Groundwater Sustainability Plans. These GSPs include climate change projections for temperature, precipitation, sea level rise, and snowpack loss that impact water supply availability for basin planning efforts. By 2040, critically over-drafted basins should reach sustainability, and, by 2042, the remaining high- and medium-priority basins should reach sustainability. SGMA provides the state with enhanced drought resilience, as climate change will create more frequent and severe droughts in the future. DWR will provide ongoing support to local agencies through guidance and financial and technical assistance in groundwater management.

4A.24.2.3. Executive Order B-30-15: Establishing 2030 California Emissions Target, Adaptation Initiatives (2015)

This EO requires that the state's adaptation strategy—Safeguarding California—be updated every 3 years and that California's 5-year infrastructure plan incorporate current and future climate change impacts when constructing new projects or rehabilitating existing ones. The order also lists guiding principles for adaptation, such as prioritizing adaptation actions that also reduce GHG emissions; using flexible, adaptive approaches; protecting vulnerable populations; and prioritizing natural infrastructure approaches. State agencies must incorporate climate change into their planning and investment decisions using a life-cycle cost accounting process to evaluate and compare infrastructure investment and alternatives.

4A.24.2.4. Executive Order B-37-16: Making Water Conservation a California Way of Life (2016)

This EO permanently developed new water use targets for urban water agencies that built upon the 20% reduction in urban water use requirement by 2020. As climate change may constrain future water resources, the reduction targets in this EO help mitigate that impact by reducing water demand. Water use targets were customized for each agency and were based on indoor residential per-capita water use, outdoor irrigation, commercial/industrial/institutional water use, and water lost through leaks. The EO also prohibited practices that waste potable water, prioritized projects that reduce leaks and water system losses, directed urban and agricultural water suppliers to accelerate data collection, and certified innovative water conservation technologies. Finally, the order updated requirements for water shortage contingency plans and agricultural water management plans. Water supply managers may incorporate these management plans when considering climate change in long-term water resources forecasting.

4A.24.2.5. State Water Resources Control Board Resolution No. 2017-0012: Comprehensive Response to Climate Change (2017)

This resolution stated that the Division of Drinking Water (DDW) would begin to include climate change vulnerability assessments into community water system sanitary surveys and provide technical assistance and financial support to protect drinking water systems most vulnerable to climate change impacts. The State Water Board and Regional Water Boards were also to work together to identify actions to develop new and underutilized water resources, expand surface water and groundwater storage, add operational flexibility, restore and maintain healthy watersheds, and modify permits and other regulatory requirements to reduce vulnerability of infrastructure to flooding, storm surge, and sea level rise.

4A.24.2.6. California's 2017 Climate Change Scoping Plan

The Climate Change Scoping Plan is California's strategy to achieve its 2030 greenhouse gas emission target of a 40% reduction below 1990 levels. While this plan focuses on greenhouse gas mitigation, it also contains goals to increase the resilience of agriculture, natural lands, and water supplies. The plan prioritizes increasing water savings through innovative technologies, conservation targets, updated agricultural water management plans, and conservation regulations. The plan also identifies using renewable energy for the State Water Project as a potential goal.

4A.24.2.7. Assembly Bill 1668: Water Management Planning (2017–2018)

This bill requires the State Water Board and DWR to adopt long-term standards for efficient water use and performance measures for commercial, industrial, and institutional water use by mid-2022. By October 2021, State Water Board and DWR must make recommendations on these standards and performance measures. The standard will be 55 gallons per capita per day for indoor residential water use by 2025 and 50 gallons per capita per day by 2030. The bill also requires agricultural water suppliers to include an annual water budget and drought plan in their agricultural water management plans. Similar to EO B-37-16, the efficient water use standards in this bill will reduce water use, helping to mitigate the impacts climate change has on reducing water resources, and the development of water budgets and drought plans can provide useful information for water resource managers when planning for climate change.

Plans and guidance provided by California agencies may be relevant for the development of the Project.

- California DWR *Managing an Uncertain Future; Climate Adaptation Strategies for Water* (California DWR 2008)
- California DWR *California Water Plan Update* (California DWR 2018): This is the State's strategic plan for managing and developing water resources, including consideration of a range of climate scenarios for water resource sustainability and infrastructure resilience.
- *Safeguarding California* (State of California 2018): This is the State's official high-level climate adaptation plan covering multiple sectors, such as water, energy, and agriculture

4A.24.3. Local/Regional Policies and Regulation

All of the regulations listed in Section 4A.17.3, Greenhouse Gas Emissions, Local/Regional Policies and Regulations that are applicable to reducing or controlling greenhouse gases are also applicable to climate change because greenhouse gases contribute to climate change. There are no local policies tied to climate adaptation requirements in the water sector. However, some of the tools and guidance provided by local and regional agencies may be relevant for the development of the Project, such as: California DWR *Central Valley Flood Protection Plan* (California DWR 2017).

4A.25 Chapter 29, Indian Trust Assets

4A.25.1. Federal Policies and Regulations

The United States has a unique legal and political relationship with Indian tribes as provided for in the U.S. Constitution, treaties, and other federal laws and policies. The federal trust responsibility and government-to-government relationship are just two aspects of this relationship. Reclamation is committed to complying with the laws and policies that define this special relationship with Indian tribes.

The U.S. Government's trust responsibility for Indian resources requires Reclamation and other agencies to take measures to protect and maintain trust resources. These responsibilities include taking reasonable actions to preserve and restore tribal resources. Reclamation will carry out its activities in a manner that protects Indian Trust Assets (ITAs) and avoids adverse effects when possible.

The terms *ITAs* and *trust resources* mean a legal interest in land, minerals, funds, rights, or other property that have been reserved by or granted to Indian tribes or Indian individuals by treaties, statutes, and EOs and held by the United States in trust for an Indian tribe or Indian individual or held by an Indian tribe or Indian individual subject to a restriction on alienation imposed by the United States (25 C.F.R. § 115.002). An ITA has three components: (1) the trustee, (2) the beneficiary, and (3) the trust assets. These legal interests, which may include ownership or the use interests, are sometimes further interpreted through court decisions and regulations.

The terms *Indian trust responsibility* or *trust responsibility* mean the United States' obligation to protect and maintain ITAs or trust resources. For most Reclamation purposes, the terms *ITAs* and *trust resources* are functionally equivalent.

With other federal agencies, the Secretary of the Interior is charged with implementing the United States' trust responsibility on behalf of the Indian tribes. All U.S. Department of Interior agencies are delegated the Secretary of the Interior's trust duties as defined by statutes and regulations. Reclamation supports the Department of Interior's trust responsibility policy and will discharge, without limitation, the Secretary of the Interior's Indian trust responsibility. Reclamation complies with procedures contained in Departmental Manual Part 512.2 guidelines, which protect ITAs. Reclamation will carry out its activities in a manner that protects ITAs and avoids adverse impacts when possible. When Reclamation cannot avoid adverse impacts, it will provide appropriate mitigation.

Reclamation will actively support and participate in the U.S. Department of Interior's Indian water rights negotiation and implementation activities, as it works to resolve the water rights claims of Indian tribes through negotiated settlements, if feasible, rather than litigation.

Reclamation will implement the ESA (Public Law 93-205) in a manner that respects the exercise of tribal sovereignty over the management of Indian lands and tribal trust resources.

4A.25.2. State Policies and Regulations

No state policies or regulations apply to ITAs. It is only a federal obligation.

4A.25.3. Local/Regional Policies and Regulations

No local policies or regulations apply to ITAs. It is only a federal obligation.

4A.26 Chapter 30, Environmental Justice and Socioeconomics

4A.26.1. Federal Policies and Regulations

4A.26.1.1. Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 states that "No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title VI bars intentional discrimination but also unjustified disparate impact discrimination resulting from policies and practices that are neutral on their face (i.e., there is no evidence of intentional discrimination) but have the effect of discrimination on protected groups.

4A.26.1.2. Executive Order 12898

EO 12898, issued in 1994, requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations…." (59 FR 7629). In the memorandum transmitting EO 12898 to federal agencies, it was further specified that, "each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act [NEPA] of 1969" (59 FR 7629).

4A.26.1.3. Environmental Justice Guidance under the National Environmental Policy Act (1997)

In 1997, the CEQ issued guidance on how to implement EO 12898 and conduct an environmental justice analysis. This guidance established the role of EO 12898 as it relates to actions subject to NEPA and established the criteria for identifying environmental justice populations and how to consider the involvement of environmental justice groups throughout phases of the NEPA process. This guidance includes definitions, thresholds, and methodological guidance for conducting environmental justice analyses (CEQ 1997).

4A.26.1.4. U.S. Department of the Interior Environmental Compliance Memorandum No. ECM 95-3 and Environmental Justice Strategic Plan (1995)

Memorandum No. ECM 95-3, issued in 1995 in response to EO 12898, provides guidance for complying with EO 12898 for U.S. Department of the Interior actions and programs. It stipulates that environmental documents prepared by U.S. Department of the Interior agencies shall analyze the impact of agency actions on minority and low-income populations. The memorandum directs agencies to evaluate the equity of the impacts imposed on these populations relative to the benefit of the action. The relevant environmental document should identify any such impacts or the absence of impacts on minority and low-income populations. The U.S. Department of the Interior adopted the Environmental Justice Strategic Plan in 1995; this plan sets goals related to the implementation of EO 12898 and Memorandum No. ECM 95-3 (U.S. Department of the Interior 1995).

4A.26.1.5. Housing and Community Development Act of 1974

Pursuant to Section 104(d) of the Housing and Community Development Act of 1974, as amended, and the implementing regulations at 24 C.F.R. 42, a residential antidisplacement and relocation assistance plan is required and must provide for: (1) one-for-one replacement of occupied and vacant occupiable low- and moderate-income dwelling units demolished or converted to another use in connection with a development project assisted under Parts 570 and 92 and (2) provide relocation assistance for all low- and moderate-income persons who occupied housing that is demolished or converted to a use other than for low- or moderate-income housing (Congressional Research Service n.d.).

4A.26.2. State Policies and Regulations

4A.26.2.1. Senate Bill 115 (1999)

Approved in 1999, California SB 115 defines environmental justice as "the fair treatment of people of all races, cultures and income with respect to development, adoption and implementation of environmental laws, regulations and policies." SB 115 adds this language in Section 65040.12 to the California Government Code and Part 3 to Division 34 of the PRC, both of which concern environmental justice relating to environmental quality. Finally, SB 115 also established the Governor's OPR as the coordinating agency for state environmental justice programs and requested that Cal-EPA establish a model environmental justice policy for its boards, departments, and offices.

4A.26.2.2. Assembly Bill 1628 (2019)

AB 1628, passed in September 2019, revised the State of California's definition of environmental justice, as established in SB 115. Previous California law defined *environmental justice* for these purposes to mean the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. AB 1628 revised this definition to include protection for people of all national origins, in addition to people of all races, cultures, and incomes, and expanded the meaning of environmental justice to include "among other things, the availability of a healthy environment for all people." AB 1628 revised and expanded the definition of environmental justice included in Section 65040.12 of the California Government Code.

4A.26.2.3. California Government Code Section 65040.12

Pursuant to SB 115, signed into law in October 2001 and amended in 2019 by the passage of AB 1628, Section 65040.12 requires the OPR to:

1. Consult with the Secretaries of the Cal-EPA, the Resources Agency, and the Business, Transportation, and Housing Agency, the Working Group on Environmental Justice established pursuant to Section 72002 of the PRC, any other appropriate state agencies, and all other interested members of the public and private sectors in this state.
2. Coordinate the office's efforts and share information regarding environmental justice programs with the CEQ, USEPA, the General Accounting Office, the Office of Management and Budget, and other federal agencies.

3. Review and evaluate any information from federal agencies that is obtained as a result of their respective regulatory activities under federal EO 12898, and from the Working Group on Environmental Justice established pursuant to Section 71113 of the PRC.
4. Establish guidelines for addressing environmental justice issues in city and county general plans, including planning methods for the equitable distribution of public facilities and services, industrial land uses, and the promotion of more livable communities.

Section 65040.12 defines environmental justice as "the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." Under this definition, environmental justice includes:

1. The availability of a healthy environment for all people.
2. The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution so that the effects of the pollution are not disproportionately borne by those populations and communities.
3. Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decision-making process.
4. At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions.

4A.26.3. Local/Regional Policies and Regulations

4A.26.3.1. Glenn County General Plan

The following goals and policies excerpted from the Community Development Element of the Glenn County General Plan pertain to environmental justice and socioeconomics (Glenn County 1993).

Goal CDG-19: Preserve agriculture while increasing the stability of, and diversifying, the county's economy.

Policy CDP-142: Actively support regional, countywide and local economic development initiatives and programs, through funding, staff responsiveness and assistance, and development policies and project review processes which encourage economic growth.

Policy CDP-143: Encourage the recruitment and establishment of non-agricultural industries and employment-generating land uses which do not conflict with the County's environmental goals and do not compromise the overall integrity and viability of the agricultural sector of the economy.

Goal CDG-20: Retain and undergo expansion of existing businesses and industries in Glenn County.

Policy CDP-151: Ensure contact, by appropriate staff and/or elected officials, regularly with the owners/ operators of large local employers to discuss the local business environment and to identify ways in which the County might facilitate or promote the continuing success and long-term viability of local industries and commerce.

4A.26.3.2. Colusa County General Plan

The following goals and policies excerpted from the Economic Development Element of the *2030 General Plan* pertain to environmental justice and socioeconomics (Colusa County 2012).

Goal ED-1: Diversify the County's economic base and create sustainable long-term economic growth that will benefit County residents and businesses by providing high-paying jobs, and reducing unemployment, and broadening the range of industries

Policy ED 1-19: Promote the expansion of tourist opportunities, especially agritourism (farm products and education) and outdoor recreation, including boating, rafting, fishing, hunting, horseback riding, bird watching, hiking, and camping.

Policy ED 1-20: Develop a visitor network that links the County's attractions, including recreational activities, historic homes and properties, local events, lodging, dining, and shopping opportunities near the primary travel corridors.

Policy ED 1-22: Support the development of public amenities, such as boat ramps, picnic facilities, and/or restrooms at public access locations along or near the Sacramento River, East Park Reservoir, the wildlife refuges, Mendocino National Forest, and the proposed Sites Reservoir.

4A.26.3.3. Yolo County 2030 Countywide General Plan

The following goals and policies excerpted from the Agriculture and Economic Development Element of the *2030 Countywide General Plan* pertain to environmental justice and socioeconomics (Yolo County 2009).

GOAL AG-3: Promote a healthy and competitive farm economy to expand the County's agricultural base.

Policy AG-3.4: Recognize and protect agricultural infrastructure, such as farm-to market routes, water diversion and conveyance structures, fertilizer and chemical sales, airfields, processing facilities, research and development and farm worker housing.

4A.27 References

The references cited in this appendix are provided below and organized by chapter.

Chapter 5, Surface Water Resources

California Department of Water Resources (DWR). 2020. Final Environmental Impact Report for Long-Term Operation of the California State Water Project. State Clearinghouse No. 2019049121. Appendix B: 2018 Coordinated Operation Agreement Addendum. Available: https://water.ca.gov/News/Public-Notices/2020/March-2020/Final-EIR-for-SWP-Operations. Accessed: November 2, 2020.

Colusa County. 2020. Colusa County Code, Chapter 33 Flood Damage Prevention. https:// https://www.codepublishing.com/CA/ColusaCounty/#!/ColusaCounty33.html#33-1.1. Accessed: November 2, 2020.

Colusa County. 2012. Colusa County General Plan. Prepared by De Novo Planning Group.

Glenn County. 2020a. Glenn County General Plan Update: Existing Conditions Report 2020. Prepared by De Novo Planning Group.

Glenn County. 2020b. Glenn County Code, Chapter 15.540 Flood Plain Management Zone. https://www.countyofglenn.net/sites/default/files/resources/County_Code_Directory/Title%2015.pdf. Accessed: November 2, 2020.

Tehama County. 2020. Tehama County Code, Chapter 15.52 Floodplain Management Regulations. https://library.municode.com/ca/tehama_county/codes/code_of_ordinances?nodeId=TIT15BUCO_CH15.52FLMARE. Accessed: November 2, 2020.

Tehama County. 2009. Tehama County General Plan Update 2009-2029. Prepared by PMC.

U.S. Army Corps of Engineers. 1986. Overtopping of Flood Control Levees and Floodwalls. Publication Engineering Technical Letter 1110-2-299. August 22.

U.S. Army Corps of Engineers. 1994. Structural Design of Closure Structures for Local Flood Protection Projects. Publication EM 1110-2-2705. March 31.

U.S. Army Corps of Engineers. 1995. Design of Coastal Revetments, Seawalls, and Bulkheads. Publication EM 1110-2-1614. June 30.

U.S. Army Corps of Engineers. 1997. Design Guidance on Levees. Publication ETL 1110-2-555. November 30.

U.S. Army Corps of Engineers. 1998. Conduits, Culverts, and Pipes. Publication EM 1110-2-2902. March 31.

U.S. Army Corps of Engineers. 1999a. Guidelines on Ground Improvement for Structures and Facilities. Publication ETL 1110-1-185. February 1.

U.S. Army Corps of Engineers. 1999b. Engineering and Design for Civil Works Projects. Publication ER 1110-2-1150. August 31.

U.S. Army Corps of Engineers. 2000. Design and Construction of Levees. Publication EM 1110-2-1913. April 30.

U.S. Army Corps of Engineers. 2001. Geotechnical Investigations. Publication EM 1110-1-1804. January 1.

U.S. Army Corps of Engineers. 2003a. Recommendations for Seepage Design Criteria, Evaluation and Design Practices. Sacramento District. July 15. http://www.safca.org/documents/2003%20Levee%20Seepage%20Task%20Force%20Report-CESPK.pdf.

U.S. Army Corps of Engineers. 2003b. Slope Stability. Engineer Manual. Publication EM 1110-2-1902. October 31. http://140.194.76.129/publications/eng-manuals/em1110-2-1902/entire.pdf.

U.S. Army Corps of Engineers. 2004. Geotechnical Levee Practice. Publication SOP EDG-03. June 28.

U.S. Army Corps of Engineers. 2005. Engineering and Design—Design Guidance for Levee Underseepage. Technical Letter ETL 1110-2-569. May 1. http://www.geotechnicalinfo.com/usace_design_guidance_for_levee_underseepage.pdf.

U.S. Army Corps of Engineers. 2006. Quality Management. Publication ER 1110-1-12. September 30.

U.S. Army Corps of Engineers. 2009. Engineering Technical Letter 1110-2-571. Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures. Washington, DC. April 10. ftp://ftp.usace.army.mil/pub/rmc/Holden/SPK%20Vegetation%20Variance%20Request%202011-01-24%20For%20FTP/ETL%201110-2-571_10%20April%202009.pdf.

Yolo County. 2020. Yolo County Code, Chapter 4 Flood Protection. https://codelibrary.amlegal.com/codes/yolocounty/latest/yolo/0-0-0-30507. Accessed: November 2, 2020.

Yolo County. 2009. 2030 Countywide General Plan. Woodland, CA. November 10. https://www.yolocounty.org/general-government/general-government-departments/county-administrator/general-plan/adopted-general-plan. Accessed: November 2, 2020.

Chapter 6, Surface Water Quality

California Cyanobacteria and Harmful Algal Bloom Subcommittee. 2020. *Benthic Algal Mat Signage Design*. Available: https://mywaterquality.ca.gov/habs/resources/docs/benthic_signage_procedure_20200430.pdf. Accessed: March 12, 2021.

California Water Quality Monitoring Council. 2021. *California Voluntary Guidance for Response to HABs in Recreational Inland Waters*. Cyanobacteria and Harmful Algal Bloom Network. Available: https://mywaterquality.ca.gov/habs/resources/habs_response.html. Accessed: March 11, 2021.

Central Valley Regional Water Quality Control Board. 2018. *The Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin*. California Regional Water Quality Control Board, Central Valley Region. Fifth Edition. Revised May 2018.

Central Valley Regional Water Quality Control Board. 2011. *Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Methylmercury and Total Mercury in the Sacramento-San Joaquin River Delta Estuary (Attachment 1 to Resolution No. R5-2010-0043)*. Available: https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/2011_1020_deltahg_bpa.pdf. Accessed: June 30, 2021.

Central Valley Regional Water Quality Control Board. 2010. *American River Watershed Methylmercury TMDL and Mercury Control Program Information Sheet*. Available: https://data.sacriver.org/assets/5ffd2763a1b5d1a3078c4bd991651244/application/pdf/2010oct_arwatershed_merctmdl_info.pdf. Accessed: June 30, 2021.

Central Valley Regional Water Quality Control Board. 2006. Amendment to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Diazinon and Chlorpyrifos Runoff into the Sacramento-San Joaquin Delta. Available: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2006-0061.pdf. Accessed: June 30, 2021.

Central Valley Regional Water Quality Control Board. 2005. *Amending the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Mercury in Cache Creek, Bear Creek, Sulphur Creek, and Harley Gulch*. Available: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2005-0146.pdf. Accessed: June 30, 2021.

Central Valley Regional Water Quality Control Board. 2002. *Upper Sacramento River TMDL for Cadmium, Copper and Zinc Final Report*. Available: https://www.waterboards.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/upper_sacramento_cd_cu_zn/tmdl_final_rpt_apr2002.pdf. Accessed: June 30, 2021.

Colusa County. 2012a. *Chapter 5. Conservation Element. From: Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

Colusa County. 2012b. *Chapter 11. Public Services and Facilities Element. From: Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

County of Yolo. 2009. *2030 Countywide General Plan*. Planning and Public Works Department, Woodland, CA. Adopted November 10, 2009. Resolution No. 09-189.

Glenn County 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

San Francisco Bay Regional Water Quality Control Board. 2019. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*. Oakland, CA. Available: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/docs/ADA_compliant/BP_all_chapters.pdf. Accessed: October 27, 2020.

State of California. 2017. *Statewide Mercury Control Program for Reservoirs Summary*. Available: https://www.waterboards.ca.gov/water_issues/programs/mercury/reservoirs/docs/summary_april_2017.pdf. Accessed: March 12, 2021.

State Water Resources Control Board. 2019. *Cyanobacteria and Cyanotoxins in Drinking Water*. Available: https://www.waterboards.ca.gov/drinking_water/programs/habs/. Accessed: March 12, 2021.

State Water Resources Control Board. 2018. *Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary*. December 12. Available: https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf. Accessed: October 23, 2020.

Tehama County. 2009. *Tehama County General Plan Update 2009 – 2029*. Prepared by PMC. March.

U.S. Environmental Protection Agency. 2019. *Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories (AWQC/SA) for Microcystins and Cylindrospermopsin*. EPA 822-R-19-001. Available: https://www.epa.gov/sites/production/files/2019-05/documents/hh-rec-criteria-habs-document-2019.pdf. Accessed: March 11, 2021.

U.S. Environmental Protection Agency. 2020. *EPA Drinking Water Health Advisories for Cyanotoxins*. Available: https://www.epa.gov/cyanohabs/epa-drinking-water-health-advisories-cyanotoxins. Accessed: March 11, 2021.

Yolo County. 2004. *Yolo County Stormwater Management Program (SWMP) Planning Document*. March 2003; revised October 2004. Woodland, CA. Prepared by Larry

Walker Associates. Available: https://www.yolocounty.org/home/showdocument?id=2567. Accessed: October 25, 2020.

Chapter 7, Fluvial Geomorphology

None.

Chapter 8, Groundwater Resources

Colusa County. 2012a. *Chapter 5, Conservation Element. From: Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

Colusa County. 2012b. Chapter 11. *Public Services and Facilities Element. From: Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

County of Yolo. 2009. *2030 Countywide General Plan*. Planning and Public Works Department, Woodland, CA. Adopted November 10, 2009. Resolution No. 09-189.

Glenn County 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

Tehama County. 2009. *Tehama County General Plan*. Prepared by PMC. March.

Chapter 9, Vegetation Resources

California Department of Fish and Game and Yolo Basin Foundation. 2008. *Yolo Bypass Wildlife Area Land Management Plan*. June. Napa, CA. Prepared by EDAW, Inc, Sacramento, CA.

Colusa County. 2012. *Chapter 5, Conservation Element. From: Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

Glenn County. 2020. *Glenn County General Plan Update, Existing Conditions Report 2020*. Adopted. Glenn County, CA. February. Prepared by De Novo Planning Group. Available: https://static1.squarespace.com/static/5c8a73469b7d1510bee16785/t/5e556b56c253f84cdc287783/1582656403698/GlennCounty-ECR-Final-Feb2020.pdf.

National Invasive Species Council. 2016. *2016–2018 National Invasive Species Management Plan*. Washington, DC. Available: 2016-2018 NISC Management Plan (doi.gov).

State Water Resources Control Board. 2019a. *Cyanobacteria and Cyanotoxins in Drinking Water*. Available: https://www.waterboards.ca.gov/drinking_water/programs/habs/.

State Water Resources Control Board 2019b. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.* Adopted April 2, 2019. Available:

https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf.

Tehama County. 2009. *Tehama County General Plan Update, 2009-2029*. Adopted: March 2009. Red Bluff, CA.

Yolo County. 2009. *2030 Countywide General Plan*. Adopted: November 10, 2009. Woodland, CA.

Yolo Habitat Conservancy. 2020. *Yolo Habitat Conservancy*. Last revised: 2020. Available: https://www.yolohabitatconservancy.org/

Chapter 10, Wildlife Resources

California Department of Fish and Game and Yolo Basin Foundation. 2008. *Yolo Bypass Wildlife Area Land Management Plan*. June. Napa, CA. Prepared by EDAW, Inc, Sacramento, CA.

Colusa County. 2012. *Chapter 5, Conservation Element. From: Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

Glenn County. 2020. *Glenn County General Plan Update, Existing Conditions Report 2020*. Adopted. Glenn County, CA. February. Prepared by De Novo Planning Group. Available: https://static1.squarespace.com/static/5c8a73469b7d1510bee16785/t/5e556b56c253f84cdc287783/1582656403698/GlennCounty-ECR-Final-Feb2020.pdf.

Tehama County. 2009. *Tehama County General Plan Update, 2009-2029*. Adopted: March 2009. Red Bluff, CA.

Yolo County. 2009. *2030 Countywide General Plan*. Adopted: November 10, 2009. Woodland, CA.

Yolo Habitat Conservancy. 2020. *Yolo Habitat Conservancy*. Last revised: 2020. Available: https://www.yolohabitatconservancy.org/

Chapter 11, Aquatic Biological Resources

Andreen, L. A. and S. C. Jones. 2008. *The Clean Water Act, a Blueprint for Reform*. Center for Progressive Reform, CPR Shite Paper #802 (July 2008). The University of Alabama School of Law.

Bork, K. S., J.F. Krovoza, J. V. Katz, P. B. Moyle. 2012. *The Rebirth of California Fish and Game Code Section 5937: Water for Fish*. UC Davis Law Review, Volume 45. Available: https://lawreview.law.ucdavis.edu/issues/45/3/Topic/45-3_Bork.pdf.

Central Valley Regional Water Quality Control Board. 2018. *The Water Quality Control Plan (Basin Plan) for the California Regional water Quality Control Board, Central Valley*

Region, Fifth Edition, The Sacramento River Basin and the San Joaquin River Basin. Available: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf.

Colusa County. 2012. *Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

County of Yolo. 2009. *2030 Countywide General Plan*. Planning and Public Works Department, Woodland, CA. Adopted November 10, 2009. Resolution No. 09-189.

Glenn County 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

National Marine Fisheries Service. 2014. *Recovery Plan for the Evolutionarily Significant Units of Sacramento River Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the Distinct Population Segment of California Central Valley Steelhead*. California Central Valley Area Office. July 2014.

National Marine Fisheries Service. 2018. *Recovery Plan for the Southern Distinct Population Segment of North American Green Sturgeon (Acipenser medirostris)*. Sacramento, CA.

National Marine Fisheries Service. 2019. *Biological Opinion for the Biological Opinions on the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project. West Coast Region.*

Tehama County. 2009. *Tehama County General Plan Update 2009 – 2029*. Prepared by PMC. March.

U.S. Fish and Wildlife Service. 1996. *Sacramento-San Joaquin Delta Native Fishes Recovery Plan*. U.S. Fish and Wildlife Service, Portland, Oregon

U.S. Fish and Wildlife Service. 2019. *Biological Opinion for the Biological Opinions on the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project*. Sacramento, CA.

Chapter 12, Geology and Soils

Colusa County. 2012. *General Plan, Conservation Element*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

Glenn County. 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

Tehama County. 2009. *Tehama County General Plan Update, 2009-2029*. Adopted: March 2009. Red Bluff, CA.

Yolo County. 2009. *2030 Countywide General Plan*. Adopted: November 10, 2009. Woodland, CA.

Chapter 13, Minerals

California State Mining and Geology Board. n.d. *Guidelines for classification and designation of mineral lands*. Available at: https://www.conservation.ca.gov/smgb/Guidelines/ and https://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf.

Executive Office of the President. 2017. *A federal strategy to ensure secure and reliable supplies of critical minerals*. Federal Register, v. 82, n0. 246, p. 60835-60837, Accessed October 2, 2020; https://federalregister.gov/documents/2017/12/26/2017-27899/a-federal-strategy-to-ensure-secure-and-reliable-supplies-of-critical-minerals.

Glenn County. 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

U.S. Department of the Interior. 2017. *Critical mineral independence and security*. U.S. Department of the Interior, Order No. 3359, Accessed October 2, 2020; https://www.doi.gov/sites/doi.gov/files/uploads/so_criticalminerals.pdf.

Chapter 14, Land Use

Colusa County. 2012. *Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

County of Yolo. 2009. *2030 Countywide General Plan*. Planning and Public Works Department, Woodland, CA. Adopted November 10, 2009. Resolution No. 09-189.

County of Yolo. 2014. *Yolo County Community Services Department, Zoning Code (Title 8 of the Yolo County Code)*. Adopted July 2014. Available: https://www.yolocounty.org/home/showpublisheddocument?id=65510. Accessed November 12, 2020.

Glenn County 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

Chapter 15, Agriculture and Forestry Resources

Colusa County. 2012. *2030 General Plan: Agriculture Element*. Available: https://www.countyofcolusa.org/DocumentCenter/View/2719. Accessed: September 29, 2020.

Glenn County. 2020. *Glenn County General Plan Update: Existing Conditions Report*. Prepared by: De Novo Planning Group. Prepared for: Glenn County. Available: https://static1.squarespace.com/static/5c8a73469b7d1510bee16785/t/5e556b56c253f84cd

c287783/1582656403698/GlennCounty-ECR-Final-Feb2020.pdf. Accessed: September 29, 2020.

Yolo County. 2009. *2030 Countywide General Plan: Agriculture and Economic Development Element*. Available: https://www.yolocounty.org/general-government/general-government-departments/county-administrator/general-plan/adopted-general-plan. Accessed: September 29, 2020.

Chapter 16, Recreation Resources

California Department of Parks and Recreation's Division of Boating and Waterways. 2009. *ABCs of the California Boating Law*. Sacramento, CA. Available: 27 http://www.dbw.ca.gov/Pubs/Abc. Accessed: January 19, 2012.

Colusa County. 2012. *Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

County of Yolo. 2009. *Yolo County 2030 Countywide General Plan*. November 10. Woodland, CA. 24 Available: http://www.yolocounty.org/Index.aspx?page=1965. Accessed: January 17, 2012.

Glenn County. 1993. *Glenn County General Plan, Policy Plan*. Adopted June 15, 1993. Glenn County, CA.

Glenn County 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

Shasta-Trinity National Forest. 2014. *Management Guide, Shasta and Trinity Units*. Available at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3790610.pdf. Accessed on December 8, 2020.

Chapter 17, Energy

California Energy Commission 2019. *Building Energy Efficiency Standards for Residential and Nonresidential Buildings for the 2019 Building Energy Efficiency Standards Title 24, Part 6, and Associated Administrative Regulations, California Energy Commission, 2019*. Available: https://ww2.energy.ca.gov/2018publications/CEC-400-2018-020/CEC-400-2018-020-CMF.pdf Accessed November 27, 2020.

County of Colusa 2012. *Colusa County 2030 General Plan Public Services and Facilities Element*. County of Colusa, California. Adopted July 21, 2012. Available: https://www.countyofcolusa.org/DocumentCenter/View/2728 Accessed November 27, 2020.

County of Glenn 2020. *Glenn County Existing Conditions Report*. 2020. Available: https://static1.squarespace.com/static/5c8a73469b7d1510bee16785/t/5e556b56c253f84cd

c287783/1582656403698/GlennCounty-ECR-Final-Feb2020.pdf Accessed November 27, 2020.

———. 1993. *Glenn County General Plan, Policy Plan. Environmental Impact Report Glenn County General Plan Volume IV Adopted*. June 15, 1993. Glenn County, Available: https://www.countyofglenn.net/sites/default/files/images/4%20EIR%20Glenn%20County%20General%20Plan%20Vol.%20IV%20Reduced%20Size.pdf Accessed November 27, 2020.

Chapter 18, Navigation, Transportation, and Traffic

Glenn County. 1993. *Glenn County General Plan, Policy Plan*. Adopted June 15, 1993. Glenn County, CA.

Glenn County. 2019. *Glenn County Active Transportation Plan*. Adopted June 20, 2019.

Glenn County 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

Colusa County. 2012. *Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

Colusa County. 2019. *2018 Colusa County Regional Transportation Plan Update*. June.

County of Yolo. 2009. *2030 Countywide General Plan. Planning and Public Works Department, Woodland, CA*. Adopted November 10, 2009. Resolution No. 09-189.

Tehama County. 2009. *Tehama County General Plan Update 2009 – 2029*. Prepared by PMC. March.

Chapter 19, Noise

California Office of Noise Control. 1977. *Model Community Noise Control Ordinance*.

Colusa County. 2012. *Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

County of Yolo. 2009. *2030 Countywide General Plan*. Planning and Public Works Department, Woodland, CA. Adopted November 10, 2009. Resolution No. 09-189.

Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. September.

Glenn County 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

State of California. 2017. State of California General Plan Guidelines. Available: https://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf.

Tehama County. 2009. *Tehama County General Plan Update 2009 – 2029*. Prepared by PMC. March.

U.S. Environmental Protection Agency. 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. March.

Chapter 20, Air Quality

California Air Resources Board. 2016. *Ambient Air Quality Standards*. Last revised: May 4, 2016. Available: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed: October 1, 2019.

California Air Resources Board. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October. Available: https://ww2.arb.ca.gov/sites/default/files/classic//diesel/documents/rrpfinal.pdf. Accessed May 24, 2021.

Colusa County. 2012. *Colusa County General Plan*. Available: http://www.countyofcolusageneralplan.org/sites/default/files/Colusa_County_General_Plan_adoptedJuly2012.pdf. Accessed: October 28, 2020.

Colusa County Air Pollution Control District. 2002. *Rules and Regulations*. Available: https://countyofcolusa.org/836/Rules-and-Regulations. Accessed: October 28, 2020.

Glenn County. 2020. *Glenn County General Plan Update | Existing Conditions Report 2020*. Available: https://static1.squarespace.com/static/5c8a73469b7d1510bee16785/t/5e556b56c253f84cdc287783/1582656403698/GlennCounty-ECR-Final-Feb2020.pdf. Accessed: October 28, 2020.

Glenn County Air Pollution Control District. 2010. *Regulations of the Air Pollution Control District of Glenn County*. Available: https://www.countyofglenn.net/sites/default/files/Agriculture/AP%20Regs%20Book%201%202010update.pdf. Accessed: October 28, 2020.

Sacramento Valley Air Quality Engineering and Enforcement Professionals. 2018. *Northern Sacramento Valley Planning Area 2018 Triennial Air Quality Attainment Plan*. Available: http://www.airquality.org/SVBAPCC/Documents/2018%20Triennial%20Report.pdf. Accessed November 23, 2020.

Tehama County. 2009. *Tehama County General Plan*. Available: https://www.co.tehama.ca.us/images/stories/planning/2009-

2029%20Tehama%20County%20General%20Plan%20r1.pdf. Accessed October 28, 2020.

Tehama County Air Pollution Control District. 2015. *Current Rules*. Available: https://www.tehcoapcd.net/rules/. Accessed: October 28, 2020.

U.S. Environmental Protection Agency. 2020. *Basic Information About Air Quality SIPs*. Last Revised: August 3, 2020. Available: https://www.epa.gov/sips/basic-information-air-quality-sips. Accessed October 28, 2020.

Yolo County. 2009. *2030 Countywide General Plan*. Adopted: November 10, 2009. Woodland, CA.

Yolo-Solano Air Quality Management District. 2007. *Handbook for Assessing and Mitigating Air Quality Impacts*. Available: http://www.ysaqmd.org/wp-content/uploads/Planning/CEQAHandbook2007.pdf. Accessed October 28, 2020.

Chapter 21, Greenhouse Gas Emissions

Ledbetter, Ian. Glenn County Air Pollution Control District. October 9, 2021 – phone call with ICF regarding air quality and greenhouse gas emissions thresholds for CEQA purposes.

Ryan, Casey. Colusa County Air Pollution Control District. October 14, 2021 — phone call with ICF regarding air quality and greenhouse gas emissions thresholds for CEQA purposes.

Supreme Court of the United States. 2007. *Massachusetts, et. al., Petitioners v. Environmental Protection Agency et al*. Available: https://www.law.cornell.edu/supct/pdf/05-1120P.ZO. Accessed: May 24, 2021.

Tehama County. 2009. *Tehama County General Plan*. Available: https://www.co.tehama.ca.us/images/stories/planning/2009-2029%20Tehama%20County%20General%20Plan%20r1.pdf. Accessed October 28, 2020.

Tehama County Air Pollution Control District. 2015. *Air Quality Planning & Permitting Handbook – Guidelines for Assessing Air Quality Impacts*. Available: https://tehcoapcd.net/PDF/CEQA%20Handbook%20Mar%202015%20Final.pdf. Accessed October 29, 2020.

Yolo-Solano Air Quality Management District. 2007. *Handbook for Assessing and Mitigating Air Quality Impacts*. Available: http://www.ysaqmd.org/wp-content/uploads/Planning/CEQAHandbook2007.pdf. Accessed October 28, 2020.

Yolo County. 2009. *2030 Countywide General Plan*. Available: https://www.yolocounty.org/home/showdocument?id=14457. Accessed: October 30, 2020.

Chapter 22, Cultural Resources

Colusa County. 2012. *Colusa County General Plan*. Conservation Element. Adopted July 31. Prepared by De Novo Planning Group. Available: https://www.countyofcolusa.org/137/General-Plan. Accessed: October 19, 2020.

County of Yolo. 2009. *2030 Countywide General Plan*. Adopted November 10, 2009. Available: https://www.yolocounty.org/general-government/general-government-departments/county-administrator/general-plan.

Glenn County. 2020. *Glenn County General Plan Update, Existing Conditions Report 2020*. Prepared by De Novo Planning Group. Available: https://glenncounty.generalplan.org/. Accessed: October 19, 2020.

Tehama County. 2009. *General Plan. Open Space and Conservation Element*. Prepared by PMC. March.

Chapter 23, Tribal Cultural Resources

Colusa County. 2012. *Colusa County General Plan*. Conservation Element. Adopted July 31. Prepared by De Novo Planning Group. Available: https://www.countyofcolusa.org/137/General-Plan. Accessed: October 19, 2020.

County of Yolo. 2009. *2030 Countywide General Plan*. Adopted November 10, 2009. Available: https://www.yolocounty.org/general-government/general-government-departments/county-administrator/general-plan.

Glenn County. 2020. *Glenn County General Plan Update, Existing Conditions Report 2020*. Prepared by De Novo Planning Group. Available: https://glenncounty.generalplan.org/. Accessed: October 19, 2020.

Tehama County. 2009. *General Plan. Open Space and Conservation Element*. Prepared by PMC. March.

Chapter 24, Visual Resources

California Department of Transportation. 2019. *List of Eligible and Officially Designated State Scenic Highways*. Available https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Last updated: July 2019. Accessed: October 19, 2020.

Colusa County. 2012. *Colusa County General Plan*. Adopted: July 31, 2012. Colusa County, CA.

Glenn County. 2020. *Glenn County General Plan Update, Existing Conditions Report 2020*. Adopted: February 2020. Glenn County, CA.

———. 1993. *Glen County General Plan, Policy Plan*. Adopted. June 15, 1993. Glenn County, CA.

Tehama County. 2009. *Tehama County General Plan Update, 2009-2029*. Adopted: March 2009. Red Bluff, CA.

Yolo County. 2009. *2030 Countywide General Plan*. Adopted: November 10, 2009. Woodland, CA.

Chapter 25, Population and Housing

California Department of Housing and Community Development. 2020. *Regional Housing Needs Allocation and Housing Elements Website*. Available: https://www.hcd.ca.gov/community-development/housing-element/index.shtml Accessed: October 22, 2020.

Chapter 26, Public Services and Utilities

California Integrated Waste Management Board. 2009. *Tiered Regulatory Placement Criteria*. Available: 19. Accessed: June 24, 2009

Colusa County. 2012. *Colusa County General Plan. Prepared by De Novo Planning Group*. Adopted July 31, 2012.

Glenn County. 1993. *Glenn County General Plan, Policy Plan*. Adopted June 15, 1993. Glenn County, CA.

Glenn County 2020. *Glenn County General Plan Update, Existing Conditions Report*. Glenn County, California. Prepared by De Novo Planning Group, February 2020.

Chapter 27, Public Health and Environmental Hazards

California Department of Forestry and Fire Protection (CAL FIRE). May 2007. *California's Fire Hazard Severity Zones*. Available: https://www.sccgov.org/sites/dpd/DocsForms/Documents/Fire_Hazard_Zone_Fact_Sheet.pdf. Accessed: October 27, 2020.

California Office of Environmental Health Hazard Assessment (OEHHA). 2020a. *A Guide to Eating Fish from the Sacramento River and Northern Delta*. Updated May 2020. Available: https://oehha.ca.gov/media/downloads/advisories/sacramentorvndeltaposterenglish.pdf. Accessed: November 3, 2020.

California Office of Environmental Health Hazard Assessment (OEHHA). 2020b. *How to Follow Advisories*. Available: https://oehha.ca.gov/fish/how-follow-advisories. Accessed: November 3, 2020.

California Office of Environmental Health Hazard Assessment (OEHHA).2018a. *A Guide to Eating Fish from the Central and South Delta*. Available: https://oehha.ca.gov/media/downloads/advisories/deltacentralsouthposter082418.pdf. Accessed: November 3, 2020.

California Office of Environmental Health Hazard Assessment (OEHHA).2018b. *A Guide to Eating Fish from California Lakes and Reservoirs*. Available: https://oehha.ca.gov/media/downloads/advisories/statewidelakesposter021218.pdf. Accessed: November 3, 2020.

California Office of Environmental Health Hazard Assessment (OEHHA). 2018c. *A Guide to Eating American Shad, Chinook Salmon, Steelhead Trout, Striped Bass, and White Sturgeon in California Rivers, Estuaries, and Coastal Waters*. https://oehha.ca.gov/media/downloads/advisories/anadromousposter070218.pdf. Accessed: November 3, 2020.

California Office of Environmental Health Hazard Assessment (OEHHA). 2018d. *A Guide to Eating Fish from Lake Oroville (Butte County).* Available: https://oehha.ca.gov/media/downloads/advisories/lakeorovilleposter.pdf. Accessed: May 18, 2021.

California Office of Environmental Health Hazard Assessment (OEHHA). 2018e. *A Guide to Eating Fish from the Lower Feather River (Butte, Sutter, and Yuba Counties).* Available: https://oehha.ca.gov/media/downloads/advisories/posterlowerfeatherriver060618.pdf. Accessed: May 18, 2021.

California Office of Environmental Health Hazard Assessment (OEHHA). 2018f. *A Guide to Eating Fish from Folsom Lake (Sacramento, El Dorado, and Placer Counties).* Available: https://oehha.ca.gov/media/downloads/advisories/folsomlakeposter.pdf. Accessed: May 18, 2021.

California Office of Environmental Health Hazard Assessment (OEHHA). 2018g. *A Guide to Eating Fish from the Lower American River (Sacramento County)*. Available: https://oehha.ca.gov/media/downloads/advisories/loamericanrvposter042018.pdf. Accessed: May 18, 2021.

California Office of Environmental Health Hazard Assessment (OEHHA). 2017. *A Guide to Eating Fish from San Luis Reservoir (Merced County)*. Available: https://oehha.ca.gov/media/downloads/advisories/sanluisreservoirposter102417.pdf. Accessed: May 18, 2021.

Colusa County. 2012. *Colusa County General Plan, Safety Element*. Available: https://www.countyofcolusa.org/137/General-Plan. Accessed: October 30, 2020.

Colusa Mosquito Abatement District. n.d. *About Us*. Available: https://colusamosquitoabatementdistrict.com/services.html. Accessed: October 30, 2020.

Glenn County. 2020. *Existing Conditions Report, Public Safety Element*. Available: https://icfonline.sharepoint.com/sites/EP/SitesProgram/Admin%20Draft%20EIREIS/_Resources/General%20Plans/Glenn%20County%20General%20Plan/GlennCounty-ECR-Final-Feb2020.pdf?CT=1604007863107&OR=ItemsView. Accessed: October 30, 2020.

Glenn County Mosquito and Vector Control. 2020. *About the District*. Available: https://glennmosquito.specialdistrict.org/about-us. Accessed: October 30, 2020

Sacramento-Yolo Mosquito and Vector Control. 2018. *Integrated Pest Management*. Available: https://www.fightthebite.net/programs/integrated-pest-management/. Accessed: October 30, 2020.

Tehama County. 2018. *Tehama County General Plan Safety Element 2018 Update*. Available: https://tehamacounty.ca.gov/images/stories/planning/2009-2029%20Tehama%20County%20General%20Plan%20r1.pdf. Accessed: October 30, 2020.

Yolo County. 2009. *County of Yolo 2030 Countywide General Plan*. Pages 24-26. Available: https://www.yolocounty.org/home/showdocument?id=14463. Accessed: October 30, 2020.

Chapter 28, Climate Change

California DWR. 2008. *Managing an Uncertain Future: Climate Adaptation Strategies for Water*. Available at: https://www.scc.ca.gov/webmaster/ftp/pdf/climate_change/water_strategies.pdf.

California DWR. 2017. *Central Valley Flood Protection Plan*. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Flood-Management/Flood-Planning-and-Studies/Central-Valley-Flood-Protection-Plan/Files/2017-CVFPP-Update-FINAL_a_y19.pdf.

California DWR 2018. *California Water Plan Update*. Available at: https://water.ca.gov/Programs/California-Water-Plan/Update-2018.

State of California. 2018. *Safeguarding California*. Available at: https://resources.ca.gov/CNRALegacyFiles/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf.

U.S. Army Corps of Engineers. 2014. *Climate Change Adaptation Plan and Report*. Available at: https://www.usace.army.mil/portals/2/docs/sustainability/performance_plans/2014_usace_climate_change_adaptation_plan.pdf.

U.S. Bureau of Reclamation. 2016. *SECURE Water Act Section 9503(c)—Reclamation Climate Change and Water 2016*. Available at: https://www.usbr.gov/climate/secure/docs/2016secure/2016SECUREReport.pdf.

U.S. Department of the Interior. 2020. *U.S. Department of the Interior WaterSMART (Sustain and Manage America's Resources for Tomorrow)*. Available at: https://www.usbr.gov/watersmart/.

U.S. Fish and Wildlife Service. 2010. *Rising to the Urgent Challenge: Strategic Plan for Responding to Accelerating Climate Change*. Available at: https://www.fws.gov/home/climatechange/pdf/ccstrategicplan.pdf.

U.S. Geological Survey. 2009. *Climate Change and Water Resources Management: A Federal Perspective*. Available at: https://pubs.usgs.gov/circ/1331/Circ1331.pdf.

U.S. Geological Survey Water. 2010. *The Nation's Fundamental Climate Issue: A White Paper on the U.S. Geological Survey Role and Capabilities*. Available at: https://pubs.usgs.gov/circ/1347/pdf/circ-1347.pdf.

Chapter 29, Indian Trust Assets

No references.

Chapter 30, Environmental Justice and Socioeconomics

Colusa County. 2012. Chapter 6. *Economic Development Element. From: Colusa County General Plan*. Prepared by De Novo Planning Group. Adopted July 31, 2012.

Congressional Research Service. n.d. *Housing and Community Development Act of 1974 Bill Summary*. Available: https://www.congress.gov/bill/93rd-congress/senate-bill/3066#:~:text=Housing%20and%20Community%20Development%20Act%20of%201974%20%2D%20Title%20I%3A%20Community,help%20finance%20Community%20Development%20Programs.

Council on Environmental Quality (CEQ). 1997. *Environmental Justice: Guidance under the National Environmental Policy Act*. Available: https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

Glenn County. 1993. *Glenn County General Plan, Policy Plan*. Adopted June 15, 1993. Glenn County, CA.

U.S. Department of the Interior. 1995. *Environmental Compliance Memorandum No. ECM95-3*. Available: https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/ECM-95-3.pdf.

Yolo County. 2009. *2030 Countywide General Plan*. Adopted: November 10, 2009. Woodland, CA.