Appendix A 2035 General Plan and CAP EIR Executive Summary Table 2-1

Table 2-1. Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
4.1 Aesthetics and Visual Resources			
IMPACT 4.1-1 Substantial Adverse Effect on a Scenic Vista. Implementation of the Proposed Project would change views of farmland from individual parcels, but it would not have a substantial adverse effect on a scenic vista. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.1-2 Substantially Damage Scenic Resources, Including, but not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway. There is no state scenic highway within or in close proximity to the Planning Area. In addition, policies and implementation programs in the Proposed Project require that the city's tree canopy is managed and improved and that historic buildings are preserved. There are no rock outcroppings in the Planning Area. The impact is less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.1-3 Substantially Degrade the Existing Visual Character or Quality of the Site and its Surroundings. The Proposed Project facilitates new development that will change the existing visual character of the Planning Area. However, impacts on visual character and quality of the site are subjective and variable between different individuals. The impact is considered significant.	S	None available.	SU
IMPACT 4.1-4 Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area. Implementation of the Proposed Project would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The impact is considered significant.	S	**Mitigation Measure 4.1-4 – The 2035 General Plan should be amended to include the following new policies:** Policy 2.F.4 Light Pollution. Control artificial lighting to avoid spill-over lighting and preserve the night sky. Policy 2.F.5 Glare. Control artificial lighting to prevent glare.	SU
4.2 Agriculture and Forestry Resources			
IMPACT 4.2-1 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as Shown on the Maps Prepared Pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to Non-Agricultural Use. Implementation of the Proposed Project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The impact is considered significant.	S	**Mitigation Measure 4.2-1 – The 2035 General Plan should be amended to include the following modified policy:** Policy 2.A.3 Agricultural Mitigation. For impacts to agriculture within the ULL, require one acre to be permanently conserved for every acre converted to urban development. <u>The farmland being conserved must be of the same Farmland Mapping and Monitoring Program type (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance) as the farmland that is being converted, or of a type of higher quality, and the conserved farmland should be located as close to the Woodland ULL as possible.</u>	SU
IMPACT 4.2-2 Conflict with Existing Zoning For Agricultural Use, or a Williamson Act Contract. There are parcels currently zoned for agricultural use in the Planning Area; however, the 2002 General Plan specifies that the City may allow development on land zoned Agriculture when it is needed for urban development. There are properties adjacent to new growth areas under Williamson Act contracts, but policies in the 2035 General Plan reduce potential impacts on these properties. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.2-3 Involve Other Changes in the Existing Environment that, Due to Their Location or Nature, Could Result in Conversion of Farmland, to Non-Agricultural Use. Policies in the 2035 General Plan emphasize the importance of agriculture to Woodland and support the viability of farming operations; however, implementation of the Proposed Project would result in the conversion of farmland to non-agricultural use. The impact is considered significant and unavoidable.	S	**Mitigation Measure 4.2-3 – The 2035 General Plan should be amended to include the following new policy:** Policy 7.C.5 Agricultural Buffer. Require new development that occurs at the edge of the ULL to be set back a minimum of 300 feet from adjacent agricultural land where possible. Equivalent means of providing agricultural buffers may be considered by the Planning Commission on a case by case basis for parcels whose dimensions would preclude or severely limit development potential with the required buffer size. The buffer shall be landscaped and may include public right of way.	SU
4.3 Air Quality			
IMPACT 4.3-1 Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors. Emissions of criteria air pollutants and precursors could exceed an ambient air quality standard or contribute substantially to an existing or predicted air quality exceedance. The level of construction emissions could conflict with or obstruct implementation of the applicable air quality plan. YSAQMD recommends that lead agencies incorporate construction mitigation measures, and the Proposed Project has policies that would reduce this impact. However, given the scale of the Proposed Project, the City cannot determine that potential construction impacts would be below relevant significance thresholds throughout the planning horizon. The impact is considered significant.	S	**Mitigation Measure 4.3-1a – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Air Quality 1)** New developments that could generate a potentially significant short-term air quality impact shall incorporate feasible construction mitigation strategies, including those listed below, those included in an updated set of mitigation recommendations prepared by the Yolo-Solano Air Quality Management District, or those determined by the City to be as effective: a. Water all active construction areas at least twice daily. b. Haul trucks shall maintain at least two feet of freeboard. c. Cover all trucks hauling soil, sand, and other loose materials. d. Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut-and-fill operations and hydroseed area. e. Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days). f. Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land. g. Plant vegetative ground cover in disturbed areas as soon as possible. h. Cover inactive storage piles.	SU

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		i. Sweep streets if visible soil material is carried out from the construction site. j. Treat accesses to a distance of 100 feet from the paved road with a 6 to 12 inch layer of wood chips or mulch. k. Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel. l. Limit all idling of vehicles and equipment that use gasoline or diesel fuel to five minutes maximum. m. Use alternative power source, such as electricity, for construction equipment or use reformulated and emulsified fuels, incorporate catalyst and filtration technologies, and generally modernize the equipment fleet with cleaner and newer engines. **Mitigation Measure 4.3-1b – Policy 7.F.2. will be amended as follows:** Policy 7.F.2 Best Management Practices. Require all projects to implement Best Management Practices (BMPs) for reducing air pollutant emissions associated with the construction and operation of development projects as a standard City condition of approval.	
IMPACT 4.3-2 Generation of Long-Term Operational Emissions of Criteria Air Pollutants and Precursors. Long-term operational emissions would be generated from day-to-day activities associated with residential and non-residential land uses under the Proposed Project. Operational emissions associated with the Proposed Project would exceed applicable YSAQMD thresholds. The level of operational emissions could conflict with or obstruct implementation of the applicable air quality plan. Proposed Project policies would reduce potentially significant impacts, but not to a level that would be below relevant thresholds. The impact is considered significant.	S	**Mitigation Measure 4.3-2 – Implement Mitigation Measure 4.3-1b.**	SU
IMPACT 4.3-3 Expose Sensitive Receptors to Substantial Pollutant Concentrations. Project-related vehicle trips would contribute vehicles to local intersections that could cause a CO hotspot (i.e., exceedance of the CO ambient air quality standard). However, it is not anticipated that the Proposed Project's land uses would contribute substantial vehicle volumes to existing or future intersections that could cause a CO hotspot. During construction and operation of the Proposed Project, localized air quality emissions would be generated that could affect existing and proposed sensitive receptors. Construction activities would generate diesel particulate matter (diesel PM) emissions that could affect existing and proposed sensitive receptors. Existing regulations and proposed policies and implementation programs would reduce potential exposure to substantial pollutant concentrations. The impact is considered significant.	S	**Mitigation Measure 4.3-3a – Policy 7.F.3 should be amended as follows:** Policy 7.F.3. Protect Sensitive Receptors. For the purposes of environmental review of potential toxic air contaminant impacts, consider residentially designated land uses, hospitals _____ __ esidential care facilities, _____ care centers, playgrounds to be "sensitive receptors." Discourage the location of new sensitive receptor uses within 500 feet of a limited access state highway (SR 113 and 1-5). Implement applicable buffer distances recommended by the California Air Resources Board between sensitive uses and sources of substantial pollutant concentrations.	LTS for construction-related SU for stationary source exposure
		Mitigation Measure 4.3-3b – Implement Mitigation Measure 4.3-1b. **Mitigation Measure 4.3-3c – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Air Quality 2)** a. New development shall be required to demonstrate adherence with applicable YSAQMD-recommended health risk thresholds involving sensitive receptors, uses that involve substantial truck trips, and large gas stations, as defined by the applicable regulations. "Substantial truck trips" is defined as more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or TRU unit operations that exceed 300 hours per week. A "large gas station" is one that would be anticipated to accommodate a throughput of 3.6 million gallons per year or greater. b. Proposed uses that include sensitive receptors may demonstrate compliance with this implementation program by providing a minimum 1,000-foot buffer from existing uses that involve substantial truck trips and a minimum 50-foot buffer from existing large gas stations. c. Proposed uses that involve substantial truck trips may demonstrate compliance with this implementation program by providing a minimum 1,000-foot buffer from properties where the City's land use designation would allow sensitive receptors. d. Proposed large gas stations may demonstrate compliance with this implementation program by providing a minimum 300-foot buffer, while typical gas dispensing facilities would provide a minimum 50-foot buffer from existing sensitive receptors and from properties where the City's land use designation would allow sensitive receptors. e. Avoid siting new sensitive receptors within 500 feet of the edge of the closest travel lane of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. f. Avoid siting new sensitive land uses within 300 feet of any existing dry cleaning operation.	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		g. As an alternative to these buffer distances, proposed sensitive receptors, uses that involve substantial truck trips, and large gas stations may provide a site-specific health risk assessment, using methods consistent with applicable guidance from the Office of Environmental Health Hazard Assessment, with mitigation, if necessary, to demonstrate compliance with applicable YSAQMD-recommended health risk thresholds. When health risk impacts exceed YSAQMD-recommended thresholds, feasible on-site mitigation measures to reduce TAC exposure shall be implemented to mitigate health risk impacts below YSAQMD thresholds. On-site measures could include, but are not limited to providing enhanced filtration systems (e.g., MERV 13 or greater) for near-by sensitive receptor buildings, changes to the TAC emission source's operation, and positioning of exhaust and intake for ventilation systems to minimize exposure among others. **Mitigation Measure 4.3-3d – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Air Quality 3)** a. New development that would require the use of diesel-fueled construction equipment within 300 feet of an existing sensitive receptor use an equipment mix, incorporate buffering, schedule construction activities, or use other strategies to reduce potential health risk consistent with guidance from the Yolo-Solano Air Quality Management District. b. Alternatively, a project applicant may prepare a site-specific estimate of diesel PM emissions associated with total construction activities and evaluate for health risk impact on existing sensitive receptors in order to demonstrate that applicable YSAQMD-recommended thresholds for toxic air contaminants would not be exceeded or that applicable thresholds would not be exceeded with the application of alternative mitigation techniques approved by the City.	
IMPACT 4.3-4 Objectionable Odors Affecting a Substantial Number of People. The Proposed Project includes policies that would avoid exposure of a substantial number of people to objectionable odors. The impact is less than significant.	LTS	No mitigation is required.	LTS
4.4 Biological Resources			
IMPACT 4.4-1 Loss of Special-status Plants and Loss of Special-status Plant Habitat. Implementation of the Proposed Project would result in conversion of habitat for special-status plant species, which could result in loss of special-status plants either through direct removal or through habitat degradation. The impact is considered potentially significant.	PS	**Mitigation Measure 4.4-1a – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Biological Resources 1)** a. The City will require biological inventory surveys for new developments that could affect special-status species or sensitive habitat in areas designated for development under the General Plan. b. The City will work with project applicants to identify opportunities to preserve special-status species occurrences and sensitive habitats through design and planning. If the HCP/NCCP is adopted and state and federal ITPs have been issued, the City shall implement the applicable requirements of the HCP/NCCP as relevant to any specific land use project. If the HCP/NCCP is not in place and/or ITPs have not been issued, the City shall follow the steps described below. c. If the City determines it is reasonable and feasible to do so, while still achieving the specific project development goals and objectives, the City will require preservation of occupied special-status species habitat and sensitive habitat types as a condition of project approval. If adverse effects cannot be avoided, project proponents shall be required to mitigate all adverse effects in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species and habitat, including surveys conducted according to applicable standards and protocols, where necessary, implementation of impact minimization measures based on accepted standards and guidelines and best available science, and compensatory mitigation for unavoidable loss of special-status species and sensitive habitats. d. If the project would result in take of state or federally listed species, the City will require project proponent/s to obtain take authorization from the U.S. Fish & Wildlife Service or the California Department of Fish and Wildlife, as appropriate, depending on species status, and comply with all conditions of the take authorization. e. If the Yolo HCP/NCCP is not adopted or the affected species or habitat is not covered under the plan, the City will require project applicants to develop a mitigation and monitoring plan, in coordination with CDFW and/or USFWS, as appropriate depending on species status, to compensate for the loss of special-status species and sensitive habitats. The mitigation and monitoring plan will describe in detail how loss of special-status species or sensitive habitats shall be avoided or offset, including details on restoration and creation of habitat, compensation for the temporal loss of habitat, management and monitoring to avoid indirect habitat degradation (e.g., management of invasive plant species, maintenance of required hydrology), success criteria ensuring that habitat function goals and objectives are met and target special-status species are established, performance standards to ensure success, and remedial actions if performance standards are not met. The plan will include detailed information on the habitats present within the preservation and mitigation areas, the long-term management and monitoring of these habitats, legal protection for the preservation and mitigation areas (e.g., conservation easement, declaration of restrictions), and funding mechanism information (e.g., endowment). f. If available, purchase of mitigation credits at an agency-approved mitigation bank (i.e., approved by the agency with jurisdiction over the affected species or habitat) in Yolo County, will be acceptable for compensatory mitigation for special-status species that are not covered under the Yolo HCP/NCCP.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Mitigation Measure 4.4-1b – Policy 7.B.5., Policy 7.B.7, and Policy 7.B.11 should be amended as follows: Policy 7.B.5 Open Space for Conservation. Where appropriate, permanently protect as open space areas of natural resource value, including sensitive habitat t es (e alkali sink and rairie freshwater wetlands freshwater marsh ri arian forest drainages), ~~wetland preserves, riparian corridors, woodlands,~~ special-status plant occurrences, and floodplains. ~~Support the maintenance of open space and natural areas that are interconnected and of sufficient size to protect biodiversity, accommodate wildlife movement, and sustain ecosystems.~~ Maintain connectivity between open space areas designated for habitat conservation values within the Planning Area as well as linkages to adjacent habitats outside of the Planning Area, such as Willow Slough, Cache Creek, and habitat preserves to the east. Policy 7.B.7 Woodland Regional Park. Protect and maintain Woodland Regional Park as an important wildlife preserve and habitat for ~~rare native~~ special-status plants and allow for public access that is compatible with and promotes public education of the site's habitat value. Policy 7.B.11 Sensitive Site Planning. Site new development to maximize the protection of native tree species and ~~sensitive~~ special-status plant and wildlife habitats.	
IMPACT 4.4-2 Loss and Degradation of Habitat for Special-status Wildlife Species and Potential Direct Take of Individuals. Implementation of the Proposed Project would allow conversion of undeveloped land that currently supports known occupied and potential habitat for special-status wildlife species to residential, commercial, and other developed land uses. Buildout of the Proposed Project would result in loss and degradation of suitable habitat for several special-status wildlife species and could result in take of State- and Federally-listed wildlife species and loss or displacement of special-status wildlife populations. However, implementation of the 2035 General Plan policies and implementation program and compliance with state and federal laws, along with the General Plan Land Use Diagram would reduce potential impacts on special-status wildlife species. The impact is considered potentially significant.	PS	**Mitigation Measure 4.4-2a – Policy 7.B.6 and 7.B.8 should be amended as follows:** Policy 7.B.6. Open Space Buffer. Continue to work with Yolo County and the City of Davis to maintain the permanent open space buffer between County Roads 27 and 29 and its existing wildlife habitat values. Policy 7.B.8 Native and Compatible Non-Native Plant Species. Require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in order to preserve the visual integrity of the landscape_----- provide benefits ~~habitat conditions suitable~~ for native wildlife, and ensure that a variety of plants suited to the region are maintained. **Mitigation Measure 4.4-2b – Implement Mitigation Measure 4.4.1a** **Mitigation Measure 4.4-2c – Implement Mitigation Measure 4.4.1b**	LTS
IMPACT 4.4-3 Loss and Degradation of Riparian Habitat or Other Sensitive Natural Communities. Implementation of the Proposed Project would result in conversion of undeveloped land that currently supports a limited amount of riparian habitat and possibly remnant alkali prairie to residential, commercial, and other developed land uses. (All other sensitive natural communities, including vernal pool habitats and other freshwater wetlands found in the Planning Area are addressed under impacts on federally protected wetlands and are not discussed here.) Therefore, buildout of the Proposed Project could result in loss and degradation of riparian or alkali prairie habitat. However, implementation of the 2035 General Plan policies and implementation programs and compliance with state and federal laws, along with the General Plan Land Use Diagram would reduce potential impacts on riparian habitat and other sensitive natural communities. The impact is considered potentially significant.	PS	**Mitigation Measure 4.4-3a – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Biological Resources 3):** If the project would result in fill or alteration of a waterway or any body of water supporting riparian forest habitat, the City will require project proponent/s to notify the California Department of Fish and Wildlife, obtain a Lake and Streambed Alteration Agreement if determined necessary by the California Department of Fish and Wildlife, and comply with all conditions of the Lake and Streambed Alteration Agreement. **Mitigation Measure 4.4-3b – Implement Mitigation Measure 4.4-1a** **Mitigation Measure 4.4-3c – Implement Mitigation Measure 4.4-1b** **Mitigation Measure 4.4-3d – Implement Mitigation Measure 4.4-2a**	LTS
IMPACT 4.4-4 Loss and Degradation of Federally Protected Wetlands. Implementation of the Proposed Project would result in conversion of land that currently supports waterways and ponds and may support freshwater marsh, vernal pools, and other freshwater wetlands to residential, commercial, and other developed land uses. These wetland habitats and other waters may be protected under Section 404 of the CWA. Therefore, buildout of the Proposed Project could result in loss and degradation of federally protected wetlands. The impact is considered potentially significant.	PS	**Mitigation Measure 4.4-4a – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Biological Resources 3)** If the project would result in ground disturbance on sites containing waterways or other aquatic habitats, the City will require project proponent/s to complete a delineation of waters of the United States according to U.S. Army Corps of Engineers' methods, and to submit the completed delineation to the U.S. Army Corps of Engineers for jurisdictional determination. If the project would result in fill of wetlands or other waters of the United States, the City will require project proponent/s to obtain a Section 404 Clean Water Act permit from the U.S. Army Corps of Engineers and water quality certification from the Regional Water Quality Control Board pursuant to Section 401 of the Clean Water Act. If the project involves work in areas containing waters disclaimed by the USACE, project applicants shall obtain a Waste Discharge Requirement permit from the Regional Water Quality Control Board pursuant to the Porter Cologne Act. Project applicants shall be required to obtain all needed permits prior to project implementation, to abide by the conditions of the permits, including all mitigation requirements, and to implement all requirements of the permits in the timeframes required therein. **Mitigation Measure 4.4-4b – Implement Mitigation Measure 4.4-1a** **Mitigation Measure 4.4-4b – Implement Mitigation Measure 4.4-1b**	LTS
IMPACT 4.4-5 Interference with Wildlife Movement Corridors and Nursery Sites. The Proposed Project plans for development within the Pacific flyway, a major bird migration route. However, buildout of the Proposed Project would not create a barrier to movement of migratory species or alter the character of existing habitat available to migrating birds such that it would no longer function as a migratory corridor. This impact is considered less than significant.	LTS	No mitigation is required.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 4.4-6 Conflict with Local Ordinances Protecting Biological Resources. The 2035 General Plan policies and compliance with City ordinance would reduce potential impacts on protected trees. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.4-7 Conflict with an Adopted Habitat Conservation Plan Natural Community Conservation Plan. The General Plan Land Use Diagram and 2035 General Plan policies and implementation programs have been designed to provide consistency with the proposed Yolo HCP/NCCP. This impact is considered significant.	S	**Mitigation Measure 4.4-7a – Implement Mitigation Measure 4.4-1a** **Mitigation Measure 4.4-7b – Implement Mitigation Measure 4.4-1b** **Mitigation Measure 4.4-7c – Implement Mitigation Measure 4.4-2a**	LTS
IMPACT 4.4-8 Substantial Reduction in the Habitat of a Fish or Wildlife Species, Cause a Fish or Wildlife Population to Drop Below Self-Sustaining Levels, Eliminate a Plant or Animal Community, or Substantially Reduce the Number or Restrict the Range of an Endangered, Rare, or Threatened Species. Implementing the Proposed Project would not substantially reduce the habitat of a fish or wildlife species, eliminate a plant or animal community, or substantially reduce the number or restrict the range of any endangered, rare, or threatened species because the majority of known occurrences of special-status species and their habitat would be preserved. This impact is less than significant.	LTS	No mitigation is required.	LTS
4.5 Climate Change, Greenhouse Gas Emissions, and Energy			
IMPACT 4.5-1 Generation of Greenhouse Gas Emissions. Implementation of the Proposed Project would implement planned land uses that would involve short-term GHG emissions associated with construction and infrastructure improvements, along with long-term operational emissions. However, policies and reduction strategies within the 2035 General Plan and the 2035 CAP would ensure that the City achieves its share of AB 32, Executive Order B-30-15, and Executive Order S-3-05 emissions reductions. The impact is less than cumulatively considerable.	CC	**Mitigation Measure 4.5-1a – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Greenhouse Gas Emissions 1)** a. The City will maintain a Climate Action Plan designed to achieve the reduction targets for land use-related emissions for the years 2020 and 2035 and put the City on a trajectory toward goals for longer-term years, such as 2050. The City's reduction targets may be revised over time, but will represent a rate of emissions that is efficient enough to provide for Woodland's share of AB 32, Executive Order B-30-15, SB 32, and Executive Order S-3-05 emissions reductions. b. The Climate Action Plan will focus on GHG emission sectors over which the City could have influence – either through entitlement authority, public investments, incentives, or other feasible means. When making the comparison between Woodland's GHG efficiency and that required for the state as a whole, the City can remove from consideration GHG sources that are beyond local control. c. The City will monitor relevant local, regional, State, and federal legislation and regulations related to GHG emissions, land use planning, and environmental review, and will make changes to the Climate Action Plan accordingly. Future regulations may have the effect of reducing GHG emissions associated with implementation of the Proposed Project. The effect of future regulations shall be taken into account in future revisions to the Climate Action Plan. New transportation modeling tools may become available that allow revisions to emissions estimates based on the City's policies related to land use, urban design, and transportation. d. The City will revise the Climate Action Plan, as necessary, based on updated inventories and assessments of the effectiveness of reduction strategies no less than every 5 years. If, based on the City's future updated assessments, existing reduction strategies would not achieve the City's reduction targets, the City will make revisions to strategies or develop new strategies. The City will make revisions to its reduction targets, if necessary, to ensure that the target continues to demonstrate an appropriate share of the State's emission reduction goals for Woodland. The City anticipates that a Climate Action Plan update will be needed after new statewide measures are adopted to reduce GHG emissions, such as when the State updates the Air Resources Board Scoping Plan. The City will make revisions to the Climate Action Plan, if necessary, as new technology becomes available that would affect emissions in the Planning Area or the City's ability to forecast future emissions. e. In maintaining the Climate Action Plan, during the CAP updates described above, the City will consider new or revised reduction strategies that may be necessary to achieve the City's reduction targets, while also promoting other goals of the City's General Plan. The City will identify additional plans, policies, projects, mitigation measures, and regulations that are necessary to reduce GHG emissions and achieve the City's reduction targets. The City will consider regulatory changes, infrastructure investment strategies, incentives, contributions to (or local use of) carbon offset programs, and other measures, as appropriate. The City shall consider financing programs for installation and use of renewable energy infrastructure in new and/or existing development, building codes to further increase energy efficiency in new buildings, incentive programs to assist existing property owners in making energy efficiency upgrades, travel demand management programs for new nonresidential projects, and other mechanisms that would reduce GHG emissions. The City will prioritize reduction strategies that offer co-benefits, such as reducing household or business transportation costs, reducing household and business utility bills, improving local air quality, reducing energy use, reducing traffic congestion, conserving water and other resources, moderating the heat island effect, preserving natural habitat, creating local jobs, among other benefits.	LTCC

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		f. The City anticipates that State funding for GHG-efficient transportation systems and other local applications of the State's GHG reduction mandates will be important in meeting the State's overall GHG goals. Local governments will rely on state funding to improve existing buildings and provide more energy- and GHG-efficient sources of electricity. The City will monitor grant and other funding programs that could be used to implement different components of the Climate Action Plan. **Mitigation Measure 4.5-1b – Implementation of Mitigation Measure 4.3-2a** **Mitigation Measure 4.5-1c – Implementation of Mitigation Measure 4.3-2b**	
IMPACT 4.5-2 Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases. 2035 General Plan policies and implementation programs and the 2035 CAP ensure that GHG emissions within the Planning Area occur at a rate that is consistent with goals set for the State government to reduce GHG emissions. Projects that seek to use streamlining identified under SB 375 would need to determine consistency with SACOG's MTP/SCS. The impact is potentially significant.	PS	**Mitigation Measure 4.5-2 – The 2035 General Plan should be amended to include the following new policy:** Policy 7.F.12. MTP/SCS Consistency. For projects seeking to utilize available CEQA streamlining, determine project consistency with the MTP/SCS as a component of application review.	LTS
IMPACT 4.5-3 Develop Land Uses or Development Patterns that Cause Wasteful, Inefficient, or Unnecessary Consumption of Energy. During construction and following buildout of the Proposed Project, energy would be consumed in the forms of fossil fuels and electricity. A large body of existing regulations would have the effect of reducing energy demand and would, then, also reduce potential adverse environmental effects associated with energy demand. The Proposed Project also includes many policies that promote additional energy conservation and savings and that would reduce peak demand and associated environmental effects. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.5-4 Require or Result in the Construction of New or Expanded Energy Production or Transmission Facilities, the Construction of which Could Cause Significant Environmental Effects Implementation of the Proposed Project would increases energy demand and would result in the need to extend services and infrastructure to new users in the Planning Area. Policies and implementation programs in the Proposed Project, as well as existing regulations would reduce potential impacts. Construction of facilities would occur within the assumed development footprint of the Proposed Project and impacts are considered throughout this EIR. There are no additional significant effects that are not already addressed. The impact is less than significant.	LTS	No mitigation is required	LTS
4.6 Cultural Resources			
IMPACT 4.6-1 Cause a Substantial Adverse Change in the Significance of Archaeological or Historical Resources as defined in CEQA Guidelines Section 15064.5. The Proposed Project plans for the construction of new buildings and structures. Modification of existing buildings and structures could also occur in the Planning Area. Although there are no previously recorded archaeological resources within the Planning Area, future projects involving intensive grading, trenching, excavation, soil stockpiling, and other earthmoving activities could impact previously unrecorded cultural resources. Implementation of the Proposed Project has the potential to damage or destroy archaeological and historic architectural resources that qualify as historical resources or unique archaeological resources under CEQA. The significance of such resources could be materially impaired because their ability to convey significance could be destroyed or diminished. This impact is considered significant.	S	**Mitigation Measure 4.6-1a – The 2035 General Plan should be amended to include the following modified policy:** **Policy 2.O.3. Relocation of Historic Buildings.** Where feasible and appropriate, encourage the relocation of reusable historic buildings within or into historic neighborhoods as a means of historic preservation. Relocation is only permitted ~~with reuse provisions and timing agreements in place.~~ Upon execution of an agreement covering reuse provisions and approval of a replacement project. **Policy 2.P.2. Environmental Review.** Require that environmental review be conducted for alterations and/or demolition of buildings designated as, or potentially eligible for designation as, historic structures as required by Chapter 12A of the Municipal Code and CEQA regulations. **Mitigation Measure 4.6-1b – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Cultural 1)** Projects that could have significant adverse impacts to potentially significant archaeological resources shall be required to assess impacts and provide feasible mitigation. The following steps, or those deemed equally effective by the City, will be followed: a. Request information from the California Native American Heritage Commission to obtain a review of the Sacred Lands File and a list of local Native American groups and individuals that may have specific knowledge of cultural resources in the area that could be affected by project implementation. Each Native American group and individual identified by the Native American Heritage Commission will be contacted to obtain any available information on cultural resources in the project area. Additional consultation with relevant tribal representatives may be appropriate depending on the relatively level of cultural sensitivity.	SU

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		b. Request updated information from the Northwest Information Center of the California Historical Resources Information System to determine whether the project area has been previously surveyed and whether archaeological resources were identified. In the event the records indicate that no previous survey has been conducted or existing survey data is greater than five years old, the applicant will retain the services of a qualified archaeologist to assess the adequacy of the existing data (if any) and assess the archaeological sensitivity of the project area. If the survey did not meet current professional standards or regulatory guidelines, or relies on outdated information, a qualified archaeologist will make a recommendation on whether a survey is warranted based on the sensitivity of the project c. area for archaeological resources. d. If a survey is warranted, it will include all necessary background research in addition to an archaeological pedestrian survey. Based on findings of the survey, additional technical studies may be required, such as geoarchaeological sensitivity analysis, or other analysis scaled according to the nature of the individual project. A report will document the results of the survey and provide appropriate management recommendations, and include recordation of identified archaeological resources on appropriate California Department of Parks and Recreation site record forms and cultural resources reports. e. Management recommendations may include, but are not limited to additional studies to evaluate identified sites or archaeological monitoring at locations determined by a qualified archaeologist to be sensitive for subsurface cultural resource deposits. f. Once approved by the City, provide the Northwest Information Center with appropriate California Department of Parks and Recreation site record forms and cultural resources reports for any resources identified. Any subsequent reports completed as a result of additional technical work will likewise be submitted to the Northwest Information Center. g. If no archeological resources are identified that may be directly or indirectly impacted by project activities, mitigation is complete as there would be no adverse change to documented archeological resources. The exception would be in the event of the discovery of a previously unknown archaeological site inadvertently exposed during project implementation. In such an event, a qualified archaeologist will be retained to assess the discovery and provide management recommendations as necessary. h. When a project will impact a known archaeological site, and avoidance is not a feasible option, a qualified archaeologist shall evaluate the eligibility of the site for listing in the California Register of Historic Resources. If the archaeological site is found to be a historical resource as per CEQA Guidelines Section 15064.5 (a)(3), the qualified archaeologist shall recommend further mitigative treatment which could include preservation in place or data recovery. i. If a site to be tested is prehistoric, local tribal representatives should be afforded the opportunity to monitor the ground-disturbing activities. Appropriate mitigation may include curation of artifacts removed during subsurface testing. j. If significant archaeological resources that meet the definition of historical or unique archaeological resources are identified in the project area, the preferred mitigation of impacts is preservation in place. If impacts cannot be avoided through project design, appropriate and feasible treatment measures are required, which may consist of, but are not limited to actions, such as data recovery excavations. If only part of a site will be impacted by a project, data recovery will only be necessary for that portion of the site. Data recovery will not be required if the implementing agency determines prior testing and studies have adequately recovered the scientifically consequential information from the resources. Studies and reports resulting from the data recovery shall be deposited with the Northwest Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code.	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Mitigation Measure 4.6-1c – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Cultural 2) For projects that could adversely affect a potential historic resources: a. Consult the City's Historic Resources Inventory and, as necessary, seek updated information from the North Central Information Center or other applicable data repositories to determine whether the project area has been surveyed, and whether historic built environment resources were identified. b. If a survey of the property or the area in which the property is located has not been conducted , a qualified architectural historian shall conduct a study of the project area for the presence of historic built environment resources. c. If a study is required, it will evaluate the significance of built environment resources greater than 50 years in age that may be directly or indirectly impacted by project activities. The study may include a field survey; background, archival and historic research; and consultation with local historical societies, museums or other interested parties; as necessary. d. If necessary, the qualified architectural historian's study will recommend appropriate protection or mitigative treatment, if any, and include recordation of identified built environment resources on appropriate California Department of Parks and Recreation (DPR) series 523 forms. Recommended treatment for historical resources identified in the report shall be implemented. e. If no significant historic built environment resources are identified in the study or prior survey of the project area that may be directly or indirectly impacted by project activities, there is no adverse change to documented historical built environment resources and no further action is required. f. If a significant historic built environment resource could be directly or indirectly impacted by project activities, avoidance shall be considered the primary mitigation option. If avoidance is not feasible, then the maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation, or reconstruction of the historical resource, conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties will reduce impacts to an acceptable level. If adherence to the Secretary of the Interior's Standards cannot avoid materially altering in an adverse manner the physical characteristics or historic character of the surrounding environmental setting that contribute to a resource's historic significance, additional mitigation may be required. g. If avoidance is not feasible and minimizing impacts through adherence to the Secretary of the Interior's Standards for the Treatment of Historic Properties is not feasible, documentation is required using, as appropriate, Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), and/or Historic American Landscapes Survey (HALS) guidelines.	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Mitigation Measure 4.6-1d – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Cultural 3) a. During ground-disturbing activities necessary to implement proposed development and infrastructure projects, if any prehistoric or historic subsurface resources are discovered, all work within 100 feet of the resources shall be halted and a qualified archaeologist1 shall be consulted within 24 hours to assess the significance of the find, according to CEQA Guidelines Section 15064.5, and implement, as applicable, CEQA Guidelines Sections 15064.5(d), (e), and (f). b. If any find is determined to be a historical resource according to CEQA Guidelines Section 15064.5, representatives from the City and the archaeologist will meet to determine the appropriate avoidance measures or other appropriate mitigation. Cultural resources shall be recorded on appropriate Department of Parks and Recreation forms, and all significant cultural materials recovered shall be, as necessary and at the discretion of the qualified archaeologist and in consultation with the local Native American community if the discovery is prehistoric in age, subject to scientific analysis, professional curation, and documentation according to professional standards. If it is determined that the proposed development or infrastructure project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Section 21083.2 of the California Public Resources Code and CEQA Guidelines Section 15126.4, with a preference for preservation in place. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is being carried out. Preservation in place may be accomplished by planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. c. If avoidance is not feasible, the qualified archaeologist shall develop and oversee the execution of a treatment plan. The treatment plan shall include, but shall not be limited to, data recovery procedures based on location and type of archaeological resources discovered and a preparation and submittal of report of findings to the Northwest Information Center of the California Historical Resources Information System. Data recovery shall be designed to recover the significant information the archaeological resource is expected to contain, based on the scientific/historical research questions that are applicable to the resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable resource questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by project proponents' actions. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.	
IMPACT 4.6-2 Disturb Human Remains, including those Interred Outside of Formal Cemeteries. The Proposed Project would result in development and infrastructure improvement projects throughout the Planning Area that would involve earthmoving activities that could impact human remains. There is the potential for discovery of human remains during construction. This impact is considered significant.	S	**Mitigation Measure 4.6-2 – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Cultural 4)** a. Consistent with Health and Safety Code, Section 7050 through 7052 and Health and Safety Code Section 8010 through 8030, in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery during construction, the City and contractor/s shall take the following steps: (1) No further excavation or disturbance of the project site or any nearby area reasonably suspected to overlie adjacent human remains will occur until: (A) the coroner of Yolo County has been contacted to determine that no investigation of the cause of death is required, and (B) if the coroner determines the remains to be Native American: 1. the coroner shall contact the Native American Heritage Commission within 24 hours; 2. the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendant from the deceased Native American; and 3. the most likely descendant 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 Section 5097.98 of the Public Resources Code; or (2) Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance: (A) the Native American Heritage Commission is unable to identify a most likely descendant or the most likely descendant fails to make a recommendation within 24 hours after being notified by the commission; (B) the most likely descendant identified fails to make a recommendation; or (C) the landowner or his or her authorized representative rejects the recommendation of the most likely descendant, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	SU

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
4.7 Geology, Soils, Minerals Resources, and Paleontological Resources			
IMPACT 4.7-1 Seismic Hazards Related to Surface Fault Rupture, Strong Seismic Ground Shaking, and Liquefaction. Development and land use change consistent with the Proposed Project could subject people and structures to hazards associated with strong seismic ground shaking and liquefaction. Implementation of the policies in the 2035 General Plan, and compliance with relevant laws and ordinances, would reduce the potential for loss or damage from seismic hazards. This impact is less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.7-2 Impacts Related to Soil Erosion. Land use change under the Proposed Project would result in substantial grading, excavation, and movement of earth associated with site preparation activities. These activities would increase soil erosion, especially from wind and water, and the potential for siltation of local drainages. Implementation of the policies in the Proposed Project, combined with relevant laws and ordinances, would reduce the potential for soil erosion. This impact is less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.7-3 Geologic Hazards Related to Unstable Soils, Expansive Soils, and Soil Unsuitable for Septic Systems. Land use change under the Proposed Project would result in the placement of buildings and infrastructure in areas of unstable soils, soils with high a shrink-swell potential, and in locations where the soil is not appropriate for use with septic systems. With adoption and implementation of policies and the implementation program in the Proposed Project, combined with current construction regulations, this impact is considered significant.	S	**Mitigation Measure 4.7-3a – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Soils 1)** Where soils are proposed for use as leach fields associated with wastewater treatment, the City shall require a site-specific evaluation by a licensed geotechnical engineer regarding the soil suitability, including a perc test, as appropriate. All septic systems or other forms of on-site wastewater treatment and disposal facilities shall be designed by a licensed geotechnical or civil engineer. On-site wastewater treatment systems shall be designed to meet the following parameters: • provide available effective absorptive area in both primary and reserve disposal fields; • provide appropriate separation between the disposal field bottom and groundwater or a restrictive soil layer; • factor the ground slope in both the primary and reserve disposal field areas; • factor the influent wastewater strength and quantity in wastewater system design; • accommodate requirements for setbacks from wells, surface waters, and property boundaries; and • provide treatment of wastewater such that it does not adversely affect water quality or endanger public health.	LTS
IMPACT 4.7-4 Loss or Damage to Paleontological Resources During Earth-Moving Activities. Paleontological resources could occur in the Planning Area and construction activities under the Proposed Project could result in damage to, or destruction of unknown subsurface paleontological resources. Paleontological resources could occur in Pleistocene-age sediments that underlie portions of the Planning Area. Construction activities in these areas could result in damage to, or destruction of unknown subsurface paleontological resources. With the policies and implementation program in the Proposed Project, this impact is considered significant.	S	**Mitigation Measure 4.7-4 – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Paleontological Resources 1)** • Prior to the start of earthmoving activities that would disturb 1 acre of land or more within the Riverbank or Modesto Formations, the project applicant shall inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. • If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify the City of Woodland Community Development Department. • The project applicant shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan. The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the City to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.	LTS
3.8 Hazards and Hazardous Materials			
IMPACT 4.8-1 Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials. Implementation of the Proposed Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. However, existing regulations and proposed policies in the Proposed Project would address this potential risk and the impact is considered less than significant.	LTS	No mitigation is required.	LTS

[1] The California Office of Historic preservation utilizes the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation as found in Code of Federal Regulations, 36 CFR Part 61. The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus: 1. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management; 2. At least four months of supervised field and analytic experience in general North American archeology; and 3. Demonstrated ability to carry research to completion. In addition to these minimum qualifications, a professional in prehistoric archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period.

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 4.8-2 Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment. Implementation of the Proposed Project plans for a wide variety of uses, including commercial and industrial uses that could result in upset and accident conditions involving the release of hazardous materials into the environment. Individual projects under the Proposed Project for which there are potential significant impacts related to hazards would require a project-level environmental review at the time they are proposed. With existing regulations and Proposed Project goals and policies, the impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.8-3 Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School. Projects that could potentially occur under the Proposed Project could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. However, existing regulations provide standards for uses involving the handling or emissions of hazardous materials within a quarter mile of schools. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.8-4 Be Located on a Site Which Is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Would Create a Significant Hazard to the Public or the Environment. Implementation of the Proposed Project could involve changes to sites included on a list of hazardous materials sites compiled pursuant to Government Code 64964.5. However, with existing regulations and Proposed Project goals and policies, the impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.8-5 For a Project Located within and Airport Land Use Plan or, where such a Plan has Not Been Adopted, within Two Miles of a Public Airport or Public Use Airport, Would the Project Result in a Safety Hazard For People Residing or Working within an Airport Land Use Plan Area. A portion of the Planning Area is in the SMF Airport Influence Area. The 2035 General Plan includes policies to avoid any adverse impact. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.8-6 Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan. Proposed Project policies support the mitigation of and preparation for emergencies. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.8-7 Expose People or Structures to a Significant Risk of Loss, Injury or Death Involving Wildland Fires, Including Where Wildlands are Adjacent to Urbanized Areas or Where Residences are Intermixed with Wildlands. Most of the Planning Area is non-wildland/non-urban area that is not at risk for wildland fires. Implementation of the Proposed Project would result in new development in SP-1A, which is adjacent to a Moderate Fire Hazard Severity Zones. However, existing regulations related to fire flow, access, and clearances around structures would ensure a less than significant impact.	LTS	No mitigation is required.	LTS
***4.9* Hydrology, Flooding, and Water Quality**			
IMPACT 4.9-1 Violation of Water Quality Standards. Implementation of the Proposed Project would convert large areas of undeveloped land to residential, commercial, industrial, and mix-uses, as well as intensify land uses as infill in existing downtown and major corridor areas, resulting in impacts related to additional discharges of pollutants to receiving water bodies. Such pollutants would result in adverse changes to the water quality of local water bodies. However, with adoption and implementation of the proposed policies in the Proposed Project, combined with current land use, stormwater, grading, and erosion control regulations, this impact is considered significant.	PS	**Mitigation Measure 4.9-1 – Policy 5.1.4 should be amended as follows:** Policy 5.I.4. Low Impact Development. Require new development and redevelopment projects to incorporate site design and low impact development runoff requirements, in accordance with the Municipal Code <u>to reduce runoff rates, filter out pollutants, and facilitate groundwater infiltration</u>. Such features may include, but are not limited to: • Canopy trees or shrubs to absorb rainwater; • Grading that lengthens flow paths over permeable surfaces and increases runoff travel time to reduce the peak hour flow rate; • Partially removing curbs and gutters from parking areas where appropriate to allow stormwater sheet flow into vegetated areas; • Use of permeable paving in parking lots and other areas characterized by significant impervious surfaces; • On-site stormwater detention, use of bioswales and bioretention basins to facilitate infiltration; and • Integrated or subsurface water retention facilities to capture rainwater for use in landscape irrigation and other non-potable uses.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 4.9-2 Construction-Related Water Quality Impacts. Construction and grading activities during development consistent with the Proposed Project could result in excess runoff, soil erosion, and stormwater discharges of suspended solids and increased turbidity. Such activities could mobilize other pollutants from project construction sites as contaminated runoff to on-site and ultimately off-site drainage channels. Many construction-related wastes have the potential to degrade existing water quality. Construction activities that are implemented without mitigation could violate water quality standards or cause direct harm to aquatic organisms. However, with implementation of existing regulations and water quality policies contained in the 2035 General Plan, this impact is considered significant.	PS	**Mitigation Measure 4.9-2 – Implement Mitigation Measure 4.9-1**	LTS
IMPACT 4.9-3 On-Site and Downstream Erosion and Sedimentation and Alteration of Drainage Patterns – East and South Alternatives. Development and land use change consistent with the 2035 General Plan would increase the amount of impervious surfaces, thereby increasing surface runoff. This increase in surface runoff would result in an increase in both the total volume and the peak discharge rate of stormwater runoff, and therefore could result in greater potential for erosion, sedimentation, hydromodification, and on- and off-site flooding. However, with adoption and implementation of the proposed policies and actions in the 2035 General Plan, combined with current grading, erosion, and flood control regulations, this impact is considered significant.	PS	**Mitigation Measure 4.9-3 – Implement Mitigation Measure 4.4-1**	LTS
IMPACT 4.9-4 Interference with Groundwater Recharge or Substantial Depletion of Groundwater Supplies. Land use changes under the Proposed Project would result in additional impervious surfaces, which could reduce the amount of groundwater recharge and in turn, affect the yield of hydrologically connected wells. However, a substantial reduction in groundwater recharge is not anticipated. An increase in water demands and associated depletion of groundwater supplies could also result from the land use changes under the Proposed Project; however, access to new surface water supplies and opportunities for conjunctive use through aquifer storage and recovery would result in a reduced reliance on groundwater supplies. With compliance with existing regulations and implementation of Proposed Project policies, this impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.9-5 Place Housing Within a 100-Year Flood Hazard Area As Mapped on a Federal Flood Hazard Boundary Or Flood Insurance Rate Map or Other Flood Hazard Delineation Map. Implementation of the Proposed Project would place housing in new growth areas within a current 100-year flood hazard area only if a funded, comprehensive flood solution is secured. Additional policies in the Proposed Project limit the flooding risks of infill development. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.9-6 Place Within a 200-year Flood Hazard Areas Structures Which Would Impede or Redirect Flood Flows. Implementation of the Proposed Project would place structures within a 200-year flood hazard area; however, policies in the Proposed Project prohibit diversion of flood flows onto adjacent properties. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.9-7 Expose People or Structures to a Significant Risk of Loss, Injury or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam. The Proposed Project plans for infill and new growth development in areas within the levee and dam inundation areas. The impact is considered significant.	S	No feasible mitigation.	SU
4.10 Land Use Planning, Population, and Housing			
IMPACT 4.10-1 Physically Divide an Established Community. Implementation of the Proposed Project would not physically divide an established community. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.10-2 Conflict with Any Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project (Including, but not Limited to the General Plan, Specific Plan, Local Coastal Program, or Zoning Ordinance) Implementation of the Proposed Project would differ from the Yolo County 2030 General Plan, which has jurisdiction over unincorporated land in the Proposed Project Planning Area. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.10-3 Impacts Related to Inducing Population Growth. Implementation of Proposed Project would induce population growth substantially higher than that projected in the SACOG regional population projections and introduce Specific Plan Areas that are not anticipated to be fully developed by 2035, the planning horizon for the 2035 General Plan. The impact is considered significant.	S	No feasible mitigation.	SU

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 4.10-4 Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere. The Proposed Project does not propose converting established residential areas to a nonresidential land use or changing the land use or development character of existing developed residential areas. However, if any housing or residences are displaced, it is assumed that construction of 7,000 residential dwelling units on the project site would fully replace any residential units removed and provide housing for any displaced residents. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
4.11 Noise and Vibration			
IMPACT 4.11-1 Exposure of Noise-Sensitive Land Uses to Short-Term (Construction). Future development and implementation of the policies in the Proposed Project would result in exposure of existing and proposed noise sensitive land uses to noticeable increases from construction activities. This impact is considered significant.	S	**Mitigation Measure 4.11-1 – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Noise 1)** a. Demolition, construction, site preparation, and related activities that would generate noise perceptible at the property line of the subject property are limited to the hours between 7:00 A.M. and 6:00 P.M. on Monday through Saturday and between 9:00 A.M. and 6:00 P.M. on Sunday and federal holidays. The building inspector may issue an exception to this limitation on hours in cases of urgent necessity where the public health and safety will not be substantially impaired. b. Idling times for noise-generating equipment used in demolition, construction, site preparation, and related activities shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes. c. Demolition, construction, site preparation, and related activities that do not involve pile driving proposed within 445 feet from the edge of properties with existing, occupied noise-sensitive uses shall incorporate all feasible strategies to reduce noise exposure for noise-sensitive uses, including: ▪ Provide written notice to all known occupied noise-sensitive uses within 400 feet of the edge of the project site boundary at least 2 weeks prior to the start of each construction phase of the construction schedule; ▪ Ensure that construction equipment is properly maintained and equipped with noise control components, such as mufflers, in accordance with manufacturers' specifications; ▪ Re-route construction equipment away from adjacent noise-sensitive uses; ▪ Locate noisy construction equipment away from surrounding noise-sensitive uses; ▪ Use sound aprons or temporary noise enclosures around noise-generating equipment; ▪ Position storage of waste materials, earth, and other supplies in a manner that will function as a noise barrier for surrounding noise-sensitive uses; ▪ Use the quietest practical type of equipment; ▪ Use electric powered equipment instead of diesel or gasoline engine powered equipment; ▪ Use shrouding or shielding and intake and exhaust silencers/mufflers; and ▪ Other effective and feasible strategies to reduce construction noise exposure for surrounding noise-sensitive uses. d. For construction of buildings that require the installation of piles, an alternative to installation of piles by hammering shall be used. This could include the use of augured holes for cast-in-place piles, installation through vibration or hydraulic insertion, or another low-noise technique.	SU

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 4.11-2 Exposure to or Generation of Long-Term Noise Levels. Future development of new noise-sensitive land uses would occur under the Proposed Project within areas that either are currently exposed to noise from both transportation and non-transportation noise sources, or will be in the future. Uses allowed under the 2035 General Plan could potentially expose existing or planned noise-sensitive uses to noise levels that exceed local standards. The impact is considered significant.	S	**Mitigation Measure 4.11-2a – Policy 8.G.3 should be amended as follows:** Policy 8.G.3 Noise Exposure from Transportation Sources. Require noise-reducing mitigation to meet allowable outdoor and indoor noise exposure standards in Table 8-6 [Table 4.11-13]. Noise mitigation measures that may be approved to achieve these noise level targets include but are not limited to the following: • Construct facades with ~~substantial weight and~~ sound insulation to achieve acceptable interior noise; • Use sound-rated windows for primary sleeping and activity areas; • Use sound-rated doors for all exterior entries at primary sleeping and activity areas; • Use ~~minimum~~ setbacks and/or sound ~~exterior~~ barriers where applicable, feasible, and reasonable; • Use acoustic baffling of vents for chimneys, attic and gable ends; • Install a mechanical ventilation system that provides fresh air under closed window conditions; and • Maximize site design so that buildings shelter outdoor areas. **Mitigation Measure 4.11-2b – The 2035 General Plan should be amended to include the following new policies:** Policy 8.G.13 Noise Attenuation Barriers. Noise attenuation barriers are strongly discouraged, except to attenuate noise for existing developed uses, and may be used in the context of new developments only when no other approach to noise mitigation is feasible. Policy 8.G.14 Vehicle Traffic. New developments shall disperse vehicular traffic onto a network of fully connected smaller roadways and minimize funneling of local traffic onto large-volume, high-speed roadways near existing or planned noise-sensitive land uses to the maximum extent feasible. Policy 8.G.15 Operational Noise. In new development areas, service, utility, loading areas, roof-mounted equipment, and noise-generating equipment shall be screened, designed, and located to reduce visibility and noise for surrounding properties and pedestrian areas.	SU
IMPACT 4.11-3 Exposure to or Generation of Vibration. Construction of projects under the Proposed Project could cause temporary, short-term disruptive vibration for locations near sensitive receptors. Under the Proposed Project, future development of new vibration-sensitive land uses could occur within vibration-generating areas (e.g., railroads). This impact is considered significant.	S	**Mitigation Measure 4.11-3a – The 2035 General Plan should be amended to include the following new implementation program (Implementation Program Vibration 1)** a. New development that proposes the use of piles for foundations shall include all feasible measures necessary with the goal to ensure that vibration exposure for adjacent buildings is less than 0.5 PPV and less than 80 VdB for adjacent vibration-sensitive uses and less than 0.2 PPV for adjacent historic buildings. These performance standards shall take into account the reduction in vibration exposure that would occur through coupling loss provided by each affected building structure. If it is determined necessary to avoid damage, the project applicant shall coordinate with the Chief Building Official to implement corrective actions, which may include, but is not limited to building protection or stabilization. b. New developments that would generate substantial long-term vibration shall provide analysis and mitigation, as feasible, to achieve velocity levels, as experienced at habitable structures of vibration-sensitive land uses, of less than 80 vibration decibels. **Mitigation Measure 4.11-3b – Implement Mitigation Measure 4.11-1**	SU
IMPACT 4.11-4 Expose People to Excessive Airport Noise. The Planning Area is outside of the 60 dB CNEL contours of all nearby airports. The impact is less than significant.	LTS	No mitigation is required.	LTS
4.12 Public Services and Recreation			
IMPACT 4.12-1 Impacts Related to Fire Protection Services. Implementation of the Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives for fire protection. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.12-2 Impacts Related to Police Protection Services. Implementation of the Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives for police protection. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.12-3 Impacts Related to School Services. Implementation of the Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives for schools. The impact is considered potentially significant.	PS	Funding for new school construction is provided through State and local revenue sources. Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) governs the amount of fees that can be levied against new development. Payment of fees authorized by the statute is deemed "full and complete mitigation."	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 4.12-4 Impacts Related to Parks and Recreation Services. Implementation of the Proposed Project would require the provision of 5.0 acres of parkland per 1,000. The Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives for parks. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.12-5 Impacts Associated with Other Public Facilities. Implementation of the Proposed Project could result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives for other public facilities. The impact is considered potentially significant.	PS	**Mitigation Measure 4.12-5a – The 2035 General Plan should be modified to include the following new implementation program (Implementation Program Public Services 1):** Adopt a Municipal Facilities Master Plan that studies and identifies future space needs for city government offices, library facilities, and any other municipal service facilities not addressed in the Parks, Recreation, and Community Services Master Plan, and establishes space standards and ratios, as appropriate.	LTS
IMPACT 4.12-6 Impacts Related to Increased Use of Existing Parks and Recreational Facilities. Implementation of the Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 4.12-7 Impacts Related to Recreational Facilities. Implementation of the Proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
4.13 Transportation and Circulation			
IMPACT 4.13-1 Conflict with an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System by Resulting in Unacceptable Levels of Service on City of Woodland Roadways. Implementation of the Proposed Project could cause unacceptable LOS conditions on some roadway segments, depending on the Alternative. The impact is considered significant for the East Alternative and less than significant for the South Alternative.	East Alternative – PS	**Mitigation Measure 4.13-1a – The 2035 General Plan should be amended to include the following modification of the Circulation Diagram in the East Alternative.** East Alternative Circulation Diagram: <u>Include E. Gum Avenue from Bourn Drive to Pioneer Avenue as a 2-lane minor arterial.</u> This action would result in potential physical changes to the roadway under this classification that may include access control and minor turn-lane widening at intersections. Under this classification, the LOS would be improved to LOS C and the impact would be **less than significant with mitigation**. OR **Mitigation Measure 4.13-1b – The 2035 General Plan should be amended to include the following modified policy:** – **Policy 3.A.1 Vehicle Level of Service (LOS) Standard.** Strive to develop and manage the roadway system to maintain LOS D or better as defined in the latest edition of the Highway Capacity Manual (Transportation Research Board) during weekday AM and PM peak hour conditions with the following exceptions described below and mapped on Figure 3-1. A. LOS C - Kentucky Ave from East Street to County Road 98. This level of service is required to accommodate the mix of commercial/industrial truck traffic with residential driveways. B. LOS E – Freeway ramp terminal intersections <u>and E. Gum Avenue from Bourn Drive to Pioneer Avenue.</u> C. LOS F – LOS F is allowed for the following roadway segments and intersections where the City finds that the improvements or other measures required to achieve the LOS standard are unacceptable because of their impact on other community values. • Main Street from 6th Street to Cleveland St. • Maxwell Ave from Farnham Avenue to County Road 102 This action would recognize that potential physical changes to this section E. Gum Avenue to increase its capacity are not desirable due to access or right-of-way impacts on adjacent properties or the environment. The impact would be **less than significant with mitigation**. AND	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Mitigation Measure 4.13-1c – The 2035 General Plan should be amended to include the following modified policy and new implementation program: – **Policy 3.A.4 Reduce Vehicle Miles Traveled (VMT)**. Require new development projects to achieve a 10 percent reduction in VMT per capita or VMT per service population compared to the general plan 2035 VMT performance, or a 10 percent reduction compared to baseline conditions for similar land uses ~~Apply a VMT transportation performance metric threshold of 30 VMT per capita~~ when measuring transportation impacts for subsequent projects and making General Plan consistency findings. Reducing peak period VMT in particular is desirable due to the added benefit of minimizing severe congestion and reducing emissions. Use of VMT reduction strategies such as those in Chart 6-2 below taken from *Quantifying Greenhouse Gas Mitigation Measures*, CAPCOA, 2010 or similar professional research documents is encouraged. *[See Section 4.13 of this EIR, "Transportation and Circulation"]* taken from *Quantifying Greenhouse Gas Mitigation Measures*, CAPCOA, 2010 or similar professional research documents is encouraged. **Implementation Program 3.8** After final adoption of SB 743 CEQA Guidelines changes and any associated technical advisory recommendations by the State of California, the City will assess the VMT reduction goal contained in Policy 3.A.4. The assessment should consider substantial evidence presented by the State in recommending any alternative VMT reduction goals as CEQA thresholds plus the community values expressed by the goals and policies. The City should strive to set thresholds consistent with the City's envisioned future while striving to achieve reasonable reductions in vehicle travel that produce air pollution and greenhouse gases.	
	South Alternative – LTS	No mitigation is required	LTS
IMPACT 4.13-2 Conflict with an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System by Resulting in Unacceptable Levels of Service on Caltrans Roadways. Implementation of the Proposed Project would exacerbate unacceptable No Project LOS D conditions on the I-5 Mainline east of County Road 102 under 2035 conditions. The impact is considered potentially significant.	PS	**Mitigation Measure 4.13-2 – Implement Mitigation Measure 4.13-1c.**	LTS
IMPACT 4.13-3 Conflict with an Applicable Congestion Management Program by Resulting in Unacceptable Levels of Service on CMP Network Roadways. Implementation of the Proposed Project would cause unacceptable LOS conditions on one CMP roadway segment. The impact is considered significant.	S	**Mitigation Measure 4.13-3a – Implement Mitigation Measure 4.13-1c.** **Mitigation Measure 4.13-3b – The 2035 General Plan should be amended to include the following modification of the circulation diagram.** **East Alternative Circulation Diagram:** Include County Road 102 from E. Gibson Road to Farmers Central Road as a 4-lane principal arterial.	LTS
IMPACT 4.13-4 Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, Taking into Account All Modes of Transportation. Implementation of the Proposed Project would not result in conflicts with applicable plans, ordinances or policies that have not already been discussed in Impacts 4.13-1 through 4.13-3. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.13-5 Result in Changes to Air Traffic Patterns. Implementation of the Proposed Project includes land use changes that would have only a limited influence on air traffic patterns. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.13-6 Substantially Increase Hazards Due to a Design Feature. Implementation of the Proposed Project will modify the existing transportation network to accommodate existing and future users that could change existing travel patterns or traveler expectations. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.13-7 Result in Inadequate Emergency Access. Implementation of the Proposed Project will alter land use patterns and increase travel demand on the transportation network that may influence emergency access. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.13-8 Result in Potential Conflicts with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Facilities. Implementation of the Proposed Project would not result in conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The impact is considered less than significant.	LTS	No mitigation is required	LTS
4.14 Utilities			
IMPACT 4.14-1 Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board. Implementation of the Proposed Project would not exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board. The impact is considered less than significant.	LTS	No mitigation is required	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 4.14-2 Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects. Implementation of the Proposed Project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.14-3 Impacts Related to Construction or Expansion of Stormwater Facilities. Implementation of the Proposed Project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.14-4 Water Supply Impacts. Implementation of the Proposed Project would not result in having insufficient water supplies available to serve the project from existing entitlements and resources, nor are new or expanded entitlements needed. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.14-5 Wastewater Treatment Capacity Impacts. Implementation of the Proposed Project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. The impact is considered less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.14-6 Solid Waste Disposal Capacity Impacts. Development under the Proposed Project would be served by a landfill with sufficient permitted capacity to serve the project's solid waste disposal needs. The impact is less than significant.	LTS	No mitigation is required	LTS
IMPACT 4.14-7 Compliance with Federal, State, and Local Statutes and Regulations Related to Solid Waste. Implementation of the Proposed Project would be compliant with federal, State, and local statutes and regulations related to solid waste. The impact is considered less than significant.	LTS	No mitigation is required	LTS

Appendix B Notice of Preparation and Scoping Summary

B1 INTRODUCTION

In discharging its duties under Section 15021 of the California Environmental Quality Act (CEQA) Guidelines, the City of Woodland (as lead agency) intends to prepare a supplemental environmental impact report (SEIR), consistent with Section 15163 of the CEQA Guidelines (Title 14 of the California Code of Regulations, hereinafter the "CEQA Guidelines"), for the City of Woodland General Plan Amendment to Policy 2.A.1 (proposed project). This environmental document will supplement the City's 2035 General Plan and Climate Action Plan Final Environmental Impact Report (2035 General Plan and CAP EIR; State Clearinghouse #2013032015 and adopted and certified on May 16th, 2017).

The proposed project would allow the City to provide utilities (i.e., potable water, wastewater or recycled water) up to one mile beyond the Urban Limit Line (ULL) to existing commercial facilities in operation on or prior to November 3, 2026. The City's current boundaries are circumscribed by a permanent ULL established by a vote of the people in 2006. The approved initiative placed restrictions on the provision of utility services outside the ULL. The ULL boundary and provisions of utility services outside the ULL may only be modified by another vote by the people. Amendment to Policy 2.A.1 would be subject to voter approval of an amendment to the ULL. The City is considering including a measure on the November 2026 ballot that would amend the ULL to allow the expansion of existing City utilities to commercial facilities located on parcels with a boundary that falls wholly or partially within one mile of the ULL and in operation on or prior to November 3, 2026. The SEIR is being prepared to provide additional information needed to address the proposed project, in addition to that which was provided in the City's 2035 General Plan and CAP EIR. The City received applications to extend utilities beyond the current ULL, and it is anticipated at this time that two existing commercial facilities located within unincorporated Yolo County, would make use of the utility extension, if the ballot measure passes. These two existing commercial facilities are Bayer U.S. Crop Science, LLC (located at 37437 CA-16, Woodland, CA 95695) and Clark Pacific (located at 40600 County Road 18C, Woodland, CA 95776). The ballot measure would not require either Bayer or Clark Pacific to extend utility facilities and services.

City of Woodland issued a notice of preparation (NOP) of a Draft SEIR for the proposed project on August 12, 2025 and held one virtual public scoping meeting on August 19, 2025. The NOP was distributed to the State Clearinghouse, to the Yolo County Clerk's office, and to multiple stakeholders and Responsible Agencies. The State CEQA Guidelines provide a 30-day period for responsible and trustee agencies to respond to an NOP and must provide specific detail about the scope and content of the environmental information to be included in the EIR (Section 15082[b]). CEQA also requires lead agencies to hold at least one scoping meeting if a project is of statewide, regional, or areawide significance (Section 21083.9[a][2]).

The City of Woodland received comments in response to the NOP in the form of letters submitted via letter/email. The purpose of this report is to document the comments received and identify topics or issues of concern raised by responsible agencies, trustee agencies, and the public during the 30-day scoping period (August 12, 2025 through September 12, 2025). The City of Woodland will consider all comments received during the scoping process and address those pertaining to physical environmental issues when preparing the Draft SEIR.

B2 SCOPING MEETING

The City of Woodland held one scoping meeting to inform interested parties about the proposed project and receive comments on the scope and content of the Draft SEIR. This meeting was held virtually from 4:00–5:50 pm on August 19, 2025. Attendance at this meeting consisted of 12 people in total, including two members of the public; representative from the City of Woodland, applicants, and consultants.

B2.1 PUBLIC SCOPING MEETING COMMENTS

No public comments were made at the public scoping meeting.

B3 WRITTEN COMMENTS

This section provides a synopsis of the written comments received during the 30-day NOP public comment period. A total of seven comment letters were received within the 30-days. One comment letter was received outside of the scoping period. Table 1 provides a list of persons who submitted written comment letters on the NOP.

Table 1. List of Written Comment Letters

COMMENTER	AFFILIATION	DATE
Pricilla Torres-Fuentes	Native American Heritage Commission	8/14/2025
Special Filings Unit	California Secretary of State	8/15/2025
Christine M. Crawford, AICP	Yolo County Local Agency Formation Commission	9/11/2025
Peter G. Minkel	Central Valley Regional Water Quality Control Board	9/12/2025
Robert H. Falconer	Yolo County Farm Bureau	9/12/2025
Jeff Anderson	Yolo County, Department of Community Services	9/12/2025
Xing Liu	Federal Emergency Management Agency	9/24/2025

Table 2 provides a summary of the written comments and the sections of the Draft SEIR in which the City of Woodland will include relevant information. The comments have been paraphrased for brevity. A copy of the NOP and copies of the comment letters are included in Attachment 1 to this Scoping Summary Report.

Table 2. Synopsis of Written Comments

Affiliation	Comment Synopsis	Draft SEIR Section(s) that will Address the Comment
Native American Heritage Commission	**Tribal Cultural Resources and Cultural Resources:** The commenter describes provisions added to CEQA with Assembly Bill (AB) 52 and provisions imposed by Senate Bill (SB) 18. The commenter further describes related tribal consultation and environmental analysis requirements. The commenter also describes the Native American Heritage Commission's recommendations for cultural resources assessments.	Section 4.5, Cultural Resources and Tribal Cultural Resources
California Secretary of State	The commenter identifies that the proposed project is outside the jurisdiction of the Secretary of State of California.	Not Applicable.
Yolo Local Agency Formation Commission	**Responsible Agency:** The commenter noted that the Local Agency Formation Commission (LAFCo) is a Responsible Agency for the SEIR and if the project is approved by the City Council and voters, LAFCo will use the SEIR to consider approvals.	Section 2.2 Intended Use of this EIR
Yolo Local Agency Formation Commission	**Project Description:** The commenter requested clarification of what is permitted under the extension to "commercial facilities". The commenter noted there are at-risk water systems surrounding the City that may warrant future consolidation and these should not be precluded from the proposed project	Chapter 3, Project Description
Yolo Local Agency Formation Commission	**Project Description and Approvals:** discuss the need for LAFCo approval under Section Government Code 56133.	Section 2.2, Intended Use of this EIR
Yolo Local Agency Formation Commission	**Land Use:** The commenter requests demonstrated compliance with LAFCo's Out of Agency Service Review Policies (Section 3.0)	Section 4.9, Land Use and Planning, Population and Housing
Yolo Local Agency Formation Commission	**Land Use and Growth Inducing:** The commenter requests demonstrated compliance with LAFCo's Agriculture Conservation Policies (Section 4.0)	Section 4.9, Land Use and Planning, Population and Housing and Section 6.2, Growth-Inducing Impacts
Central Valley Regional Water Quality Control Board	**Surface and Groundwater Quality:** The commenter provides information regarding the Central Valley Regional Water Quality Control Board's Basin Plan and anti-degradation considerations associated with the State Water Board Anti-Degradation Policy. The commenter requests that the environmental document should evaluate potential impacts to both surface and groundwater quality. The commenter further describes provisions related to multiple water quality permits that could be applicable to the proposed project (i.e., construction storm water general permit, Clean Water Action Section 404, Clean Water Act Section 401, Waste Discharge Requirements, Dewatering Permit, Limited Threat General NPDES Permit, NPDES Permit).	Section 4.8, Hydrology and Water Quality and Section 4.11, Utilities
Yolo County Farm Bureau	**Agriculture, Land Use and Growth:** The commenter expresses concern regarding land use and growth within the county potentially affecting agricultural resources.	Section 6.2, Growth-Inducing Impacts
Yolo County Farm Bureau	**Requirements of SEIR:** The commenter requests the environmental analysis include the following: Appropriateness of preparing an SEIR	Section 2.1.1, Type of EIR

Affiliation	Comment Synopsis	Draft SEIR Section(s) that will Address the Comment
Yolo County Farm Bureau	**Agricultural Resources, Transportation, and Public Services:** The commenter requests the environmental analysis include the following: Foreseeable impacts to agricultural resources, as well as impacts to transportation, traffic, and public services	Section 4.1, Agriculture and Forestry Resources, and Section 2.1.4, Other Environmental Topics not Discussed in Detail in this Supplemental EIR
Yolo County Farm Bureau	**Multiple Resources:** The commenter requests the environmental analysis include the following: Other foreseeable impacts identified in CEQA Appendix G checklist	Section 4.2, Air Quality; Section 4.3, Biological Resources; Section 4.4 Greenhouse Gases and Energy; Section 4.5, Cultural Resources and Tribal Cultural Resources; Section 4.6, Geology, Soils, and Paleontological Resources; Section 4.7, Hazards and Hazardous Materials; Section 4.8, Hydrology and Water Quality; Section 4.9, Land use and Planning, Population and Housing; Section 4.10, Noise and Vibration; and Section 4.11, Utilities
Yolo County Farm Bureau	**Cumulative and Growth Inducing:** The commenter requests the environmental analysis include the following: Cumulative and/or growth inducing impacts this project may cause	Chapter 6, Other CEQA Considerations
Yolo County Farm Bureau	**Mitigation Measures:** The commenter requests the environmental analysis include the following: Appropriate avoidance and/or mitigation measures	Chapter 4, Impact Analysis
Yolo County Farm Bureau	**Proposed Project and Growth Inducing:** The commenter requests the environmental analysis include the following: Purpose and need for the project including known or foreseeable follow-on projects that may be enabled by the project	Section 2.1.1, Type of EIR and 2.1.2, Purpose of this Environmental Impact Report, and Section 6.2, Growth-Inducing Impacts
Yolo County, Department of Community Services	**Cumulative:** The commenter provided background information on the land use and zoning of the Clark Pacific facility. The commenter requested that Clark Pacific Expansion Project (ZF #2023-0005) be considered in the Cumulative Impacts analysis in the Draft SEIR. This project would require County approval of a General Plan Amendment to redesignate the project site's land use designation from AG to IN, and a Rezone to change the zoning designation of the project site from A-N to I-H. The County prepared a Project Initial Study and released a Notice of Preparation for the Draft EIR for the proposed Clark Pacific Facility Expansion Project from March 28, 2025, to April 28, 2025, and held a public scoping meeting on April 10, 2025. The County is currently preparing a Draft EIR which is expected to be released later this calendar year. The City of Woodland will receive notification when the Draft EIR is released.	Section 6.1, Cumulative
Yolo County, Department of Community Services	**Growth Inducing:** The commenter requests that the City analyze growth-inducing impacts of extending sewer and water services to areas outside of the ULL, including the potential connection for future users not currently anticipated to connect.	Section 6.2, Growth-Inducing Impacts
FEMA	**Floodplains and Floods:** The commenter requested review of the current Flood Insurance Rate Maps. The commenter provided background information on the National Flood Insurance Program flood plain building requirements.	Chapter 3, Project Description; Section 4.8, Hydrology and Water Quality; Section 4.9, Land Use and Planning

Attachment 1

NOTICE OF PREPARATION (NOP)
FOR THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT (Draft SEIR)
FOR THE City of Woodland GENERAL PLAN Amendment to Policy 2.A.1

Date: August 12, 2025

To: Responsible Agencies, Interested Parties and Organizations

Subject: **Notice of Preparation of a Draft Supplemental Environmental Impact Report for the City of Woodland General Plan Amendment to Policy 2.A.1**

Project Title: City of Woodland General Plan Amendment: Policy 2.A.1

Location: The project area encompasses the portion of the adjoining Yolo County unincorporated area that falls within a distance of one mile of the City's voter-adopted Urban Limit Line, and existing commercial facilities that are located within one mile from the voter-adopted Urban Limit Line (see Figure 1).

In discharging its duties under Section 15021 of the California Environmental Quality Act (CEQA) Guidelines, the City of Woodland (as lead agency, hereinafter "City") intends to prepare a supplemental environmental impact report (SEIR), consistent with Section 15163 of the CEQA Guidelines (Title 14 of the California Code of Regulations, hereinafter the "CEQA Guidelines"), for the City of Woodland General Plan Amendment to Policy 2.A.1 (the "proposed project," described later in this document). This environmental document will supplement the City's 2035 General Plan and Climate Action Plan Final Environmental Impact Report (2035 General Plan and CAP EIR; State Clearinghouse #2013032015).

In accordance with Section 15082 of the CEQA Guidelines, the City has prepared this notice of preparation (NOP) to provide the State Clearinghouse division of the Governor's Office of Land Use and Climate Innovation, responsible and trustee agencies, and other interested parties with sufficient information describing the proposed project and its potential environmental effects.

CEQA Guidelines Section 15163 states that a lead agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if proposed changes meet the conditions described in CEQA Guidelines Section 15162 and if only minor additions and changes would be necessary to make the previous EIR adequate. Because the City has determined that a SEIR will be prepared for the proposed project, an Initial Study has not been prepared (CEQA Guidelines Section 15063[a]).

PROJECT OVERVIEW: The City is considering an amendment to Policy 2.A.1 in the General Plan ("the proposed project"). The amendment would allow the City to provide utilities (i.e., potable water, wastewater or recycled water) up to one mile beyond the Urban Limit Line (ULL) to existing commercial facilities in operation on or prior to November 3, 2026. The City's current boundaries are circumscribed by a permanent ULL established by a vote of the people in 2006. The approved initiative placed restrictions on the provision of utility services outside the ULL. The ULL boundary and provisions of utility services outside the ULL may only be

modified by another vote by the people. Amendment to Policy 2.A.1 would be subject to voter approval of an amendment to the ULL. The City is considering including a measure on the November 2026 ballot that would amend the ULL to allow the expansion of existing City utilities to commercial facilities located on parcels with a boundary that falls wholly or partially within one mile of the ULL and in operation on or prior to November 3, 2026. The SEIR will be prepared to provide additional information needed to address the proposed project, in addition to that which was provided in the City's 2035 General Plan and CAP EIR (State Clearinghouse #2013032015 and adopted and certified on May 16th, 2017).

The City received applications to extend utilities beyond the current ULL, and it is anticipated at this time that two existing commercial facilities located within unincorporated Yolo County, would make use of the utility extension, if the ballot measure passes. These two existing commercial facilities are Bayer U.S. Crop Science, LLC (located at 37437 CA-16, Woodland, CA 95695) and Clark Pacific (located at 40600 County Road 18C, Woodland, CA 95776) (see Figures 1, 2 and 3). The ballot measure would not require either Bayer or Clark Pacific to extend utility facilities and services.

SCOPING PERIOD: As specified by the CEQA Guidelines, the NOP will be circulated for a 30-day review period. The comment period runs from August 12, 2025 to September 12, 2025 The City welcomes input on the scope of the SEIR analysis during the review period. If the City has not received either a response or a well-justified request for additional time by a responsible agency by the end of the review period, the City will presume that the responsible agency has no response (CEQA Guidelines Section 15082[b][2]). All scoping comments received during this period will be considered in determining the appropriate scope and content of the Draft SEIR.

Comments during the review period shall be directed to Erika Bumgardner, AICP, Deputy Community Development Director, Community Development Department; 300 First Street, Woodland, CA 95695.

Comments may also be submitted electronically by 4:00pm on September 12, 2025 to erika.bumgardner@cityofwoodland.gov. Erika may be reached by phone at (530) 661-5886.
SCOPING WEBINAR: A virtual scoping meeting for the SEIR will be conducted on Tuesday, August 19, 2025 at 4:00 PM. To register for the webinar, please visit: bit.ly/woodlandSEIR.

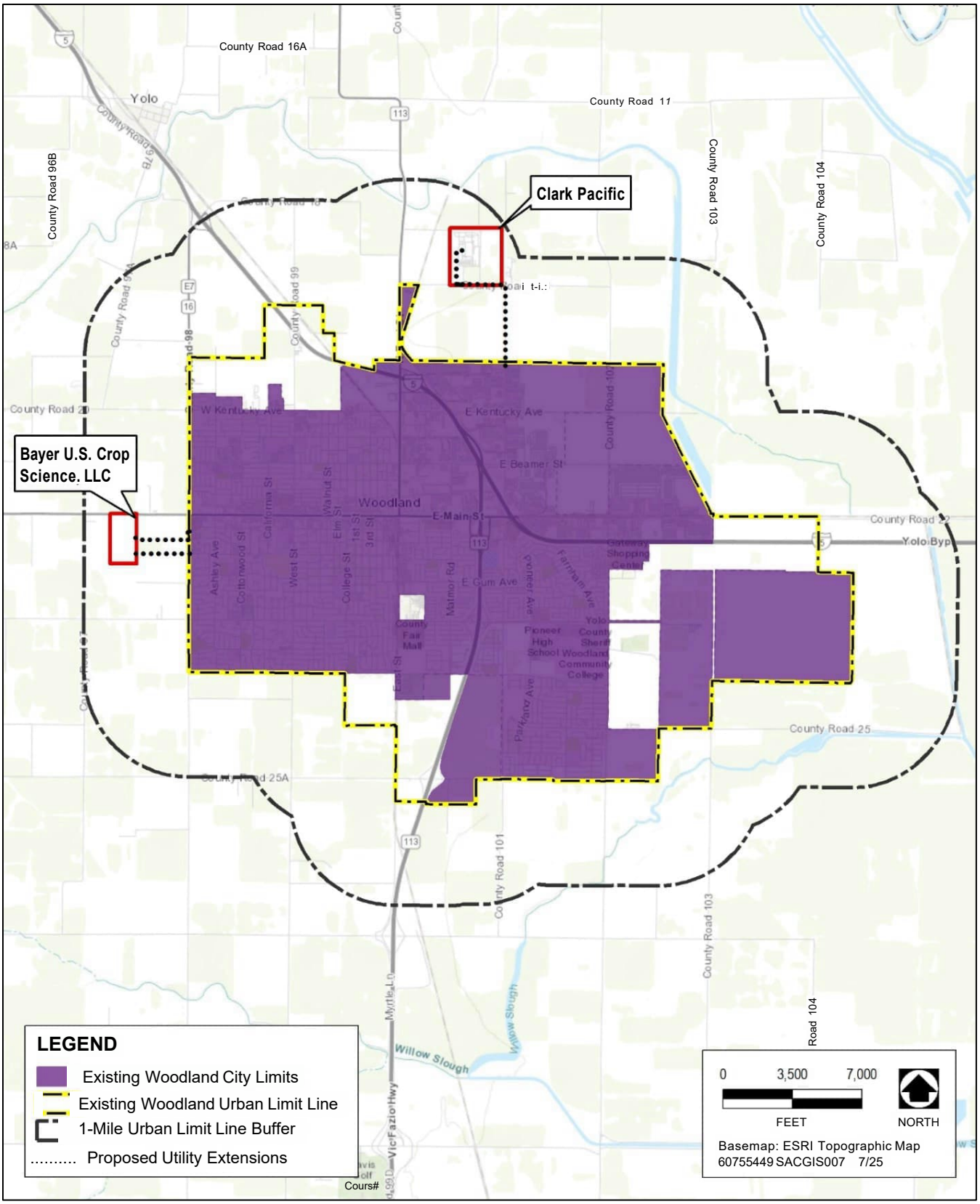

Figure 1: Proposed Project Vicinity Map

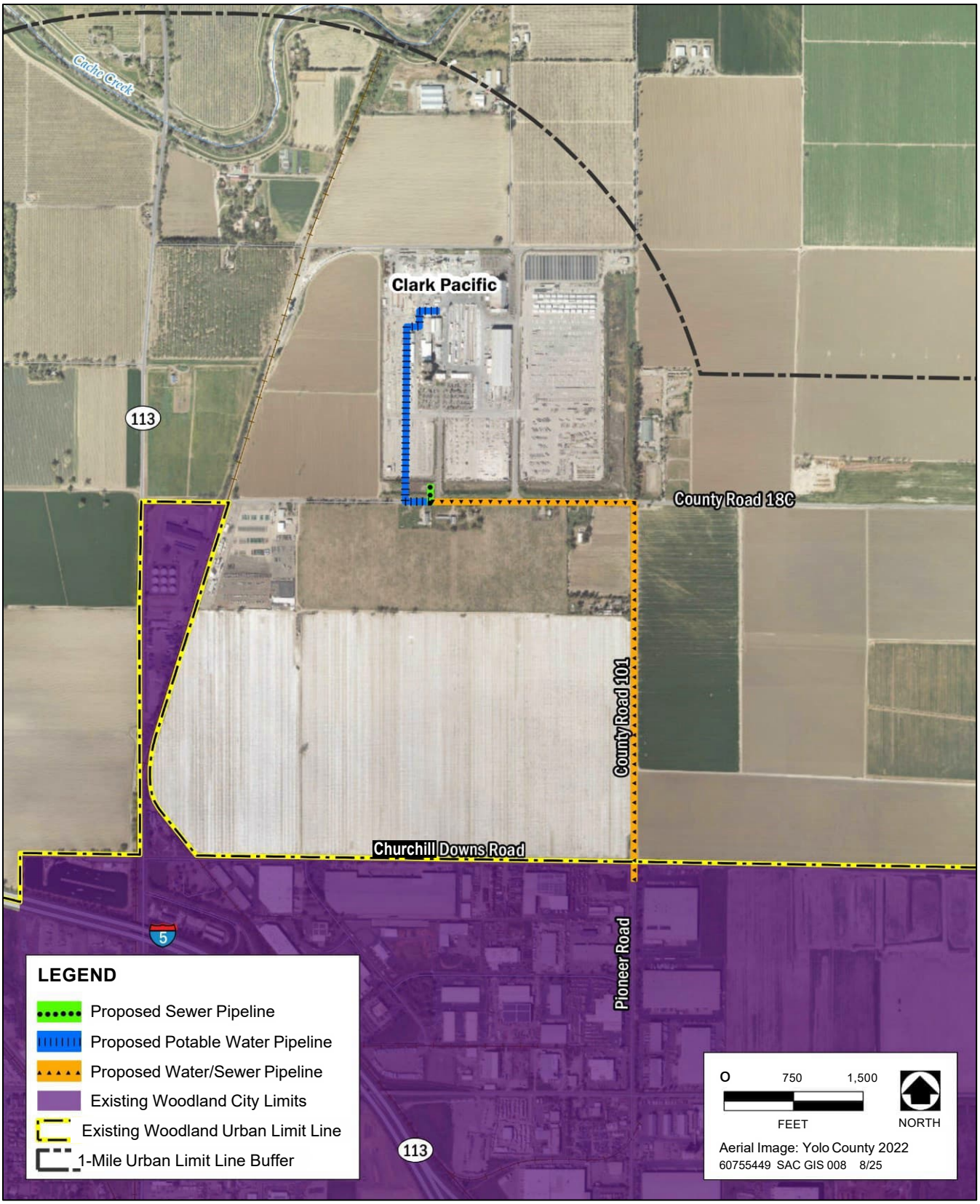

Figure 2: Proposed Project Clark Pacific Utility Extension Alignments

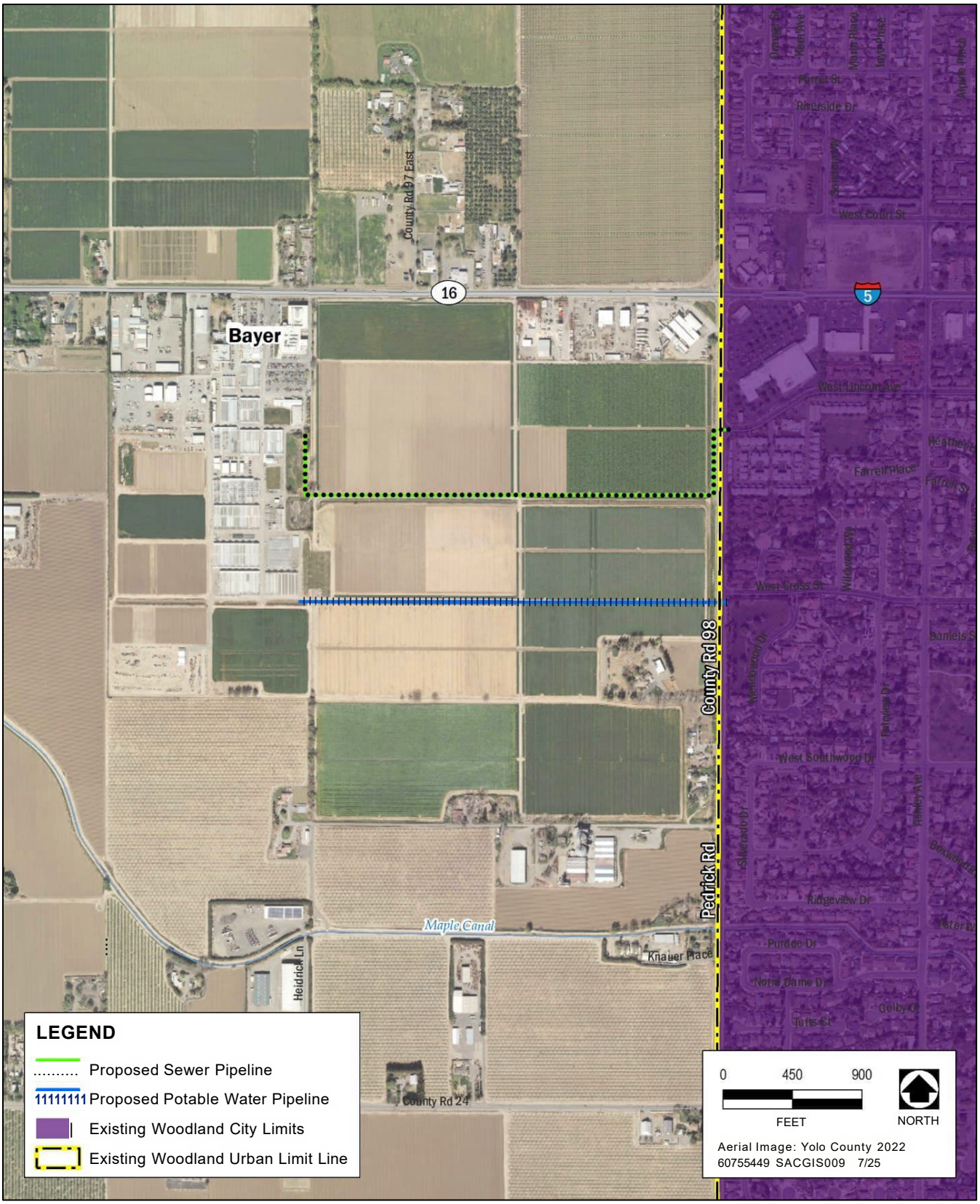

Figure 3: Proposed Project Bayer U.S. Crop Science, LLC Utility Extension Alignments

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.aov

August 14, 2025

Erika Bumgardner
City of Woodland
300 First Street
Woodland CA 95695

Re 2013032015 General Plan Amendment to Policy 2,A.1 Project Yolo County

Dear Ms. Bumgardner:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd. (a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

a. A brief description of the project.

b. The lead agency contact information.

c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).

d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Davs of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. [Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

a. Alternatives to the project.

b. Recommended mitigation measures.

c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

a. Type of environmental review necessary.

b. Significance of the tribal cultural resources.

c. Significance of the project's impacts on tribal cultural resources.

d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=3033l) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@NAHC.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

cc: State Clearinghouse

Shirley N. Weber, Ph.D. I California Secretary of Stat®
Business Frograms Division [Special Hljngs
0,0, Bax 942870 | Sacramento, CA94277 870 | 916,653.3984 I ww-sos. goWbuaness-prcgrems/spedal-Slings.

August 15, 2025

City of Woodland
300 First Street
Woodland, CA 95695

To Whom It May Concern:

Thank you for contacting the California Secretary of State.

The subject matter of your message does not appear to fall under the jurisdiction of the Secretary of State's office. If you have a specific question that relates to business conducted with this office, please respond accordingly specifying the details of your inquiry in your correspondence.

Please let us know if you have any additional questions.

Sincerely,

Special Filings Unit
Business Programs Division
California Secretary of State

YOLO
LOCAL
AGENCY
FORMATION
COMMISSION

COMMISSION
CHAIR
BILL BIASI
Councilmember
City of Winters

OSCAR VILLEGAS
VICE CHAIR
Supervisor - 1st District

LUCAS FRERICHS
Supervbor - 2nd District

PAMELA MILLER
Public Member

GLORIA PARTIDA
Councilmember
City of Davis

ALTERNATES
SHEILA ALLEN
Supervisor - 4th District

TANIA GARCIA-CADENA
Councilmember
City of Woodland

ERIK VINK
Public Member

STAFF
CHRISTINE M. CRAWFORD, AICP
Executive Officer

JDTREBEC
Deputy Executive Officer

TERRI TUCK
Retired Annuitant
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lafco@yolocounty.org

www.yololafcn.org

Yoto LAFCo
Collaboration for Better Government

September 11, 2025

Erika Bumgardner, AICP
Deputy Community Development Director
City of Woodland
300 First Street
Woodland, CA 95695

Re: Notice of Preparation for the Draft Supplemental Environmental Impact Report for the City of Wood land General Plan Amendment to Policy 2.A.I

Dear Ms. Bumgardner:

Thank you for the opportunity to comment on the Notice of Preparation for the City of Woodland General Plan Amendment (GPA) to Policy 2.A.1 Supplemental Impact Report (SEIR). The Yolo Local Agency Formation Commission (LAFCo) will be a Responsible Agency for this SEIR, and if the project is approved by the City Council and voters, LAFCo will use this SEIR to consider any approvals required for extended City services outside its jurisdictional boundary. Accordingly, LAFCo provides the following comments and observations to help improve the SEIR and ensure that it is suitable for LAFCo's needs.

In the project description, please clarify what is permitted under the extension to “commercial facilities". According to the State Water Resources Control Board SAFER Dashboard, there are at-risk water systems surrounding the City or other systems that may warrant future consolidation and LAFCo staff recommends these not be precluded by the proposed GPA language.

Government Code section 56133 requires that districts and cities obtain LAFCo approval of any new or extended services outside the agency's existing boundaries. For the Commission to approve any requests, the area to be served must either be (1) within the sphere of influence ("SOI") of the agency and annexation of the territory is anticipated; or (2) services are needed outside an agency's SOI to respond to an existing or impending public health or safety threat (e.g. failing well or septic system). There is an exemption under section 56133(e)(3) that potentially could be considered for Bayer Crop Science if the facility is determined by LAFCo to directly support agricultural industries. LAFCo recommends that the SEIR discuss the need for LAFCo approval under section 56133.

As such the project and SEIR analysis must comply with the Yolo LAFCo's Out of Agency Service Review policies (Section 3.0) and Agricultural Conservation Policies (Section 4.0) found at the following link HERE. These policies should be discussed in the SEIR.

Thank you again for consulting with Yolo LAFCo. If you have any questions, please feel free to contact me.

Best regards,

Christine M. Crawford, AICP

12 September 2025

Erika Bumgardner
City of Woodland
300 First Street
Woodland, CA 95695
erika.bumgardner@cityofwoodland.gov

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, GENERAL PLAN AMENDMENT TO POLICY 2.A.1, SCH#2013032015, YOLO COUNTY

Pursuant to the State Clearinghouse's 12 August 2025 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the General Plan Amendment to Policy 2.A.1, located in Yolo County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by

the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins,* please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations
All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit
Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is reguired by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit - Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements - Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter G. Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Nicole Williams
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ED Yolo County Farm Bureau®

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Submitted Electronically

September 12, 2025

Erika Bumgardner, ATCP
Deputy Community Development Director
Community Development Department
300 Eirst Street
Woodland, CA 95695

RE: NOP of a Draft SEIR for the City of Woodland General Plan Amendment to Policy 2.A.1

Dear Ms. Bumgardner:

Farm Bureau has received the Notice of Preparation ("NOP") for a Draft Supplemental Environmental Impact Report ("Draft SEIR") related to a potential General Plan Amendment to allow for the extension of utilities beyond the City's Urban Limit Line ("ULL") for certain existing commercial facilities within the County of Yolo's jurisdiction. Farm Bureau understands that the City has determined to publish a DSEIR to enable this action, which supplements a pre-existing environmental impact report ("EIR") related to the City's 2035 General Plan.

Farm Bureau is eminently concerned with land use and growth within the County, as it may affect agricultural resources, and has long been a leading voice in advocating for the concerns of its farmer-members and agricultural resources in general. As such, we will review the Draft SEIR for this project in detail, and asks that the City explore the following CEQA-related concerns:

- Whether a SETR is appropriate for this project, and the referenced underlying EIR covers the CEQA-required substance that is not otherwise covered by the SEIR, or whether a stand-alone EIR is required for this project;
- What foreseeable impacts to agricultural resources will be enabled by the project, as well as impacts to transportation, traffic and public services will occur;
- What other foreseeable impacts delineated by the CEQA Appendix G Environmental Impacts may occur, since it appears that no Initial Study will be prepared for this project;
- What cumulative and/or growth-inducing impacts the project may cause;
- What appropriate avoidance and/or mitigation measures exist with reference to the environmental impacts the project may cause;

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- What the purpose and need for the project is, including known or foreseeable follow-on projects that may be enabled by the project.

Thank you for considering the foregoing, and Farm Bureau looks forward to further review of any CEQA documentation the City may put forth on this project. Tn this regard, please add Farm Bureau to the mailing list for this project.

Sincerely,

Robert H. Falconer
President, Yolo County Farm Bureau

COUNTY of YOLO

Adam Fieseler
Director

DEPARTMENT OF COMMUNITY SERVICES

292 W Beamer St, Woodland, CA 95695
www.YoloCounty.gov (530) 666-8775

September 12, 2025

VIA E-MAIL

Erika Bumgardner, Deputy Community Development Director
City of Woodland
erika.bumgardner@citvofwoodland.gov

Dear Ms. Bumgardner:

The County of Yolo appreciates the opportunity to provide scoping comments on the Draft Supplemental Environmental Impact Report (Draft SEIR) for the proposed amendment to Policy 2.A.1 in the City's General Plan that would allow the City to provide utilities (i.e., potable water, wastewater or recycled water) up to one mile beyond the Urban Limit Line (ULL) to existing commercial facilities in operation on or prior to November 3, 2026. The ULL boundary and provisions of utility services outside of the ULL may only be modified by a vote by the people. As such, the City is considering including a measure on the November 2026 ballot that would amend the ULL to allow the expansion of existing City utilities to commercial facilities located on parcels within a boundary that falls wholly or partially within one mile of the ULL and in operation on or prior to November 3, 2026. The Notice of Preparation (NOP) for the Draft SEIR anticipates that two existing commercial facilities located in unincorporated Yolo County, Bayer U.S. Crop Science and Clark Pacific, would make use of the utility extension if the ballot measure passes. County staff are hopeful that the information provided in this letter will help improve the Draft SEIR and the decision-making process surrounding the project.

Bayer U.S. Crop Science, located at 37437 CA-16 (APNs: 025-470-035, and -038), has a general plan land use designation of Agriculture (AG) and is zoned Agricultural Intensive (A-N). The County has issued several discretionary approvals over the years to allow for agricultural research uses, including office and laboratory buildings, conference center, greenhouses, warehouses, and other agricultural structures. Most recently, the Yolo County Planning Commission approved a Use Permit Modification and adopted a Negative Declaration (SCH #1999082018) on October 8, 2009, to allow for the addition of approximately 168,000 square feet of building area to the agricultural research facility.

Clark Pacific, located at 40600 County Road 18C (APNs: 027-250-028, and -029), has a general plan land use designation of Industrial (IN) and is zoned Heavy Industrial (I-N). A small portion of the property along the southern boundary of APN 027-250-028 and along the eastern and southern boundary of APN 027-250-029 has a general plan land use designation of Open Space (OS) and is zoned Public Open Space (POS). Yolo County has issued discretionary approvals that allowed for the establishment and operation of Clark Pacific facility. On April 1, 2008, the Yolo County Board of Supervisors certified an Initial Study/Mitigated Negative Declaration (IS/MND) (SCH #2008022124) for the Clark Pacific Project (ZF #2007-078), which included approval of a General Plan Amendment of 90 acres from AG to IN, a Rezone from Agricultural General (A-I) to Heavy Industrial (M-2), a Conditional Use Permit (CUP) requesting a change from one nonconforming use to another nonconforming use, and a Development Agreement (Doc. No. 2008-0012768). Later, on July 24, 2012, the Board of Supervisors certified the

Clark Pacific Expansion project EIR (SCH #2011092080), which included the expansion of the Clark Pacific facility to the west, resulting in its existing size and form (ZF #2011-0029). The Clark Pacific Expansion Project included a Rezone of 58.6 acres from A-I to M-2, 20 acres from A-I to Open Space (OS), and six acres from M-2 to OS, and approval of a Tentative Subdivision Map, an amendment to the existing Development Agreement (Doc. No. 2012-0028850), and the termination of components of the previously approved CUP. [Note: The zoning designations described in the 2008 and 2012 project approvals, above, were updated as part of the County's comprehensive zoning code update in 2014.]

County staff would like to make the City aware of a current project (ZF #2023-0005), submitted by Clark Pacific, to expand the facility on a 76.6-acre A-N zoned parcel immediately west of the existing Clark Pacific site (APN 027-250-019). The proposed Clark Pacific expansion does not include specific development plans at this time, but the future facilities are anticipated to be similar to the existing Clark Pacific facility and developed in up to four phases. Prior to phased development, the project site would continue to be used for agricultural purposes. Additionally, the proposed project would include associated internal roadway improvements, utility improvements, and landscaping. The project would require County approval of a General Plan Amendment to redesignate the project site's land use designation from AG to IN, and a Rezone to change the zoning designation of the project site from A-N to I-H. The County prepared a Project Initial Study and released a Notice of Preparation for the Draft EIR for the proposed Clark Pacific Faiclity Expansion Project from March 28, 2025, to April 28, 2025, and held a public scoping meeting on April 10, 2025. The County is currently preparing a Draft EIR which is expected to be released later this calendar year. The City of Woodland will receive notification when the Draft EIR is released. Please consider the Clark Pacific Expansion Project (ZF #2023-0005) as part of the Cumulative Impacts analysis in the Draft SEIR.

State CEQA Guidelines Section 15126.2(d) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The County requests that the City analyze growth-inducing impacts of extending sewer and water services to areas outside of the ULL, including the potential connection for future users not currently anticipated to connect.

The County is appreciative of the opportunity to provide scoping comments on the proposed City of Woodland General Plan Amendment to Policy 2.A.1 and hopes that dialogue with the City continues as the project progresses.

Sincerely,

Jeff Anderson, Principal Planner
Department of Community Services

Cc (via-email only):

Adam Fieseler, Director
Stephanie Cormier, Assistant Director
Michael Webb, Chief Administrative Officer

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052

FEMA

September 24, 2025

Erika Bumgardner, AICP
Deputy Community Development Director
Community Development Department
300 First Street
Woodland, California 95695

Dear Ms. Bumgardner:

This is in response to your request for comments regarding Notice of Preparation (NOP) for the Draft Supplemental Environmental Impact Report (Draft SEIR) for the City of Woodland General Plan Amendment to Policy 2.A, City of Woodland, Yolo County, California.

Please review the current effective Flood Insurance Rate Maps (FIRMs) for the County of Yolo (Community Number 060423), and City of Woodland (Community Number 060426), Maps revised May 16, 2012. To locate FIRMs online, visit the Map Service Center (MSC) at https://msc.fema.gov. Please note that Woodland, Yolo County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any ***development*** must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision, hi accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-fomis.

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The Woodland floodplain manager can be reached by calling Brent Meyer, Community Development Director, at (530) 661-5947. The Yolo County floodplain manager can be reached by calling Scott Doolittle, Plan Check Engineer, at (530) 666-8609.

If you have any questions or concerns, please do not hesitate to contact Gabriel Riggle, Emergency Management Specialist, at gabriel.riggle@fema.dhs.gov of the Mitigation staff.

Sincerely,

Xing Liu, Branch Chief
Floodplain Management and Insurance Branch

cc:
Brent Meyer, Community Development Director, City of Woodland, CA
Scott Doolittle, Plan Check Engineer, Yolo County, CA
Alex Acosta, State of California, Department of Water Resources, North Central Region Office
Anntonette Duncan, DWR NFIP Coordinator, State of California, Sacramento Headquarters Office
Gabriel Riggle, Emergency Management Specialist, DHS/FEMA Region IX
Jakob Crockett, Acting Environmental Regional Officer, DHS/FEMA Region IX

Appendix C Draft Ballot Language

C DRAFT BALLOT LANGUAGE

Shall the City of Woodland amend the policy establishing the City's Urban Limit Line to permit the extension of sewer, water, and recycled water facilities to serve parcels within a mile of the Urban Limit Line that have commercial facilities in operation on or prior to November 3, 2026, be adopted?

C.1 DRAFT AMENDMENT TO ULL POLICY LANGUAGE IN GENERAL PLAN

Policy 2.A.1 Urban Limit Line. A permanent Urban Limit Line (ULL) is established around Woodland to permanently circumscribe urban development and comply with provisions for agricultural lands. Public services and facilities shall not extend beyond the permanent Urban Limit Line, with the exception of sewer, water, and recycled water facilities to serve existing commercial facilities located on parcels with a boundary that falls wholly or partially within one mile of the ULL and in operation on or prior to November 3, 2026. The City shall take such administrative steps as may be required to implement Policy 2.A.1. The City shall also identify funding for implementing a permanent urban limit line, including mitigation for developing on agricultural land. The City shall continually reevaluate residential land use densities, housing policies, and zoning to determine the potential for increased residential densities for both infill sites and undeveloped land within the Urban Limit Line. The City shall continually review existing non-residential zoning to determine the potential for conversion to higher density residential uses within the permanent Urban Limit Line. The City will encourage and support appropriately located agricultural and wildlife conservation easements to support implementation of the permanent urban limit line.

This policy enacts Woodland Measure A (Ballot of June 2006), Urban Limit Line, and can only be modified by the voters.

C.2 DESCRIPTION OF PHYSICAL IMPROVEMENTS:

Should the Measure pass, and the Council approve any agreements to extend services, the physical improvements would involve the construction of one or more of the following:

Sewer Line Extension: Installation of new sewer main line, assumed to be 10 inches in diameter, approximately 5 to 8 feet deep and up to 1 mile per service connection. Location of work may be within existing public right of way and/or on private property (primarily used as agriculture). Improvement may also include the installation of force main pump(s) and force main pipelines where gravity flow is not adequate. As condition of connection to City Sewer, abandonment of existing leach field(s) would be required.

Treated Water Main Line Extension: Installation of new pressurized water main line, assumed to be eight inches in diameter, approximately 3-6 feet deep and up to 1 mile per service connection. Location of work may be within existing public right of way and/or on private property (primarily used as agriculture). Work to include appurtenances including: valves, air/vacuum valves and fire hydrants. Work to also include the installation of meters and backflow protection devices at point of connection. Improvements may also include the installation of booster pump(s) to support required pressure.

Recycled Water Main Line Extension: Installation of new pressurized recycled water main line, assumed to be eight inches in diameter, approximately 3-6 feet deep and up to 1 mile per service connection. Location of work may be within existing public right of way and/or on private property (primarily used as agriculture). Work to include appurtenances including: valves and air/vacuum valves. Work to also include the installation of meters. Improvements may also include the installation of booster pump(s) to support required pressure.

C.3 SUMMARY OF PUBLIC / ENVIRONMENTAL BENEFITS

- Reduce demand on ground water would increase water availability for agriculture and other uses in vicinity reliant on ground water
- Reduce demand on ground water aquifer(s)
- Reduce potential for land subsidence
- Reduce potential for groundwater contamination from wells
- Septic: reduce potential for soil and groundwater contamination and reduce land area required for leach fields and holding ponds
- Preserve employment centers (jobs) through provision of reliable water and sewer utilities
- Improves drinking water quality (nitrates and hexavalent chromium)
- Limited nature of properties which can potentially access the utilities mitigates growth inducement, particularly by precluding residential uses
- Consistent with State Water Resources Control Board policy to consolidate small public water and sewer systems with larger water and sewer systems

Appendix D Air Quality and Greenhouse Gas Emissions Modeling

WOODLAND ULL EMISSIONS SUMMARY

Bayer - Construction Emission Summary

Project Component	ROG ton/year	NOX ton/year	PM10 lb/day	PM2.5 lb/day	CO2e MT/year
Utility Extensions	0.04	0.4	35.4	5.3	93.92
Groundwater Well Decommissioning	0.0004	0.002	0.12	0.06	1.13
Septic Tank Decommissioning	0.001	0.01	0.33	0.23	2.89
Retention Pond Decommissioning	0.0005	0.01	6.1	1.9	9.77
YSAQMD Thresholds	*10*	*10*	*80*	*None*	None
Bayer Total	0.05	0.4	42.0	7.5	107.71

Clark Pacific - Construction Emission Summary

Project Component	ROG ton/year	NOX ton/year	PM10 lb/day	PM2.5 lb/day	CO2e MT/year
Utility Extensions	0.03	0.3	2.6	1.1	69.33
Groundwater Well Decommissioning	0.0004	0.002	0.1	0.1	1.13
Wastewater Facility Decommissioning	0.001	0.01	0.3	0.2	2.89
YSAQMD Thresholds	*10*	*10*	*80*	*None*	None
Clark Pacific Total	0.03	0.3	3.1	1.4	73.36

Project Component	ROG	NOX	PM10	PM2.5	CO2e
Bayer & Clark Pacific Total	0.08	0.7	45.1	8.90	181.07

Project Characteristics	Input
Project Name	Woodland ULL - Bayer
Project Location	Yolo County
CEC California Electricity Demand Forecast Zone	4
Land Use Setting	Suburban
Construction Start Date	5/3/2027
Utility	PG&E

Land Use

Project Component	CalEEMod Land Use Type	Size	Unit	Acreage	Notes
Utility Extension - Sewer	Linear - Road Construction	0.608	miles	1.84	Total distance of proposed sewer line is 3,210 feet.
Utility Extension - Water	Linear - Road Construction	0.526	miles	1.59	Total distance of proposed water line is 2,775 feet.
Retention Pond Decommissioning	Parking - Other Nonasphalt Surfaces	6.25	ksf	0.14	Measured in Google Earth
Well Decommissioning	Parking - Other Nonasphalt Surfaces	2.1	ksf	0.05	Measured in Google Earth
Septic System Decomissioning	Parking - Other Nonasphalt Surfaces	12.6	ksf	0.29	Measured in Google Earth

Notes:
1. Acreage for linear land uses is based on 25 feet width of disturbance area.
2. Predominant soil type for linear land uses: sand gravel

	Start Date	Duration (days)
Linear Activities	5/3/2027	20

Notes:
1. Duration is based on 15 days for excavation + pipelaying (based on total alignment distance and 400 feet per day), 2 days for vegetation clearing/grubbing (CalEEMod default), and 3 days of paving (CalEEMod default).

Project Component	CalEEMod Phase	Start Date	End Date	Number of Days
Utility Extension	Linear, Grubbing & Land Clearing	5/3/2027	5/3/2027	2
	Linear, Grading & Excavation	5/4/2027	5/15/2027	8
	Linear, Drainage, Utilities, and Subgrade	5/16/2027	5/24/2027	7
	Linear, Paving	5/25/2027	5/29/2027	3
Retention Pond Decommissioning	Grading	6/1/2027	6/1/2027	1
Well Decommissioning	Demolition	6/2/2027	6/4/2027	3
Septic System Decommissioning	Demolition	6/7/2027	6/11/2027	5

Notes:
1.Uses default linear phases for Utility Extension work.
2. Retention pond decommissioning conservatively assumed to occur over 1 day.
3. Well and septic tank decommissioning durations based on anticipated work. Assumed to not overlap with utility extension work.

Construction Equipment:

Project Component	CalEEMod Phase	CalEEMod Equipment	Quantity	Hours per Day	HP	Load Factor	Fuel Type
Retention pond decommissioning	Demolition	Graders	1	8	148	0.41	Diesel
Retention pond decommissioning	Demolition	Rollers	1	8	36	0.38	Diesel
Well decommissioning	Demolition	Off-Highway Trucks	2	2	376	0.38	Diesel
Septic tank decommissioning	Demolition	Excavators	1	8	36	0.38	Diesel
Septic tank decommissioning	Demolition	Tractors/Loaders/Backhoes	1	8	84	0.37	Diesel
Septic tank decommissioning	Demolition	Crawler Tractors	1	8	87	0.43	Diesel
Septic tank decommissioning	Demolition	Off-Highway Trucks	1	2	376	0.38	Diesel
Utility Extension	Linear, Grubbing & Land Clearing	Signal Boards	2	8	6	0.82	Electric
Utility Extension	Linear, Grubbing & Land Clearing	Crawler Tractors	2	8	87	0.43	Diesel
Utility Extension	Linear, Grubbing & Land Clearing	Excavators	2	8	36	0.38	Diesel
Utility Extension	Linear, Grading & Excavation	Excavators	6	8	36	0.38	Diesel
Utility Extension	Linear, Grading & Excavation	Crawler Tractors	2	8	87	0.43	Diesel
Utility Extension	Linear, Grading & Excavation	Graders	2	8	148	0.41	Diesel
Utility Extension	Linear, Grading & Excavation	Rollers	4	8	36	0.38	Diesel
Utility Extension	Linear, Grading & Excavation	Signal Boards	2	8	6	0.82	Electric
Utility Extension	Linear, Grading & Excavation	Tractors/Loaders/Backhoes	4	8	84	0.37	Diesel
Utility Extension	Linear, Grading & Excavation	Rubber Tired Loaders	2	8	150	0.36	Diesel
Utility Extension	Linear, Grading & Excavation	Scrapers	4	8	423	0.48	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Scrapers	4	8	423	0.48	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	2	8	96	0.4	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	4	8	84	0.37	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	2	8	6	0.82	Electric
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	4	8	84	0.37	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	2	8	6	0.82	Electric
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Graders	2	8	148	0.41	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	2	8	8	0.43	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Pumps	2	8	11	0.74	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	2	8	37	0.48	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	2	8	14	0.74	Diesel
Utility Extension	Linear, Paving	Rollers	6	8	36	0.38	Diesel
Utility Extension	Linear, Paving	Paving Equipment	2	8	89	0.36	Diesel
Utility Extension	Linear, Paving	Pavers	2	8	81	0.42	Diesel
Utility Extension	Linear, Paving	Tractors/Loaders/Backhoes	4	8	84	0.37	Diesel
Utility Extension	Linear, Paving	Signal Boards	2	8	6	0.82	Electric

Notes:
1. Retention pond would be filled and compacted - assumed 1 grader and 1 roller.
2. Well decommissioning assumed to require 1 concrete truck and 1 utility vehicle; included for 2 hours as off-highway trucks while onsite. Truck travel included in on-road table below.
3. Septic tank would be abandoned in placed; assumed to require -1 excavator, 1 backhoe, 1 small bulldozer, 1 large truck to pump out the system before it is abandoned in place.
4. Utility extension inputs based on CalEEMod defaults for linear project.

Dust from Material Movement:

Project Component	CalEEMod Phase	Volume (cubic feet)1	Material Import (cy)
Retention Pond Decommissioning	Grading	62500	2,315

Notes:
1. Retention pond volume = (250ft x 25ft x 10ft)

Paved Areas:

Project Component	CalEEMod Land Use Type	Paved Area (acres)	Percent Asphalt
Utility Extension [1]	Linear, Road Construction	0.859	100
Retention Pond Decommissioning	Parking - Other Nonasphalt Surfaces	0.000	0
Well Decommissioning	Parking - Other Nonasphalt Surfaces	0.000	0
Septic System Decomissioning	Parking - Other Nonasphalt Surfaces	0.000	0

Notes:
1. Conservatively assume 25 percent of total utility extension area is repaved.

Construction Vehicle Trips:

Project Component	CalEEMod Phase	Worker Trips (one-way trips per day) 1	Vendor Truck trips (one-way trips per day)	Haul Truck Trips (one-way trips per day)
Utility extension	Linear, Grubbing & Land Clearing	15	0	0
	Linear, Grading & Excavation	65	2	0
	Linear, Drainage, Utilities, and Subgrade	55	0	0
	Linear, Paving	40	0	0
Retention Pond Decommissioning	Grading	5	0	290
Well Decommissioning	Demolition	5	4	0
Septic Tank Decommissioning	Demolition	10	2	0

Notes:
1. Worker trips based on 2.5 one-way worker trips per piece of equipment (CalEEMod User Guide).
2. For retention pond, well, and septic decommissioning related activities, assume worker vehicles and haul trucks travel on 100% paved roads - retention bond is accessible through Bayer facility which is entirely paved.
3. For linear utility extension, assumes worker vehicle travel on paved roads is based on the fraction of the maximum alignment distance (0.6 miles for sewer main) of the total worker trip length. See below.
4. Trip distances based on CalEEMod defaults for one-way trips.

Paved Area:

Utility Alignment	Length (miles)	Paved distance (miles)	Percent Paved
Sewer Pipe Installation	0.304	13.996	97.9%
Water Pipe Installation	0.263	14.037	98.2%

Worker	14.3
Vendor	8.8
Hauling	20

Measures

Water unpaved roads (2x daily)
Water exposed area (2x daily)

Conversion Factors:

1 acre =	43560	sqft
1 mile =	5280	ft

Woodland ULL Project Inputs - Clark Pacific

Project Characteristics	Input
Project Name	Woodland ULL - Bayer
Project Location	Yolo County
CEC California Electricity Demand Forecast Zone	4
Land Use Setting	Suburban
Construction Start Date	5/3/2027
Utility	PG&E

Land Use:

Project Component	CalEEMod Land Use Type	Size	Unit	Acreage	Notes
Utility Extension - Sewer + Water	Linear - Road Construction	1.645	miles	4.98	Total distance of proposed water+sewer main is 8,685 feet.
Well and Septic Decommissioning	Parking - User Defined Parking	1	-	0.00	Acreage does not affect construction inputs

Notes:
1. Acreage for linear land uses is based on 25 feet width of disturbance area.
2. Predominant soil type for linear uses: sand gravel

Construction Duration:

Activity	Start Date	Duration (days)
Linear Activities	5/3/2027	29

Notes:
1. Duration is based on 22 days for excavation + pipelaying (based on total alignment distance and 400 feet per day), 3 days for vegetation clearing/grubbing (CalEEMod default) and 4 days of paving (CalEEMod default).

Construction Phasing:

Project Component	CalEEMod Phase	Start Date	End Date	Number of Days
Utility Extension	Linear, Grubbing & Land Clearing	5/3/2027	5/7/2027	3
Utility Extension	Linear, Grading & Excavation	5/8/2027	5/24/2027	12
Utility Extension	Linear, Drainage, Utilities, and Subgrade	5/25/2027	6/8/2027	10
Utility Extension	Linear, Paving	6/9/2027	6/14/2027	4
Well Decommissioning	Demolition	6/29/2027	7/1/2027	3
Septic System Decommissioning	Demolition	7/5/2027	7/9/2027	5

Notes:
1.Uses default linear phases for Utility Extension work.
2. Well and septic tank decommissioning durations based on anticipated work. Assumed to not overlap with utility extension work.

Construction Equipment:

Project Component	CalEEMod Phase	CalEEMod Equipment	Quantity	Hours per Day	HP	Load Factor	Fuel Type
Well decommissioning	Demolition	Off-Highway Trucks	2	2	376	0.38	Diesel
Septic decommissioning	Demolition	Excavators	1	8	36	0.38	Diesel
Septic decommissioning	Demolition	Tractors/Loaders/Backhoes	1	8	84	0.37	Diesel
Septic decommissioning	Demolition	Crawler Tractors	1	8	87	0.43	Diesel
Septic decommissioning	Demolition	Off-Highway Trucks	1	2	376	0.38	Diesel
Utility Extension	Linear, Grubbing & Land Clearing	Signal Boards	3	8	6	0.82	Electric
Utility Extension	Linear, Grubbing & Land Clearing	Crawler Tractors	1	8	87	0.43	Diesel
Utility Extension	Linear, Grubbing & Land Clearing	Excavators	1	8	36	0.38	Diesel
Utility Extension	Linear, Grading & Excavation	Excavators	3	8	36	0.38	Diesel
Utility Extension	Linear, Grading & Excavation	Crawler Tractors	1	8	87	0.43	Diesel
Utility Extension	Linear, Grading & Excavation	Graders	1	8	148	0.41	Diesel
Utility Extension	Linear, Grading & Excavation	Rollers	2	8	36	0.38	Diesel
Utility Extension	Linear, Grading & Excavation	Signal Boards	3	8	6	0.82	Electric
Utility Extension	Linear, Grading & Excavation	Tractors/Loaders/Backhoes	2	8	84	0.37	Diesel
Utility Extension	Linear, Grading & Excavation	Rubber Tired Loaders	1	8	150	0.36	Diesel
Utility Extension	Linear, Grading & Excavation	Scrapers	2	8	423	0.48	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Scrapers	2	8	423	0.48	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	1	8	96	0.4	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	2	8	84	0.37	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	3	8	6	0.82	Electric
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	1	8	8	0.43	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	3	8	6	0.82	Electric
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	1	8	8	0.43	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Pumps	1	8	11	0.74	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Graders	1	8	148	0.41	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	1	8	37	0.48	Diesel
Utility Extension	Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	1	8	14	0.74	Diesel
Utility Extension	Linear, Paving	Rollers	3	8	36	0.38	Diesel
Utility Extension	Linear, Paving	Paving Equipment	1	8	89	0.36	Diesel
Utility Extension	Linear, Paving	Pavers	1	8	81	0.42	Diesel
Utility Extension	Linear, Paving	Tractors/Loaders/Backhoes	2	8	84	0.37	Diesel
Utility Extension	Linear, Paving	Signal Boards	3	8	6	0.82	Electric

Notes:
1. Well decommissioning assumed to require 1 concrete truck and 1 utility vehicle; included for 2 hours as off-highway trucks while onsite. Truck travel included in on-road table below.
2. Septic tank would be abandoned in placed; assumed to require -1 excavator, 1 backhoe, 1 small bulldozer, 1 large truck to pump out the system before it is abandoned in place.
3. Utility extension inputs based on CalEEMod defaults for linear project.

Paved Areas:

Project Component	CalEEMod Land Use Type	Paved Area (acres)	Percent Asphalt
Utility extension	Linear, Road Construction	1.246	100

Notes:
1. Conservatively assume 25% of total area is repaved.

Construction Vehicle Trips:

Project Component	CalEEMod Phase	Worker Trips (one-way trips per day)	Vendor Truck trips (one-way trips per day)	Haul Truck Trips (one-way trips per day)
Utility extension	Linear, Grubbing & Land Clearing	13	0	0
	Linear, Grading & Excavation	38	1	0
	Linear, Drainage, Utilities, and Subgrade	33	0	0
	Linear, Paving	25	0	0
Well Decommissioning	Demolition	5	4	0
Septic Tank Decommissioning	Demolition	10	2	0

Notes:
1. Worker trips based on 2.5 one-way worker trips per piece of equipment (CalEEMod User Guide).
2. Utility extension alignment and facility areas are paved.
3. Trip distances based on CalEEMod defaults for one-way trips.

Woodland ULL - Energy Calculations

Bayer	Phase	Source	Fuel Type	MT CO2	lb CO2/gallon	Gallons
Groundwater Well Decommissioning	Well decommissioning (2027) - Unmitigated	Off-Road Equipment	Diesel	0.91	22.45	89.05
Groundwater Well Decommissioning	Well decommissioning (2027) - Unmitigated	Worker	Gasoline	0.07	18.73	7.98
Groundwater Well Decommissioning	Well decommissioning (2027) - Unmitigated	Vendor	Diesel	0.14	22.45	14.23
Septic Tank Decommissioning	Septic tank decommissioning (2027) - Unmitigated	Off-Road Equipment	Diesel	2.53	22.45	248.11
Septic Tank Decommissioning	Septic tank decommissioning (2027) - Unmitigated	Worker	Gasoline	0.23	18.73	26.60
Septic Tank Decommissioning	Septic tank decommissioning (2027) - Unmitigated	Vendor	Diesel	0.12	22.45	11.86
Retention Pond Decommissioning	Retention pond decommissioning (2027) - Unmitigated	Off-Road Equipment	Diesel	0.32	22.45	31.63
Retention Pond Decommissioning	Retention pond decommissioning (2027) - Unmitigated	Worker	Gasoline	0.02	18.73	2.66
Retention Pond Decommissioning	Retention pond decommissioning (2027) - Unmitigated	Hauling	Diesel	8.98	22.45	881.14
Utility Extensions	Linear, Grubbing & Land Clearing (2027) - Unmitigated	Off-Road Equipment	Diesel	0.89	22.45	87.42
Utility Extensions	Linear, Grubbing & Land Clearing (2027) - Unmitigated	Worker	Gasoline	0.14	18.73	15.96
Utility Extensions	Linear, Grading & Excavation (2027) - Unmitigated	Off-Road Equipment	Diesel	47.14	22.45	4627.54
Utility Extensions	Linear, Grading & Excavation (2027) - Unmitigated	Worker	Gasoline	2.35	18.73	276.63
Utility Extensions	Linear, Grading & Excavation (2027) - Unmitigated	Vendor	Diesel	0.19	22.45	18.98
Utility Extensions	Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated	Off-Road Equipment	Diesel	36.14	22.45	3548.43
Utility Extensions	Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated	Worker	Gasoline	1.74	18.73	204.81
Utility Extensions	Linear, Paving (2027) - Unmitigated	Off-Road Equipment	Diesel	4.41	22.45	432.71
Utility Extensions	Linear, Paving (2027) - Unmitigated	Worker	Gasoline	0.54	18.73	63.84
Total	**Total**	**Total - Onsite Diesel**	**Diesel**	**92**	**22.45**	**9065**
Total	**Total**	**Total - Onsite Diesel**	**Diesel**	**9**	**22.45**	**926**
Total	**Total**	**Total - Gasoline**	**Gasoline**	**5**	**18.73**	**598**

Sources:
a Modeled by AECOM in 2025.
b U.S. Energy Information Administration released September 2024(https://www.eia.gov/environment/emissions/co2_vol_mass.php)

Clark Pacific	Phase	Source	Fuel Type	MT CO2	lb CO2/gallon	Gallons
Groundwater Well Decommissioning	Well decommissioning (2027) - Unmitigated	Off-Road Equipment	Diesel	0.907019868	22.45	89.05
Groundwater Well Decommissioning	Well decommissioning (2027) - Unmitigated	Worker	Gasoline	0.067812304	18.73	7.98
Groundwater Well Decommissioning	Well decommissioning (2027) - Unmitigated	Vendor	Diesel	0.144985607	22.45	14.23
Septic Tank Decommissioning	Septic decommissioning (2027) - Unmitigated	Off-Road Equipment	Diesel	2.527304265	22.45	248.11
Septic Tank Decommissioning	Septic decommissioning (2027) - Unmitigated	Worker	Gasoline	0.226041014	18.73	26.60
Septic Tank Decommissioning	Septic decommissioning (2027) - Unmitigated	Vendor	Diesel	0.120821339	22.45	11.86
Utility Extensions	Linear, Grubbing & Land Clearing (2027) - Unmitigated	Off-Road Equipment	Diesel	0.667819442	22.45	65.56
Utility Extensions	Linear, Grubbing & Land Clearing (2027) - Unmitigated	Worker	Gasoline	0.169530761	18.73	19.95
Utility Extensions	Linear, Grading & Excavation (2027) - Unmitigated	Off-Road Equipment	Diesel	35.35216985	22.45	3470.65
Utility Extensions	Linear, Grading & Excavation (2027) - Unmitigated	Worker	Gasoline	2.034369127	18.73	239.39
Utility Extensions	Linear, Grading & Excavation (2027) - Unmitigated	Vendor	Diesel	0.144985607	22.45	14.23
Utility Extensions	Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated	Off-Road Equipment	Diesel	25.81743397	22.45	2534.59
Utility Extensions	Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated	Worker	Gasoline	1.469266592	18.73	172.89
Utility Extensions	Linear, Paving (2027) - Unmitigated	Off-Road Equipment	Diesel	2.938367733	22.45	288.47
Utility Extensions	Linear, Paving (2027) - Unmitigated	Worker	Gasoline	0.452082028	18.73	53.20
Total	**Total**	**Total - Onsite Diesel**	**Diesel**	**68**	**22.45**	**6696**
Total	**Total**	**Total - Onsite Diesel**	**Diesel**	**0.4**	**22.45**	**40**
Total	**Total**	**Total - Gasoline**	**Gasoline**	**4**	**18.73**	**520**

Sources:

a Modeled by AECOM in 2025.

b U.S. Energy Information Administration released September 2024(https://www.eia.gov/environment/emissions/co2_vol_mass.php)

Woodland ULL - Bayer Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Woodland ULL - Bayer
Construction Start Date	5/3/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	26.8
Location	38.67420207055477, -121.81075149404109
County	Yolo
City	Unincorporated
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	328
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	0.61	Mile	1.84	0.00	0.00	—	—	Sewer pipe
Road Construction	0.53	Mile	1.59	0.00	0.00	—	—	Water pipe

Other Non-Asphalt Surfaces	6.25	1000sqft	0.14	0.00	0.00	—	—	Retention pond
Other Non-Asphalt Surfaces	2.10	1000sqft	0.05	0.00	0.00	—	—	Well decommissioning
Other Non-Asphalt Surfaces	12.6	1000sqft	0.29	0.00	0.00	—	—	Septic tank decomissioning

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.02	5.93	47.2	61.4	0.17	1.97	33.4	35.4	1.82	3.44	5.26	—	24,225	24,225	1.18	3.19	40.7	25,247
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.25	2.10	2.63	0.01	0.08	1.36	1.44	0.08	0.14	0.22	—	646	646	0.03	0.01	0.10	651
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.05	0.38	0.48	< 0.005	0.02	0.25	0.26	0.01	0.03	0.04	—	107	107	< 0.005	< 0.005	0.02	108

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	7.02	5.93	47.2	61.4	0.17	1.97	33.4	35.4	1.82	3.44	5.26	—	24,225	24,225	1.18	3.19	40.7	25,247
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.30	0.25	2.10	2.63	0.01	0.08	1.36	1.44	0.08	0.14	0.22	—	646	646	0.03	0.01	0.10	651
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.06	0.05	0.38	0.48	< 0.005	0.02	0.25	0.26	0.01	0.03	0.04	—	107	107	< 0.005	< 0.005	0.02	108

3. Construction Emissions Details

3.1. Well decommissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.22	1.49	0.01	0.04	—	0.04	0.04	—	0.04	—	667	667	0.03	0.01	—	669
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.48	5.48	< 0.005	< 0.005	—	5.50
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.91	0.91	< 0.005	< 0.005	—	0.91
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.5	54.5	< 0.005	< 0.005	0.18	55.2
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	< 0.005	0.02	0.24	112
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.41	0.41	< 0.005	< 0.005	< 0.005	0.42
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.88	0.88	< 0.005	< 0.005	< 0.005	0.92
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Septic tank decommissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.55	4.59	6.11	0.01	0.21	—	0.21	0.20	—	0.20	—	1,114	1,114	0.05	0.01	—	1,118
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.3	15.3	< 0.005	< 0.005	—	15.3
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipme	< 0.005 t	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.53	2.53	< 0.005	< 0.005	—	2.54
Demoliti on	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.53	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.36	110
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	53.3	53.3	< 0.005	0.01	0.12	55.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.38
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.76
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Retention pond decommissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	3.31	4.64	0.01	0.17	—	0.17	0.16	—	0.16	—	710	710	0.03	0.01	—	713
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.95	1.95	< 0.005	< 0.005	—	1.95
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.32	0.32	< 0.005	< 0.005	—	0.32
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.5	54.5	< 0.005	< 0.005	0.18	55.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	1.48	0.45	23.9	8.44	0.13	0.38	5.25	5.63	0.26	1.47	1.73	—	19,784	19,784	1.01	3.15	39.1	20,786
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	54.2	54.2	< 0.005	0.01	0.05	56.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.98	8.98	< 0.005	< 0.005	0.01	9.42

3.7. Linear, Grubbing & Land Clearing (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.80	0.67	5.99	6.90	0.01	0.33	—	0.33	0.30	—	0.30	—	982	982	0.04	0.01	—	985
Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.38	5.38	< 0.005	< 0.005	—	5.40
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.89	0.89	< 0.005	< 0.005	—	0.89
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.79	0.00	0.00	6.78	6.78	0.00	0.70	0.70	—	163	163	< 0.005	0.01	0.54	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.03	0.03	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Linear, Grading & Excavation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.76	5.68	47.0	58.0	0.12	1.97	—	1.97	1.81	—	1.81	—	12,990	12,990	0.53	0.11	—	13,034

Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.03	1.27	< 0.005	0.04	—	0.04	0.04	—	0.04	—	285	285	0.01	< 0.005	—	286
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.16	3.43	0.00	0.00	29.4	29.4	0.00	3.02	3.02	—	708	708	0.01	0.02	2.34	718

Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	1.57	1.57	< 0.005	0.16	0.16	—	53.3	53.3	< 0.005	0.01	0.12	55.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.06	0.00	0.00	0.60	0.60	0.00	0.06	0.06	—	14.2	14.2	< 0.005	< 0.005	0.02	14.4
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	1.17	1.17	< 0.005	< 0.005	< 0.005	1.22
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.11	0.11	0.00	0.01	0.01	—	2.35	2.35	< 0.005	< 0.005	< 0.005	2.38
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.53	4.63	39.6	46.4	0.11	1.53	—	1.53	1.40	—	1.40	—	11,384	11,384	0.46	0.09	—	11,423
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	0.89	< 0.005	0.03	—	0.03	0.03	—	0.03	—	218	218	0.01	< 0.005	—	219
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.16	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	36.1	36.1	< 0.005	< 0.005	—	36.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.14	2.90	0.00	0.00	24.9	24.9	0.00	2.55	2.55	—	599	599	0.01	0.02	1.98	608
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.44	0.44	0.00	0.05	0.05	—	10.5	10.5	< 0.005	< 0.005	0.02	10.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.08	0.08	0.00	0.01	0.01	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Linear, Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.95	1.64	14.4	21.6	0.03	0.56	—	0.56	0.51	—	0.51	—	3,239	3,239	0.13	0.03	—	3,250
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.6	26.6	< 0.005	< 0.005	—	26.7

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.41	4.41	< 0.005	< 0.005	—	4.42
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.10	2.11	0.00	0.00	18.1	18.1	0.00	1.86	1.86	—	436	436	0.01	0.02	1.44	442
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.14	0.14	0.00	0.01	0.01	—	3.28	3.28	< 0.005	< 0.005	0.01	3.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.03	0.03	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Well decommissioning	Demolition	6/2/2027	6/4/2027	5.00	3.00	—
Septic tank decommissioning	Demolition	6/7/2027	6/11/2027	5.00	5.00	—
Retention pond decommissioning	Grading	6/1/2027	6/1/2027	5.00	1.00	—
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	5/3/2027	5/5/2027	5.00	2.00	—
Linear, Grading & Excavation	Linear, Grading & Excavation	5/6/2027	5/17/2027	5.00	8.00	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	5/18/2027	5/27/2027	5.00	7.00	—
Linear, Paving	Linear, Paving	5/28/2027	6/1/2027	5.00	3.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Well decommissioning	Off-Highway Trucks	Diesel	Average	2.00	2.00	376	0.38
Septic tank decommissioning	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Septic tank decommissioning	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

Septic tank decommissioning	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Septic tank decommissioning	Off-Highway Trucks	Diesel	Average	1.00	2.00	376	0.38
Retention pond decommissioning	Graders	Diesel	Average	1.00	8.00	148	0.41
Retention pond decommissioning	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Excavators	Diesel	Average	6.00	8.00	36.0	0.38
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Linear, Grading & Excavation	Graders	Diesel	Average	2.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	4.00	8.00	36.0	0.38
Linear, Grading & Excavation	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	2.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	4.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	4.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40

Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	2.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	2.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Linear, Paving	Rollers	Diesel	Average	6.00	8.00	36.0	0.38
Linear, Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Linear, Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Paving	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	15.0	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—

Linear, Grading & Excavation	Worker	65.0	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	55.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	40.0	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT
Retention pond decommissioning	—	—	—	—
Retention pond decommissioning	Worker	5.00	14.3	LDA,LDT1,LDT2
Retention pond decommissioning	Vendor	—	8.80	HHDT,MHDT
Retention pond decommissioning	Hauling	290	20.0	HHDT
Retention pond decommissioning	Onsite truck	—	—	HHDT
Well decommissioning	—	—	—	—
Well decommissioning	Worker	5.00	14.3	LDA,LDT1,LDT2
Well decommissioning	Vendor	4.00	8.80	HHDT,MHDT
Well decommissioning	Hauling	0.00	20.0	HHDT
Well decommissioning	Onsite truck	—	—	HHDT
Septic tank decommissioning	—	—	—	—

Septic tank decommissioning	Worker	10.0	14.3	LDA,LDT1,LDT2
Septic tank decommissioning	Vendor	2.00	8.80	HHDT,MHDT
Septic tank decommissioning	Hauling	0.00	20.0	HHDT
Septic tank decommissioning	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Well decommissioning	0.00	0.00	0.00	—	—
Septic tank decommissioning	0.00	0.00	0.00	—	—
Retention pond decommissioning	2,315	—	0.50	0.00	—
Linear, Grubbing & Land Clearing	—	—	3.43	0.00	—
Linear, Grading & Excavation	—	—	3.43	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	3.43	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	0.46	100%
Road Construction	0.40	100%
Other Non-Asphalt Surfaces	0.00	0%
Other Non-Asphalt Surfaces	0.00	0%
Other Non-Asphalt Surfaces	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	235	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.2	annual days of extreme heat
Extreme Precipitation	5.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A

Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	52.0
AQ-PM	23.9
AQ-DPM	17.2
Drinking Water	56.4
Lead Risk Housing	19.4
Pesticides	85.9
Toxic Releases	70.1
Traffic	11.2
Effect Indicators	—
CleanUp Sites	23.5
Groundwater	69.7
Haz Waste Facilities/Generators	76.4
Impaired Water Bodies	83.0
Solid Waste	63.7
Sensitive Population	—
Asthma	60.1
Cardio-vascular	70.0
Low Birth Weights	36.1
Socioeconomic Factor Indicators	—
Education	54.8
Housing	12.3
Linguistic	46.5

Poverty	28.2
Unemployment	30.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	64.91723341
Employed	14.74400103
Median HI	72.30848197
Education	—
Bachelor's or higher	58.84768382
High school enrollment	100
Preschool enrollment	63.55703837
Transportation	—
Auto Access	62.47914795
Active commuting	59.36096497
Social	—
2-parent households	62.33799564
Voting	67.66328757
Neighborhood	—
Alcohol availability	88.48967022
Park access	26.52380341
Retail density	6.634158861
Supermarket access	18.96573848
Tree canopy	8.841267804
Housing	—
Homeownership	82.38162453

Housing habitability	91.76183755
Low-inc homeowner severe housing cost burden	66.85486975
Low-inc renter severe housing cost burden	94.49505967
Uncrowded housing	56.87155139
Health Outcomes	—
Insured adults	68.95932247
Arthritis	0.0
Asthma ER Admissions	44.3
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	96.8
Cognitively Disabled	22.1
Physically Disabled	33.4
Heart Attack ER Admissions	33.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	47.2
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	65.5
English Speaking	67.8
Foreign-born	34.1
Outdoor Workers	53.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	89.3
Traffic Density	13.3
Traffic Access	23.0
Other Indices	—
Hardship	28.8
Other Decision Support	—
2016 Voting	70.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	61.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Paving	Assume 25% of alignment is repaved. No paving for decommissioning activities.
Construction: Construction Phases	Linear excavation+utilities is 15 days based on alignment length and default durations for grubbing and paving.
Construction: Trips and VMT	Haul trucks to fill retention pond based on fill volume and 16 cy per truck.
Construction: On-Road Fugitive Dust	Linear worker paved distance updated based on alignment length. For decommissioning activities, assume worker and haul travel is on 100% paved roads (areas are accessible onsite which is paved).
Construction: Off-Road Equipment	Defaults for decommissioning activities updated based on limited scope of work.
Construction: Dust From Material Movement	—

Woodland ULL - Clark Pacific Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Woodland ULL - Clark Pacific
Construction Start Date	5/3/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	26.8
Location	38.70482532012596, -121.7485797752733
County	Yolo
City	Unincorporated
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	326
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	1.65	Mile	4.98	0.00	0.00	—	—	Utility extension
User Defined Parking	1.00	User Defined Unit	0.00	0.00	0.00	—	—	Well and septic decommissioning

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.53	2.99	23.6	31.0	0.06	0.99	1.63	2.61	0.91	0.22	1.13	—	6,932	6,932	0.27	0.07	1.41	6,961
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.22	0.19	1.50	1.94	< 0.005	0.06	0.10	0.16	0.06	0.01	0.07	—	441	441	0.02	< 0.005	0.04	443
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.03	0.27	0.35	< 0.005	0.01	0.02	0.03	0.01	< 0.005	0.01	—	73.1	73.1	< 0.005	< 0.005	0.01	73.4

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.53	2.99	23.6	31.0	0.06	0.99	1.63	2.61	0.91	0.22	1.13	—	6,932	6,932	0.27	0.07	1.41	6,961
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	0.22	0.19	1.50	1.94	< 0.005	0.06	0.10	0.16	0.06	0.01	0.07	—	441	441	0.02	< 0.005	0.04	443
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.04	0.03	0.27	0.35	< 0.005	0.01	0.02	0.03	0.01	< 0.005	0.01	—	73.1	73.1	< 0.005	< 0.005	0.01	73.4

3. Construction Emissions Details

3.1. Well decommissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.22	1.49	0.01	0.04	—	0.04	0.04	—	0.04	—	667	667	0.03	0.01	—	669
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.48	5.48	< 0.005	< 0.005	—	5.50
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.91	0.91	< 0.005	< 0.005	—	0.91
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.5	54.5	< 0.005	< 0.005	0.18	55.2
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	< 0.005	0.02	0.24	112
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.41	0.41	< 0.005	< 0.005	< 0.005	0.42
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.88	0.88	< 0.005	< 0.005	< 0.005	0.92
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Septic decommissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.55	4.59	6.11	0.01	0.21	—	0.21	0.20	—	0.20	—	1,114	1,114	0.05	0.01	—	1,118
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.3	15.3	< 0.005	< 0.005	—	15.3
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.53	2.53	< 0.005	< 0.005	—	2.54
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.53	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.36	110
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	53.3	53.3	< 0.005	0.01	0.12	55.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.38
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.76
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Linear, Grubbing & Land Clearing (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	3.00	3.45	< 0.005	0.16	—	0.16	0.15	—	0.15	—	491	491	0.02	< 0.005	—	492

Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.03	4.03	< 0.005	< 0.005	—	4.05
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.67	0.67	< 0.005	< 0.005	—	0.67
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.66	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	136	136	< 0.005	< 0.005	0.45	138

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.02	1.02	< 0.005	< 0.005	< 0.005	1.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Linear, Grading & Excavation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.38	2.84	23.5	29.0	0.06	0.99	—	0.99	0.91	—	0.91	—	6,495	6,495	0.26	0.05	—	6,517
Dust From Material Movement	—	—	—	—	—	—	1.24	1.24	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.77	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	214	214	0.01	< 0.005	—	214
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.4	35.4	< 0.005	< 0.005	—	35.5
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.15	0.09	1.98	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	409	409	0.01	0.01	1.35	414
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.6	26.6	< 0.005	< 0.005	0.06	27.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.88	0.88	< 0.005	< 0.005	< 0.005	0.92
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.06
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.76	2.32	19.8	23.2	0.05	0.76	—	0.76	0.70	—	0.70	—	5,692	5,692	0.23	0.05	—	5,711
Dust From Material Movement	—	—	—	—	—	—	1.03	1.03	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.08	0.06	0.54	0.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	156	156	0.01	< 0.005	—	156
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.8	25.8	< 0.005	< 0.005	—	25.9
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.08	1.72	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	354	354	0.01	0.01	1.17	359
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.87	8.87	< 0.005	< 0.005	0.01	9.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.47	1.47	< 0.005	< 0.005	< 0.005	1.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Linear, Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.82	7.18	10.8	0.01	0.28	—	0.28	0.26	—	0.26	—	1,619	1,619	0.07	0.01	—	1,625
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.7	17.7	< 0.005	< 0.005	—	17.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.94	2.94	< 0.005	< 0.005	—	2.95

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.32	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	272	272	< 0.005	0.01	0.90	276
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.73	2.73	< 0.005	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Well decommissioning	Demolition	6/29/2027	7/1/2027	5.00	3.00	—
Septic decommissioning	Demolition	7/5/2027	7/9/2027	5.00	5.00	—
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	5/3/2027	5/7/2027	5.00	3.00	—
Linear, Grading & Excavation	Linear, Grading & Excavation	5/8/2027	5/24/2027	5.00	12.0	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	5/25/2027	6/8/2027	5.00	10.0	—
Linear, Paving	Linear, Paving	6/9/2027	6/14/2027	5.00	4.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Well decommissioning	Off-Highway Trucks	Diesel	Average	2.00	2.00	376	0.38
Septic decommissioning	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Septic decommissioning	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Septic decommissioning	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Septic decommissioning	Off-Highway Trucks	Diesel	Average	1.00	2.00	376	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	3.00	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43

Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Signal Boards	Electric	Average	3.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Paving	Signal Boards	Electric	Average	3.00	8.00	6.00	0.82

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	12.5	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	37.5	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	32.5	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT

Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT
Well decommissioning	—	—	—	—
Well decommissioning	Worker	5.00	14.3	LDA,LDT1,LDT2
Well decommissioning	Vendor	4.00	8.80	HHDT,MHDT
Well decommissioning	Hauling	0.00	20.0	HHDT
Well decommissioning	Onsite truck	—	—	HHDT
Septic decommissioning	—	—	—	—
Septic decommissioning	Worker	10.0	14.3	LDA,LDT1,LDT2
Septic decommissioning	Vendor	2.00	8.80	HHDT,MHDT
Septic decommissioning	Hauling	0.00	20.0	HHDT
Septic decommissioning	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Well decommissioning	0.00	0.00	0.00	—	—
Septic decommissioning	0.00	0.00	0.00	—	—
Linear, Grubbing & Land Clearing	—	—	4.98	0.00	—
Linear, Grading & Excavation	—	—	4.98	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	4.98	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	1.25	100%
User Defined Parking	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	352	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.4	annual days of extreme heat
Extreme Precipitation	4.60	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	52.0
AQ-PM	23.9
AQ-DPM	17.2
Drinking Water	56.4
Lead Risk Housing	19.4
Pesticides	85.9
Toxic Releases	70.1
Traffic	11.2
Effect Indicators	—
CleanUp Sites	23.5
Groundwater	69.7
Haz Waste Facilities/Generators	76.4
Impaired Water Bodies	83.0
Solid Waste	63.7

Sensitive Population	—
Asthma	60.1
Cardio-vascular	70.0
Low Birth Weights	36.1
Socioeconomic Factor Indicators	—
Education	54.8
Housing	12.3
Linguistic	46.5
Poverty	28.2
Unemployment	30.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	64.91723341
Employed	14.74400103
Median HI	72.30848197
Education	—
Bachelor's or higher	58.84768382
High school enrollment	100
Preschool enrollment	63.55703837
Transportation	—
Auto Access	62.47914795
Active commuting	59.36096497
Social	—
2-parent households	62.33799564
Voting	67.66328757

Neighborhood	—
Alcohol availability	88.48967022
Park access	26.52380341
Retail density	6.634158861
Supermarket access	18.96573848
Tree canopy	8.841267804
Housing	—
Homeownership	82.38162453
Housing habitability	91.76183755
Low-inc homeowner severe housing cost burden	66.85486975
Low-inc renter severe housing cost burden	94.49505967
Uncrowded housing	56.87155139
Health Outcomes	—
Insured adults	68.95932247
Arthritis	0.0
Asthma ER Admissions	44.3
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	96.8
Cognitively Disabled	22.1
Physically Disabled	33.4
Heart Attack ER Admissions	33.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	47.2
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	65.5
English Speaking	67.8
Foreign-born	34.1
Outdoor Workers	53.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	89.3
Traffic Density	13.3
Traffic Access	23.0
Other Indices	—
Hardship	28.8
Other Decision Support	—
2016 Voting	70.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0

Healthy Places Index Score for Project Location (b)	61.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	—
Construction: Construction Phases	Linear duration is based on 22 days for excavation + pipelaying (based on total alignment distance and 400 feet per day), 3 days for vegetation clearing/grubbing (CalEEMod default) and 4 days of paving (CalEEMod default).
Construction: Off-Road Equipment	Decommissioning equipment based on minimal scope of work.
Construction: On-Road Fugitive Dust	Alignment and access roads all paved.
Construction: Paving	Assume 25% of utility extension alignment area is repaved.

Appendix E Biological Reconnaissance Survey Results

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BIOLOGICAL RECONNAISSANCE SURVEY RESULTS FOR THE BAYER AND CLARK PACIFIC PIPELINE ALIGNMENTS IN WOODLAND, CALIFORNIA

The City of Woodland (City) is proposing an amendment to Policy 2.A.1 of the 2035 General Plan where the City's ultimate boundaries are limited to the Urban Limit Line (ULL) and restrictions on the provision of services exist outside of the ULL. The amendment (proposed project) would permit the extension of sewer, water, and recycled water utility facilities to serve existing commercial facilities up to one mile beyond the existing ULL. It is anticipated at this time that two existing businesses, Bayer U.S. Crop Science, LLC (Bayer) and Clark Pacific are seeking participation in the extension of the City's utility services of the proposed project.

This memorandum details the methods and results of a biological reconnaissance survey conducted for the proposed Bayer and Clark Pacific utility alignments, including a 500-foot survey buffer, to support environmental review of the proposed project. (Figure 1 and 2).

ENVIRONMENTAL SETTING

The City of Woodland is located in Yolo County, approximately 15 miles northwest of Sacramento and 8 miles north of Davis, within the lower Sacramento Valley of California's Central Valley region. The City occupies the flat alluvial plain of the Sacramento River watershed, with gently sloping topography ranging from approximately 50 to 60 feet above mean sea level. The surrounding landscape is characterized by extensive agricultural production, irrigation canals, and rural residences, with urban development concentrated within and adjacent to the ULL. Native vegetation within the Woodland area has been largely replaced by agricultural and urban land uses, leaving limited remnants of riparian woodland and annual grassland along canals, roadways, and drainage corridors.

UTILITY ALIGNMENT LOCATION

Bayer and Clark Pacific facilities are within one mile of the existing ULL where land use is dominated by agriculture**.**

The Bayer facility is located to the west of Woodland on Highway 16 and County Road 98 (37437 CA-16, Woodland, CA 95695; APN: 025-470-038-000). The proposed Bayer utility alignments would span approximately 0.5 miles from Road 98 and W Lincoln Avenue west across an existing agricultural field, owned and maintained by Bayer. Different agricultural crops are rotated in the existing agricultural field depending on the season and need; at the time of the survey, the field was planted in hay for ultimate use by neighboring farms and was bordered by alfalfa plants. The proposed pipelines would intersect at the existing well and the City's main line along County Road 98.

The Clark Pacific facility is located on the north side of Road 18C (located at 40600 County Road 18C, Woodland, CA 95776; APN: 027-250-028-000). The proposed Clark Pacific utility alignments would extend north from the intersection of Churchill Downs Road and Road 101 to the intersection of Road 18C and Road 101 and turn westward along Road 18C until it reached Clark Pacific.

METHODOLOGY

DESKTOP ANALYSIS

Prior to initiating the field survey, a desktop analysis was performed. This analysis included queries of California Native Plant Society (CNPS) Rare Plant Inventory (CNPS 2025a), California Natural Diversity Database (CNDDB, CDFW 2025a), U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation project planning tool (USFWS 2025a), and the USFWS National Wetlands Inventory (NWI) (USFWS 2025b) for records of special-status species or previously documented within or adjacent to the proposed project. The CNPS query included the following U.S. Geological Survey (USGS) 7.5-minute quadrangles: Woodland and Grays Bend. The CNDDB query included the following U.S. Geological Survey (USGS) 7.5-minute quadrangles Davis, Eldorado Bend, Grays Bend, Knights Landing, Madison, Merritt, Winters, Woodland, and Zamora.

FIELD SURVEY

AECOM biologist Gabi Patterson and AECOM Archeologist Zenzi Moore-Dawes conducted reconnaissance level biological resources surveys across the two utility alignments on July 30, 2025. The Clark Pacific facility was surveyed on foot and the Bayer facility was initially assessed by driving the survey area with an escort. Afterward, noted habitat potentially suitable for state- and federally listed plant and wildlife species were surveyed on foot. Private property and otherwise inaccessible portions of the 500-foot buffer were scanned to the extent possible with binoculars. Following completion of the field reconnaissance, all biological observations, habitat notes, and site boundary information recorded during the survey were later digitized and mapped using ArcGIS Pro (ESRI, 2025).

SURVEY RESULTS

The proposed Bayer alignment is located primarily within an agricultural field. Different agricultural crops are rotated in the existing agricultural field depending on the season and need. This field is typically used to grow vegetable or cover crops and hay on a rotational basis and is harvested or tilled annually. At the time of the survey, the field was planted in hay for ultimate use by neighboring farms and was bordered by alfalfa plants. The proposed alignment supports limited habitat for wildlife, given the regular harvest and rotation of crops. Numerous mature trees within and surrounding the alignment and existing Bayer facility offer potential nesting habitat for raptors, and a pair of Swainson's hawks (*Buteo swainsoni*) were observed soaring over the northern portion of the agricultural field during the survey. The facility's retention pond supports a narrow riparian band that could provide habitat for nesting or foraging birds. Several small mammal burrows were noted along the pond's banks and within a soil stockpile near leach field three; however, no special-status species or sign were recorded within these burrows.

The proposed Clark Pacific alignment and facility supports a greater variety of habitat features and wildlife activity, when compared to the Bayer proposed alignment. A colony of cliff swallows (*Petrochelidon pyrrhonota*) was observed nesting along the eaves and connecting bridge of the silos, and a red-tailed hawk (*Buteo jamaicensis*) nest was documented on the southernmost silo platform, with annual nesting activity confirmed by Clark Pacific staff. The facility also contains two elderberry shrubs (*Sambucus nigra*) which have potential to support the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) however, no beetle sign was observed. The northern portion of the alignment along County Road 18C includes annual grassland and Fremont cottonwoods (*Populus fremontii*), while the southern side transitions into a residential corridor containing numerous valley oaks and Northern California black walnuts (*Juglans hindsii*). Scattered small mammal burrows were observed in drainage ditches, though no evidence of special-status wildlife was detected. Along County Road 101, an additional pair of Swainson's hawks was observed foraging above adjacent agricultural fields.

LAND COVER TYPES

Land cover types identified in the survey area are described below. The location and extent of the land cover types in the survey area are shown in Figure 1 and Figure 2 and representative photos of the proposed utility alignments and their respective habitats are provided in Attachment A.

AGRICULTURAL LAND

The agricultural lands surround both the Clark Pacific and Bayer utility extension alignments and consist of field crops such as hay and alfalfa, as well as adjacent orchards. Although cultivated fields can temporarily provide foraging habitat for some special-status wildlife species, these areas are harvested and tilled annually, which substantially reduces their long-term habitat value and discourages wildlife use.

ANNUAL GRASSLAND

Annual grasslands are present along the northern edge of CR-18C within the Clark Pacific alignment. This land cover typically provides habitat for numerous special-status wildlife species and potential for rare plant species. However, this area is actively managed these areas through regular mowing, which reduces vegetation structure and limits wildlife use and plant establishment potential. The leach field areas at Clark Pacific and Bayer are upland in nature, composed of compacted fill with sparse nonnative grasses, and do not exhibit wetland hydrology, hydric soils, or hydrophytic vegetation.

DEVELOPED

Developed areas consist primarily of impervious surfaces such as buildings, paved roads, parking lots, and graveled shoulders. Within the utility alignments, these areas offer little to no habitat value for special-status species, aside from minimal use by urban-tolerant wildlife.

HORTICULTURAL LANDSCAPE

Horticultural landscaped areas are present and are defined as intentionally planted and maintained with ornamental or native vegetation that receive supplemental irrigation, pruning, and maintenance. Although these areas can occasionally provide nesting or foraging habitat for common or urban-tolerant bird species, the frequent disturbance and regular landscape maintenance result in low potential habitat value for special-status species.

OAK WOODLAND

Native oak trees provide nesting, roosting, and foraging opportunities for numerous wildlife species, including raptors, woodpeckers, and cavity-nesting birds. The southern side of CR-18C, a continuous row of large valley oaks (*Quercus lobata*) was observed. The City of Woodland City of Woodland Tree Preservation Ordinance establishes protection standards for mature trees. Under Woodland Municipal Code Chapter 12.48, heritage oak trees (i.e. valley oaks measuring 33 inches diameter at breast height (DBH) or greater), and established trees (i.e. a tree of any species with a trunk diameter of 12 inches or more at DBH) are subject to the city's tree preservation ordinance.

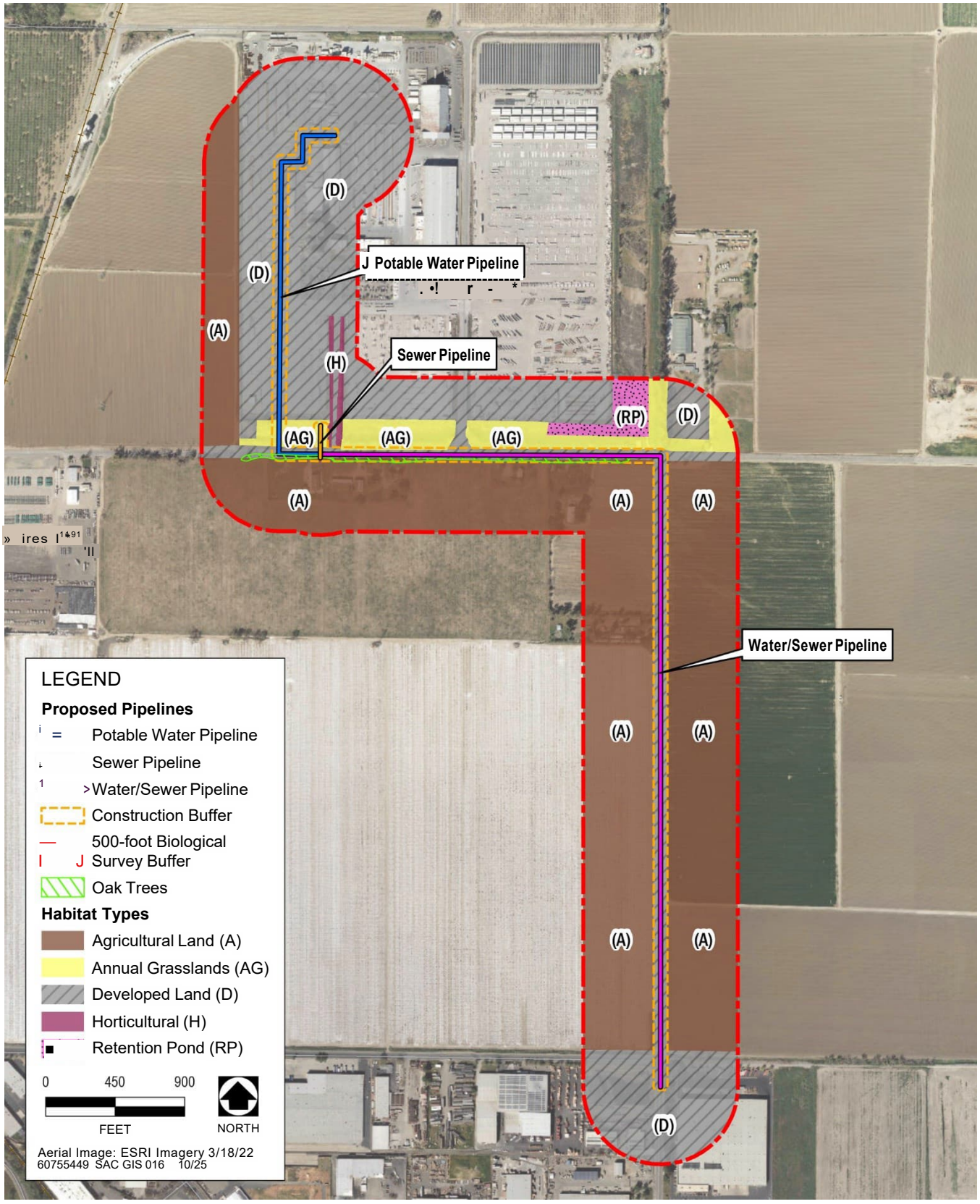

Figure 1. Clark Pacific Utility Extension Alignment Land Cover Types

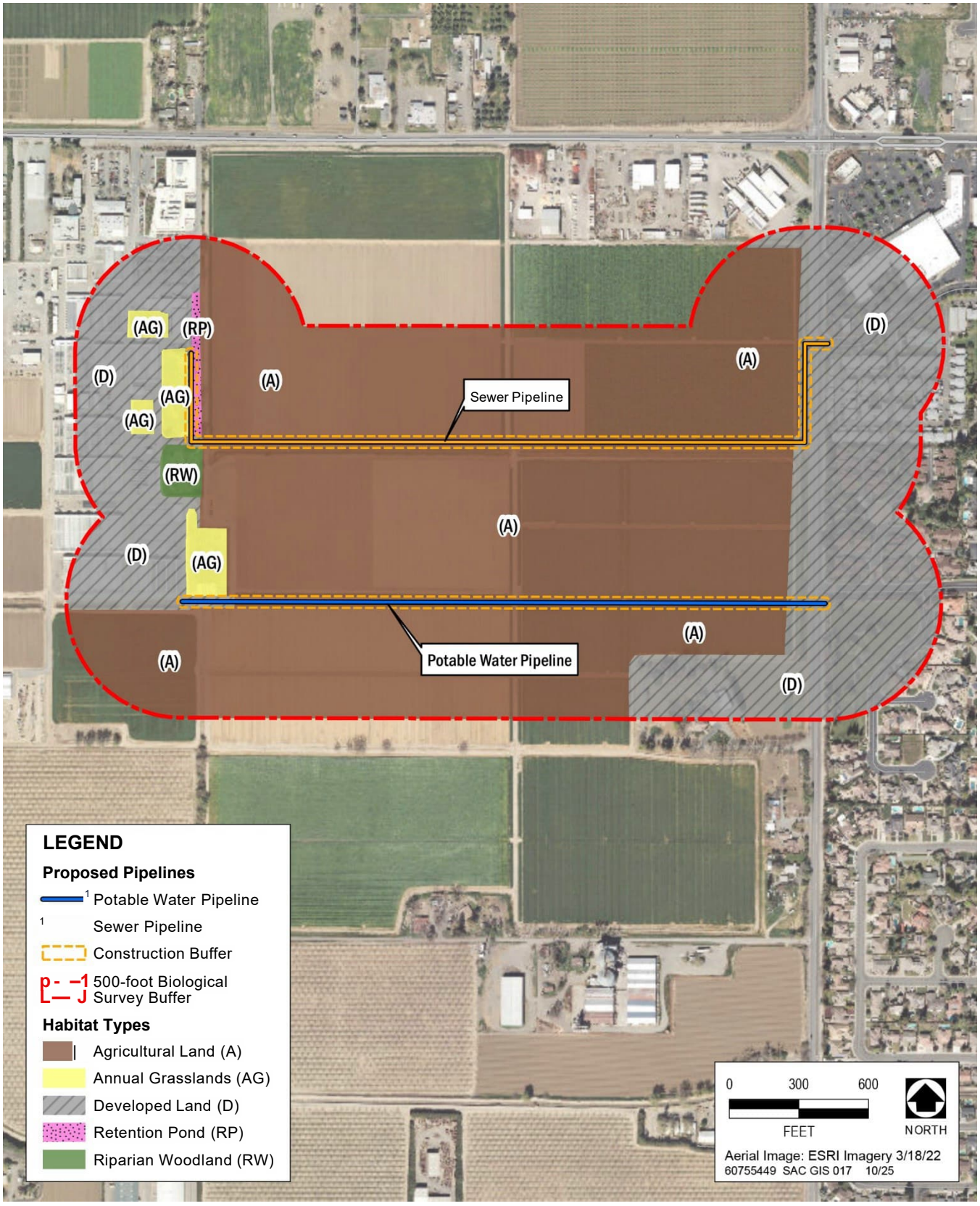

Figure 2 Bayer Utility Extension Alignment Land Cover Types

AQUATIC RESOURCES

RETENTION PONDS

A single man-made retention pond was observed within the Bayer facility. The feature is designed to receive process water from the Bayer facility. It is artificially constructed in upland terrain and lacks a hydrologic connection to any natural drainage, stream, or wetland. The western bank of the pond supports interspersed riparian habitat containing large Fremont cottonwood trees and scrubby narrow-leaved willow (S*alix exigua*) trees that extend to the south of the retention pond, while the eastern side has a small band of non-native vegetation adjacent to an access area.

A man-made retention pond was observed on aerial images in the 500-foot buffer of the Clark Pacific facility. This area was inaccessible during the survey, however, appears to be artificially constructed and lacks a hydrologic connection to any natural drainage, stream, or wetland. The feature appears to be designed for stormwater detention and management and likely collects runoff from adjacent areas.

SPECIAL STATUS SPECIES

SPECIAL-STATUS PLANTS

A review of the database analysis identified 14 special-status plant species with potential to occur in the vicinity of the proposed utility extensions. Although several of these species are known or presumed present within the broader City of Woodland Planning Area, none were determined to have potential to occur within the Clark Pacific or Bayer utility extension alignments. Both utility extension alignments occur within disturbed agricultural and industrial landscapes dominated by upland soils, annual grassland, and developed surfaces. No alkaline flats, vernal pools, woodlands, marshes, or swamps, habitats typically supporting special-status plant species, are present within the 500-foot survey buffers. The 14 special-status plant species identified through the database queries are summarized in Table 1, which presents their regulatory status, habitat associations, and an analysis of the potential for each utility alignment to support the species.

Table 1. Special-Status Plant Species Potential to Occur

Species	Federal	State[1,2]	Habitat	Clark Pacific Utility Extension Alignment	Bayer Utility Extension Alignment
Ferris' milk-vetch *Astragalus tener* var. *ferrisae*	—	1B.1	Subalkaline flats and mesic sites in valley and foothill grassland, meadows and seeps; 15 to 250 foot elevation. Bloom: April–May.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.
Alkali milk-vetch *Astragalus tener* var. *tener*	—	1B.2	Alkaline soils within playas, vernal pools, and adobe clay valley and foothill grassland habitats; 0 to 196-foot elevation. Bloom: March–June	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.
Heartscale *Atriplex cordulata* var. *cordulata*	—	1B.2	Saline or alkaline flats or scalds in chenopod scrub, desert scrub, or meadow, and grassland habitats in sandy soils; 1 to 500 foot elevation; Blooms April–October.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.

Species	Federal	State[1,2]	Habitat	Clark Pacific Utility Extension Alignment	Bayer Utility Extension Alignment
Brittlescale *Atriplex depressa*	—	1B.2	Alkaline clay soils within chenopod scrub, meadow and seeps, playas, vernal pools, and valley and foothill grassland habitats; 0 to 1,050 foot elevation. Bloom: April–October	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.
Pappose tarplant *Centromadia parryi* ssp. *parryi*	—	1B.2	Chaparral, Coastal prairie, Marshes and swamps (coastal salt), Meadows and seeps, Valley and foothill grassland (vernally mesic); Alkaline (often); 0-1,380 feet elevation. Bloom: May-November	**Unlikely to occur:** Although grassland habitat is present near the alignment, the required habitat is not present within the alignment.	**Unlikely to occur.** Required habitat is not present within or near the alignment.
Palmate-bracted bird's beak *Chloropyron palmatum*	E	E 1B.1	Alkaline soils in seasonally flooded lowlands; 16 to 510 foot elevation. Bloom: May–October	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.
San Joaquin spearscale *Extriplex joaquinana*	—	1B.2	Alkaline soils on chenopod scrub, meadow and seeps, playas, and valley and foothill grassland; 3 to 2,740 foot elevation. Bloom: April–October	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.
Woolly rose-mallow *Hibiscus lasiocarpus* var. *occidentalis*	—	1B.2	Marshes and swamps (freshwater); from 0 to 320 feet in elevation. Blooms June to September.	**Unlikely to occur.** Suitable habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable habitat is not present within the survey buffer.
Heckard's pepper-grass *Lepidium latipes* var. *heckardii*	—	1B.2	Alkaline flats in valley and foothill grassland; 6 to 656 foot elevation. Bloom: March–May	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable alkaline habitat is not present within the survey buffer.
Baker's navarretia *Navarretia leucocephala* ssp. *bakeri*	—	1B.1	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools; Mesic. 15-5,710 feet elevation. Bloom: April-July.	**Unlikely to occur.** Suitable habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable habitat is not present within the survey buffer.
California alkali grass *Puccinellia simplex*	—	1B.2	Saline flats, mineral springs; below 3,000 feet elevation. Bloom: March–May.	**Unlikely to occur.** Suitable habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable habitat is not present within the survey buffer.
Keck's checkerbloom *Sidalcea keckii*	—	1B.1	Cismontane woodland, Valley and foothill grassland; Clay, Serpentinite; 245-2,135 feet elevation. Bloom: April-May	**Unlikely to occur.** Suitable soils and substrate are not present within the survey buffer.	**Unlikely to occur.** Suitable soils and substrate are not present within the survey buffer.
Suisun Marsh aster *Symphiotrichum lentum*	—	1B.2	Brackish and freshwater marshes and swamps; 0–10 foot elevation; Blooms: May–November.	**No potential to occur.** Alignment is not within elevation range for this species.	**No potential to occur.** Alignment is not within elevation range for this species.
Saline clover *Trifolium hydrophilum*	—	1B.2	Marshes and swamps, vernal pools, and mesic, alkaline valley and foothill grassland; 0 to 984-foot elevation. Bloom: April–June	**Unlikely to occur.** Suitable swamps, vernal pools or alkaline grassland habitat is not present within the survey buffer.	**Unlikely to occur.** Suitable swamps, vernal pools or alkaline grassland habitat is not present within the survey buffer.

Table Notes:
[1] State: E = Listed as endangered under CESA.
[2] California Rare Plant Ranks and extensions
1B = Rare or endangered in California and elsewhere.
.1 = Seriously endangered in California (>80 percent of occurrences are threatened and/or high degree and immediacy of threat).
1B = Rare or endangered in California and elsewhere.
.1 = Seriously endangered in California (>80 percent of occurrences are threatened and/or high degree and immediacy of threat).
.2 = Fairly endangered in California (20 to 80 percent of occurrences are threatened).
Sources: Table 4.4-2 of the 2035 General Plan and CAP EIR, CNDDB 2025, CNPS 2025; compiled by AECOM in 2025.

SPECIAL STATUS WILDLIFE

The database analysis identified 32 special-status wildlife species and 6 special-status fish species with potential to occur within the proposed survey area or its vicinity. Of the wildlife species evaluated for their potential to occur, 9 species were determined to have a moderate or high potential to occur. These species are listed below and include taxa associated with grassland, riparian, and open woodland habitats.

All vegetation types present within the project area—including annual grassland, retention and detention ponds, valley oak woodland, riparian habitats, and mature trees within developed areas—have the potential to provide foraging and nesting habitat for migratory birds and other native wildlife species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, and 3513.

INVERTEBRATES

- **Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)** – *Could occur* at Clark Pacific, where two elderberry shrubs were observed near the leach field; no sign of beetle activity was detected. Unlikely at Bayer due to absence of host plants.

- **Crotch's bumble bee (*Bombus crotchii*)** – *Could occur* at both alignments. Marginal open-grassland habitat near the alignments may provide limited foraging opportunities.

BIRDS

- **Swainson's hawk (*Buteo swainsoni*)** – *Known to occur* at both alignments. Large trees adjacent to the alignments offer suitable nesting habitat, and nearby agricultural fields provide high-quality foraging areas.

- **Northern harrier (*Circus cyaneus*)** – *Could occur* at both alignments. Grassland and fallow agricultural fields near the project provide potential nesting and foraging habitat.

- **White-tailed kite (*Elanus leucurus*)** – *Could occur* at both alignments. Isolated trees and adjacent grasslands may provide nesting and foraging habitat.

- **Loggerhead shrike (*Lanius ludovicianus*)** – *Could occur* at both alignments. Nests and forages in nearby grassland and shrub habitats.

- **Yellow-breasted chat (*Icteria virens*)** – *Could occur* at both alignments. Suitable riparian thickets and shrub vegetation are present in limited areas near the alignments.

- **Burrowing owl (*Athene cunicularia*)** – *Could occur* at both alignments. Foraging habitat occurs near the alignments; at Bayer, burrows were detected near the retention pond but no owl sign was observed.

- **Pallid bat (*Antrozous pallidus*)** – *Could occur* near Clark Pacific. Suitable roosting opportunities may exist in oak hollows or nearby structures.

The six fish species identified through the database queries were excluded from further evaluation because no suitable aquatic habitat for fish exists within or adjacent to the proposed alignments.

The special-status wildlife species identified through the database analysis are summarized in Table 2, which presents their regulatory status, habitat associations, and an analysis of the potential for each utility alignment to support these species.

Table 2. Special Status Wildlife Species Potential to Occur

Species	Federal Listing Status.[1]	State Listing Status[2]	Habitat	Clark Pacific Utility Extension Alignment	Bayer Utility Extension Alignment
Invertebrates					
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	T	_	Blue elderberry (*Sambucus mexicana*) shrubs (the host plant species), typically as an abundant component in dense riparian habitat below 3,000 feet in elevation; on slightly higher and older floodplain surfaces without saturated soils (Vaghti et al. 2009).	**Could occur.** Two blue elderberry shrubs on the northern edge of the leach field; no sign of valley elderberry longhorn beetle exit holes on shrubs.	**Unlikely to occur.** Required habitat is not present within or adjacent to the alignment; no elderberry shrubs present.
Crotch's bumble bee *Bombus crotchii*	_	CE	Open grassland and scrub; nests underground. Food plants include milkweed, lupine (*Lupinus* spp.), burclover (*Medicago* spp.), phacelia (*Phacelia* spp.), and sage (*Salvia* spp.).	**Could occur.** Marginal habitat is present near the alignment.	**Could occur.** Marginal habitat is present near the alignment.
Monarch butterfly *Danaus plexippus*	PT	_	Open habitats including fields, meadows, weedy areas, marshes, and roadsides. Monarch butterflies roost in wind-protected tree groves (such as eucalyptus) with nectar and water sources nearby. Caterpillar host plants are milkweeds (*Asclepias* spp.).	**Unlikely to occur.** Suitable habitat (milkweed) was not identified within the alignment.	**Unlikely to occur.** Suitable habitat (milkweed) was not identified within the alignment.
Western bumblebee *Bombus occidentalis*	_	CE	Nests underground. Visits a wide variety of wildflowers. In California, this species is currently observed in high elevation meadows, forests, riparian areas in the Sierra Nevada and Cascades as well as in coastal grasslands in northern California (CDFW 2022)	**Unlikely to occur.** The alignment is outside this species' current known range.	**Unlikely to occur.** The alignment is outside this species' current known range.
Vernal pool fairy shrimp *Branchinecta lynchi*	T	_	Vernal pool habitats ranging from small, clear pools in sandstone rock outcrops to large, turbid, and/or alkaline vernal pools. Most commonly in grass- or mud-bottomed basalt flow depression pools in unplowed grasslands.	**Unlikely to occur.** Vernal pools are not present within the alignment.	**Unlikely to occur.** Vernal pools are not present within the alignment.
Vernal pool tadpole shrimp *Lepidurus packardi*	E	_	Vernal pools or swales that form in slight depressions after being inundated following fall and winter rains. The pools contain clear to highly turbid water and have an impervious hardpan, claypan, or basalt layer beneath the soil surface that retains the water for a few months at a time.	**Unlikely to occur.** Vernal pools are not present within the alignment.	**Unlikely to occur.** Vernal pools are not present within the alignment.
Amphibians and Reptiles					
California red-legged frog *Rana draytonii*	T	SSC	Foothill streams with dense shrubby or emergent riparian vegetation, minimum 11–20 weeks of water for larval development, and upland refugia for aestivation.	**Unlikely to occur.** The alignment is outside this species' currently known occupied range.	**Unlikely to occur.** The alignment is outside this species' currently known occupied range.

Species	Federal Listing Status.[1]	State Listing Status[2]	Habitat	Clark Pacific Utility Extension Alignment	Bayer Utility Extension Alignment
California tiger salamander *Ambystoma californiense*	T	T	Vernal pools and seasonal wetlands with a minimum 10-week inundation period and surrounding uplands, primarily grasslands, with burrows and other belowground refugia (e.g., rock or soil crevices).	**Unlikely to occur.** Suitable vernal pool and seasonal wetland habitat is not present within the alignment.	**Unlikely to occur.** Suitable vernal pool and seasonal wetland habitat is not present within the alignment.
Northwestern pond turtle *Actinemys marmorata*	PT	SSC	Permanent and nearly permanent waters, including ponds, lakes, marshes, slow-moving streams, rivers, sloughs, and irrigation canals/ditches with open bank areas, emergent vegetation, and logs or boulders for basking. Nests along the aquatic habitat shore or in adjacent uplands in sunny, open hillsides or fields, as long as appropriate soil moisture and warmth are present. Generally nest within 325 feet of aquatic habitat, but has been reported to nest up to 1,600 feet from water.	**Unlikely to occur.** Suitable aquatic habitat is not present within the alignment.	**Unlikely to occur.** Suitable aquatic habitat is not present within the alignment.
Western spadefoot *Spea hammondii*	PT	SSC	Shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands, also temporary rainpools.	**Unlikely to occur.** Suitable aquatic habitat is not present within the alignment.	**Unlikely to occur.** Suitable aquatic habitat is not present within the alignment.
Giant garter snake *Thamnophis gigas*	T	T	Cultivated rice, freshwater marsh, and slow moving streams, ditches, or canals.	**Unlikely to occur.** Suitable aquatic habitat and connectivity are not present within the alignment..	**Unlikely to occur.** Suitable aquatic habitat and connectivity are not present within the alignment..
Birds					
Swainson's Hawk *Buteo swainsoni* (nesting)	_	T	Nests in riparian forest and isolated trees, open woodlands, and woodland margins; nests and forage in grasslands and agricultural fields.	**Known to occur.** Numerous large trees are present adjacent to the alignment for nesting potential; foraging habitat present; documented presence during field survey.	**Known to occur.** Numerous large trees are present adjacent to the alignment for nesting potential; foraging habitat present; documented presence during field survey.
Northern harrier *Circus hudsonius* (nesting)	_	SSC	Nests and forages in grasslands, agricultural fields, and marshes. Nests on the ground within patches of dense, often tall, vegetation in undisturbed areas (MacWhirter and Bildstein 1996).	**Could occur. S**uitable habitat is present near alignment.	**Could occur. S**uitable habitat is present near alignment.
White-tailed kite *Elanus leucurus* (nesting)	_	FP	Forages in grasslands and agricultural fields; nests in riparian zones, oak woodlands, and isolated trees.	**Could occur.** Foraging habitat and isolated nesting trees are present near alignment.	**Could occur.** Foraging habitat and isolated nesting trees are present near alignment.
Least bittern *Ixobrychus exilis* (nesting)	_	SSC	Nests in freshwater and brackish marshes with tall, dense emergent vegetation with clumps of woody plants over deep water.	**Unlikely to nest.** Suitable nesting habitat is not present due to lack of deep-water bodies.	**Unlikely to nest.** Suitable nesting habitat is not present due to lack of deep-water bodies.
Western snowy plover *Charadrius nivosus nivosus* (nesting)	T	SSC	Nests and forages on sandy and gravelly beaches along the coast and the shores of inland alkali lakes. Has also been documented nesting on levees of artificial ponds in Yolo County, including sewage treatment ponds. Needs sandy or gravelly, friable soils for nesting.	**Unlikely to occur.** Suitable nesting habitat is not present due to lack of sandy or gravelly, friable soils for nesting.	**Unlikely to occur.** Suitable nesting habitat is not present due to lack of sandy or gravelly, friable soils for nesting.
Mountain plover *Charadrius montanus* (wintering)	_	SSC	Forages in short grasslands and plowed agricultural fields where vegetation is sparse and trees are absent.	**Could occur.** Foraging habitat is present near the alignment.	**Could occur.** Foraging habitat is present near the alignment.

Species	Federal Listing Status.[1]	State Listing Status[2]	Habitat	Clark Pacific Utility Extension Alignment	Bayer Utility Extension Alignment
Western yellow-billed cuckoo *Coccyzus americanus occidentalis* (nesting)	T	E	Nests in large blocks of deciduous riparian thickets or forests with dense, low-level or understory foliage adjacent to slow-moving watercourses, backwaters along broad, lower floodplains of larger river systems. Willow and cottonwood are almost always a component of the vegetation. In the Sacramento Valley, also utilizes adjacent walnut orchards.	**Unlikely to occur.** Suitable riparian habitat is not present in or near the alignment. The alignment is outside the species' current breeding range.	**Unlikely to occur.** Suitable riparian habitat is not present in or near the alignment. The alignment is outside the species' current breeding range.
Grasshopper sparrow *Ammodramus savannarum* (nesting)	_	SSC	Forages and nests in dense grasslands; favors a mix of native grasses, forbs, and scattered shrubs. Nests in depressions on the ground at the bases of grass clumps. Prefers large tracts of habitat.	**Unlikely to occur.** Large tracts of suitable habitat in large tracts of dense grasslands with a mix of native grasses, forbs and scattered shrubs are not present.	**Unlikely to occur.** Large tracts of suitable habitat in large tracts of dense grasslands with a mix of native grasses, forbs and scattered shrubs are not present.
Song sparrow – "Modesto" population (*Melospiza melodia pop. 1*) (year round)	_	SSC	Nests and forages primarily in emergent marsh, riparian scrub, and early successional riparian forest habitats in the north-central portion of the Central Valley; infrequently in mature riparian forest and sparsely vegetated ditches and levees. Forages primarily on exposed ground or in leaf litter.	**Unlikely to occur.** This species is unlikely to nest due to a lack of suitable marsh and riparian scrub habitat.	**Unlikely to occur.** This species is unlikely to nest due to a lack of suitable marsh and riparian scrub habitat.
Purple martin *Progne subis* (nesting)	_	SSC	Nests in tree cavities, bridges, freeway overpasses, utility poles, lava tubes, and buildings. Forages in foothill and low montane oak and riparian woodlands; less frequently in coniferous forests and open or developed habitats.	**Unlikely to occur.** Lack of known breeding colonies within the alignment and existing trees provide marginal nesting habitat. .	**Unlikely to occur.** Lack of known breeding colonies within the alignment and existing trees provide marginal nesting habitat.
Bank swallow *Riparia riparia* (nesting)	_	T	Nests in colonies in unvegetated vertical banks or cliffs with fine-textured, sandy soils, typically next to streams, rivers, or lakes. Forages in a variety of habitats near nests.	**Unlikely to occur.** Suitable nesting habitat along vertical banks or cliffs are not present.	**Unlikely to occur.** Suitable nesting habitat along vertical banks or cliffs are not present.
Tricolored Blackbird *Agelaius tricolor* (nesting)	_	T/SSC	Forages in agricultural lands and grasslands; nests in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs.	**Unlikely to occur.** Suitable nesting habitat, such as blackberry thickets and cattails, is not present.	**Unlikely to occur.** Suitable nesting habitat, such as blackberry thickets and cattails, is not present.
Yellow-headed blackbird *Xanthocephalus xanthocephalus* (nesting)	_	SSC	Nests in marshes with tall, dense emergent vegetation, most commonly at the edges of lakes, reservoirs, or ponds with relatively deep water. Forages in freshwater marshes, and sometimes in nearby open fields, preferably with moist ground.	**Unlikely to occur.** Suitable nesting habitat in the form of marshes and tall dense emergent vegetation and deep water is not present.	**Unlikely to occur.** Suitable nesting habitat in the form of marshes and tall dense emergent vegetation and deep water is not present.
Loggerhead shrike *Lanius ludovicianus* (nesting)	_	SSC	Forages and nests in grasslands, shrublands, and open woodlands. Nests in trees and shrubs.	**Could occur. S**uitable nesting habitat is present adjacent to the alignment.	**Could occur. S**uitable nesting habitat is present adjacent to the alignment.
Yellow-breasted chat *Icteria virens* (nesting)	_	SSC	Forages and nests in riparian thickets of willow, blackberry, and wild grape within 10 feet of the ground.	**Unlikely to occur.** Suitable riparian scrub habitat is not present=..	**Unlikely to occur.** Suitable riparian scrub habitat is not present.
Yellow warbler *Setophaga petechial* (nesting)	_	SSC	Nests in riparian vegetation such as willows, cottonwoods, and alders.	**Unlikely to occur.** The alignment is outside the species' current breeding range.	**Unlikely to occur.** The alignment is outside the species' current breeding range.

Species	Federal Listing Status.[1]	State Listing Status[2]	Habitat	Clark Pacific Utility Extension Alignment	Bayer Utility Extension Alignment
Western burrowing owl *Athene cunicularia hypugaea* (year round)	_	CE/SSC	Nests and forages in grasslands, agricultural lands, open shrublands, and open woodlands with existing ground squirrel burrows or friable soils.	**Could occur:** No suitable burrows detected along alignment. Suitable foraging habitat is present near alignment.	**Could occur:** Burrows were detected within the retention pond area, though no sign of the species was detected. Suitable foraging habitat is present near alignment.
Least Bell's vireo *Vireo bellii pusillus* (nesting)	E	E	Nests and forages in low, dense riparian vegetation along perennial or intermittent streams.	**Unlikely to occur.** Alignment is outside the species' current breeding range and lacks suitable nesting habitat.	**Unlikely to occur.** Alignment is outside the species' current breeding range and lacks suitable nesting habitat.
Mammals					
American badger *Taxidea taxus*	_	SSC	Drier open shrub, forest, and herbaceous habitats with friable soils for digging burrows.	**Unlikely to occur.** Extensive patches of undisturbed habitat are not present; burrows present were not large enough for badger use.	**Unlikely to occur.** Extensive patches of undisturbed habitat are not present; burrows present were not large enough for badger use
Pallid bat *Antrozous pallidus*	_	SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in rock crevices, oak hollows, bridges, or buildings.	**Could occur. S**uitable habitat present; oak hollows present.	**Unlikely to occur.** Required habitat is not present within the alignment; no oak hollows, rocks, or woodlands
Western red bat *Lasiurus blossevilli*	_	SSC	Roosts primarily in dense tree foliage, especially in cottonwood, sycamore, and other riparian trees or orchards (Pierson et al. 2004). Prefers habitat edges and mosaics with trees that are protected from above and open below and open areas for foraging, including grasslands, shrublands, and open woodlands.	**Unlikely to occur.** Required habitat is not present.	**Unlikely to occur.** Required habitat is not present.

Table Notes:

CAP EIR =Climate Action Plan Environmental Impact Report; CDFW = California Department of Fish and Wildlife; CNDDB = California Natural Diversity Database; I-5 = Interstate 5; SR = State Route

[1] Federal: T = Listed as threatened under ESA; E = Listed as endangered under ESA

[2] State: T = Listed as threatened under CESA; E = Listed as endangered under CESA; C = Candidate for listing under CESA; FP = Fully Protected under California Fish and Game Code; SSC = Considered a species of special concern by CDFW

Source: Table 4.4-3 of 2035 General Plan and CAP EIR; CNDDB 2025, USFWS 2025; CNPS 2025, compiled by AECOM in 2025

CONCLUSION

BAYER ALIGNMENT

The Bayer alignment is located within an agricultural field. This field is typically used to grow vegetable or cover crops and hay on a rotational basis and is harvested or tilled annually. The pipelines would be installed into trenches on the north and south sides of the gravel access road that runs east to west through the field (Photo 1). The alignment connection point on the east side runs through a vegetated drainage canal, into a developed area (Photo 2). The western connection point is an active well, fenced in and surrounded by gravel (Photo 3). The three leach fields within the facility are mowed grasslands, surrounded by developed infrastructure and gravel roads (Photo 4-Photo 6). Leach field two drains into a culvert that leads to the retention pond area (Photo 7). The potable water well to be decommissioned sits within a fenced and graveled area (Photo 8).

Although the Bayer alignment is relatively void of habitat, there are numerous large trees within the facility and surrounding the agricultural field that have raptor nesting potential. One Swainson's hawk pair was observed soaring over the northern portion of the field during the survey. In addition, the retention pond provides riverine habitat and has potential to host other state/federally listed species (Photo 9). Lastly, small mammal burrows were noted along the retention pond banks (Photo 10) and atop the staged soil pile located on the western edge of the facility, near leach field three (Photo 11). No special status species or their sign were observed within the burrows.

CLARK PACIFIC ALIGNMENT

A colony of cliff swallow nests was detected along the eaves of the historical silos and the bridge connecting them (Photo 12). A large stick nest was also observed on the ladder platform of the southernmost silo (Photo 13). This nest annually supports a red-tailed hawk according to Clark Pacific staff. Bird exclusion methods such as hardware cloth and noise machines have been installed within the facility It also supports two elderberry shrubs (Photo 14) and one large Valley oak (Photo 15). No sign of valley elderberry longhorn beetle was observed on the shrubs.

The northern side of the alignment along County Road 18C is primarily annual grassland and Fremont cottonwoods (Photo 16). There is a drainage canal that parallels the road (Photo 17). The southern side of the alignment along County Road 18C is within a residential area and hosts numerous large valley oaks (Photo 18) and Northern California black walnuts. The drip lines of these trees extend into the proposed pipe alignment (Photo 19). A drainage ditch also parallels this side of the road and contains a few sporadic small mammal burrows (Photo 19). No special status species or their sign were observed within the burrows.

At the intersection of County Roads 18C and 101, there is a stormwater detention area behind a locked gate on the northern side (Photo 20). There are concrete lined culverts in front of the access gate to this area. An overview photograph was taken atop the bank, showing the presence of narrowleaf willows and Fremont cottonwoods (Photo 21). The neighboring properties are agricultural fields.

The eastern side of County Road 101 is agricultural fields of alfalfa and hay. A drainage ditch has been excavated in the soil along the road (Photo 23). One Swainson's hawk pair was observed soaring over the field. The western side of County Road 101 is dominated by orchards, with one residence located along the road (Photo 25). This residential area has a mixed forest, including Valley oaks (Photo 26). The pipeline alignment would connect into existing main lines at the intersection of County Road 101, Churchill Downs Avenue, and North Pioneer Avenue. The land cover in this area is primarily developed, with horticultural areas within business parking lots.

Attachment A provides representative photographs of the survey areas. **Attachment B** provides a complete list of wildlife species observed. **Attachment C** provides a list of plant species observed along the alignments.

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California Department of Fish and Wildlife. 2025. CNDDB: California Natural Diversity Database; Nine-Quad Search of the Davis, Eldorado Bend, Grays Bend, Knights Landing, Madison, Merritt, Winters, Woodland, and Zamora. 7.5-minute Quadrangles. Project species list can be generated online at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed on July 21, 2025.

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Attachment A: Representative Photo Log

Photo 1. Overview of Bayer pipeline alignment within the agricultural field. Photograph facing east.

Photo 2. Eastern connection point of the Bayer pipeline through a roadside ditch into a developed area. Photograph facing east.

Photo 3. Western connection point of the Bayer pipeline. Photograph facing southeast.

Photo 4. Overview of leach field one within the Bayer facility. Photograph facing southeast.

Photo 5. Overview of leach field two within the Bayer facility. Photograph facing southwest.

Photo 6. Culvert with drainage from leach field two leading to the retention pond area within the Bayer facility. Photograph facing east.

Photo 7. Well to be decommissioned within the Bayer facility. Photograph facing northwest.

Photo 8. Overview of the retention pond from the northernmost gate within the Bayer facility. Photograph facing south.

Photo 9. Burrows located on the banks of the retention pond area within the Bayer facility. Photograph facing southeast.

Photo 10. Burrows within the staged soil piles to the west of leach field three within the Bayer facility. Photograph facing southwest.

Photo 11. Cliff swallow nests on the silos within the Clark Pacific facility. Photograph facing west.

Photo 12. Large stick nest located on the platform to the silos within the Clark Pacific facility. Photograph facing southeast.

Photo 13. Overview of the leach field with the Clark Pacific facility. Photograph facing southwest.

Photo 14. Two elderberry shrubs along the northern fence line of the leach field within the Clark Pacific facility. Photograph facing northwest.

Photo 15. Valley oak within the Clark Pacific leach field. Photograph facing northwest.

Photo 16. Overview of the northern side of the Clark Pacific alignment along County Road 18C. Photograph facing east.

Photo 17. Valley oaks present along the southern side of CR-18C along the proposed Clark Pacific pipeline alignment. Photograph facing west.

Photo 18. Example of valley oaks along the southern side of CR-18C with drip lines extending into the road along the Clark Pacific pipeline alignment. Photograph facing west.

Photo 19. Burrows located within the drainage canal along the southern side of CR-18C along the Clark Pacific pipeline alignment. Photograph facing southwest.

Photo 20. Stormwater detention area along the northern side of CR-18C adjacent to the Clark pacific pipeline alignment. Photograph facing northwest.

Photo 21. Overview of Fremont cottonwoods and narrowleaf willows within stormwater detention area on northern side of CR-18C adjacent to the Clark Pacific pipeline alignment. Photograph facing northwest.

Photo 22. Overview of the eastern side of CR-101 along the Clark Pacific pipeline alignment. Photograph facing north.

Photo 23. Orchards present along the western side of CR-101 along the Clark Pacific pipeline alignment. Photograph facing south.

Attachment B: List of Wildlife Species Observed

Common Name	Scientific Name
Birds	
American Crow	*Corvus brachyrhynchos*
American Goldfinch	*Spinus tristis*
Anna's Hummingbird	*Calypte anna*
Cliff Swallow	*Petrochelidon pyrrhonota*
European Starling	*Sturnus vulgaris*
House Finch	*Haemorhous mexicanus*
Lark Sparrow	*Chondestes grammacus*
Lesser Goldfinch	*Spinus psaltria*
Mourning Dove	*Zenaida macroura*
Northern Mockingbird	*Mimus polyglottos*
Red-tailed Hawk	*Buteo jamaicensis*
Rock Pigeon	*Columba livia*
Swainson's Hawk	*Buteo swainsoni*
Turkey Vulture	*Cathartes aura*
Western Kingbird	*Tyrannus verticalis*
Reptiles	
Western fence lizard	*Sceloporus occidentalis*
Mammals	
Desert cottontail	*Sylvilagus audubonii*

Attachment C: List of Plant Species Observed

Common Name	Scientific Name
Alfalfa	*Medicago sativa*
Artichoke thistle	*Cynara cardunculus*
Black mustard	*Brassica nigra*
Bromes	*Bromus* spp.
Butterfly bush	*Buddleja davidii*
California poppy	*Eschscholzia californica*
Century plant	*Agave americana*
Chinese hackberry	*Celtis sinensis*
Chinese pistache	*Pistacia chinensis*
Curly Dock	*Rumex crispus*
Deodar cedar	*Cedrus deodara*
Elderberry	*Sambucus nigra*
Eucalyptus	*Eucalyptus* sp.
Field bindweed	*Convolvulus arvensis*
Fremont cottonwood	*Populus fremontii*
Mexican fan palm	*Washingtonia robusta*
Narrowleaf willow	*Salix exigua*
Northern California black walnut	*Juglans hindsii*
Oleander	*Nerium oleander*
Prickly lettuce	*Lactuca serriola*
Stinkwort	*Dittrichia graveolens*
Toothpickweed	*Visnaga daucoides*
Valley oak	*Quercus lobata*
Vinegarweed	*Trichostema lanceolatum*
Wild oats	*Avena* spp.
Yellow-star thistle	*Centaurea solstitialis*

Appendix F Yolo Habitat Conservation Plan/Natural Communities Conservation Plan EIS/EIR, Appendix C, Avoidance and Minimization Measures

Avoidance and Minimization Measures

AMM1, Establish Buffers. Project proponents will design projects to avoid and minimize direct and indirect effects of permanent development on the sensitive natural communities specified in Table 4-1 (herein referred to as *sensitive natural communities*) and covered species habitat specified in Table 4-1 by providing buffers, as stipulated in the relevant sensitive natural community AMMs (Section 4.3.3) and covered species AMMs (Section 4.3.4). On lands owned by the project proponent, the project proponent will establish a conservation easement, consistent with Section 6.4.1.3, *Land Protection Mechanisms*, to protect the buffer permanently if that land is being offered in lieu of development fees, as described in Section 4.2.2.6, *Item 6: HCP/NCCP Fees or Equivalent Mitigation*. The project proponent will design buffer zones adjacent to permanent residential development projects to control access by humans and pets (AMM2, *Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces*).

Where existing development is already within the stipulated buffer distance (i.e., existing uses prevent establishment of the full buffer), the development will not encroach farther into the space between the development and the sensitive natural community.

This AMM does not apply to seasonal construction buffers for covered species, which are detailed for each species in Section 4.3.4, *Covered Species*.

A lesser buffer than is stipulated in the AMMs may be approved by the Conservancy, USFWS, and CDFW if they determine that the sensitive natural community or covered species is avoided to an extent that is consistent with the project purpose (e.g., if the purpose of the project is to provide a stream crossing or replace a bridge, the project may encroach into the buffer and the natural community or species habitat to the extent that is necessary to fulfill the project purpose).

AMM2, Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces. For development projects implemented adjacent to non-agricultural natural communities and covered species habitats, project proponents will incorporate urban-habitat interface elements into project design to minimize the following indirect effects of the development on adjacent habitat areas:

- Noise and visual disturbances that diminish the ability of covered and other native wildlife species to use the habitat.
- Increased numbers of pets (e.g., dogs, cats) that can result in harassment and mortality of covered and other native wildlife species.
- Increased levels of direct habitat disturbances associated with increased human access to habitats (e.g., destruction of vegetation and injury or mortality of wildlife associated with use of off-road vehicles).
- Escape or planting of invasive nonnative plants.

This AMM does not apply to development where it is immediately adjacent to existing developed lands.

The project proponent will implement the following urban-habitat interface design elements and activities, as applicable, to each discretionary project:

- Place roads or other non-residential spaces, such as parks or greenbelts, rather than lots at the urban-natural community interface. The benefits of this may include a reduction in the number of incidences of pets entering the natural communities.
- Design roads, bike paths, and trails to discourage entry of humans and pets into adjacent natural communities and promote citizen policing at the natural community periphery.

- Establish barriers that discourage entry of humans and pets into natural community areas.
- Design fences to prevent pets from escaping yards into adjacent natural communities, control entry and dumping of trash into adjacent natural communities, and when appropriate, shield adjacent natural communities from visual disturbances that may interfere with normal wildlife behavioral patterns.
- Fence new public roads associated with developments to prevent unauthorized public access into habitat areas and effectively direct wildlife to specially designed crossing structures.
- Design development drainage systems and implement appropriate best management practices to avoid changes to overland flow and water quality in natural community areas, including streamcourses.
- Design development lighting to avoid projecting light into adjacent natural community areas. For lights at or near the urban-natural community interface, use low-glare lighting to minimize lighting effects on natural communities.

AMM3, Confine and Delineate Work Area. Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways to minimize natural community and covered species habitat disturbance. The project proponent will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.

AMM4, Cover Trenches and Holes during Construction and Maintenance. To prevent injury and mortality of giant garter snake, western pond turtle, and California tiger salamander, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

AMM5, Control Fugitive Dust. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.

AMM6, Conduct Worker Training. All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.

AMM7, Control Nighttime Lighting of Project Construction Sites. Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.

AMM8, Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas. Project proponents should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or improved ecological functions (e.g., grassland and agricultural land). Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects on the following:

- Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.

- Occupied western burrowing owl burrows. [Occupied for the purpose of AMM8 means at least one burrowing owl has been observed occupying the burrow within the last three years. Occupancy of a burrow may also be indicated by owl sign at the burrow entrance, including molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site]

- Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season.

Project proponents will follow specific AMMs for sensitive natural communities (Section 4.3.3, Sensitive Natural Communities) and covered species (Section 4.3.4, Covered Species) in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, project proponents will conduct surveys to determine if any of the biological resources listed above are present.

Within one year following removal of land cover, project proponents will restore temporary work and staging areas to a condition equal to or greater than the covered species habitat function of the affected habitat. Restoration of vegetation in temporary work and staging areas will use clean, native seed mixes approved by the Conservancy that are free of noxious plant species seeds.

AMM9, Establish Buffers around Sensitive Natural Communities. The buffers for each sensitive natural community are as follows:

- Alkali prairie and vernal pools: The area necessary to provide the hydrologic conditions needed to support the wetlands within these natural communities (250 feet). Covered activities will avoid vernal pools or alkali seasonal wetlands by 250 feet [Alkali seasonal wetlands are seasonal wetlands within the alkali prairie natural community], or other distance based on site specific topography to avoid indirect hydrologic effects. A buffer of less than 250 feet around vernal pools or alkali seasonal wetlands will be subject to wildlife agency concurrence that effects will be avoided. Considerations that may warrant a buffer of less than 250 feet may include topography (i.e., if the surrounding microwatershed extends less than 250 feet from the pool or wetland), intervening hydrologic barriers such as roads or canals, or other factors indicating that the proposed disturbance area does not contribute to the pool's hydrology. Other considerations may include temporary disturbance during the dry season where measures are implemented to avoid disturbance of the underlying claypan or hardpan, and the area is returned to pre-project conditions prior to the following rainy season.

- Valley foothill riparian: One hundred feet from canopy drip-line. If avoidance is infeasible, a lesser buffer or encroachment into the sensitive natural community may be allowed if approved by the Conservancy and the wildlife agencies, based on the criteria listed in AMM1. Transportation or utility crossings may encroach into this sensitive natural community provided effects are minimized and all other applicable AMMs are followed.

- Lacustrine and riverine: Outside urban planning units, 100 feet from the top of banks [Defined as the area within which water is contained in a channel.]. Within urban planning units, 25 feet from the top of the banks.

- Fresh emergent wetland: Fifty feet from the edge of the natural community.

AMM10, Avoid and Minimize Effects on Wetlands and Waters. Project proponents will comply with stormwater management plans that regulate development as part of compliance with regulations under National Pollutant Discharge Elimination System (NPDES) permit requirements. Covered activities that result in any fill of waters or wetlands will also comply with requirements under Section 404 of the Clean Water Act, State Water Resources Control Board (State Board), Fish and Game Code Section 1602, and Regional Board regulations. Other than requirements for buffers, minimizing project footprint, and species-specific measures

for wetland-dependent covered species, this HCP/NCCP does not include specific best management practices for protecting wetlands and waters because they may conflict with measures required by the USACE, State Board, Regional Board, and CDFW.

AMM11, Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak. Palmate-bracted bird's-beak is covered by the Yolo HCP/NCCP only for the removal of suitable habitat and not for the removal of palmate-bracted bird's beak plants. This AMM ensures compliance with this provision. To determine if palmate-bracted bird's-beak is present and could be affected, the project proponent will conduct a planning-level survey for this species for any covered activities to be conducted within 250 feet of suitable habitat (as defined in Appendix A, *Covered Species Accounts*). The survey will be conducted during the period from May 31 to September 30 and will be consistent with *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Game 2009).

The project proponent will avoid occupied habitat where palmate-bracted bird's beak has been located within any of the last 15 years (seed viability could be as little as three years and as much as six years, as described in Appendix A, Section A.1.2, *Species Description and Life History*). The project proponent also will avoid any new occurrences of this species identified during planning-level surveys. Avoidance will require a 250-foot setback from the occupied habitat, or greater distance depending on site-specific topography to avoid hydrologic effects. A shorter buffer distance may apply if is determined to avoid effects and is approved by the Conservancy, USFWS, and CDFW. Mortality of palmate-bracted bird's beak individuals will be avoided, except as needed through management activities that provide an overall benefit to the species.

AMM12, Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle. The project proponent will retain a qualified biologist who is familiar with valley elderberry longhorn beetle and evidence of its presence (i.e., exit holes in elderberry shrubs) to map all elderberry shrubs in and within 100 feet of the project footprint with stems that are greater than one inch in diameter at ground level. To avoid take of valley elderberry longhorn beetle fully, the project proponent will maintain a buffer of at least 100 feet from any elderberry shrubs with stems greater than one inch in diameter at ground level. *AMM1, Establish Buffers*, above, describes circumstances in which a lesser buffer may be applied. For elderberry shrubs that cannot be avoided with a designated buffer distance as described above, the qualified biologist will quantify the number of stems one inch or greater in diameter to be affected, and the presence or absence of exit holes. The Conservancy will use this information to determine the number of plants or cuttings to plant on a riparian restoration site to help offset the loss, consistent with Section 6.4.2.4.1, *Valley Elderberry Longhorn Beetle*. Additionally, prior to construction, the project proponent will transplant elderberry shrubs identified within the project footprint that cannot be avoided.

Transplantation will only occur if a shrub cannot be avoided and, if indirectly affected, the indirect effects would otherwise result in the death of stems or the entire shrub. If the project proponent chooses, in coordination with a qualified biologist, not to transplant the shrub because the activity would not likely result in death of stems of the shrub, then the qualified biologist will monitor the shrub annually for a five-year monitoring period. The monitoring period may be reduced with concurrence from the wildlife agencies if the latest research and best available information at the time indicates that a shorter monitoring period is warranted. If death of stems at least one inch in diameter occurs within the monitoring period, and the qualified biologist determines that the shrub is sufficiently healthy to transplant, the project proponent will transplant the shrub as described in the following paragraph, in coordination with the qualified biologist. If the shrub dies during the monitoring period, or the qualified biologist determines that the shrub is no longer healthy enough to survive transplanting, then the Conservancy will offset the shrub loss consistent with the preceding paragraph.

The project proponent will transplant the shrubs into a location in the HCP/NCCP reserve system that has been approved by the Conservancy. Elderberry shrubs outside the project footprint but within the 100-foot buffer will not be transplanted.

Transplanting will follow the following measures:

1. Monitor: A qualified biologist will be on-site for the duration of the transplanting of the elderberry shrubs to ensure the effects on elderberry shrubs are minimized.

2. Timing: The project proponent will transplant elderberry plants when the plants are dormant, approximately November through the first two weeks of February, after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the plant and increase transplantation success.

3. Transplantation procedure:

    a. Cut the plant back three to six feet from the ground or to 50 percent of its height (whichever is taller) by removing branches and stems above this height. Replant the trunk and stems measuring one inch or greater in diameter. Remove leaves that remain on the plants.

    b. Relocate plant to approved location in the reserve system, and replant as described in Section 6.4.2.4.1, *Valley Elderberry Longhorn Beetle*.

AMM13, Minimize Take and Adverse Effects on Habitat of California Tiger Salamander. The project proponent will retain a qualified biologist to identify any suitable aquatic and upland habitats for California salamander (as defined in Appendix A, *Covered Species Accounts*) present in and within 500 feet of the project footprint during planning-level surveys. The qualified biologist will also assess whether critical habitat could be affected by the covered activity.

Except for habitat management and enhancement, all covered activities will provide a 500-foot setback from aquatic California tiger salamander habitat. If a covered activity is outside the Dunnigan Creek Unit of California tiger salamander critical habitat and, as designed, will not avoid aquatic habitat by at least 500 feet, the project proponent will either conduct visual and dip-net surveys, consistent with CDFW protocol, during the period for November 1 to May 15 (California Department of Fish and Game 2003) or assume presence. If the species is present or assumed to be present, the covered activity will not remove aquatic habitat until at least four new occupied breeding pools are discovered or established in the Plan Area and protected in the Plan Area. After the four new occupied breeding pools are protected, and with concurrence of USFWS and CDFW, up to three breeding pools may be affected. The breeding habitat may not be removed if USFWS and CDFW determine that the covered activity would remove a significant occurrence of this species that could be necessary for maintaining the genetic diversity or regional distribution of the species. This AMM applies to California tiger salamander aquatic habitat and surrounding uplands, as defined by reference to the setbacks described above; it does not apply to cultivated agricultural lands (i.e., agricultural lands other than grazing lands) or other low-value upland habitat for California tiger salamander.

AMM14, Minimize Take and Adverse Effects on Habitat of Western Pond Turtle. There are no specific design requirements for western pond turtle habitat, however, project proponents must follow design requirements for the valley foothill riparian and lacustrine and riverine natural communities described in AMMs 9 and 10, which require a 100-foot (minimum) permanent buffer zone from the canopy drip-line (the farthest edge on the ground where water will drip from the tree canopy, based on the outer boundary of the tree canopy). If modeled upland habitat will be impacted, a qualified biologist must be present and will assess the likelihood of western pond turtle nests occurring in the disturbance area (based on sun exposure, soil conditions, and other species habitat requirements).

If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground disturbing activity for nests that may be unearthed during the disturbance, and will move out of harm's way any turtles or hatchlings found.

AMM15, Minimize Take and Adverse Effects on Habitat of Giant Garter Snake. The project proponent will avoid effects on areas where planning-level surveys indicate the presence of suitable habitat for giant garter snake. To avoid effects on giant garter snake aquatic habitat, the project proponent will conduct no in-water/in-channel activity and maintain a permanent 200-foot non-disturbance buffer from the outer edge of potentially occupied aquatic habitat. If the project proponent cannot avoid effects of construction activities, the project proponent will implement the measures below to minimize effects of construction projects (measures for maintenance activities are described after the following bulleted list).

- Conduct preconstruction clearance surveys using USFWS-approved methods within 24 hours prior to construction activities within identified giant garter snake aquatic and adjacent upland habitat. If construction activities stop for a period of two weeks or more, conduct another preconstruction clearance survey within 24 hours prior to resuming construction activity.

- Restrict all construction activity involving disturbance of giant garter snake habitat to the snake's active season, May 1 through October 1. During this period, the potential for direct mortality is reduced because snakes are expected to move and avoid danger.

- In areas where construction is to take place, encourage giant garter snakes to leave the site on their own by dewatering all irrigation ditches, canals, or other aquatic habitat (i.e., removing giant garter snake aquatic habitat) between April 15 and September 30. Dewatered habitat must remain dry, with no water puddles remaining, for at least 15 consecutive days prior to excavating or filling of the habitat. If a site cannot be completely dewatered, netting and salvage of giant garter snake prey items may be necessary to discourage use by snakes.

- Provide environmental awareness training for construction personnel, as approved by the Conservancy. Training may consist of showing a video prepared by a qualified biologist, or an in-person presentation by a qualified biologist. In addition to the video or in-person presentation, training may be supplemented with the distribution of approved brochures and other materials that describe resources protected under the Yolo HCP/NCCP and methods for avoiding effects.

- A qualified biologist will prepare a giant garter snake relocation plan which must be approved by the Conservancy prior to work in giant garter snake habitat. The qualified biologist will base the relocation plan on criteria provided by CDFW or USFWS, through the Conservancy.

- If a live giant garter snake is encountered during construction activities, immediately notify the project's biological monitor and USFWS and CDFW. The monitor will stop construction in the vicinity of the snake, monitor the snake, and allow the snake to leave on its own. The monitor will remain in the area for the remainder of the work day to ensure the snake is not harmed or, if it leaves the site, does not return. If the giant garter snake does not leave on its own, the qualified biologist will relocate the snake consistent with the relocation plan described above.

- Employ the following management practices to minimize disturbances to habitat:

  - Install temporary fencing to identify and protect adjacent marshes, wetlands, and ditches from encroachment from construction equipment and personnel.

  - Maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetative buffer strips, or other accepted practices. No plastic, monofilament, jute, or similar erosion-control matting that could entangle snakes or other wildlife will be permitted.

Ongoing maintenance covered activities by local water and flood control agencies typically involve removal of vegetation, debris, and sediment from water conveyance canals as well as resloping, rocking, and stabilizing the canals that serve agricultural water users. Maintenance of these conveyance facilities can typically occur only from mid-January through April when conveyance canals and ditches are not in service by the agency, although some drainages are used for storm conveyance during the winter and are wet all year. This timing

is during the giant garter snake's inactive period. This is when snakes may be using underground burrows and are most vulnerable to take because they are unable to move out of harm's way. Maintenance activities, therefore, will be limited to the giant garter snake's active season (May 1 to October 1) when possible. All personnel involved in maintenance activities within giant garter snake habitat will first participate in environmental awareness training for giant garter snake, as described above for construction-related activities. To minimize the take of giant garter snake, the local water or flood control agency will limit maintenance of conveyance structures located within modeled giant garter snake habitat (Appendix A, *Covered Species Accounts*) to clearing one side along at least 80 percent of the linear distance of canals and ditches during each maintenance year (e.g., the left bank of a canal is maintained in the first year and the right bank in the second year). To avoid collapses when resloping canal and ditch banks composed of heavy clay soils, clearing will be limited to one side of the channel during each maintenance year.

For channel maintenance activities conducted within modeled habitat for giant garter snake, the project proponent will place removed material in existing dredged sites along channels where prior maintenance dredge disposal has occurred. For portions of channels that do not have previously used spoil disposal sites and where surveys have been conducted to confirm that giant garter snakes are not present, removed materials may be placed along channels in areas that are not occupied by giant garter snake and where materials will not re-enter the canal because of stormwater runoff.

Modifications to this AMM may be made with the approval of the Conservancy, USFWS, and CDFW.

AMM16, Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite. The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.

For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

AMM17, Minimize Take and Adverse Effects on Habitat of Western Yellow-Billed Cuckoo. The project proponent will retain a qualified biologist to conduct planning-level surveys and assess whether habitat for western yellow-billed cuckoo (as defined in Appendix A, Covered Species Accounts) is present within 500 feet of covered activities. If habitat is present, the project proponent will redesign the project to avoid or minimize activities within 500 feet of western yellow-billed cuckoo habitat. If the activity will encroach within

500 feet of habitat and there are no breeding (or nesting) season records for the species within one-quarter mile of the covered activity within the previous three years, a qualified biologist will conduct planning-level surveys for active nests, consistent with USFWS protocol (Appendix N), during the period from June 1 to August 30. Operations and maintenance activities that do not occur during the breeding season (June 1 to August 30) and do not remove western yellow-billed cuckoo habitat are not required to conduct surveys or record searches; no further avoidance or minimization is necessary for such activities.

If an occupied territory is discovered during planning-level surveys, or there is a record of the species occurring within one-quarter mile of the covered activity within the previous three years, the project proponent will design the project to avoid activities within 500 feet of suitable habitat, unless the Conservancy, USFWS, and CDFW approve a shorter distance.

If an activity occurs within 500 feet of suitable habitat during the breeding season, regardless of whether or not a qualified biologist detected the species during planning-level surveys or there are records for the species in the area, a qualified biologist will conduct preconstruction surveys that are consistent with USFWS protocol (Appendix N) during the same season when the activity will occur. If the biologist finds active territories (i.e., presence of a singing male), the project proponent will avoid activity within 500 feet of suitable habitat that is contiguous with the territory from June 1 to August 30. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

AMM18, Minimize Take and Adverse Effects on Western Burrowing Owl. The project proponent will retain a qualified biologist to conduct planning-level surveys and identify western burrowing owl habitat (as defined in Appendix A, *Covered Species Accounts*) within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines (Appendix L).

If burrowing owls are identified during the planning-level survey, the project proponent will minimize activities that will affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint does not impinge on a nondisturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this nondisturbance buffer could range from 150 to 1,500 feet (Table 4-2, *Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls*), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012). The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.

- Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.

- High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground

explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.

The project proponent may qualify for a reduced buffer size, based on existing vegetation, human development, and land use, if agreed upon by CDFW and USFWS (California Department of Fish and Game 2012).

Table 4-2[1] Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls

Time of Year	Level of Disturbance (feet) from Occupied Burrows		
	Low	Medium	High
April 1–August 15	600	1,500	1,500
August 16–October 15	600	600	1,500
October 16–March 31	150	300	1,500

Notes: [1] Table number corresponds to the numbering provided in the HCP/NCCP.

Source: Yolo Habitat Conservancy 2018

If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), the project proponent will retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines (Appendix L, Take Avoidance Surveys). The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.

If the biologist finds the site to be occupied[1] by western burrowing owls during the breeding season (February 1 to August 31), the project proponent will avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the project proponent develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:

- The Conservancy, CDFW, and USFWS approves the AMM plan provided by the project proponent.
- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
- If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require

[1] Occupancy of burrowing owl habitat during preconstruction surveys is confirmed at a site when at least one burrowing owl or sign (fresh whitewash, fresh pellets, feathers, or nest ornamentation) is observed at or near a burrow entrance.

that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.

- If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the project proponent may remove the nondisturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.

If evidence of western burrowing owl is detected outside the breeding season (September 1 to January 31), the project proponent will establish a non-disturbance buffer around occupied burrows, consistent with Table 4-2, as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:

- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).

- The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.

- If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.

- If the owls are gone for at least one week, the project proponent may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed and construction may continue.

Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active.

A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced and owls are not disturbed. Passive relocation (i.e., exclusion) of owls has been used in the past in the Plan Area to remove and exclude owls from active burrows during the nonbreeding season (Trulio 1995). Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. If the Conservancy determines that passive relocation is necessary, the project proponent will develop a burrowing owl exclusion plan in consultation with CDFW biologists. The methods will be designed as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques[2]. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow to prevent reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.

[2] The Conservancy will maintain a checklist of passive relocation techniques. CDFW will approve the initial list, and the Conservancy will update as needed in coordination with CDFW.

AMM19, Minimize Take and Adverse Effects on Least Bell's vireo. The project proponent will retain a qualified biologist to conduct planning-level surveys and determine if habitat for least Bell's vireo (as defined in Appendix A, *Covered Species Accounts*) is present within 500 feet of covered activities. If habitat is present, the project proponent will redesign the project to avoid or minimize activities within 500 feet of least Bell's vireo habitat. If the activity will encroach within 500 feet of habitat and there are no breeding season records for the species within one-quarter mile of the covered activity within the previous three years, the qualified biologist will conduct planning-level surveys for active territories, consistent with USFWS (2001) guidelines, during the breeding season (April 1 to July 15). Operations and maintenance activities that do not occur during the breeding season and do not affect least Bell's vireo habitat are not required to conduct surveys or record searches, and no further avoidance or minimization is necessary for such activities.

- If an occupied territory is discovered during planning-level surveys, or there is a record of the species occurring within one-quarter mile of the covered activity within the previous three years, the project proponent will design the project to avoid activities within 500 feet of suitable habitat, unless the Conservancy, USFWS, and CDFW approve a shorter distance.

- If an activity occurs within 500 feet of suitable habitat during the breeding season, regardless of whether or not the species was detected during planning-level surveys or there are records for the species in the area, a qualified biologist will conduct preconstruction surveys, consistent with USFWS (2001) guidelines, during the same season when the activity will occur. If active territories are found, the project proponent will avoid activity within 500 feet of the habitat from April 1 to July 15. This buffer may be reduced with approval from the Conservancy, USFWS, and CDFW.

- The project proponent will avoid disturbance of previous least Bell's vireo territories (up to three years since known nest activity) during the breeding season, unless the disturbance is to maintain public safety. Least Bell's vireo uses previous territories; disturbance during the breeding season may preclude birds from using existing unoccupied territories.

- The required buffer may be reduced in areas where barriers or topographic relief features are adequate for protecting the nest from excessive noise or other disturbance. Conservancy staff members will coordinate with the wildlife agencies and evaluate exceptions to the minimum nondisturbance buffer distance on a case-by-case basis. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

- If occupied territories are identified, a qualified biologist will monitor construction activities in the vicinity of all active territories to ensure that covered activities do not affect nest success.

AMM20, Minimize Take and Adverse Effects on Habitat of Bank Swallow. The project proponent will retain a qualified biologist to identify and quantify (in acres) bank swallow nesting habitat (as defined in Appendix A, *Covered Species Accounts*) within 500 feet of the project footprint. If a 500-foot buffer from nesting habitat cannot be maintained, the qualified biologist will check records maintained by the Conservancy and CDFW to determine if bank swallow nesting colonies have been active on the site within the previous five years. If there are no records of nesting bank swallows on the site, the qualified biologist will conduct visual surveys during the period from March 1 to August 31 to determine if a nesting colony is present.

For operations and maintenance activities or other temporary activities that do not remove nesting habitat and occur outside the nesting season (September 1 to February 28), it is not necessary to conduct a record search, planning and preconstruction surveys, or any additional avoidance measures. If activities will occur during the nesting season, surveys will be necessary as for other covered activities, but the 500-foot survey distance and buffer distance may be reduced upon Conservancy and wildlife agency approval based on site-specific conditions, such as the level of noise and disturbance generated by the activity, the duration of the activity, and the presence of visual and noise buffers (e.g., vegetation, structures) between the activity and the nesting colony.

If an active bank swallow colony is present or has been present within the last 5 years within the planning-level survey area, the Conservancy, USFWS and CDFW will be notified in writing within 15 working days, and the project proponent will design the project to avoid adverse effects within 500 feet of the colony site(s), unless a shorter distance is approved by the Conservancy, USFWS, and CDFW, based on site-specific conditions such as visual barriers (trees or structures) between the activity and the colony. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

The reserve system management plan including bank swallow habitat will provide examples of additional measures that may apply to activities on reserve system lands to avoid and minimize effects on bank swallow.

AMM21, Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird. The project proponent will retain a qualified biologist to identify and quantify (in acres) tricolored blackbird nesting and foraging habitat (as defined in Appendix A, *Covered Species Accounts*) within 1,300 feet of the footprint of the covered activity. If a 1,300-foot buffer from nesting habitat cannot be maintained, the qualified biologist will check records maintained by the Conservancy (which will include CNDDB data, and data from the tricolored blackbird portal) to determine if tricolored blackbird nesting colonies have been active in or within 1,300 feet of the project footprint during the previous five years. If there are no records of nesting tricolored blackbirds on the site, the qualified biologist will conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30, consistent with protocol described by Kelsey (2008).

Operations and maintenance activities or other temporary activities that do not remove nesting habitat and occur outside the nesting season (March 1 to July 30) do not need to conduct planning or construction surveys or implement any additional avoidance measures.

If an active tricolored blackbird colony is present or has been present within the last five years within the planning-level survey area, the project proponent will design the project to avoid adverse effects within 1,300 feet of the colony site(s), unless a shorter distance is approved by the Conservancy, USFWS, and CDFW. If a shorter distance is approved, the project proponent will still maintain a 1,300-foot buffer around active nesting colonies during the nesting season but may apply the approved lesser distance outside the nesting season. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

Avoidance and Minimization Measures within the Reserve System

Reserve system activities, including agricultural activities as described in Appendix M, *Yolo County Agricultural Practices*, have the potential to result in take of covered species. Covered species potentially affected by ongoing reserve system activities, and measures to avoid and minimize these effects, are described below. Prohibited land uses and other restrictions on reserve lands will be stipulated in the conservation easements, as described in Section 7.5.5.3.2, *Minimum Restrictions within a Yolo HCP/NCCP Conservation Easement.* Management practices on reserve lands will be developed with landowners, further described in the management plans, and approved by the wildlife agencies. The species included below are the covered species most likely to be affected by covered activities in the reserve system because they are most likely to occur on cultivated lands. Cultivated lands consist of working landscapes on which agricultural activities take place on a regular basis. The potential scenarios described below for which take could occur are not exhaustive, however, and site-specific conditions could warrant different or additional measures to avoid and minimize take of the covered species found on cultivated lands that will count toward conservation commitments. The Conservancy will describe these avoidance and minimization measures as applicable in site-specific conservation easements or management plans that the wildlife agencies will approve. For bank swallow, agricultural practices on reserve system lands will comply with AMM20, *Bank Swallow,* above.

VALLEY ELDERBERRY LONGHORN BEETLE

On reserve lands whose primary conservation values include valley elderberry longhorn beetle conservation, agricultural and other activities that would potentially result in take of valley elderberry longhorn beetle will not occur within a 100-foot buffer around elderberry shrubs, thereby avoiding take. Management activities which would not result in take of valley elderberry longhorn beetle (e.g., hand weeding, planting native plants) may occur within the 100-foot buffer If existing, ongoing activities (e.g., agricultural activities, such as a farming road) encroach within 100 feet of elderberry shrubs on reserve land, the valley elderberry longhorn beetle habitat within 100 feet of such activities will not count toward the habitat protection commitment for this species. The Conservancy will coordinate with the wildlife agencies if elderberry shrubs are present within the reserve system on or near cultivated lands to develop additional protection measures as needed to maintain the conservation values of the easement and comply with the Yolo HCP/NCCP.

CALIFORNIA TIGER SALAMANDER

Reserve system activities will avoid harming, harassing, injuring, or killing California tiger salamanders. If California tiger salamanders are present in a pond or other water feature on a site enrolled in the reserve system, the management plan for the site will specify water management measures intended to reduce the potential establishment of predatory non-native species and will restrict pond maintenance activities, and limit ground disturbing activities to the dry season to minimize the potential for harming California tiger salamanders that may be actively moving through uplands. In the event that a salamander needs to be moved out of harm's way to avoid injuring or killing individuals, a qualified biologist will relocate the salamander to nearby habitat. The Conservancy will coordinate with the wildlife agencies where California tiger salamanders may be present within the reserve system, to develop additional protection measures as needed to maintain the conservation values of the easement and comply with the Yolo HCP/NCCP.

GIANT GARTER SNAKE

Canal and ditch maintenance on cultivated lands typically involves removal of vegetation, debris, and sediment from water conveyance channels. To minimize effects on giant garter snake, these activities within giant garter snake habitat will be limited to the giant garter snake's active season (May 1 to October 1) when possible. To minimize the take of giant garter snake, farmers and land managers on lands in the reserve system will limit maintenance of conveyance structures located within giant garter snake habitat to clearing one side along at least 80% of the linear distance of the channels during each maintenance year (e.g., the left bank of a canal is maintained in the first year and the right bank in the second year). In the event that a giant garter snake needs to be moved out of harm's way to avoid injuring or killing individuals, a qualified biologist will relocate the giant garter snake to nearby habitat.

For channel maintenance activities conducted within giant garter snake habitat, farmers on cultivated land within giant garter snake habitat in the reserve system will place removed material at least 200 feet from permanent aquatic habitat. For portions of channels that do not have previously used spoil disposal sites and the area has been checked by a qualified biologist to confirm that giant garter snakes are not in harm's way, removed materials may be placed along channels in areas that are at least 200 feet from permanent aquatic habitat and where materials will not re-enter the canal because of stormwater run-off. The Conservancy will coordinate with the wildlife agencies where giant garter snakes may be present within the reserve system on or near cultivated lands, to develop additional protection measures as needed to maintain the conservation values of the easement and comply with the Yolo HCP/NCCP.

WESTERN POND TURTLE

Western pond turtles may occur within canals and ditches in the reserve system. To minimize the take of western pond turtle, farmers and land managers on lands in the reserve system will limit maintenance of conveyance structures located within western pond turtle habitat to clearing one side along at least 80% of

the linear distance of the channels during each maintenance year (e.g., the left bank of a canal is maintained in the first year and the right bank in the second year).

For channel maintenance activities conducted within western pond turtle habitat, farmers and land managers within western pond turtle habitat in the reserve system will place removed material at least 200 feet from permanent aquatic habitat. For portions of channels that do not have previously used spoil disposal sites and the area has been checked by a qualified biologist to confirm that western pond turtles are not in harm's way, removed materials may be placed along channels in areas that are at least 200 feet from permanent aquatic habitat and where materials will not re-enter the canal because of stormwater run-off. In the event that a western pond turtle needs to be moved out of harm's way to avoid injuring or killing individuals, a qualified biologist will relocate the western pond turtle to nearby habitat The Conservancy will coordinate with the wildlife agencies where western pond turtles may be present within the reserve system on or near cultivated lands, to develop additional protection measures as needed to maintain the conservation values of the easement and comply with the Yolo HCP/NCCP.

SWAINSON'S HAWK AND WHITE-TAILED KITE

Swainson's hawk and white-tailed kite prey species can be considered agricultural pests and rodenticides are sometimes used as part of general agricultural operations to control pest populations. Rodenticides both reduce available food resources and can directly harm individual Swainson's hawks and white-tailed kites that ingest prey that have been poisoned by rodenticides. The use of rodenticides is prohibited on all lands in the reserve system, including cultivated lands, to avoid effects to Swainson's hawk and white-tailed kite.

The removal or cutting of trees on lands in the reserve system is prohibited except as reasonably necessary and/or prudent for (1) fire breaks, (2) prevention or treatment of disease; or (3) removing vegetation and debris which poses a health and safety hazard or a threat to standard agricultural operations including, but not limited to, downed trees or limbs. In cases where the cutting or removal of a tree is deemed necessary because of one of the reasons mentioned above, the removal of the tree shall not occur during the Swainson's hawk or white-tailed kite nesting season (February 1 through October 1) to avoid disturbance during the breeding season. No standing tree shall be removed until it has been verified that the tree is not an active Swainson's hawk or white-tailed kite nest tree. The Conservancy will coordinate with the wildlife agencies where Swainson's hawks or white-tailed kites are present within the reserve system on or near cultivated lands, to develop additional protection measures as needed to maintain the conservation values of the easement and comply with the Yolo HCP/NCCP.

WESTERN BURROWING OWL

Farmers and land managers on lands in the reserve system will avoid disturbing burrows occupied by western burrowing owls. The Conservancy will coordinate with the wildlife agencies if burrowing owls are found on actively farmed lands within the reserve system to develop additional protection measures as needed to maintain the conservation values of the easement and comply with the Yolo HCP/NCCP.

TRICOLORED BLACKBIRD

Tricolored blackbirds can nest in triticale and other types of grain crops, although this has not been documented in Yolo County. In the rare event that tricolored blackbirds nest in cultivated lands within the reserve system, the farmer will delay harvesting the crop and other agricultural practices a sufficient distance from the active nest to avoid harming, harassing, injuring, or killing individuals until the tricolored blackbirds have finished nesting (i.e., fledglings are capable of acquiring food on their own). A qualified biologist will confirm the distance in which harvesting can occur and the time at which tricolored blackbirds have finished nesting (and therefore when the remaining harvest may occur). The Conservancy will coordinate with the wildlife agencies if tricolored blackbirds are found within the reserve system on or near actively farmed lands, to develop additional protection measures as needed to maintain the conservation values of the easement and comply with the Yolo HCP/NCCP.